STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF REMEDIAL ACTION BY:	)	
	)	ENFORCEMENT ORDER
Yakima Valley Spray Facility	)	
1108-1122 South First Street	)	No. DE 01TCPCR-3249
Yakima, Washington 98901	)	

TO: U-Haul of Inland Northwest
c/o Mr. John Eide
E 14505 Sprague
Spokane, WA 99216

I.

Jurisdiction

This Order ("Order") is issued pursuant to the authority of the Revised Code of Washington (RCW) 70.105D.050(1).

II.

Findings of Fact

The Department of Ecology (Ecology) makes the following Findings of Fact.

2.1. U-Haul/Yakima Valley Spray (Facility), is located at 1108-1122 South First Street in Yakima, Washington, on Parcel Numbers 191330-21031 (1.50 acres) and 191330-21034 (2.20 acres). These two parcels were purchased by U-Haul of Inland Northwest in 1984 and are still both owned by U-Haul of Inland Northwest (hereafter referred to as U-Haul). The source of this information is the Yakima County Assessor's records.

2.2. The Environmental Protection Agency found the site was contaminated with perchloroethylene in 1989. Further investigation by Ecology and U-Haul in 1991 discovered additional contaminants in the surface and subsurface soil.

2.3. In 1991, Ecology issued Enforcement Order DE 91TC-C453 to U-Haul of Inland Northwest. This Order required U-Haul to investigate the extent of the contamination at the Facility and provide the results in a Remedial Investigation/Feasibility Study (RI/FS)

report. Surface and subsurface soil samples were taken at the Facility and analyzed. Results of the investigation, reported in the RI, showed that sixty-two (62) hazardous substances were in the soil and groundwater at this Facility. Forty-nine (49) hazardous substances were found in the soil. Thirty-seven (37) hazardous substances were found in the groundwater. Twenty-four (24) hazardous substances were common to both soil and groundwater. Of the 62 hazardous substances found at the Facility, 25 were in concentrations above the MTCA method A and method B cleanup levels. A complete listing of the site's hazardous substances with their highest concentrations in either soil or groundwater media is attached as Exhibit A that is hereby incorporated as an integral and enforceable part of this Order.

2.4. In conformance with WAC 173-340-708(2), Ecology has selected nine (9) indicator hazardous substances found in the Facility soil and groundwater to represent and control the cleanup at the Facility. These 9 were selected because they represent the greatest health and environmental risks in the Facility's soil and groundwater. The 9 indicator substances in soil are:

aldrin
dieldrin
arsenic
gamma BHC (lindane)
beta BHC
DDT
TPHG (gasoline)
TPHD (diesel)
PCE (perchloroethylene)

The presence and distribution of these 9 hazardous substances are documented in the August 21, 1995 Remedial Investigation (RI) prepared by RETEC (Seattle, Washington), on file at the Department of Ecology regional office in Yakima, Washington.

2.5. On March 10, 1995, RETEC submitted a draft Feasibility Study (FS). On November 22, 1995, after thorough review, Ecology commented on the draft FS and directed U-Haul to submit a final FS addressing Ecology's comments. On January 30, 1998, U-Haul notified Ecology that it needed up to an additional year to complete the Final FS report. No Final FS Report was ever submitted. Ecology has determined, however, that it has sufficient information to make a cleanup decision for the site without submittal of a Final FS.

2.6. On August 14, 2001, Ecology issued a Final Cleanup Action Plan for the Facility.

III.

Ecology Determinations

3.1. U-Haul of Inland Northwest is an "owner or operator" as defined in RCW 70.105D.020(12) of a "Facility" as defined in RCW 70.105D.020(4).

3.2 The Facility is known as Yakima Valley Spray/U-Haul and is located at 1108-1122 South First Street in Yakima, Washington.

3.3. The substances found at the Facility as described in Ecology Order No. DE 91TC-C453 and in the August 19, 1994 - Remedial Investigation Report for the Yakima Valley Spray Company (U-Haul) Facility, Yakima, Washington (by RETEC, Seattle, Washington) are "hazardous substances" as defined in RCW 70.105D.020(7).

3.4. Based on the presence of these hazardous substances at the Facility and all factors known to Ecology, there has been a release of hazardous substances at the Facility, as defined in RCW 70.105D.020(20).

3.5. By letter dated August 30, 1991, Ecology notified U-Haul of its status as a "potentially liable person" under RCW 70.105D.040 after notice and opportunity to comment.

3.6. Pursuant to RCW 70.105D.030(1) and RCW 70.105D.050, Ecology may require PLPs to investigate or conduct other remedial actions with respect to the release or threatened release of hazardous substances, whenever it believes such action to be in the public interest.

3.7. Based on the foregoing facts, Ecology believes the remedial action required by this Order is in the public interest.

IV.

Work to be Performed

Based on the foregoing Facts and Determinations, it is hereby ordered that U-Haul take the following remedial actions, and that these actions be conducted in accordance with Chapter 173-340 of the Washington Administrative Code (WAC) unless otherwise specifically provided for herein.

4.1 The attached Cleanup Action Plan (CAP; Exhibit B), shall be implemented by U-Haul at the Facility and is hereby incorporated in its entirety as an integral and enforceable part of this Order.

4.2 By the 15th day of each month, commencing on the first month following the beginning of excavation, and continuing until the installation of the last monitoring well or June 1, 2002, whichever is sooner, U-Haul shall submit a monthly report to Ecology detailing the progress, activities, and sampling results for the previous month in complying with this Order.

4.3 No later than sixty (60) days after the effective date of this Enforcement Order, U-Haul shall submit to Ecology for review and approval a Draft Work Plan (Plan) for implementing the CAP. Elements of the Draft Work Plan shall contain at a minimum:

- An Engineering Design Report in accordance with WAC 173-340-400(4)(a) and addressing all Applicable, Relevant and Appropriate Requirements (ARARS), including the two attached regulatory letters (Exhibit C), and other needed actions to comply with the substantive requirements of this section. In addition, in accordance with WAC 173-340-400(4)(a)(ix), the Work Plan shall discuss engineering controls that shall be established to control airborne emissions and off-site drainage
- Construction plans and specifications meeting the requirements of WAC 173-340-400(4)(b) and addressing needed permits and access agreements with adjoining affected property owners necessary to implement the CAP
- An Operation and Maintenance Plan meeting the requirements of WAC 173-340-400(4)(c) that shall be implemented at the Facility including requirements for the annual inspection and maintenance of the surface cap
- A Compliance Monitoring Plan meeting the requirements of WAC 173-340-410. This Plan shall include the groundwater monitoring of the five new wells, MW-10, MW-7, and MW-6 for the 9 indicator hazardous substances of Section 2.4
- A Sampling and Analysis Plan (SAP) meeting the requirements of WAC 173-340-820 and addressing the following:
  - The sampling and characterizing of airborne contaminants before and during excavation and backfill. Air releases from the Facility shall be detected, measured, evaluated and, if a health risk is present, addressed at the site
  - The sampling and characterizing of contaminated groundwater purge water (presently stored in drums in the Shell Oil Building)
  - The sampling and characterizing of building demolition wastes
  - The sampling and characterizing of excavated materials less than 1 inch in diameter
  - The sampling and characterizing of excavated materials greater than 1 inch in diameter
  - The sampling and characterizing of excavations requiring, at a minimum, confirmational sampling from all pits at excavation completion, before final backfill, for all contaminants historically found at the facility and in accordance with WAC 173-340-410(3). All analyses shall be submitted to Ecology within 48 hours prior to backfilling the excavation

hours prior to backfilling the excavation

- A Groundwater Sampling and Analysis Plan meeting the requirements of WAC 173-340-820 and addressing the following:
  - Sampling from all facility wells both before excavation begins and immediately following final backfill for all groundwater contaminants historically found at the Facility. Analyses shall be submitted to Ecology within 48 hours of the sampling time and date. Depth to groundwater shall be monitored from three (3) upgradient and three (3) downgradient monitoring wells immediately before, and then weekly during the excavation period.
  - Scheduled quarterly (every 3 months) groundwater monitoring of eleven (11) Ecology-selected monitoring wells for an initial period of five years (Section 4.8)
  - During quarterly groundwater monitoring, laboratory analyses shall be for the 9 indicator contaminants and shall be submitted to Ecology within 30 calendar days of field sampling. Quarterly sampling of the 11 monitoring wells shall be for a minimum of two years. Based on the analysis of two years of data, U-Haul may propose to Ecology an alternate sampling schedule for a minimum of three additional years. Ecology may require additional groundwater samples be taken, analyzed, and submitted to Ecology for any contaminant during the remediation period if it believes that a contaminant poses a threat to human health or the environment
- A Health and Safety Plan in accordance with WAC 173-340-810(2) that includes Facility sampling for airborne contamination and specific measures to be taken in the event unsafe levels are measured
- No later than 30 days following issuance of Ecology's comments on the Draft Workplan, submit a Final Workplan addressing Ecology's comments and incorporating Ecology's requested changes

4.4 Within 45 days from the date of this enforcement order, Ecology requires identification of all permits, ARAR's (All Relevant and Appropriate Requirements), and other documents needed, but not covered by the MTCA permit exemption.

4.5 All equipment shall be staged onsite and excavation of contaminated soils shall begin no later than the 135th calendar day following the effective date of this Enforcement Order or within 15 days of Ecology's approval of the Final Work Plan, whichever is later. Sampling of all excavated soils will be implemented per an Ecology approved Sampling and Analysis Plan.

4.6 The U-Haul Facility excavations shall be backfilled and bioventing system installed, tested, and operational in accordance with the CAP and as specified in the approved plans and specifications. This task shall be completed by June 1, 2002, or 135 days after the Work Plan is approved, whichever is later.

4.7 By June 1, 2002 or within thirty (30) days of the completion of backfill, whichever is later, the installation of five (5) new monitoring wells and any replacement wells shall be completed. The placement and depth of the new wells will be determined in consultation with Ecology.

4.8 Quarterly groundwater monitoring from eleven (11) facility wells (MW-12, MW-11, MW-10, MW-7, MW-6, MW-4, and the five new monitoring wells) shall commence within 15 days of the completion of installation of the new and replacement wells and shall continue for a minimum of five years. Monitoring shall always be from the same 11 wells. Should any of the 11 monitoring wells be destroyed or abandoned during the 5-year period, U-Haul shall reinstall the wells in the same locations within 30 days of discovery.

4.9 Within 300 days of the effective date of this Order or within 30 days of final backfill, whichever is later, Institutional Controls, per WAC 173-340-440, shall be implemented at the Facility and shall consist of, at a minimum, a restrictive covenant placed on the property deed by U-Haul. Ecology shall review and approve the covenant prior to filing with the county. The restrictive covenant will address any future use or construction at the Facility. At a minimum, the restrictive covenant will contain language that restricts the property to commercial and industrial zoned uses.

4.10 By July 1, 2002 or within 60 days of completion of the surface cap, whichever is later, three copies of a Final Engineering Cleanup Report, including as-built drawings for monitoring wells and the bioventing system, shall be submitted to Ecology.

4.11 Commencing June 1, 2002, and continuing until final cleanup of the site, submit a quarterly report by the 15th day following the third month to Ecology detailing the progress, activities, and sampling results for the previous 3-month period in complying with this Order. The first report is due September 15, 2002 for the 3-month period June through August 2002.

4.12 Within 90 days of Ecology's notice to U-Haul that groundwater monitoring at the Facility is no longer necessary, three copies of a final report of groundwater monitoring results at the facility from the date of the Enforcement Order shall be submitted to Ecology.

4.13 Within 90 days of Ecology's notice to U-Haul that bioventing monitoring at the Facility is no longer necessary, three copies of a final report of bioventing monitoring results from its initiation at the facility shall be submitted to Ecology.

4.14 U-Haul may request task timelines in this Section based on written justification. Any such extension granted by Ecology will be documented by a letter from Ecology's project coordinator to U-Haul's project coordinator.

V.

Terms and Condition of Order

5.1 Definitions. Unless otherwise specified, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms used in this Order.

For purposes of this Order, Ecology is defined as the Toxics Cleanup Program, Central Regional Office, Yakima, Washington.

5.2 Public Notices. 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 the Order is inadequate or improper in any respect.

5.3 Remedial Action Costs. U-Haul of Inland Northwest shall pay to Ecology costs incurred by Ecology pursuant to this Order. These costs shall include work performed by Ecology or its contractors at the Facility under Chapter 70.105D RCW both prior to and subsequent to the issuance of this Order for investigations, remedial actions, and Order preparation, oversight, and administration. Ecology costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). U-Haul of Inland Northwest shall pay the required amount within ninety (90) 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 description of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Failure to pay Ecology's costs within ninety (90) days of receipt of an itemized statement of costs will result in interest charges pursuant to WAC 173-340-550(4).

As of June 30, 2001, the outstanding oversight cost charge and interest owed to Ecology is $307,027.37. As a condition of this Order, within 60 days of the effective date of this Order, U-Haul of Inland Northwest shall pay Ecology all oversight costs and accumulated interest to Ecology to the effective date of June 30, 2001. Thereafter, U-Haul shall keep all Ecology oversight charges current.

5.4 Designated Project Coordinators.

The project coordinator for Ecology is:

Dick Bassett
Department of Ecology
Central Regional Office
15 West Yakima, Suite 200
Yakima, Washington 98902-3452

phone: (509) 454-7839
fax: (509) 575-2809
e-mail: rbas461@ecy.wa.gov

U-Haul of Inland northwest shall notify Ecology of its project coordinator within thirty (30) calendar days of the effective date of this Order. The project coordinator(s) shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communications between Ecology and U-Haul of Inland Northwest, 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 coordinator(s). Should Ecology or U-Haul of Inland Northwest change project coordinator(s), written notification shall be provided to Ecology or U-Haul of Inland Northwest, at least ten (10) calendar days prior to the change.

5.5 Performance. All work performed pursuant to this Order shall be under the direction and supervision, as necessary, of a professional engineer or hydrogeologist, or similar expert, with appropriate training, experience, and expertise in hazardous waste site investigation and cleanup. U-Haul of Inland Northwest shall notify Ecology as to the identity of such engineer(s) or hydrogeologist(s), and of any contractors and subcontractors to used in carrying out the terms of this Order, in advance of their involvement at the Facility. U-Haul of Inland Northwest 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 will be in compliance with this Order.

Except where necessary to abate an emergency situation U-Haul of Inland Northwest shall not perform any remedial actions at Facility outside that required by this Order unless a remedial action is required of U-Haul of Inland Northwest by other Ecology Agreed Orders, Consent Decrees, or Enforcement Orders

WAC 173-340-400(7)(b)(i) requires that "construction" performed on the site must be under the supervision of a professional engineer registered in Washington State.

5.6 Access. Ecology or any Ecology-authorized representative shall have the authority to enter and freely move about all property at the Facility 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 the progress in carrying out the terms of this Order; conducting such tests or collecting samples as Ecology or the project coordinator 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 U-Haul of Inland Northwest. In the course of conducting oversight of this Order under the Model Toxics Control Act, Ecology shall provide reasonable notice before entering property unless an emergency prevents notice. When Ecology is acting under a statute other than the Model Toxics Control Act, Ecology shall provide notice consistent with that statute. Ecology shall allow split or replicate samples to be taken by U-Haul of Inland Northwest during an inspection unless doing so would interfere with Ecology's sampling. U-Haul of Inland Northwest shall allow split or replicate samples to be taken by Ecology and shall provide Ecology fourteen (14) days notice before any sampling activity.

5.7 Public Participation. Ecology shall maintain the responsibility for public participation at the Facility. U-Haul of Inland Northwest shall help coordinate and implement public participation for the Facility, including implementing the public participation plan in Exhibit D. Implementation shall include updating the "Categorized Contact and Mailing List for Site Communications." This mailing list shall include addresses and contacts within the potentially affected vicinity surrounding the facility.

5.8 Retention of Records. U-Haul of Inland Northwest shall preserve in a readily retrievable fashion, during the pendency of this Order and for ten (10) years from the date of completion of the work performed pursuant to this Order, all records, reports, documents, and underlying data in its possession relevant to this Order. Should any portion of the work performed hereunder be undertaken through contractors or agents of U-Haul of Inland Northwest., then U-Haul of Inland Northwest agrees to include in their contract with such contractors or agents a record retention requirement meeting the terms of this paragraph.

5.9 Dispute Resolution. U-Haul of Inland Northwest may request Ecology to resolve disputes which may arise during the implementation of this Order. Such request shall be in writing and directed to the signatory, or his/her successor(s), to this Order. Ecology resolution of the dispute shall be binding and final. U-Haul of Inland Northwest is not relieved of any requirements of this Order during the pendency of the dispute and remains responsible for timely compliance with the terms of the Order unless otherwise provided by Ecology in writing.

5.10 Reservation of Rights/No Settlement. Ecology reserves all rights to issue additional Orders or take any action authorized by law in the event or upon the discovery of a release or threatened release of hazardous substances not addressed by this Order, upon

discovery of any factors not known at the time of issuance of this Order, in order to abate an emergency, or under any other circumstances deemed appropriate by Ecology.

Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the releases or threatened releases of hazardous substances from the U-Haul of Inland Northwest.

In the event Ecology determines that conditions at the Facility are creating, or have the potential to create, a danger to the health or welfare of the people at the Facility or in the surrounding area or to the environment, Ecology may order U-Haul of Inland Northwest to stop further implementation of this Order for such period of time as needed to abate the danger.

5.11 Transference of Property. No voluntary or involuntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Facility shall be consummated by U-Haul of Inland Northwest 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 transfer of any legal or equitable interest U-Haul of Inland Northwest may have in the Facility or any portions thereof, U-Haul of Inland Northwest shall serve a copy of this Order upon any prospective purchaser, lessee, transferee, assignee, or other successor in such interest. At least thirty (30) days prior to finalization of any transfer, U-Haul of Inland Northwest shall notify Ecology of the contemplated transfer.

5.12 Compliance with Other Applicable Laws. All actions carried out by U-Haul of Inland Northwest pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements.

VI.

Satisfaction of this Order

The provisions of this Order shall be deemed satisfied upon U-Haul of Inland Northwest receipt of written notification from Ecology that U-Haul of Inland Northwest has completed the remedial activity required by this Order, as amended by any modifications, and that all other provisions of this Order have been complied with.

VII.

Enforcement

7.1 Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

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

B. 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 Facility.

C. In the event U-Haul of Inland Northwest refuses, without sufficient cause, to comply with any term of this Order, U-Haul of Inland Northwest may be liable for:

(1) up to three times the amount of any costs incurred by the state of Washington as a result of its refusal to comply; and

(2) civil penalties of up to $25,000 per day for each day it refuses to comply.

D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

Effective date of this Order: October 11, 2001

Donald W. Abbott
Section Manager
Toxics Cleanup Program
Central Regional Office
Department of Ecology

Exhibit A

Hazardous Substances Found at

U-Haul - Yakima Valley Spray Facility

EXHIBIT A - HAZARDOUS SUBSTANCES FOUND AT U-HAUL

CONTAMINANT	Maximum in Soil* (in mg/kg)	Maximum in GW** (in ug/l)
Organochlorine Pesticides		
DDT	300.	0.41
DDD	110.	0.82
DDE	30.	-
Endosulfan 1 (alpha)	0.54	-
Endosulfan 2 (beta)	0.39	-
Endosulfan Sulfate	0.91	0.27
Alpha BHC	0.076	-
Beta BHC	2.4	0.11
Delta BHC	0.79	-
Gamma BHC (Lindane)	2.3	0.42
Heptachlor	6.5	-
Heptachlor Epoxide	0.62	-
Endrin	11.3	-
Endrin Ketone	3.3	-
Endrin Aldehyde	0.14	-
Methoxychlor	31.	-
Aldrin	150.	-
Chlordane	6.9	-
Dieldrin	37.7	-
Perthane	112.	-
Organophosphate Pesticides		
Azinphos Methyl (Guthion)	0.25	-
Ethion	180.	-
Parathion	220.	-
Methyl Parathion	0.35	-
Chlorinated Herbicides		
2,4,5-TP (Silvex)	0.85	0.19
2,4-D	0.028	0.26
Total Petroleum Hydrocarbons (TPH)		
TPH as Diesel	27,000.	70,000.
TPH as Hydraulic Oil	6,100.	-
TPH as Gasoline	26,000.	51,000.

* Maximum concentration in Soil in milligrams per kilogram
** Maximum concentration in Groundwater in micrograms per liter

Volatile Organic Compounds	soil (mg/kg)	groundwater (ug/l)
1,1-Dichloroethane	-	7.
1,2-Dichloroethene	-	6.
1,2-Dichloropropane	-	6.
2-Butanone (MEK)	1.	-
1,1,1-Trichloroethane	0.1	9.
Acetone	-	56.
Benzene	-	500.
Carbon Disulfide	1.9	49.
Carbon Tetrachloride	0.12	-
Chloroform	0.13	15.
Dichlorobromomethane	0.28	-
Ethylbenzene	31.	490.
Methylene Chloride	0.67	-
Tetrachloroethene (PCE)	4.0	34.
Trichloroethene (TCE)	0.22	9.
Toluene	2.7	88.
Total Xylenes	0.358	470.
Vinyl Chloride	0.39	-

The Volatile Organic Compounds (VOCs) below were found in U-Haul groundwaters during 1997-98 sampling using the new VOC lab analysis method 8260. They are all components of gasoline and could not be identified in the old VOC lab analysis method 8240 used above.

1,3,5 Trimethylbenzene	-	22.
1,2,4 Trimethylbenzene	-	97.
Isopropylbenzene	-	3.7
n-propylbenzene	-	16.
sec butylbenzene	-	1.7
n-butylbenzene	-	7.7
Naphthalene	-	37.
4-Isopropyltoluene	-	3.9
Metals		
Arsenic	630.	93.
Cadmium	11.	6.5
Chromium (total)	420.	160.
Copper	490.	700.
Lead	1000.	150.
Mercury	4.9	1.0
Zinc	800.	2100.

Exhibit B

Final Cleanup Action Plan

U-Haul - Yakima Valley Spray Facility

FINAL CLEANUP ACTION PLAN

U-Haul - Yakima Valley Spray
Yakima, Washington

Prepared by

Richard Bassett
Department of Ecology
(509) 454-7839

August 14, 2001

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TABLES

ATTACHMENTS

1.0 INTRODUCTION

Chapter 173-340 Washington Administrative Code (WAC), the Model Toxics Control Act (MTCA), specifies the criteria for approving cleanup at Facilities (sites) contaminated with hazardous substances. The MTCA requires that contaminated sites be investigated and Cleanup Action Plans be written and available for public review and comment prior to implementation. This draft Cleanup Action Plan (CAP) provides for site soil remediation and the monitoring of contaminated groundwater at the U-Haul Facility. Facility is defined, per 70.105D.020(4) RCW, as "... any site or area where a hazardous substance,... has been deposited, stored, disposed of, or placed, or otherwise come to be located." The facility (interchangeably called site) is located at 1108-1122 South First Street in Yakima, Washington.

Ecology has identified U-Haul of Inland Northwest (U-Haul), the current property owner, as a potentially liable person (PLP) for the site. U-Haul was named a PLP per 70.105D.040(1) RCW. To date, Ecology has not identified any other parties as PLPs.

In 1991, under Enforcement Order #91TC-C453, Ecology required that U-Haul conduct a Remedial Investigation/Feasibility Study (RI/FS) of the site. U-Haul's consultant performed the RI work and Ecology approved the RI in August 1995.

U-Haul submitted a draft FS on March 10, 1995 that identified various cleanup alternatives for the remediation of the site. Ecology provided comments to U-Haul on the draft FS in November 1995. In October 1995, the U-Haul facility was selected as a demonstration pilot project under the Washington State House Bill 1810. During the pilot project period, October 1995 through December 1996, U-Haul submitted several theoretical cleanup scenarios to Ecology for consideration. Ecology thoroughly reviewed and evaluated these submittals and found them less protective than MTCA requirements. On November 25, 1997, Ecology required U-Haul to submit the final FS by February 2, 1998. U-Haul did not submit a final FS by this date.

Ecology and U-Haul continued to correspond and meet. There was sufficient information in the draft FS, combined with meetings and U-Haul submittals after February 2, 1998, to allow Ecology to make a cleanup action decision for the site. Therefore, Ecology prepared this draft cleanup action plan without requiring completion of a final FS.

2.0 BACKGROUND

2.1 Site History

The U-Haul (Yakima Valley Spray) facility is a 3.7-acre commercial-zoned tract in south central Yakima. The property was acquired by U-Haul of Inland Northwest in 1984 and is a combination of several real estate parcels. Each of these parcels had its own commercial history. U-Haul divided the property into three parcels (parcels C, B, A; Attachment 1) to describe past ownership of each parcel and sources of historical contamination on each parcel. Brief details of the site histories of these parcels are below.

2.1.1 Parcel C. Yakima Valley Spray operated a pesticide business for 65 years, from 1909 to 1974. Sanborn Fire Insurance Maps and historic aerial photos show many large-volumed oil tanks, both within and off the property boundaries. A site history search of the U-Haul property identified a 6000-gallon aboveground perchloroethylene (PCE) tank just inside the northern boundary. This tank was operational for five years, from 1968 to 1973.

In the center of this parcel is a waste disposal pit. This pit was continually filled with waste from the pesticide manufacturing process. When full, the pit was emptied and its contents disposed of at local Yakima County dumps (now solid waste landfills). The pit is an area of concentrated contamination. The disposal pit is located adjacent to the west side of the Shell Oil Building.

2.1.2 Parcel B. This parcel occupies the center east-west third of the U-Haul property. Two bulk petroleum products distributing businesses operated on this parcel. They were the Washington Refining Company (1912-1955) and the Shell Oil Company (1955-1971). Historic aerial photographs confirm the presence of seven aboveground 50,000-gallon tanks on the property.

2.1.3 Parcel A. The Webb parcel is located in the southern third of the U-Haul property. Historically,businesses consisting of a salvage yard and farm and heavy equipment sales and service occupied this parcel. This parcel has drywells and sumps contaminated mostly with gasoline, diesel, waste oil, and lead.

2.2 Site Hydrogeology

During the site Remedial Investigation twelve monitoring wells were installed on the property and its periphery. Their purpose was to determine the site hydrogeology and groundwater quality. All are constructed to depths of 29 feet.

Monitoring results presented in the RI show that the distance to groundwater at the site varies both seasonally and spatially. The groundwater level is consistently 5-6 feet higher at U-Haul's northern boundary than its southern boundary. The lateral distance between the two boundaries is approximately 400 feet. Seasonally, groundwater level varies from approximately 13-14 feet (late summer) to approximately 18-20 feet below ground surface (late winter). Due to the irrigation influences, groundwater flow direction varies as much as ninety degrees. The summer flow direction is predominantly to the southeast while the winter flow direction is more to the south.

The shallow aquifer beneath the site is composed of alluvial gravel that was deposited by the Yakima River. It has intercalated discontinuous lenses of silt and clay. It has an estimated conductivity of at least 10^{-2} cm/sec. Horizontal groundwater flow was calculated and reported in the RI to be 345 feet/year.

2.3 Contaminants of Concern

Sixty-two (62) contaminants have been identified at the site, 49 are found in the soil and 37 in the groundwater. There are 24 contaminants common to both soil and groundwater. Table 1 shows contaminants and their occurrence in either soil or groundwater.

Table 1 - Contaminants found in soil/groundwater at U-Haul

Chlorinated Pesticides	Found Soil	Found Groundwater	Chlorinated Pesticides	Found Soil	Found Groundwater
DDT	X	X	Heptachlor	X	
DDD	X	X	Hep. Epoxide	X	
DDE	X		Endrin	X	
Endosulfan 1 (alpha)	X		Endrin Ketone	X	
Endosulfan 2 (beta)	X		Endrin Aldehyde	X	
Endosulfan SO_4	X	X	Methoxychlor	X	
Alpha BHC	X		Aldrin	X	
Beta BHC	X	X	Chlordane	X	
Delta BHC	X		Dieldrin	X	
Gamma BHC (Lindane)	X	X	Perthane	X	
Phosphate Pesticides			**Chlorinated Herbicides**		
Guthion	X		2,4,5-TP	X	X
Ethion	X		2,4-D	X	X
Parathion	X				
Methyl Parathion	X				
Volatile Organic Compounds			**Volatile Organic Compounds**		
1,1-Dichloroethane		X	Acetone		X
1,2-Dichloropropane		X	Toluene	X	X
1,1,1-TCE	X	X	Total Xylenes	X	X
2-Butanone (MEK)	X		Vinyl Chloride	X	
Carbon Disulfide	X	X	1,3,5-TMB		X
Carbon Tetrachloride	X		1,2,4-TMB		X
Benzene		X	Isopropylbenzene		X
Ethylbenzene	X	X	n-propylbenzene		X
Methylene Chloride	X		sec butylbenzene		X
Chloroform	X	X	n-butylbenzene		X
Dichlorobromomethane	X		Naphthalene		X
Tetrachloroethene	X	X	Isopropyltoluene		X
Trichloroethene	X	X	1,2-DCE		X
Total Metals			**TPH**		
Arsenic	X	X	TPH as gasoline	X	X
Cadmium	X	X	TPH as diesel	X	X
Chromium (total)	X	X	TPH as hydraulic oil	X	
Copper	X	X			
Lead	X	X			
Mercury	X	X			
Zinc	X	X			

2.3.1 Discussion of Risks. The contaminants of concern at the U-Haul site have carcinogenic and non-carcinogenic health risks associated with them. A carcinogen "means any substance or agent that produces or tends to produce cancer in humans" (WAC 173-340-200). A noncarcinogenic contaminant is toxic to various human organs. Noncarcinogenic health risks are measured and defined according to a Hazard Index. The Hazard Index is defined as "... the sum of two or more hazard quotients for multiple hazardous substances and/or multiple exposure pathways" (WAC 173-340-200).

Attachment 2 lists the contaminants, their highest concentrations in soil and/or groundwater at the site, and their calculated cancer risk and Hazard Index as determined by both U-Haul, in their draft FS, and Ecology. In determining these values and selecting contaminant cleanup levels, WAC 173-340-705, -708, -720, and -740 were used.

2.3.2 Soil Risks. The total risk calculated for soil carcinogens in Attachment 2 ranges from $3.20X10^{-3}$ (U-Haul sum) to $4.29X10^{-3}$ (Ecology sum). These numbers mean that between 320 and 429 individuals out of 100,000 might be expected to contract cancer from exposure to the site. The difference in the U-Haul and Ecology estimates is due to different input figures into the risk equations. Both U-Haul and Ecology agree that the risk associated with the site exceeds the MTCA acceptable lifetime cancer risk of 1 in 100,000 ($1.0X10^{-5}$)[WAC 173-340-705(4)].

Attachment 2 indicates that the calculated cumulative Hazard Index for the site soil ranges from 75.21 (U-Haul sum) to 114.88 (Ecology sum). Again, the difference in the U-Haul and Ecology estimates is due to different input figures into the risk equations. Both U-Haul and Ecology agree that the cumulative Hazard Index associated with the site exceed the MTCA cumulative index of 1 [WAC 173-360-705(4)].

Attachment 3 shows that three contaminants account for more than 95 percent of the soil cancer risk at the site. This was determined from highest carcinogenic risk values in Attachment 2. The contaminants posing the highest risk for cancer due to exposure to soil are: aldrin, dieldrin, and arsenic.

2.3.3 Groundwater Risks. The total calculated groundwater cancer risk (Attachment 2) ranges from $1.4X10^{-3}$ (U-Haul sum) to $2.00X10^{-3}$ (Ecology sum). Attachment 3 indicates that U-Haul and Ecology agree that arsenic and benzene account for more than 97 percent of the calculated cancer risk associated with exposure to groundwater. Both U-Haul and Ecology agree that the site risk associated with contaminated groundwater exceeds the MTCA acceptable lifetime cancer risk of 1 in 100,000 ($1X10^{-5}$).

The cumulative Hazard Index calculated for site groundwater (Attachment 2) ranges from 8.57 (U-Haul sum) to 51.3 (Ecology sum). The difference in U-Haul and Ecology estimates is due to different input figures into the risk equations. Both U-Haul and Ecology agree that the cumulative Hazard Index associated with the site groundwater exceeds the MTCA cumulative index of 1.

3.0 REGULATORY REQUIREMENTS

Regulatory requirements (WAC 173-340-360) for cleanup actions at contaminated sites are: The protection of public health and the environment through compliance with cleanup standards established in WAC 173-340-700 through 750, and compliance with applicable state and federal laws and provisions for compliance monitoring. In addition, the regulation requires permanent solutions to the maximum extent practicable, provision for a reasonable restoration time frame, and consideration of any concerns raised during public comment on the draft cleanup action plan.

3.1 Applicable State and Federal Laws

WAC 173-340-710 requires that cleanup actions comply with "all relevant and applicable regulations" (ARARs). ARARs will be established prior to implementation of the CAP. Ecology shall issue a threshold SEPA determination with this draft CAP.

Prior to implementation of the CAP, any required construction and demolition permits must be determined and obtained. To avoid delays, they shall be obtained at least two weeks before site cleanup action [WAC 173-340-400(6)]. Ecology will be notified in the Work Plan of the permits not covered by the MTCA permit exemption.

3.2 Protection of Public Health and the Environment

Site specific data collected during the RI/FS indicates that there were area homes and businesses downgradient from the U-Haul facility that used the shallow groundwater aquifer for a drinking water source and other needs. As a result of this and other Yakima Railroad contaminated sites, Ecology provided a remedial action grant to the Cities of Yakima and Union Gap to provide safe drinking water. Businesses were notified, and private homes that requested a safe drinking water source were provided with city water through the installation of new water mains and home hookups.

The area groundwater remains a potential source of drinking water. Groundwater cleanup standards to the concentrations consistent with MTCA Method A, MTCA Method B, and WAC 173-340-720(1)(a) will be met by contaminated soil removal actions and by bioventing. A minimum five-year groundwater monitored program will verify the effectiveness of the soil/source removal.

3.3 Cleanup Standards

Cleanup standards are a combination of cleanup levels which protect public health and the environment and points of compliance (locations where these cleanup levels must be attained). These standards are established in accordance with WAC 173-340-700 through 760.

Cleanup standards are identified for the particular hazardous substances at a site and the specific areas or pathways where humans and the environment can become exposed to these substances [WAC 173-340-700(2)(a)]. Contaminants of concern are identified in Table 1 and Attachments 2 and 3. Exposure pathways identified in the RI, draft FS, and by Ecology include:

a. direct contact with contaminated soils to the general public and workers at or near the facility;
b. soil ingestion;
c. drinking and/or washing from groundwater from wells located downgradient from the facility and;
d. breathing or contact with the fumes, vapors, and dust that emanate from the site.

3.4 Soil Cleanup Levels (Indicator Hazardous Substances)

There are 62 contaminants found in the soil and groundwater at the site (Table 1). Because of this, Ecology has selected nine (9) indicator hazardous substances to represent and control the cleanup of the entire site. The MTCA Regulation defines indicator hazardous substances as, "... the subset of hazardous substances present at a site selected under WAC 173-340-708(2) for monitoring and analysis during any phase of remedial action for the purpose of characterizing the site or establishing cleanup requirements for that site". Attachment 4 provides a detailed methodology [WAC 173-340-708(2)] for the selection of indicator hazardous substances and specific reasons for each selection. The nine (9) indicator hazardous substances chosen by Ecology for the U-Haul site are shown in Table 2.

Table 2 - U-Haul Indicator Hazardous Substances with Soil Cleanup Levels, milligrams per kilogram (mg/kg)

Contaminant	Cleanup Level (mg/kg)	MTCA Method
DDT	2.94	B
Aldrin	0.0588	B
Dieldrin	0.0625	B
Beta BHC	0.556	B
Gamma BHC (Lindane)	0.769	B
Arsenic	20.0	A
PCE	0.02	Site Specific
TPH(gas)	1500.0	Site Specific
TPH(diesel)	3500.0	Site Specific

There are three exceptions to the established MTCA soil cleanup levels. (1) PCE (perchloroethylene). PCE's site-specific soil cleanup level at the U-Haul site will be 0.02 mg/kg. This site-specific soil cleanup level is more stringent than the MTCA Method A soil cleanup level (0.50 mg/kg). The site-specific PCE cleanup level was developed by Ecology based on other contaminated PCE sites within the Yakima Railroad Area. This cleanup level is consistent with all other PCE contaminated site cleanups in the Yakima Railroad Area; (2) TPH gasoline and; (3) TPH diesel. Ecology accepted the U-Haul's conclusion (May 20, 1999 submittal, ThermoRetec) that Residual Saturation Values for gasoline and diesel, as determined by soil type, would comply with acceptable health risk levels and Ecology's 1998 Interim TPH Policy. Therefore, the U-Haul soil cleanup levels for TPH gasoline and TPH diesel will be 1500 mg/kg and 3500 mg/kg, respectively.

3.5 Points of Compliance

a. Soil. "For soil cleanup levels based on the protection of groundwater, the point of compliance shall be established in the soils throughout the site." [WAC 173-340-740(6)(b)].

b. Groundwater. Twelve monitoring wells have been installed on the facility periphery to measure groundwater contamination and its potential to migrate towards off-site receptors. The additional five new wells will be installed and monitored by U-Haul after cleanup and backfill.

The groundwater point of compliance shall be "... as close as practicable to the source of hazardous substances not to exceed the property boundary" [WAC 173-340-720(6)(c)].

4.0 SELECTION OF CLEANUP ACTIONS

The Model Toxics Control Act specifies (1) the criteria for approving cleanup actions, (2) the order of preference for cleanup technologies, (3) policies for permanent solutions, (4) the application of these criteria to particular situations, and (5) the process for making these decisions [WAC 173-340-360(1)(a)].

Cleanup technologies at state contaminated sites are prioritized to minimize the amount of untreated hazardous substances remaining at a site. The priority of treating hazardous substances are, in descending order of preference: (1) reuse or recycling, (2) destruction or detoxification, (3) immobilization, (4) disposal, (5) isolation or containment, (6) institutional controls and monitoring.

4.1 Feasibility Study Cleanup Alternatives

The draft Feasibility Study presented 42 technology combinations for soil and groundwater cleanup. From these 42 alternatives U-Haul proposed 9 for discussion (Table 6-4; Feasibility Report, RETEC, March/1995). Below is a discussion of the 9 alternatives together with Ecology's assessment of the protectiveness of each alternative.

- Alternative 42 – No action alternative. This option is not acceptable since it is not protective.

- Alternative 41 – This alternative contains institutional controls only with no cleanup. U-Haul described this option as providing only low protection for human health and the environment. Ecology agrees with this assessment.

- Alternative 35C – This is U-Haul's preferred alternative. This alternative includes off-site disposal of 2,000-3,400 cubic yards of contaminated soil, soil bioventing, groundwater air sparging, longterm groundwater monitoring, and an asphalt cap. U-Haul also asks the State to designate the waste as a 'State Special Waste' (see Section 4.2).

Ecology finds this alternative inadequate for site cleanup for the following reasons:

1. It uses industrial cleanup values (MTCA Method C) for a commercial-zoned site where MTCA Method B and MTCA Method A cleanup levels are applicable;
2. This alternative addresses a maximum removal of 3,400 cubic yards. U-Haul's own estimate of on-site contaminated soils is 51,000 cubic yards. The 3,400 yards would not address the entire site.

- Alternative 38C – This alternative is similar to alternative 35C except that it would involve disposal of 3,400 cubic yards if designated a 'State Dangerous Waste'. This alternative is not protective for the same reasons as alternative 35C.

- Alternative 26C – This cleanup alternative is similar to 35C and 38C in terms of the proposed cleanup levels and volumes of soil removal. It is different in that it uses on-site thermal desorption as a remediation method instead of an off-site disposal method. This alternative is not protective for the same reasons as alternative 35C.

- Alternatives 17B, 15B, 5B, and 16T. These alternatives all increase the off-site disposal volume of contaminated soils. They use a variety of remediation measures. Alternatives 17B, 15B, and 5B address volumes of 15,000-25,000 cubic yards. Alternative 16T addresses a volume of 30,000-51,000 cubic yards. These and other U-Haul alternatives are summarized in Attachment 5. The details of the proposed cleanup decision chosen by Ecology are set forth in section 4.2.

4.2 Cleanup Alternative Selected by Ecology

Ecology has selected a modified version of alternative 17B as the cleanup action. This alternative includes excavation, screening, disposal, and bioventing. These technologies are applicable for site remediation and comply with the requirements of Chapter 173-340 WAC. In addition, the technologies provide solutions as directed by WAC 173-340-360(5).

In alternative 17B U-Haul requested that Ecology designate the waste from the entire site as a State Special Waste. Ecology believes that some of the contaminated soil at the site might designate as a Dangerous Waste per Chapter 173-303 WAC. If the soil does designate as a Dangerous Waste, it could not be designated as a State Special Waste. Further, it is U-Haul's responsibility to properly designate the soil and submit this to Ecology for review.

In addition, before waste designation occurs, the excavated site soil contaminants must be sampled and characterized in accordance with Chapter 173-303 WAC. If the wastes from the site designate as a Dangerous Waste, they must be disposed of in accordance with Chapter 173-303 WAC.

The disposal 'pit' area will be excavated to the seasonal low groundwater level, or about 18-20 feet below ground surface. For the rest of the site, with the exception of TPH contaminated areas (see

next paragraph), excavation will be to five (5) feet.

For site areas of exclusively high TPH concentrations, excavation will be to a minimum depth of five feet or the concentration levels of Table 3, whichever is deeper. At the TPH concentration levels of Table 3, U-Haul will have the option of either continuing to excavate or to biovent until the compliance cleanup levels of Table 2 or Table 3 are attained.

Following backfill and replacement and new monitoring well installation, a five-year groundwater monitored program will be implemented. At the same time institutional controls will be implemented. Institutional controls will include a deed restriction (Section 5.5) prepared and filed by U-Haul.

5.0 WORK TO BE PERFORMED

5.1 Soil Excavation. Areas to be excavated at the U-Haul site include all areas where soil contaminant concentrations exceed the cleanup levels of Table 2. This includes contaminated soils on the U-Haul property and adjoining properties to the west and north. Below are contaminated soils that will be encountered.

a. Mixed (all contaminants) soils. These soils are common in the northwest quarter of the property, especially the historic Yakima Valley Spray disposal 'pit'. This pit was described in a March 17, 1992 deposition (Mr. Sid Martin; p. 71) as up to 100 feet in diameter.

   Contaminated soils extend laterally and vertically from this pit. The more mobile contaminants in the disposal pit are found deeper (to 18-20 feet) in the soil profile, and in groundwater. The disposal pit will be extensively excavated to the cleanup levels of Table 2.

b. TPH (gasoline/diesel/hydraulic oil/waste oil) contaminated soils. TPH contaminated soils are ubiquitous to the entire site. The greatest accumulations of high-concentration TPH contamination occur (1) where historic YVS tanks were either buried or above ground, (2) near the historic seven 50,000-gallon Shell oil tanks, and (3) in the drywells and sumps of the Webb property.

   Excavation of all contaminated soils will be to a minimum of five feet or deeper until the cleanup levels of Table 3 (gasoline, 15,675 mg/kg; diesel, 14,950 mg/kg) are attained. When these cleanup levels (Table 3) are met, excavation may continue, or alternatively, the remaining contaminated soils may be biovented until TPH gasoline and TPH diesel (hydraulic/waste oils also) fractions reach the cleanup levels of 1,500 mg/kg and 3,500 mg/kg, respectively.

Table 3 – U-Haul TPH Soil Cleanup Levels, milligrams per kilogram (mg/kg)

TPH Contaminant	Minimum TPH Levels Required Before Using Option to Biovent	Cleanup Level TPH Values Left After Excavation/Bioventing
Gasoline	15,675 mg/kg or less	1,500 mg/kg
Diesel	14,950 mg/kg or less	3,500 mg/kg
Hydraulic or Waste Oils	14,950 mg/kg or less	3,500 mg/kg

c. Pure Product. These wastes are to be expected at the U-Haul site because they have been found at other Yakima pesticide cleanup sites. RCRA listed wastes are pure product, and if encountered at the site will be disposed of at a permitted RCRA facility. Further, if pure product is encountered, the Ecology site manager will be notified within 12 hours.

d. Perchloroethylene (PCE) contaminated soil. PCE is the contaminant of concern for the six square mile Yakima Railroad Area (YRRA) cleanup. U-Haul of Inland Northwest is within the YRRA and has been named a Potentially Liable Person (PLP) for the cleanup of PCE at the U-Haul site.

During the site Remedial Investigation PCE was found in U-Haul property soils at all depths. Concentrations up to 4 mg/kg were found. The contaminant was also found in soils of properties to the west and north immediately adjoining U-Haul.

U-Haul is responsible for the cleanup of all PCE soil contamination on its property and on the adjoining properties. The cleanup level for PCE is 0.02 mg/kg (Table 2). This cleanup level concentration is consistent with and is required at all Yakima Railroad Area sites.

The presence of PCE on adjoining property soils attributable to the Yakima Valley Spray operations has been questioned by U-Haul. The RI shows that the distribution of DDT was a part of the Yakima Valley Spray formulation operations. DDT and PCE contamination is similar at the U-Haul site. Based on this information, U-Haul will be responsible for PCE soil cleanup on adjoining properties to the cleanup level of 0.02 mg/kg in any area where DDT concentrations are equal to or exceed 2.94 mg/kg (Table 2). The PCE cleanup level on adjoining properties will be tied only to the cleanup level of DDT. The nine other Table 2 indicator hazardous substances cleanup levels will remain the same on the adjoining properties.

5.1.1 Excavation. Disposal pit excavation will be planned so that excavation reaches its deepest (18-20 feet) during low groundwater (February to mid-April). If complete excavation is not accomplished in year 2002, the site will be safely secured for renewed excavation for the next year's low groundwater. Pit excavation will then resume until low groundwater is reached and cleanup levels established in Table 2 are attained.

5.1.2 Soil Screening. Excavated soils whose contamination exceeds cleanup levels in Table 2 and are less than 1.0 inch in diameter will be designated under WAC 173-303 and disposed of at an appropriate licensed facility.

Contaminated soils equal to or greater than 1.0 inch in diameter may either be disposed of at an offsite permitted facility or, they may be screened (more than 1.0 inch) for backfill if sampling analyses indicate the contaminant levels are less than Table 2.

Another excavation issue is unearthed concrete slabs. The slabs may be heavily contaminated. If the analyses of the slabs show contamination less than Table 2, they may be used as backfill.

5.1.3 Site Buildings. Soil contamination is present under two site buildings, the Shell Oil building and the Webb building (RI file). The Shell Oil building is located at the eastern end of the former Yakima Valley Spray disposal pit. The Webb building is located south of the former seven 50,000-gallon aboveground tanks used by Washington Refining, Shell Oil, and Yakima Valley Spray.

Contaminated soil next to and under the site buildings will be remediated. Demolished buildings and floors will be sampled and characterized for hazardous substances. If the buildings and floor(s) contain contaminants above established cleanup levels of Table 2, they will be disposed of at an appropriate permitted waste disposal facility.

Bioventing will be implemented for TPH contamination under any building floor(s) left in place. For nonTPH contaminants under floor(s) that are above the cleanup levels of Table 2, the floor(s) will act as containment as long as their integrity is maintained. The floor(s) integrity will be annually inspected and maintained until floor demolition takes place. At that time the nonTPH contaminants under the floor(s) will be addressed to the cleanup levels of that time.

If either of the two buildings (Shell, Webb) or their floors are left standing during excavation, then their foundations will require structural support. If structural support is used, then all Federal and State regulations (WAC 296-155 is one) that involve building shoring support will be addressed.

5.1.4 BNSF Railroad Tracks. Soil contamination extends beyond the U-Haul property boundary to the west and north and the existing BNSF spur tracks in those directions (RI file). Soil contamination greater than the cleanup levels in Table 2 from the property boundaries to the offset zone (integrity zone to the east of the centerline of the first set of active north-south tracks, and to the south of the unused north track centerline) will be remediated by excavation. Within the off-set zones, TPH and PCE contaminated soils greater than the cleanup levels in Table 2 will be remediated by bioventing. The first pair of active tracks to the west of the U-Haul property boundary are the north-south tracks to the concrete batch plant south of the U-Haul property.

Good communication between U-Haul and the BNSF is essential. U-Haul will coordinate with the BNSF to resolve access, safety, construction, rail-line excavation off-set locations, vehicle traffic, stockpiling, and bioventing construction and timing issues. All issues will be addressed

in the draft and final Work Plans.

5.1.5 Shanno Ditch/Sewer Line/Utilities. The Shanno Ditch may be encountered during excavation in the southeastern third of the property. An operating eight-inch sewer line will be encountered during the excavation of the disposal pit area (Attachment 1). And, a 5- or 6-foot diameter buried concrete irrigation ditch may be encountered next to the west edge of the Shell Oil building (Mr. Sid Martin 07/17/90 deposition, page 56).

Rerouting and reinstallation planning of ditches and utilities will be addressed in the Work Plan. Contamination around and under these structures will be excavated, especially in the 'disposal pit' area. U-Haul is responsible for the permanence, structural integrity, and repair of these on-site structures.

5.1.6 Soil Stockpiling and Cleanup Logistics. The Work Plan will address site staging, soil screening, and the stockpiling of contaminated and treated soils. The Plan must address how these activities will not adversely affect vehicle or pedestrian traffic, or adjacent businesses. Runoff control from rain or snowmelt will be addressed in the Plan. The Plan will include the logistics for truck or railcar loading, turnarounds, and heavy truck traffic entering and exiting the site.

5.1.7 Backfill. Excavated pits, or parts thereof, will not be backfilled until the results of confirmational sampling have been reviewed and analyzed by Ecology. In the Yakima Valley disposal pit, backfill in the surface to five-foot depth and below twelve feet in depth (high groundwater) shall be analyzed to ensure it contains no hazardous substances exceeding MTCA method A or B cleanup levels. Backfill placed between five and twelve feet below ground surface may have contaminant concentrations between method B and method C Commercial cleanup levels. In TPH excavations, backfill will not contain hazardous substances that exceed MTCA method A or B cleanup levels. The Work Plan will address the compaction and analytical testing of the backfill.

Relic concrete floors and walls may be encountered during excavation. These concrete slabs may be used for backfill if, after sampling and analysis, they are found to contain contamination less than MTCA cleanup standards. To minimize subsurface voids and slumping, slabs will be broken into pieces no larger than one foot in diameter.

5.1.8 Bioventing. An engineering plan that addresses bioventing and in compliance with WAC 173-340-400(4)(a) will be included in U-Haul's Work Plan. It will address depth, spacing, emission controls, performance monitoring and other parameters affecting bioventing installation, operation and monitoring.

Bioventing will be implemented for TPH remediation in areas that were not fully excavated to the compliance cleanup levels of Table 2. Following backfill and monitoring well construction, quarterly submittals of bioventing data and analyses will be submitted to Ecology. They will be submitted to Ecology with the quarterly groundwater monitoring analyses. Site bioventing will continue throughout the remediation process (after June 1, 2002) until the compliance cleanup levels of Table 2 are met.

The Bioventing system will be installed, tested, and operational by final backfill, or June 1, 2002. Bioventing as-builts will be required and must be submitted to Ecology by July 1, 2002 (Attachment 6).

5.2 Groundwater

5.2.1 Replacement monitoring wells. To minimize monitoring well loss, all existing monitoring wells will be flagged prior to site activities. During site excavation Monitoring Well 7 (MW-7) may have to be abandoned and destroyed. Likewise, other existing monitoring wells may be destroyed during excavation. Replacement wells will be required for all destroyed wells and will be installed within 30 days after final backfill (Attachment 6). Replacement wells will be installed as close to the original well location as possible. Replacement wells are in addition to the five new monitoring wells.

5.2.2 Five new downgradient monitoring wells. Within 30 days after final pit backfill, or by June 1, 2002, five new monitoring wells will be installed and developed downgradient from the Yakima Valley Spray disposal pit (Attachment 6). Three of the new wells will be shallow (29 feet). The remaining two new wells will be developed deeper, one to 60 feet and one to 90 feet. The two deeper wells are consistent with other deep monitoring wells in the Yakima Railroad Area. The five new monitoring well locations will be determined in consultation with Ecology.

5.2.3 As-builts. As-builts of all site groundwater monitoring wells will be required and will be submitted to Ecology by July 1, 2002 (Attachment 6).

5.3 Sampling and Analysis Plan

The Work Plan will contain a Sampling and Analysis Plan in compliance with WAC 173-340-410, -820, -830, and -840 that address soil, groundwater, and air analyses.

5.4 Engineering Controls

5.4.1 Containment of Site Pollutants. Between 80-120 people, depending on season, work within 150 yards of the site. The Work Plan will address all potential site releases. Contaminant releases during active remediation include, but are not limited to; site excavation, building demolition, equipment use, access construction and grading, heavy truck traffic, soil screening and stockpiling, and backfill.

Methods to minimize all releases will be developed in the Work Plan and will be implemented during active and passive remediation site activities.

Air Releases. As part of the Work Plan, U-Haul will develop air quality standards WAC 173-340-750 in cooperation with the Yakima County Clean Air Authority for on-site and off-site workers and the general public. Standards will be based on human health risks from toxic releases. Local weather factors will be considered.

Airborne releases will occur during active remediation and passive remediation (bioventing). These releases must be detected, measured, evaluated and, if a human health risk to cleanup workers or workers at local businesses, controlled at the site. An air monitoring system will be installed and operational prior to any site work. Samples of ambient air quality will be taken and analyzed prior to any site work.

Liquid Releases. The Work Plan will address stormwater management. This includes surface flow into excavations or off-site runoff. The Work Plan will include procedures to secure the site in the event of extended inclement weather or site shutdown of periods longer than one week.

On-site Storage. Drums of contaminated monitoring well purge water are presently located inside the Shell Oil building. They will be characterized and properly disposed of to a permitted facility. All newly created wastes will be characterized, contained as necessary, and disposed of to a permitted facility.

5.4.2 Surface Cap. The Work Plan will address the surface cap. After final backfill, a surface cap will be installed to the pre-existing grade. Compaction of the surface cap will be addressed. The cap will require an annual inspection and maintenance as long as U-Haul is required to sample monitoring wells.

5.5 Institutional Controls

Institutional controls will be established and implemented for the facility. The controls will include a deed restriction prepared and filed by U-Haul. The deed restriction will prohibit future site use that may endanger the public. It will restrict the site to commercial-zoned uses. This deed restriction will require additional soil cleanup or removal if, at any time during the life of the site, there is construction that exposes any contaminated soils. Also, the deed restriction will restrict future use of the site groundwater that may be withdrawn from it.

5.6 Periodic Review

5.6.1 Remediation prior to June 1, 2002. From the beginning of excavation to the installation of the last monitoring well or June 1, 2002, whichever is sooner, U-Haul will submit regular monthly cleanup progress reports to Ecology. These reports will be available for public review at the Yakima Department of Ecology office.

5.6.2 Long-term Compliance Monitoring after June 1, 2002. U-Haul will submit reports to Ecology that include quarterly groundwater monitoring analyses and quarterly bioventing analyses in accordance with WAC 173-340-410(1)(c). The purpose of these reports is to review site cleanup action and to assure that human health and the environment are being protected (WAC 173-340-420). The quarterly Groundwater Monitoring Program and Bioventing Program sampling will begin no later than September 1, 2002 (Attachment 6). Groundwater and bioventing sampling analyses will be submitted to Ecology within 30 days of site sampling. These reports will be available for public review at the Yakima Department of Ecology office.

6.0 RESTORATION TIMEFRAME

Soil excavation and disposal is expected to start in February 2002 and will continue through the low groundwater period of February to mid-April. Attachment 6 is a schedule that U-Haul will meet. Any deviation from this schedule must be requested in writing with the appropriate justification and postmarked to Ecology ten (10) days prior to that timeline. Approval or disapproval by Ecology of these requests will be in writing.

Remediation completion (completed excavation/backfill, installed engineered cap, all monitoring wells installed and developed, all institutional controls in place) is anticipated by June 1, 2002. The only site work not completed by this date will be the scheduled five-year groundwater monitoring sampling program and the bioventing program. The bioventing system will be installed and operational by June 1, 2002.

7.0 PUBLIC COMMENT

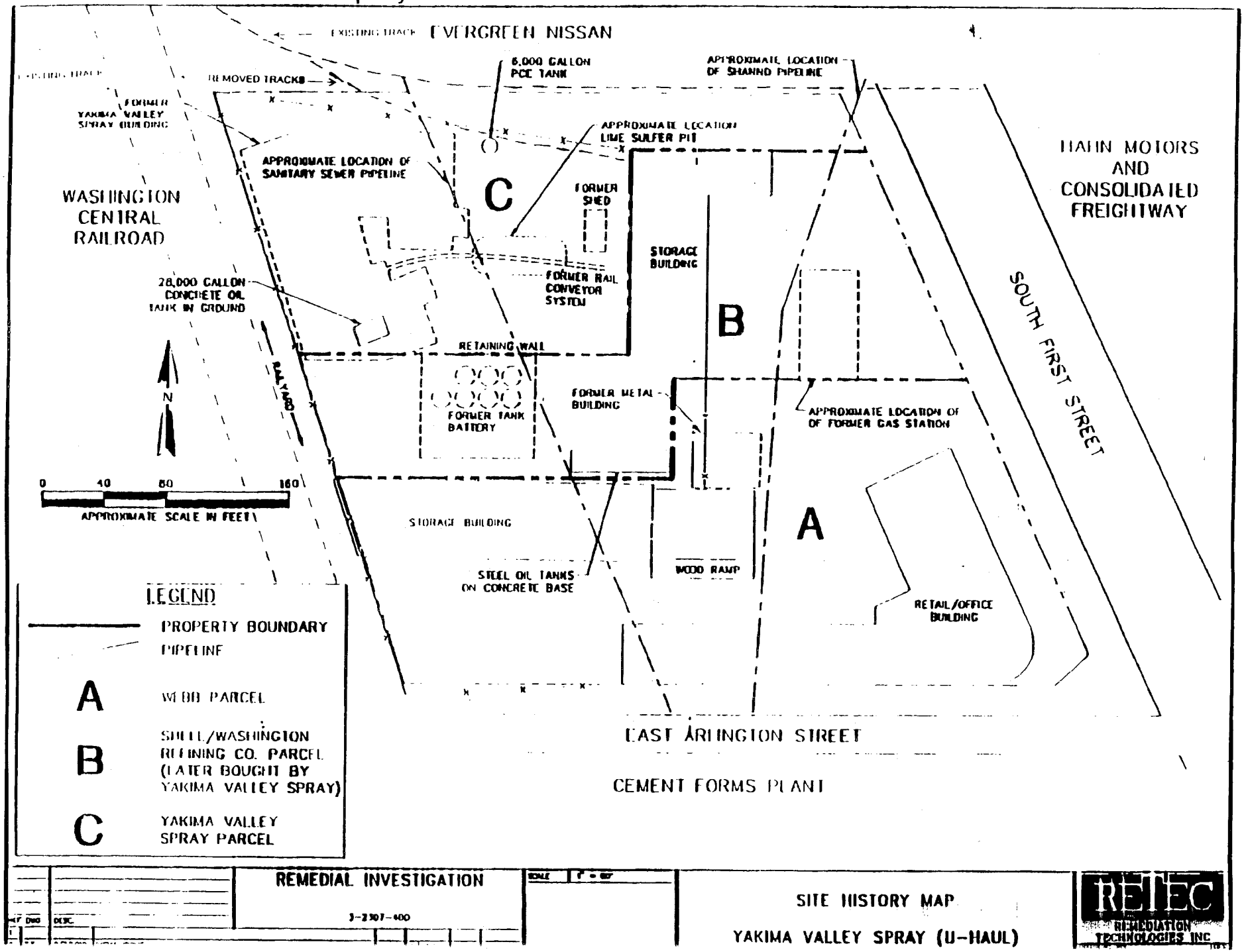
This draft Cleanup Action Plan document is available for public comment from July 8, 2001 through August 7, 2001. Comments will be directed to the U-Haul site manager at the Department of Ecology. Comments will be incorporated into the final Cleanup Action Plan as deemed appropriate by Ecology and as required in WAC 173-340-600(13).

The Cleanup Action Plan will be available at the Yakima Valley Regional Library and the Department of Ecology files for a thirty (30) day period from July 8, 2001 through August 7, 2001. This availability is published in a legal advertisement in the Yakima-Herald Republic daily newspaper.

Fact sheets have been sent to concerned citizens and local governmental agencies.

ATTACHMENT 1

U-Haul Property Parcels and Historical Structures Prior to 1971



REMEDIAL INVESTIGATION

SITE HISTORY MAP

YAKIMA VALLEY SPRAY (U-HAUL)

RETEC REMEDIATION TECHNOLOGIES INC

ATTACHMENT 2
Hazardous Substance Risks at the U-Haul Facility

	CHEMICAL	Soil High Conc (mg/kg)*	GW High Conc (ug/kg)*	CARCINOGENIC RISKS SOIL U-HAUL	CARCINOGENIC RISKS SOIL ECOLOGY	CARCINOGENIC RISKS GROUNDWATER U-HAUL	CARCINOGENIC RISKS GROUNDWATER ECOLOGY	HAZARD INDEX SOIL U-HAUL	HAZARD INDEX SOIL ECOLOGY	HAZARD INDEX GROUNDWATER U-HAUL	HAZARD INDEX GROUNDWATER ECOLOGY
Chlorine Pesticides	DDT	300	0.41	2.74E-06	1.02E-04	1.06E-06	1.59E-06	0.2	7.5	0.02	0.1025
	DDD	110	0.82	5.66E-07	2.64E-05	1.54E-05	4.50E-06				
	DDE	30	-	3.52E-07	1.02E-06						
	Endosulfan 1 (alpha)	0.54	-						0.0002		
	Endosulfan 2 (beta)	0.39	-						0.0163		
	Endosulfan Sulfate	0.91	0.27						0.0001		0.0003
	Alpha BHC	0.076	-	4.59E-07	4.79E-07				0.0001		
	Beta BHC	2.4	0.11	4.14E-06	4.32E-06	1.55E-06	2.26E-06				
	Delta BHC	0.79	-						0.3292		
	Gamma BHC (Lindane)	2.3	0.42	2.87E-06	2.99E-06	4.27E-06	1.25E-05	0.09		0.03	0.0001
	Heptachlor	6.5	-	2.80E-05	2.93E-05			0.16	0.1625		
	Heptachlor Epoxide	0.62	-	5.41E-06	5.64E-06			0.57			
	Endrin	11.3	-					0.4			
	Endrin Ketone	3.3	-								
	Endrin Aldehyde	0.14	-								
	Methoxychlor	31	-					0.07	0.0775		
	Aldrin	150	-	2.45E-03	2.55E-03			59.93	62.5		
	Chlordane	6.9	-	4.36E-06	8.97E-06			0.42	1.4375		
	Dieldrin	37.7	-	5.78E-04	6.03E-04			4.52	9.425		
	Perthane	112	-	3.11E-08	3.70E-08			0.43	0.4667		
Phosphate Pesticides	Azinphos Methyl (Guthion)	0.25	-								
	Ethion	180	-					4.32	4.5		
	Parathion	220	-					0.44	0.4583		
	Methyl Parathion	0.35	-					0.01	0.0175		
Chlorine Herbicides	2,4,5-TP (Silvex)	0.85	0.19						0.0013	0.46	0.003
	2,4-D	0.028	0.26							0.51	0.0033
Metals	Arsenic	630	93	1.09E-04	9.45E-04	1.27E-03	1.59E-03	2.59	26.25	6.07	38.75
	Cadmium	11	6.5	6.43E-05				0.13	0.275		1.625
	Chromium (total)	420	160					0.08	1.05	0.63	4
	Copper	490	700					0.02	0.1655	0.37	2.3649
	Lead	1000	150								
	Mercury	4.9	1					0.2	0.2042	0.13	0.4167
	Zinc	800	2100					0.01	0.0333	0.14	0.875

ATTACHMENT 2
Hazardous Substance Risks at the U-Haul Facility

	CHEMICAL	Soil High Conc (mg/kg)*	GW High Conc (ug/kg)*	CARCINOGENIC RISKS SOIL U-HAUL	CARCINOGENIC RISKS SOIL ECOLOGY	CARCINOGENIC RISKS GROUNDWATER U-HAUL	CARCINOGENIC RISKS GROUNDWATER ECOLOGY	HAZARD INDEX SOIL U-HAUL	HAZARD INDEX SOIL ECOLOGY	HAZARD INDEX GROUNDWATER U-HAUL	HAZARD INDEX GROUNDWATER ECOLOGY
Volatile Organic Compounds (VOCs)	1,1-Dichloroethane	-	7								0.0175
	1,2-Dichloroethene	-	6							0.01	
	1,2-Dichloropropane	-	6			3.19E-06	9.33E-06				
	2-Butanone (MEK)	1	-								0.0038
	1,1,1-Trichloroethane	0.1	9								
	Acetone	-	56							0.01	0.14
	Benzene	-	500			1.14E-04	3.31E-04				
	Carbon Disulfide	1.9	49						0.0002	0.01	0.1225
	Carbon Tetrachloride	0.12	-		1.56E-08				0.0021		
	Chloroform	0.13	15	7.60E-10	7.93E-10	1.43E-07	2.09E-06		0.0002	0.01	0.375
	Dichlorobromomethane	0.28	-		1.74E-08				0.0002		
	Ethylbenzene	31	490						0.0039	0.1	1.225
	Methylene Chloride	0.67	-	4.82E-09	5.03E-09				0.0001		
	Tetrachloroethene (PCE)	4	34	1.99E-07	2.04E-07	1.10E-05	3.96E-05		0.005	0.05	0.85
	Trichloroethene (TCE)	0.22	9	2.74E-10	2.42E-09	5.34E-07	2.26E-06			0.02	
	Toluene	2.7	88						0.0002	0.01	0.11
	Total Xylenes	0.358	470								0.0588
	Vinyl Chloride	0.39	-	7.11E-07	7.41E-07						
	1,3,5 Trimethylbenzene	-	22								
	1,2,4 Trimethylbenzene	-	97								
	Isopropylbenzene	-	3.7								0.0116
	n-propylbenzene	-	16								
	sec butylbenzene	-	1.7								
	n-butylbenzene	-	7.7								
	phthalene	-	37								0.2313
	4-Isopropyltoluene	-	3.9								
Total Petroleum Hydrocarbons (TPH)	TPH as Diesel	27000	70000								
	TPH as Hydraulic Oil	6100	-								
	TPH as Gasoline	26000	51000								
	TOTALS			3.20E-03	4.29E-03	1.40E-03	2.00E-03	75.21	114.8821	8.57	51.3
				3.20×10^{-3}	4.29×10^{-3}	1.40×10^{-3}	2.00×10^{-3}				
				320/100,000	429/100,000	140/100,000	200/100,000				

* mg/kg - milligrams per kilogram; ug/kg - micrograms per kilogram

ATTACHMENT 3 - PREDOMINANT RISK CONTAMINANTS AT THE U-HAUL FACILITY*

	CANCER RISKS				HAZARD INDICES			
	SOIL		GROUNDWATER		SOIL		GROUNDWATER	
CLARC II Ecology (1996)	(1) Aldrin (59.4%)		(1) Arsenic (79.7%)		(1) Aldrin (54.4%)		(1) Arsenic (75.6%)	
	(2) Arsenic (22.0%)		(2) Benzene (16.6%)		(2) Arsenic (22.8%)		(2) Chromium (7.8%)	
	(3) Dieldrin (14.1%)		(3) PCE (2.0%)		(3) Dieldrin (8.2%)		(3) Copper (4.6%)	
Total of Risk Represented at the Facility		95.5%		98.3%		85.4%		88.0%
U-Haul Submittal (1993)	(1) Aldrin (75.3%)		(1) Arsenic (89.4%)		(1) Aldrin (79.7%)		(1) Arsenic (70.8%)	
	(2) Dieldrin (17.8%)		(2) Benzene (8.0%)		(2) Dieldrin (6.0%)		(2) Chromium (7.3%)	
	(3) Arsenic (3.4%)		(3) DDD (1.1%)		(3) Ethion (5.7%)		(3) 2,4-D (5.9%)	
Total of Risk Represented at the Facility		96.5%		98.5%		91.4%		84.0%

* Both the CLARC II (Ecology) and the U-Haul risk comparisons (from Attachment 2) are based on incidental ingestion of surface soils and groundwater. In both comparisons, neither cancer risk or the hazard indices evaluate real or potential risks from lead or the hydrocarbons (gasoline, diesel, hydraulic, waste oil). Lead and the hydrocarbons are suspected carcinogens and are very common contaminants at the U-Haul Facility.

ATTACHMENT 4 - METHODOLOGY AND SELECTION OF SOIL INDICATOR HAZARDOUS SUBSTANCES AT THE U-HAUL FACILITY [MTCA 173-340-708(2)]

When selecting 'indicator hazardous substances' MTCA requires:

"(2) Selection of indicator hazardous substances.

(a) When defining cleanup requirements at a site that is contaminated with a large number of hazardous substances, the department may eliminate from consideration those hazardous substances that contribute a small percentage of the overall threat to human health and the environment. The remaining hazardous substances shall serve as indicator hazardous substances for purposes of defining site cleanup requirements.

(b) If the department considers this approach appropriate for a particular site, the factors evaluated when eliminating individual hazardous substances from further consideration shall include:

(i) The toxicological characteristics of the hazardous substance which govern its tendency to persist in the environment;

(ii) The chemical and physical characteristics of the hazardous substances which govern its tendency to persist in the environment;

(iii) The chemical and physical characteristics of the hazardous substances which govern its tendency to move into and through the environmental media;

(iv) The natural background concentrations of the hazardous substance;

(v) The thoroughness of testing for the hazardous substance at the site;

(vi) The frequency that the hazardous substance has been detected at the site; and

(vii) Degradation by-products of the hazardous substance."

U-Haul Facility Indicator Hazardous Substances and their selection rationale:

Indicator Hazardous Substance	Rationale
Arsenic	Metal is toxic, persistent, carcinogenic, wide distribution at site.*
Aldrin	Pesticide is toxic, most common carcinogen at facility.*
Dieldrin	Pesticide is toxic, 2nd most common carcinogen at facility.*
DDT	Pesticide is toxic, carcinogenic, has daughter products, common to site.
Beta BHC	Pesticide is toxic, carcinogenic, common to Yakima Valley 'Pit'.
Gamma BHC (Lindane)	Pesticide is toxic, carcinogenic, common to Yakima Valley 'Pit'.
PCE	VOC** is toxic, carcinogenic, found in facility soil and groundwater.
TPH (Gasoline)	Wide contamination in the facility soil and groundwater.
TPH (Diesel)	Wide contamination in the facility soil and groundwater.

* see Attachment 3

** volatile organic compound

ATTACHMENT 5 - PROPOSED CLEANUP METHODS AND TECHNICAL BACKGROUND DATA AS SUBMITTED BY U-HAUL

METHOD #	CLASSES OF* CONTAMINANTS	CLEANUP LEVELS SUGGESTED BY U-HAUL*	EXCAVATION TREATMENT ON-SITE*	EXCAVATION DISPOSAL OFF-SITE*	OTHER REMEDIATION PLANNED**	IMPLEMENT-ABILITY	TIME INVOLVED	COST (MILLION)	COMMENT
42	Pest/Metals TPHD/TPHG VOCs	No Cleanup	NONE	NONE	Nothing	easy	xxxxxxxx	0	No Action Alternative
41	Pest/Metals TPHD/TPHG VOCs	No Cleanup	NONE	NONE	(a), (b), (f), (g)	easy	xxxxxxxx	0.6M	Institutional Controls and Groundwater
35C	Pest/Metals TPHD/TPHG VOCs	Method C – MTCA 1800/900 ppm MCL or 100X Meth. B	NONE	YES 2-3.4K yds^3	(a), (c), (e), (f)	very high; no problems	within 3 years	1.6M	Ecology desig. as State special waste
38C	Pest/Metals TPHD/TPHG VOCs	Method C – MTCA 1800/900 ppm MCL or 100X Meth. B	NONE	YES 2-3.4K yds^3	(a), (c), (e), (f)	very high; no problems	within 3 years	2.0M	Ecology desig. as State dangerous waste
26C	Pest/Metals TPHD/TPHG VOCs	Method C – MTCA 1800/900 ppm MCL or 100X Meth. B	YES 2-3.4K yds^3	NONE	(a), (b), (c), (d), (e), (f)	moderately high	within 3 years	2.3M	xxxxxxx
17B	Pest/Metals TPHD/TPHG VOCs	Method B – MTCA 1800/900 ppm MCL or 100X Meth. B	NONE	YES 15-25K yds^3	(c), (f)	high; but building is challenge	within 3 years	4.4M	Ecology desig. as State special waste
15B	Pest/Metals TPHD/TPHG VOCs	Method B – MTCA 1800/900 ppm MCL or 100X Meth. B	NONE	YES 15-25K yds^3	(c), (e)	high; but building is challenge	within 3 years	4.6M	Ecology desig. as State special waste
5B	Pest/Metals TPHD/TPHG VOCs	Method B – MTCA 1800/900 ppm MCL or 100X Meth. B	YES 15-25K yds^3	NONE	(c), (d), (e)	moderate; building is challenge	within 3 years	6.7M	xxxxxxx
16T	Pest/Metals TPHD/TPHG VOCs	Method B – MTCA 200/100 ppm MCL or 100X Meth. B	NONE	YES 30-51K yds^3	(e), (f)	mod. low; building is challenge	within 3 years	8.2M	Ecology desig. as State special waste

* TPHD/TPHG – Total Petroleum Hydrocarbons (Diesel and Gasoline); VOCs – Volatile Organic Compounds; ppm – parts per million; MCL – Maximum Contaminant Level; K = 1000

** (a) asphalt cap; (b) deed/access restrictions; (c) soil bioventing; (d) low-temperature thermal desorption; (e) groundwater air sparging; (f) long-term groundwater monitoring; (g) groundwater natural attenuation

ATTACHMENT 6 - U-HAUL CLEANUP ISSUES

AND IMPLEMENTATION DATES

ISSUES	DATES
Air Monitoring System Installed/Tested/Operating	Beginning of Excavation
Deepest Site Excavation (18-20 Feet)	During Low Groundwater at Site (February to midApril)
Backfill/Compaction Completed	by June 1, 2002
Replacement Monitoring Wells Installed and Developed	by June 1, 2002
Five New Downgradient Monitoring Wells Installed and Developed	by June 1, 2002
Bioventing System Installed and Operational	by June 1, 2002
Monitoring Well As-builts Submitted to Ecology	by July 1, 2002
Bioventing As-builts Submitted to Ecology	by July 1, 2002
1st Quarterly Groundwater and Bioventing Report (Data and Analyses) Submittal to Ecology	September 1, 2002
2nd Quarterly Groundwater and Bioventing Report (Data and Analyses) Submittal to Ecology	December 1, 2002
3rd Quarterly etc.	March 1, 2003

a:constrda.atc

Exhibit C

U-Haul - Yakima Valley Spray Facility

Washington State Department of Transportation
Sid Morrison
Secretary of Transportation

South Central Region
2809 Rudkin Road, Union Gap
P.O. Box 12560
Yakima, WA 98909-2560

509-577-1600

July 19, 2001

Washington State Department of Ecology
15 W. Yakima Avenue
Suite 200
Yakima, WA 98902-3401

Attention: Debbie Smith

Subject: Yakima Valley Spray (U-Haul) Soil Remediation

We have reviewed the proposed project and have the following comments.

1. All loads transported on WSDOT rights-of-way must be within the legal load limits, or have a valid overweight permit.

2. It is the applicant's responsibility to keep and maintain state-maintained highways free of any of their debris or hazardous material. Any spilled material shall be cleaned up at the applicant's expense.

Thank you for the opportunity to review and comment on this proposed project. If you have any questions concerning our comments, please contact John Gruber at (509) 577-1636.

Sincerely,

Troy A. Suing, P.E.
Regional Planning Engineer

TAS: rh/jjg

cc: File #30, Yakima County
Don Wherry, Area 2 Maintenance Superintendent

p:\planning\devrev\yakimaco\doe_u-haul remediation.doc

Yakima Regional Clean Air Authority

Six South 2nd Street, Suite 1016, Yakima, WA 98901

(509) 574-1410 • Fax: (509) 574-1411

July 17, 2001

Ms. Debbie Smith
Department of Ecology - CRO
15 W Yakima Ave., Ste. 200
Yakima, WA 98902-3401

RE: Yakima Valley Spray / U-Haul

Dear Ms. Smith:

Please include the requirement for a Notice of Construction application and Order of Approval from YRCAA for on-site soil remediation, if involved.

Please include the requirement to file with, and gain approval from, YRCAA, a construction dust control plan to effectively control dust from the site preparation, construction and operation of the project. The plan must include measures to prevent any off-site dust emissions.

Please include the requirement to inspect any building proposed for demolition for the presence of asbestos-containing materials. All asbestos-containing materials must be removed prior to any work that would disturb asbestos. The inspection for, removal of and disposal of asbestos-containing materials must be conducted by persons certified in accordance with EPA and Washington State Department of Labor and Industries standards. Also, a Notification of Demolition and Renovation must be filed with YRCAA ten days prior to any demolition.

We will notify the property owner of the above requirements by copy of this letter. Call if we can answer questions or assist. Questions should be directed to Gary Pruitt at (509) 574-1410.

Sincerely,

FOR Les Ornelas
Air Pollution Control Officer

cc: U-Haul
Gary Pruitt, YRCAA Compliance Officer
Tom Silva, YRCAA Permit Engineer

/gwp

/chasm/wpfiles/permitting/SEPA/Other_Agencies/DOE_Manhole34_17Jul01

Exhibit D

Public Participation Plan

U-Haul - Yakima Valley Spray Facility

PUBLIC PARTICIPATION PLAN FOR THE YAKIMA VALLEY SPRAY/U-HAUL SITE IN YAKIMA, WASHINGTON

Prepared for Washington Department of Ecology
November 21, 1996

PUBLIC PARTICIPATION PLAN FOR THE YAKIMA VALLEY SPRAY/U-HAUL SITE IN YAKIMA, WASHINGTON

TABLE OF CONTENTS

1.0 INTRODUCTION AND SITE BACKGROUND

1.1 The Model Toxics Control Act and Public Participation Commitment

The Model Toxics Control Act (MTCA) began as a grass-roots citizen initiative in 1988, and started the process of cleaning up contaminated sites in Washington State. MTCA requires an owner or operator who is or was responsible for contaminated land to clean up to standards that are safe for both human health and the environment. The Washington Department of Ecology (Ecology) was mandated with implementing MTCA and overseeing cleanups throughout the state, and has issued regulations and guidance governing those cleanups. Ecology investigates any report of property contamination, and if it presents a significant threat to human health or the environment, the site is placed on the Hazardous Sites List. The cleanup process then begins.

When MTCA was written, significant emphasis was placed on public participation throughout the cleanup process. Neighboring residents, businesses, and other interested parties are given the opportunity to become involved in cleanups. The regulation requires "the early planning and development of a site-specific public participation plan." This plan includes publishing public notices of the availability of reports and studies on the site, holding public meetings or hearings, and providing other information as requested. These are the basic public participation requirements. Additional efforts can be undertaken, such as one-on-one interviews with community members, workshops, etc. Public participation grants may also be made available to groups living near contaminated sites. With those funds, citizen groups can conduct additional public involvement or receive technical assistance in understanding the complex issues of a cleanup.

The following events during the cleanup process trigger public notice:

- Results of Ecology's site initial site ranking, evaluating the need for investigation and cleanup
- The issuance of administrative orders from Ecology
- Scoping for the remedial investigative/feasibility study (RI/FS), which characterizes the contamination and evaluates cleanup options
- Availability of report from the RI/FS
- Availability of draft and final cleanup action plans, which detail the approved cleanup approach
- Extension of cleanup deadlines or missed deadlines
- Changes in site status (placement on or removal from Hazardous Sites List)
- Any other action Ecology deems appropriate for notice

When public notice is required, the law states that at a minimum the "potentially affected vicinity" must be notified by mail and an advertisement must be placed in the newspaper with the largest circulation in the community. For many of these events, the public notice triggers a 30-day public comment period. Additionally, during any public comment period, if ten or more people request one, Ecology will hold a public meeting on the proposal up for public review. The law allows Ecology to go beyond the minimum public involvement requirements if public interest and concern are high, or if the agency determines other methods would be appropriate.

1.2 Status of U-Haul Site in Ecology Enforcement Process

The "U-Haul Site" is located on South First Street in Yakima. In 1989, U-Haul and the Department of Ecology found pesticides, herbicides and hydrocarbons in both soil and groundwater on the land presently owned by the U-Haul Company. U-Haul was issued an enforcement order and the site was listed on the Hazardous Sites List in December 1991. As required by Ecology, a Remedial Investigation (RI) was then begun. Through field work, analysists determine the type and extent of contamination at the site. U-Haul submitted the final investigation report to Ecology in March 1995. It described the contamination and conditions found on the site, and was accepted by Ecology. A draft Feasibility Study (FS) was then prepared and submitted in March 1995. It proposed several different ways to clean up the site. Ecology reviewed the feasibility study and asked U-Haul for additional information on location of contaminants, potential risks to human health, proposed cleanup levels, proposed treatment technologies, and cost estimates for implementing the cleanup alternatives.

In January 1995, the state legislature established the MTCA Policy Advisory Committee (PAC) under House Bill 1810. The Policy Advisory Committee has the task of examining MTCA and recommending ways to make cleanups faster, cheaper, and better. As part of this process, the Legislature required two pilot projects to "...evaluate alternative methods for accomplishing faster, less expensive and equally protective cleanups at complex sites." However, the pilot projects must still comply with MTCA requirements. Ecology contacted potential pilot sites listed on the Hazardous Sites List, asking them to consider participating in the pilot project process. The owner of the U-Haul Site expressed interest and a 20-day public comment period was held in September 1995. On October 1, 1995, the U-Haul Site was selected as one of the participating pilot projects. There was almost no public comment on the proposed pilot selection.

The site was selected to demonstrate different approaches to risk assessment, development of cleanup standards, and remedy selection. Due to the wide variety of contaminants present and the variety of potential exposure pathways, an alternative risk-based cleanup approach is currently being pursued. The PAC receives updates on the status of the site and will review how the risk-based approach could affect the cleanup process.

1.3 Physical Site Setting

The U-Haul Site is located in the City of Yakima (see attached map); the largest city within Yakima County and the metropolitan center of south-central Washington. The city is located in the Yakima River Valley of south-central Washington and has a population of approximately 58,000 within an area of approximately 17 square miles.

The valley is bounded by the Yakima Ridge to the north, the Ahtanum Ridge and Rattlesnake Hills to the south, and upland areas to the west. The water table is typically encountered at 8 - 20 feet below surface, depending on topography, seasonal weather patterns, and recharge by irrigation. Unconfined groundwater extends to at least 100 feet below land surface, but artesian (confined) conditions are usually observed in wells completed several hundred feet below grade. Groundwater flows predominantly from the surrounding upland regions in the valley and toward the Yakima River, located about 1.5 miles east of the site. Precipitation is scant in summer, except in mountainous areas. The snowpack accumulation at high elevations supplies irrigation water for farming in the lowland areas.

Total annual precipitation is 7-8 inches for the Yakima area, with an average seasonal snowfall of 25 inches in the mountains.

The U-Haul Site is about four acres in size, and lies adjacent to both the City of Yakima's railroad corridor and one of its commercial streets (So. First Street). It is bounded to the north by Evergreen Nissan, to the south by a cement forms plant, to the west by the Washington Central Railroad lines, and to the east by South First Street, across which are Hahn Motor Sales and Consolidated Freightways. The closest private drinking water well is located about 1/4 mile away site.

1.4 Contaminants of Concern

The analysis of the site, contaminants present, and potential exposure pathways have yielded several results which should interest the public surrounding the area. First, there are two potential exposure pathways: (1) soil ingestion, direct contact through the skin, or through breathing dust particles by a worker on the site, and (2) drinking groundwater which has been contaminated by the chemicals. It is believed that the nearest existing point of exposure via groundwater is an offsite drinking water well about 1/4 mile away.

The majority of the contamination on the site is found in the northwest corner; this includes volatile organic compounds, metals, pesticides, herbicides, and petroleum-contaminated soils. Because contaminants are in the soil, contaminants may leach or move downward to groundwater. The back portion of the site is fenced, but the gate nearest First Street allows access by U-Haul customers and workers.

A total of 55 contaminants were found in site soil and/or groundwater. There are approximately 35 contaminants present which exceed the levels which are protective of groundwater. Of the 55 contaminants, about 15 are already in the groundwater and exceed groundwater standards. The contaminated soils are located well below the surface, which can reach below the water table in certain seasons.

These contaminants are believed to be a result of the past operations at the site, including an equipment maintenance facility; petroleum products storage and distribution; pesticides formulation and distribution; lime-sulfur residue disposal pit; and vehicle maintenance and service operations. The contaminants found in both groundwater and soil exceed the maximum contaminant level allowed by MTCA. The site is also overlying part of the Yakima Railroad Area, an areawide groundwater contamination situation that is under separate investigation. Ecology believes that as long as the cleanup proceeds according to MTCA standards, residents and businesses in the area face no short-term risk.

1.5 Organization of this Public Participation Plan

This public participation plan has been prepared for citizens, residents, business owners, and interest groups located near the U-Haul Site. Because the site could have impacts on human health and the environment, the public needs to be involved in the cleanup process. This public participation plan describes the neighborhood and other areas which are affected by the site, and outlines the stages in the cleanup process where public participation will occur.

Section 2.0 provides a profile of the area surrounding the U-Haul site. Section 3.0 outlines the stages of site investigation and remediation and the public involvement activities which are undertaken at each stage. The strategy, timeline, and responsible organizations for future public participation activities are explained in Section 4.0.

2.0 PROFILE OF SITE-AREA COMMUNITY

Ecology interviewed a sample of community representatives to begin the planning process for public participation for the U-Haul Site. Interviews were conducted over two days, September 11-12, 1996, by Mark Peterschmidt, Ecology Central Region Public Participation Specialist; and Pat Serie, EnviroIssues, a consultant to Ecology for public participation planning. They were conducted informally and with fairly open-ended questions, and resulted in a great deal of useful information.

The interviews followed this basic format:

- Introductions and a description of the site, its regulatory status, and the role of public participation in the MTCA investigation and cleanup process
- Questions about the interviewee's and the community's awareness of the site status, and its links with the larger Yakima Railroad Area (YRRA) process
- Questions about how the community receives information, how it has reacted to community issues in the past, and how it might be expected to view this cleanup project
- Specific questions about ways to reach people in the community with information including level of information, information and media channels, and trusted communicators
- Specific questions about outreach formats, meeting locations, information repositories, and extent of interest in varying outreach options

2.1 Key Community Concerns

Several areas of concern were representative across the interviews. The most prominent advice was to avoid unnecessarily alarming the neighborhood. The use of technical terms and citing levels of contaminants without interpretation to the public would create anxiety. Most felt strongly that translating the technical information and focusing on potential impact to the community was most important. Translation of basic information materials (e.g., factsheets, public notices, media releases) into Spanish is also critical, as the area and the neighborhood are significantly Hispanic. More detailed technical reports will not necessarily be translated, but assistance will be offered on a case-by-case basis. Interviewees counseled that a full range of resources should be available to answer questions and will be critical to answering citizens' questions about the site.

Impacts of the site contamination on drinking water and public health were major areas of concern highlighted by the interview process. While no interviewee thought it is an emergency situation requiring immediate action, they did feel that the community would have health concerns about the site and steps should be taken to listen to and address these concerns.

Several community leaders were concerned about the potential impact of the site contamination on commercial development in the area. Being located in the Central Business District, the site could have a negative impact on area properties because banks and investors are reluctant to develop contaminated properties or approve loans to property owners with potential contamination sources nearby.

2.2 Site Description and Community Characteristics

Historically the site was used for industrial purposes, including the sale and maintenance of farm machinery and heavy equipment, operation of a petroleum tank farm, and the formulation and distribution of pesticides. Currently zoned by the City of Yakima for commercial use; the site is used by U-Haul to rent, store and service rental trucks and trailers. There are no future plans to develop the site with the current commercial zoning expected to continue into the future.

Within a commercial zone, the site abuts a residential area locally referred to as the Southeast neighborhood. This neighborhood has a significant population that is low income and multi-ethnic. The median income level of the Yakima Railroad Area (Southeast Yakima) is below federal poverty levels. In addition, the population is approximately 50% Hispanic, with Spanish as the native language. There is no identified formal neighborhood organizational structure (e.g., community councils). A Northeast neighborhood group exists and is active, but a similar organization is not active in the Southeast community where the U-Haul Site is located. Traditional public meetings tend to draw few people. A major Southeast neighborhood resource is the Southeast Community Center, which can hold up to 700 people in its gym.

It was suggested that Yakima residents tend to focus within its neighborhoods on problems, but not to become as concerned city-wide. During previous environmental remediation programs (e.g., Crop King CERCLA site, YRRA investigations and bottled water situation) people did not become very excited, and have seemed comfortable with the way things were handled. Community concern about the larger YRRA groundwater contamination was significant until an alternative water source was supplied, but current community concern appears to be low.

Yakima's municipal government is set up as a council/city manager format, with the mayor elected by the council. This form of government typically puts much of the responsibility for day-to-day operation of the city under the jurisdiction of the city manager.

2.3 Identified Community Organizations and Ways to Reach Citizens

A goal of the public participation plan is to identify communication channels with the community and ways to solicit community involvement. The community reportedly likes an open house format for meetings, with posters and displays, and people available to answer questions and discuss the situation.

The City of Yakima receives much of its news and information from its major daily newspaper, the Yakima Herald-Republic, with a daily circulation of about 41,000. The City also receives information from several other smaller newspapers, the Yakima Journal with a monthly circulation of around 4,000; and the Senior Times with a monthly circulation of approximately 12,000. There is also an Hispanic newspaper, Viva, distributed at no charge with a circulation of 10,000. Eight television stations and twelve radio stations, two of which are Spanish language stations (KDNA Radio, FM 91.9 and KIHS/KZTA Radio, AM 930/FM 92.3) also provide information to the local community.

Interview respondents suggested the following ideas for distributing information and gathering public input throughout the public involvement process:

- Radio and Television Stations - See above.
- Local Churches - Several interviewees stressed the importance of using the local churches for information dissemination and public involvement. Clergy are trusted and church facilities sometimes available.
- Southeast Community Center - James Park, Director, expressed his willingness to do whatever he and his center can to help with public participation, including access to space at the center for meetings and an information repository.
- Hispanic Media and Community Groups - The large Hispanic population in Yakima calls for coordination with established Hispanic community organizations and media. Important information should be translated into Spanish. Organizations include Hispanic radio stations (especially KDNA), newspapers, as well as the following Hispanic community groups:
  - Washington State Migrant Council
  - EPIC
  - OIC
  - National Council of La Raza
  - Association de Barrios
  - Washington Association of Minority Entrepreneurs
  - Farm Workers Clinic
  - Meetings at barrios, Hispanic community centers, churches
- NAACP Chapter - Was mentioned by several community leaders as a valuable resource; is based at Southeast Community Center.
- City Government - Information on contaminated sites should be available at City Hall. Several City Council members felt Ecology should keep them up to date about the site (and other MTCA sites) and spend time educating city officials so they can address the concerns of the citizens.

3.0 SITE INVESTIGATION PROCESS AND PUBLIC PARTICIPATION ACTIVITIES

3.1 Remedial Investigation and Feasibility Study

The first step, once a contaminated site has been identified and placed on Ecology's Hazardous Sites List, is a remedial investigation and feasibility study (RI/FS). The purpose of these investigations is to collect, develop, and evaluate information on the site and its contamination in order to select a remedy for cleanup. The RI/FS includes the following items:

- general information on the facility and property
- a map showing property boundaries and features on the property
- field studies which identify the contaminants present and their locations in surface water, sediments, ground water, air, and soil
- present and proposed land use
- impact on plants and animals
- sources of contaminants
- regulations which apply to the contaminated areas
- a range of cleanup options to reduce risk to human health and the environment to meet state standards

The remedial investigation on the U-Haul Site was accepted by Ecology in March 1995. A draft feasibility study (FS) was submitted to the agency and being revised.

When the final feasibility study has been submitted and accepted by Ecology, there will be a public notice announcing availability of the reports. This public notice will describe the site and investigation results, the proposed cleanup action and the alternatives studied, and will provide a 30-day public review and comment period. The notice will be published in Ecology's Site Register and in other newspapers and publications which will reach the surrounding communities. The notice will be translated for Spanish-language publications. Posters, flyers and other media will also be used to carry the message and invite public comment.

3.2 Pilot Site Alternative Studies

When the U-Haul Site was selected as a pilot project for the MTCA Policy Advisory Committee, it triggered a look at alternative methods of investigation and cleanup as compared to MTCA requirements "as is." U-Haul used a new way to analyze the risks and potential exposures of the site, to set levels for proposed cleanup, and to assess potential remedies. The results are being used by the Policy Advisory Committee, as compared with MTCA as-is, to see if there are faster, less expensive, but still protective ways to clean sites such as the U-Haul Site.

The study used some more site-specific information, such as varying assumptions about how chemicals move in soil. It also looked at where exposure to groundwater can be assumed: MTCA requires compliance with cleanup standards to be measured beneath the site. Because shallow groundwater underneath the U-Haul Site is not suitable or used for drinking, U-Haul proposed measuring groundwater impacts at the site boundary or at the first point where water is used for drinking. The study evaluated whether an asphalt cap on the site would reduce rainwater to the soil, thus keeping contamination from moving deeper in the soil.

Making these changes would mean that less contaminated soil would need to be removed from the U-Haul Site in order to complete the cleanup. Applying MTCA "as-is" would result in a more conservative cleanup, with much more soil removed and treated or disposed off-site. Ecology is now evaluating the results to see if it will approve some or all of the pilot approach in making a cleanup remedy decision for the U-Haul Site.

3.3 Revised Feasibility Study and Cleanup Action Plan

Ecology will review the public comments received on the RI/FS and determine what remedies are appropriate for cleaning up the site. MTCA requires that any remedy option be evaluated for ability to meet the cleanup standards, and in terms of permanence and cost; whether it results in secondary waste which will have to be disposed of or treated at another location as well as other factors. U-Haul will develop and submit a draft cleanup action plan which outlines preferred cleanup methods and specified cleanup standards and other requirements at the site. Again, public notice will be published in Ecology's Site Register and local newspapers and publications. Notification will also be made to the community through posters, flyers, and local radio. A thirty-day public review and comment period will commence on the publication date.

After the public comment period, Ecology will review and consider all comments received and issue a final cleanup plan. Ecology will publish information on its availability in the Site Register.

3.4 Consent Decree or Enforcement Order

A consent decree is a legally enforceable agreement between the liable party and Ecology. If applicable in this case, the consent decree would be issued when the final cleanup action plan is ready and Ecology has approved it. If the parties are unable to agree on a consent decree approach, Ecology will issue an Enforcement Order. Both documents would commit U-Haul to clean up the site according to the cleanup action plan. When negotiations on a consent decree begin, a notice will be placed in the Site Register and local publications. Once a proposed consent decree has been issued, the agency again makes an announcement and a thirty-day comment period begins. During that period, a public hearing will also be held.

3.5 Remediation Process

When a final cleanup action plan has been completed, cleanup of the U-Haul site will begin. An engineering design report will be prepared which will include design and construction details, and a compliance monitoring plan to ensure the cleanup is working. During construction, Ecology will conduct site inspections and construction oversight. If the remediation process changes from the final decision made in the cleanup action report, the public will have a chance to comment on the changes. Public notice will be issued when the engineering design report is available and a thirty-day public review and comment period will commence.

3.6 Long-Term Monitoring and Maintenance

Once the remedy selected has been implemented to the satisfaction of Ecology, if contaminants remain present in the soil or groundwater, long-term monitoring will take place. This will include Ecology review of the site at least every five years. During this long-term monitoring process, the agency will review whether human health and the environment remain protected according to the current land use for the site and surrounding areas. The agency will also be considering whether new technologies are capable of removing the left-over contaminants. Updates on the site's condition will be published in the Site Register when reviews are conducted. If Ecology determines that additional cleanup is required, the cleanup action plan will be revised and reissued in draft form and a public review and comment period conducted.

4.0 PUBLIC PARTICIPATION STRATEGY, TIMELINE, AND RESPONSIBILITIES

Ecology and U-Haul are committed to providing information to the community and to seeking community input into the cleanup process. This section describes specific plans for accomplishing that objective in addition to the public notice requirements described in Section 3.

4.1 Sending Information to the Community

Ecology has issued several fact sheets (Appendix D) already pertaining to the site listing, selection of the site as a pilot project, and issuance of the draft remedial investigation report. Ecology will continue to issue those fact sheets for the final RI/FS, cleanup action plan, consent decree, and the remediation process. These fact sheets will be distributed at the community centers, City Hall, through churches and local businesses, and to the appropriate media as identified in the community interviews. The Ecology site and public participation managers will ensure that the local media, both English and Spanish speaking, are kept informed of activities that the public should be aware of as the process continues, and that fact sheets are provided in Spanish.

In addition, based on recommendations given to Ecology during the community interviews, the Yakima City Council, various Hispanic organizations, and the Southeast Community Center were identified as cohesive organizations which could assist in disseminating information to the public. Thus, the agency will maintain contact with the appropriate persons at each of these organizations to keep them abreast of issues at the site and ask for their advice and assistance in disseminating information to the local community.

All reports, both draft and final, and other information on the cleanup will be made available to the public at information repositories located at the Washington Department of Ecology, 15 West Yakima Avenue, Suite 200, Yakima and at the Yakima Valley Regional Library located at 102 North 3rd Street, Yakima.

4.2 Answer Public Questions

At times during the cleanup process, questions may arise from members of the public. The contact for Ecology is Dick Bassett, Site Manager, 509-454-7839 or Mark Peterschmidt, Public Involvement Specialist, 509-454-7840. Please feel free to call these persons to obtain information about the site, the MTCA process, and potential decisions which could affect you.

4.3 Obtaining Community Input to Site Decisions

When the final RI/FS has been accepted by Ecology, the agency will hold an open house to provide an opportunity for the public to ask questions and comment on the report. This open house will be held at the Southeast Community Center. Notification will be broad, including posting announcements in the community and through churches. The meeting will be held in an informal setting with several displays which explain the results contained in the RI/FS, how the RI/FS was conducted, and the MTCA process. Staff from both the agency, public involvement consultant, the site owner and its consultants will be available to answer questions about the study and its progress through the MTCA process. Comment forms will be available to be filled out at the meeting or mailed in so that the public can study the report and provide their responses to the issues raised in the report.

In addition to the open house, notification of the availability of the RI/FS report will be placed in the local newspapers and on poster in the community. This report will be available at the local information repositories, identified in Section 4.1, so that the public can view and respond to the documents if they are unable to attend the open house. These same activities will occur when the cleanup action plan is submitted to and accepted by Ecology.

When a consent decree has been negotiated between Ecology and the PLP or an enforcement order issued, a formal public hearing will be held at the Southeast Community Center to receive public comment. A transcript will be prepared of all comments received.

4.4 Coordination with Central Region Citizens Advisory Committee

The RCAC was set up under the MTCA to consult with Ecology on appropriate methods for involving the public at sites within its region. The committee is made up of local citizens who are concerned about the cleanup of hazardous sites in Washington. If the committee desires, they may be informed about the status and progress of the cleanup. Coordination will be ongoing throughout the process.

4.5 Public Involvement Schedule and Timeline

The following table outlines the public involvement activities which will take place during the cleanup process at the U-Haul site.

Site Cleanup Activity	Public Involvement Activity	Target Timeframe
Final Remedial Investigation/Feasibility Study	Fact Sheet and Public Comment Period Open House	30 days after issuance Early Spring 1997
Revised Feasibility Study and Final Cleanup Action Plan	Fact Sheet and Public Comment Period Open House	30 days from issuance of draft cleanup action plan Winter 1997
Consent Decree or Enforcement Order	Fact Sheet and Public Comment Period Public Hearing	30 days from issuance of draft consent decree Summer 1997
Remediation Process	Ongoing Public Information	1998 to 1999
Long-Term Monitoring and Maintenance Period	Ongoing Public Information	Periodically over long term

APPENDIX A
CATEGORIZED CONTACT AND MAILING LIST FOR SITE COMMUNICATIONS

SKIP STEINMETZ
ENVIRONMENTAL HEALTH DIRECTOR
YAKIMA HEALTH DISTRICT
104 N 1ST ST
YAKIMA WA 98901

THE HONORABLE LYNN BUCHANAN, MAYOR
CITY OF YAKIMA
129 N 2ND ST
YAKIMA WA 98901

CHAIRMAN
YAKIMA COUNTY COMMISSIONERS
128 N 2ND ST
YAKIMA WA 98901

DELANO SALUSKIN
YAKIMA INDIAN NATION
PO BOX 151
TOPPENISH WA 98948

DON PLESS, REGIONAL MANAGER
DEPT. OF NATURAL RESOURCES
713 E BOWERS RD
ELLENSBURG WA 98926

LARRY POPEJOY, REGIONAL MANAGER
DEPT OF WILDLIFE
1701 S 24TH AVE
YAKIMA WA 98902-5720

YAKIMA FIRE DEPT CHIEF
401 N FRONT ST
YAKIMA WA 98901

STANTON HANKINS, CHIEF
YAKIMA COUNTY FPD No. 4
4007 COMMONWEALTH
YAKIMA WA 98901

THOM HOOPER
WA ST DEPT OF FISHERIES
MAIL STOP AX-11
OLYMPIA WA 98504

PERRY HARVESTER
DEPT OF FISH & WILDLIFE
1701 S 24TH AVE
YAKIMA WA 98902-5701

WASHINGTON STATE COMMISSION ON HISPANIC AFFAIRS
1210 EASTSIDE ST 1ST FLOOR
PO BOX 40924
OLYMPIA WA 98504-0924

RURAL & FARM WORKER HOUSING
1400 SUMMITVIEW AVE #203
YAKIMA WA 98902

LYNN BUCHANAN
YAKIMA CITY COUNCIL
129 N 2ND ST
YAKIMA WA 98901

RICHARD ZAIS, JR.
YAKIMA CITY MANAGER
129 N 2ND ST
YAKIMA Wa 98901

FRED FRENCH
CITY ENGINEER
129 N 2ND ST
YAKIMA WA 98901

JERRY COPELAND
PUBLIC WORKS DIRECTOR
2301 FRUITVALE
YAKIMA WA 98902

CHRIS WAARVIK, CHAIR
VISIONING YAKIMA ENVIRONMENTAL COMMITTEE
WASTEWATER TREATMENT PLANT
2220 E VIOLA AVE
YAKIMA WA 989012

DAN HESSE
YAKIMA COUNTY PUBLIC WORKS
128 N 2ND ST RM 408
YAKIMA WA 98901

COURTHOUSE/ADMINISTRATION
YAKIMA COUNTY
128 N 2ND ST
YAKIMA WA 98901

DICK ANDERWALD
YAKIMA COUNTY PLANNING DEPT
ENVIRONMENTAL REVIEW
128 N 2ND ST
YAKIMA WA 98901

DORIS CELLARIUS
WEC
1063 S CAPITOL
OLYMPIA WA 98501

LEAGUE OF WOMEN VOTERS
225 N 2ND ST
YAKIMA WA 98901

DONALD OLIVER
DEPT OF HEALTH
OFFICE OF TOXIC SUBSTANCES
HAZARDOUS WASTE SECTION
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OLYMPIA WA 98504

SCOTT FINK
DEPT OF HEALTH
DRINKING WATER PROGRAM
1500 W 4TH AVENUE SUITE 305
SPOKANE WA 99204

DR. ROBERT ATWOOD
YAKIMA HEALTH DISTRICT
104 N 1ST ST
YAKIMA WA 98901

DAVID MUDD
DEPT OF FISH & WILDLIFE
ENVIRONMENTAL AFFAIRS GJ-11
OLYMPIA WA 98504

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U-HAUL OF INLAND NORTHWEST
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601 UNION ST SUITE 4100
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OLYMPIA WA 98504-0117

DENNIS LESTER
4703 TERRACE HEIGHTS
YAKIMA WA 98901

RUTH HUBERT HULL
8407 OCCIDENTAL
YAKIMA WA 98908

BURLINGTON NORTHERN RAILROAD
PROPERTY TAX DIVISION
ATTN: U-HAUL OF INLAND NORTHWEST
777 MAIN ST
FORT WORTH TX 76102

AMERCO REAL ESTATE CO
2721 N CENTRAL AVE
PHOENIX AZ 85004

HANS SKOV
PO BOX 2923
YAKIMA WA 98907

CRAIG TRUEBLOOD
PRESTON, THORGRIMSON, SHULER, GATES & ELLIS
1400 SEAFIRST FINANCIAL CENTER
W 601 RVIERSIDE AVE
SPOKANE WA 99201-0636

KATHY SCHWANTER
HILL - HOUSTON
1001 SW 5TH AVE SUITE 2000
PORTLAND OR 97204

THOMAS KILBANE
ATER WYNNE HEWITT DODSON & SKERRITT
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601 UNIN STREET SUITE 5450
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APPENDIX B
SUMMARY OF COMMUNITY INTERVIEWS

SUMMARY OF COMMUNITY INTERVIEWS
YAKIMA SPRAY/U-HAUL SITE – YAKIMA, WA

Several community interviews were conducted in the community of Yakima, Washington, on September 11-12, 1996. Interviewers were Mark Peterschmidt, Washington Department of Ecology Central Region, Public Participation Specialist; and Pat Serie, EnviroIssues, a consultant to Ecology for public participation planning for the site. Known as the U-Haul Site, this four-acre site is located at South First Street in Yakima. The history of the site and the status of its regulatory enforcement activities are described in the body of this public participation plan. This summary describes the discussions held with a sample of community representatives to begin the planning process for public participation in cleanup of the U-Haul Site.

The interviews followed this basic format:

- Introductions and a description of the site, its regulatory status, and the role of public participation in the MTCA investigation and cleanup process.
- Questions about the interviewee's and the community's awareness of the site status, and its links with the larger Yakima Railroad Area (YRRA) process
- Questions about how the community receives information, how it has reacted to community issues in the past, and how they might be expected to view this cleanup project
- Specific questions about ways to reach people in the community with information, including level of information, information and media channels, and trusted communicators
- Specific questions about outreach formats, meeting locations, information repositories, and extent of interest in varying outreach options

They were conducted informally and with fairly open-ended questions, and resulted in a great deal of useful information.

<u>Rod Bryant, Principal of Adams School; Board Member Southeast Community Center</u>

Mr. Bryant, principal of the neighborhood elementary school for 20 years, was not aware of the U-Haul site as a contaminated property. He reflected on community reactions to other sites (e.g., Crop King CERCLA site, YRRA investigations and bottled water situation); indicating that people don't get very excited, and have been satisfied with the way things were handled. There is significant community cohesiveness, as they have carried out both community beautification and anti-crime activities in the last few years. He expects that effects on drinking water will be the largest area of community concern.

To reach the community with information, he suggested working through churches. His church, Greater Faith (Anthony Watson, pastor, at 6th and Pacific) would be a credible information source; other churches in the area would be good communication channels as well. He suggested sending

materials to the churches with a letter to the pastor requesting help. A large Hispanic population could benefit from translation of materials and the use of Spanish-speaking media; he suggested coordinating with the Hispanic Chamber of Commerce. Placing posters in the community (IGA and Red Apple grocery stores, community center, mobile food wagons, restaurants) and establishing an information repository at the library (small child-oriented branch at the community center) were suggested.

He mentioned that he is not aware of any environmental organizations in Yakima. The City Council's Yakima 2010 experience had addressed environmental issues in general. A local branch of the NAACP is quite active, meeting monthly at the community center (Al Bradley, president). A woman named Maude Scott is a local activist; she may be reachable through the Housing Service Center. Mr. Bryant would like to be on the mailing list, and will share information with school staff and, as appropriate, students and parents. His address is: Adams School, 723 South 8th Street, Yakima, WA 98901.

Juan Aguilar, Evergreen Community Development Association and Hispanic Chamber of Commerce

Mr. Aguilar had no knowledge of the site's status, and recalled the farm implement dealership there in the 1960s and 1970s. He indicated that the critical information needed is what the potential impacts may be from the site. The community educational process must include newer Hispanic immigrants, who are trying to acclimate to the area and their work, who don't understand Washington State laws and potential impacts on their families. They may include farmworkers, warehouse workers, fruit processing workers, and others.

To reach Hispanic residents, we should hold forums in their areas -- community churches, community centers, in the barrio, and have events sponsored by Hispanic community leaders. The Hispanic Chamber would be willing to co-sponsor forums.

There are Hispanic radio stations (Radio Cadena in Granger's nightly program called "Buenos Noches" is a call-in program), and Hispanic newspapers. Power Communication Group owns the Spanish-speaking stations. The Catholic churches are the foundation of outreach to the Hispanic population (St. Joseph in Yakima, churches in Toppenish and Sunnyside); we could also see the St. Paul Diocese. Information materials must be translated into Spanish.

Other groups that may be contacted include the Washington State Migrant Council, EPIC, OIC, the local chapter of the National Council of La Raza (Tony Sandoval), Association de Barrios(Hector Franco), and Washington Association of Minority Entrepreneurs.

John Klingle, Bernie Sims - Yakima City Council Members

These two City Council members had many questions about the site, other Ecology activities, and the overall policy of site investigation and cleanup and how contaminated sites affect Yakima's business climate. They are concerned about real estate development being impacted because banks are reluctant to loan on area properties, and investors are concerned about contamination in the central business district. Don Skone, Planning Director, joined the meeting and provided the members with zoning

maps of the site (it is zoned Central Business District Support), and uses across the street area heavy industrial.

Generally, they receive fact sheets from Ecology on site status; they suggested that stronger information linkages between Ecology, city and county planning departments, and the real estate community be put in place. Information on contaminated sites should be available to City Haul so they can answer public questions. Ecology could also educate officials and residents regionally on hazardous material cleanup laws, regulations, processes, and timeframes. Such information should include the nature and extent of contamination, results if left in place, impacts on future uses, and disruption to community of remediation (e.g., noise, traffic, dust).

The community likes an open house format for meetings, with posters and displays, and people available to answer questions and discuss the situation. People must be told what their role is, how their input will be considered in the cleanup, and what followup is available. Mr. Sims emphasized, however, that people should not be frightened unnecessarily, and that site information must be translated into what it means, not just citing levels of contaminants. All three gentlemen are interested in staying informed about the progress of the U-Haul Site.

Gordon Kelly, Art McEwen - Yakima Health District, Environmental Section

Both Mr. Kelly and Mr. McEwen work with Ecology frequently, and have been involved in many community health issues. They urged that the approach be practical, not alarmist. People need information on levels of contaminants and what that means. Materials and presentations must be extremely plain-spoken, non-technical, and straightforward. They believe that residents downstream of the YRRA feel if they are on city water, there is nothing more to worry about. If onsite treatment is used, public education is needed (see Crop King CERCLA model). This included meeting with surrounding businesses, defining what was going to happen. A "Press Day" open house when the remediation started was helpful, along with followup meetings with neighbors and employees. One contact person should be identified and available. Hispanic Radio KDNA is a good information channel. The Farm Workers' Clinic is within three blocks of the U-Haul Site (6th and Nob Hill) and should be consulted.

They counseled to expect a full spectrum of reactions, and to make the full range of resource people available to answer questions (air, water, soil, technology, pathology, etc.). Outreach should be publicized well, perhaps with a press conference format and evening opportunities. Options should be clear, with associated benefits and process implications. Key stakeholders will be the Southeast Community Center, farmworkers, city government. They suggested involving Washington State Department of Health personnel to help translate contaminant levels into meaningful potential impacts (Harriet Aman, Lou Kittle).

James Park - Director; Southeast Community Center

Mr. Park is willing to make community center facilities available for any type of meetings (MLK Fellowship Hall holds 60 people; the gym holds 700 people). A donation is requested for use of rooms. The library branch and/or office could be a location for the information repository, and he is willing to distribute flyers or post information. Youth may be available for door-to-door distribution if appropriate, and translators are available throughout the onsite Substance Abuse Coalition. Mr. Park indicated the community's gratefulness for Ecology's support of their neighborhood cleanup projects, and expressed his willingness to do whatever he can to help with public participation in the U-Haul Site or other Ecology efforts.

He is also a good contact for the NAACP chapter, both adult and youth groups. They would be happy to host a speaker at their meetings. The address for the community center is 1211 South 7th Street, Yakima, WA 98901; telephone 509-248-2460.

Mayor Lynn Buchanan - City of Yakima

Mayor Buchanan believes that prompt and accurate notification is most important in contaminated site situations. Material sent to the City from Ecology is copied and goes into City Council packets, which are shared with members of the public and the media. He recalled seeing one notification about the U-Haul Site, but had no more awareness than that. He would appreciate advance notification of cleanup situations to ensure that the City can answer public questions.

He indicated that Yakima tends to focus within its communities on problems, but not to worry about them widely across the community. There is no strongly established neighborhood organizational structure (A Northeast Neighborhood group, but nothing like that in the Southeast community where the U-Haul Site is located). Traditional public meetings tend to draw few people. He suggested that we be sure to stay in touch with the City Manager and Assistant City Manager, and believed that John Klingle would likely be the most interested Council member.

APPENDIX C
LOCATIONS FOR INFORMATION REPOSITORIES AND PUBLIC MEETINGS

Information Centers

City of Yakima City Hall
129 N. 2nd Street
Yakima, WA 98901
(509) 575-6000

Yakima Valley Regional Library
102 North 3rd Street
Yakima, WA 98902
(509) 452-8541

Department of Ecology
15 West Yakima Avenue
Yakima, WA 98902
(509) 457-7121

Possible Public Meeting and Workshop Locations

Southeast Community Center
1211 South 7th Street
Yakima, WA 98901
(509) 248-2460

Greater Faith Church
816 S. 6th Street
Yakima, WA 98901
(509) 452-4221

St. Joseph Catholic Church
212 N. 4th Street
Yakima, WA 98901
(509) 248-1911.

APPENDIX D
PUBLIC NOTICES AND PUBLIC INFORMATION MATERIAL ISSUED TO DATE

CC: SY

CLAY

THE NEW SUPERFUND BULLETIN
August 14, 1989

SIGNIFICANT ISSUES

Contact: David Tetta Ext. 2-213804

Site: WYCKOFF/EAGLE HARBOR, Bainbridge Island, WA.

On Tuesday, August 8, EPA and Ecology met to discuss quality assurance issues for the Remedial Investigation (RI). We also met with CH2M Hill to discuss remedial objectives for the Feasibility Study (FS).

A fact sheet is being sent out with up to date information on the RI/FS work, negotiations with Wyckoff, and the Technical Discussion Group (TDG) meeting last week.

The TDG will be meeting again August 25 to discuss the fate and transport section of the RI, which has proven controversial and will probably delay issuance of the final RI report.

Site: NL/GOULD, Portland, OR.

The bench scale studies are nearly done; the report is due August 21. Preliminary results indicate that battery casings with greater than 10 mesh can be treated with water.

Site: PACIFIC HIDE AND FUR, Pocatello, ID.

EPA is meeting with the contractors and PRPs on August 22 to provide our comments on the 95% design documents. According to the current schedule, we should be out in the field on September 23 to begin the Remedial Action work.

Contact: Janet O'Hara Ext. 2-2712
Ellen Hale Ext. 2-1215

Site: SILVER MOUNTAIN MINE, Okanogan County, WA.

EPA now has access to the Bureau of Mines' computer bulletin board which we are using to exchange data. We are currently revising chapters of the RI.

Contact: Mike Stoner Ext. 2-2710
Lori Cohen Ext. 2-6523

Site: COMMENCEMENT BAY-NEARSHORE/TIDEFLATS, Tacoma, WA.

The draft Record of Decision went out for agency comment on August 10. Major issues so far include level of detail, incorporation of source control measures, justification for the remedy, and habitat restoration. Ecology has accepted the Cooperative Agreement for this site.

Contact: Vicky Tapang Ext. 2-1196

Site: VALDEZ OIL SPILL

Corexit 9580M2

Field tests of Corexit 9580M2 continue on Smith, Green and Seal Islands. EPA, USCG, NOAA, ADEC, and Exxon will meet to discuss issues on the dispersant (e.g., toxicity, effectiveness in removing oil), before a decision for large-scale use is made.

Bioremediation

EPA continues to monitor and take samples at bioremediation sites in Homer. Interagency Shoreline Cleanup Committee is reviewing other potential sites for nutrient application.

Animal Population

An estimated total of 29,592 birds (including 130 eagles) and 927 otters were counted as dead by the animal centers in Valdez, Seward, Homer and Kodiak.

Contact: Debbie Flood Ext. 2-2722
Bill Glasser Ext. 2-7215

YAKIMA PCE CONTAMINATION SITE

Completed a soil gas survey and special study of the Yakima site, and identified a 3-mile PCE plume within the industrial corridor of Yakima. Several potential sources have been identified.

MOSES LAKE/LARSEN AIR FORCE BASE

A soil gas survey has been initiated at the site, and TCE has been detected in 4 out of 20 samples taken to date.

AFFIDAVIT OF PUBLICAT

STATE OF WASHINGTON,)
)
COUNTY OF YAKIMA.)

BETH S. BREAKEY, being first duly sworn on oath deposes and sa that she is the Accounting Manager of Yakima Newspapers, Inc.d/b Yakima Herald Republic, a daily newspaper.Said newspaper is a leg newspaper approved by the Superior Court of the State of Washingt for Yakima County under an order made and entered on the 13th d of February, 1968, and it is now and has been for more than s months prior to the date of publication hereinafter referred t published in the English language continually as a daily newspap in Yakima, Yakima County, Washington. Said newspaper is now a has been during all of said time printed in an office maintained the aforesaid place of publication of said newspaper.

That the annexed is a true copy of a:
PUBLIC NOTICE REGARDING ENFORCEMENT ORDER TO U-HAUL -

it was published in regular issues (and not in supplement form) said newspaper once each DAY and for a period of ONE consecutive DAY (S) to-wit; on

the	15TH	day of	DECEMBER	,199
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and the such newspaper was regularly distributed to its subscribe during all of said period. That the full amount of the fee charg for the foregoing publication is the sum of $51.32.

Beth S. Breakey

Capacity

SUBSCRIBED AND SWORN to before me this 18th

day of December, 1991.

Linda K. Herd

NOTARY PUBLIC in and for the
State of Washington,
residing at Yakima.This document was part of the o
Administrative Record for the Ya
Railroad Area on October 31, 1
Washington State
Department of Ecology.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PUBLIC NOTICE REGARDING
AN ENFORCEMENT ORDER

Under the Model Toxics Control Act (RCW 4).105D), the State of Washington Department of Ecology has issued an Enforcement Order to U-Haul of Inland Northwest regarding the Yakima Valley Spray (U-Haul) site at 1122 South First Avenue in Yakima. The Order requires U-Haul of Inland Northwest to plan and conduct a RI/FS (Remedial Investigation/Feasibility Study). The Study will determine the extent to which the site property has been contaminated, and will require U-Haul to explore possible cleanup options. Among issues considered will be past hazardous substance spills or leaks, hazardous substance disposal practices, and the effects of a fire at the site in 1973.

Written comment may be submitted from December 16 through January 17, 1992 to: Richard H. Bassett, Department of Ecology, 106 South 6th Avenue (L) Yakima, Washington, 98902-3387.

Comments will be reviewed and, if necessary, the Order will be revised by the Department of Ecology. Documents concerning the Enforcement Order are available for public viewing at the above address; and at the Yakima Valley Regional Library, 102 North 3rd Street; and at the Yakima County Health Department, 104 North 1st Street, Yakima.
(60342-650)Dec. 15, 1991

YAKIMA VALLEY SPRAY, U-HAUL

WASHINGTON STATE DEPARTMENT OF ECOLOGY

UPDATE: REMEDIAL INVESTIGATION (RI) BEGINS

This is a Washington State Department of Ecology update of progress made at the U-Haul site (Yakima Valley Spray) in Yakima, Washington.

SITE BACKGROUND

The Washington State Department of Ecology (Ecology) issued an enforcement order to U-Haul of Inland Northwest on December 17, 1991, requiring a remedial investigation/feasibility study (RI/FS) on the property located at 1108-1122 South First Avenue in Yakima.

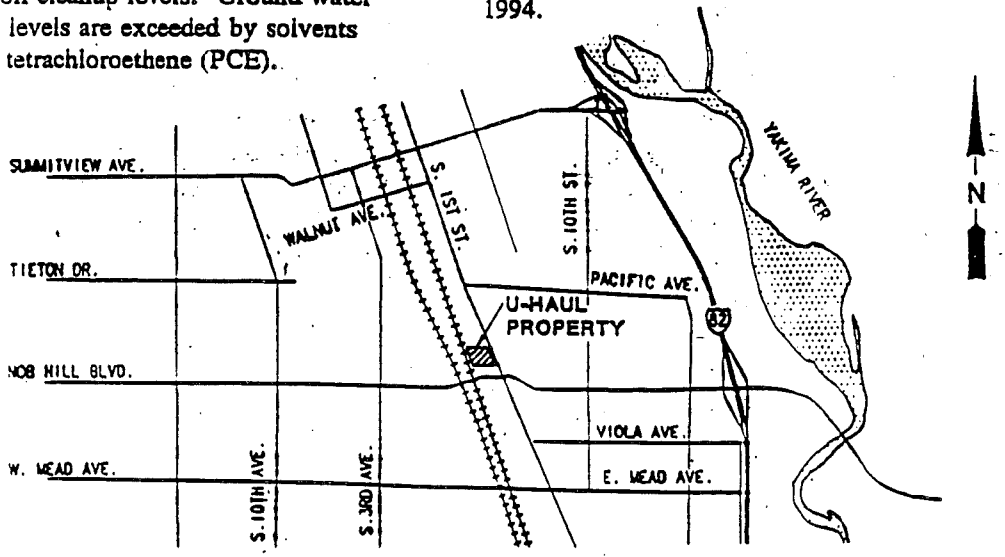
A series of businesses located on this 4.1 acre site have contributed to soil and ground water contamination over many years. Existing data shows that herbicides, pesticides and their remnants, petroleum hydrocarbons, and lead are present in surface and subsurface soils above soil cleanup levels. Ground water cleanup levels are exceeded by solvents such as tetrachloroethene (PCE).

WHAT IS BEING DONE?

U-Haul of Inland Northwest will perform and complete a Remedial Investigation by January 1, 1993. This investigation will include soil sampling at various soil depths and a first round of ground water sampling.

This sampling will occur at a minimum of fifteen test pits, five soil borings, five drywells, five sumps, and eight monitoring wells. In addition, three monitoring wells, already installed, will be sampled. Ground water monitoring will continue through 1993.

The results of this winter's investigation will be available April 15, 1993, in an Interim Findings Report. Other reports will follow in 1993 leading up to possible final cleanup actions in late 1993 and 1994.



NOVEMBER 1992

FACT SHEET

Ecology Central Regional Office
Toxics Cleanup Program
106 South 6th Avenue
Yakima, WA 98902-3387
(509) 575-2490

Dick Bassett, Site Manager
(509) 454-7839

Sharon Morse, Public Involvement Specialist
(509) 454-7886

INFORMATION REPOSITORIES:

The Ecology Office listed above

Yakima Health District
104 North 1st Street
Yakima, WA 98901

Yakima Valley Regional Library
102 North 1st Street
Yakima, WA 98901

Printed on Recycled Paper

YAKIMA VALLEY SPRAY (U-HAUL)
Yakima County

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Supplemental Sampling Program is Necessary

This is a Washington State Department of Ecology update of progress made at the former Yakima Valley Spray site, now occupied by U-Haul of Inland Northwest, on South First Avenue in Yakima, Washington.

Site Background

Over the years, many businesses have occupied this site. Yakima Valley Spray, a pesticide formulation and distribution company, occupied this site from 1908-1973. Washington Refining and Shell Oil Company occupied another portion of the site for many years also. Many different kinds of contaminants are present in the soil and ground water, such as pesticides, petroleum products and solvents.

The Washington State Department of Ecology (Ecology) issued an enforcement order to U-Haul of Inland Northwest in December 1991. It required a remedial investigation/feasibility study (RI/FS).

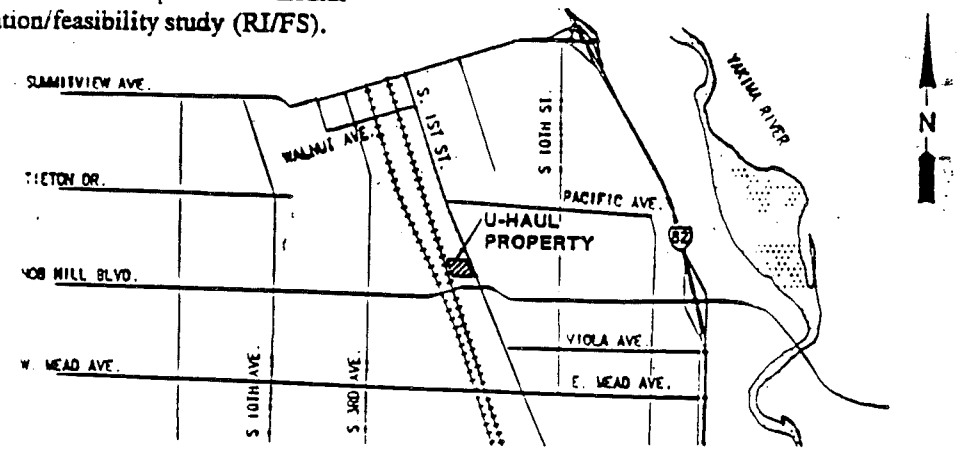
As the current owner and operator at the site, U-Haul is responsible for site cleanup. Past owners and operators at the site have been contributing funds for the investigation.

What Is Being Done?

Analysis of soil and ground water samples determined that a large part of this 3.7 acre site is contaminated. Further sampling is necessary beneath two buildings on site and adjacent properties to the west and to the north.

At least forty soil and ground water samples will be taken at specific depths at from at least eight locations.

The sampling will be completed by mid February, and a comprehensive RI/FS report will be available for public review and comment by July 1994.



If you have special accommodation needs, please call (509)575-2491.
Ecology's telecommunications device for the deaf (TDD) number is (509)454-7673

January 1994

For technical questions, please contact:

Dick Bassett, site manager
Ecology Central Regional Office
Toxics Cleanup Program
106 South 6th Avenue
Yakima, WA 98902-3387
(509) 454-7839

For other questions or to be placed on the site mailing list, please contact:

Sharon Morse, public involvement
at the address listed above
(509) 454-7886

Documents on this site can be reviewed at:

Ecology Central Regional Office
address listed above
(509)454-7658

Yakima Health District
104 North 1st Street
Yakima, WA 98901

Yakima Valley Regional Library
102 North 1st Street
Yakima, WA 98901

How Sites Are Cleaned Up

The Model Toxics Control Act allows a hazardous waste site to be cleaned up through a formal process directly overseen by the state at the expense of potentially liable persons or, when possible, independent of Ecology oversight. Independent cleanups are encouraged for sites such as leaking underground storage tank sites where established methods and technology can be applied predictably.

Formal Process

1 Initial Investigation

The Initial Investigation is Ecology's first look at a contaminated site. Within 90 days of receiving a report of a possible site, Ecology will visit the site and investigate available historical information. Sites are added to Ecology's hazardous sites data base; given a "No Further Action" determination; or passed to the appropriate local, state or federal authority for action.

2 Site Hazard Assessment

A Site Hazard Assessment is Ecology's first chance to characterize a hazardous waste site. Ecology gathers information to 1) Confirm or rule out contamination. 2) Identify hazardous substances. 3) Identify the site's environmental characteristics. 4) Evaluate potential threats to human health and the environment.

Ecology determines either that no further action is needed or ranks the site relative to others that have undergone the same scrutiny. Sites needing cleanup are placed on the Hazardous Sites List and prioritized for further action.

3 Interim/Emergency Cleanups

The goal of all hazardous waste cleanups is to reduce risk to humans and the environment. Interim and emergency cleanups are used to *reduce risk fast* on portions of a site that pose the greatest threat without waiting for an in-depth study to be finished. Interim or emergency cleanups often occur simultaneously with a phase in the long-term cleanup process.

Public notice and comment required.

4 Remedial Investigation/Feasibility Study

Eliminating human health and environmental impacts at a hazardous waste site is a sizeable engineering project. Careful study and planning are needed to make sure the chosen cleanup method makes sense environmentally and economically.

The remedial investigation provides specific and detailed information about the extent of contamination at a site. During the feasibility study, Ecology and the potentially liable persons use that information to develop and evaluate options for cleanup.

Public notice and comment required.

5 Cleanup Action Plan

Ecology chooses a preferred cleanup option from alternatives in the feasibility study and presents its decision for public comment as a "cleanup action plan". The plan identifies a preferred method of cleanu and specifies cleanup standards ("how clean") and other requirements at the site.

Public notice and comment required.

6 Cleanup Construction

Actual cleanup begins once the cleanup action plan is finalized and a consent decree or enforcement order is issued. Cleanup includes plan design, construction, and the operation and monitoring of cleanup actions.

Ecology requires the use of permanent cleanup methods wherever practical. Preferred techniques for handling hazardous substances on site are listed in this order:

1) Reuse or recycling
2) Destruction or detoxification
3) Removal and treatment/destruction of contaminants
4) Immobilization
5) Disposal in a properly designed landfill
6) Isolation or containment in place
7) Deed/Access controls and monitoring

7 Operation & Maintenance/Monitoring

Before removal from the Hazardous Sites List, all sites go through a period of performance monitoring to make sure the cleanup was effective. Many sites also require operation and maintenance of the chosen cleanup method. For example, cleanup of contaminated groun water often requires operation of a pump and treat system for many years.

8 Removal From the Hazardous Sites List

A site may be removed from the list once cleanup standards have bee met or containment and control of contaminants have proved effective. Monitoring must be conducted to confirm the long-term effectiveness o the cleanup. The length of the monitoring period depends on the natur of the site and the cleanup methods used.

Public notice and comment required.

What Happens After a Site is Cleaned Up?

When a site is removed from the Hazardous Sites List or an independent cleanup has passed Ecology review, it is given a status of "No Further Action." This is a formal, public statement by Ecology that it does not intend to pursue additional cleanup work at the site. However, a cleaned-up site can be revisited if it is recontaminated or if previously unknown contamination is discovered.

YAKIMA VALLEY SPRAY (U-HAUL)
Yakima County

WASHINGTON STATE DEPARTMENT OF ECOLOGY

PILOT PROJECT (HB 1810) CONSIDERED FOR YAKIMA VALLEY SPRAY (U-HAUL)

This is a Washington State Department of Ecology update of progress made at the former Yakima Valley Spray site, now occupied by U-Haul of Inland Northwest, on South First Avenue in Yakima, Washington.

Site Background

Over the years, many businesses have occupied this site. Yakima Valley Spray, a pesticide formulation and distribution company, occupied this site from 1908-1973. Washington Refining and Shell Oil Company occupied another portion of the site for many years also. Many different kinds of contaminants are present in the soil and ground water, such as pesticides, petroleum products and solvents.

The Washington State Department of Ecology (Ecology) issued an enforcement order to U-Haul of Inland Northwest in December 1991.

What's happening...

During the 1995 legislative session, the Washington State Legislature passed House Bill 1810. This bill created a 22 member committee to study the Department of Ecology's (Ecology) implementation of the Model Toxics Control Act. One of the bill's provisions is for the committee to designate 2 (two) pilot projects to "...evaluate alternative methods for accomplishing faster, less expensive and equally protective cleanups at complex sites".

An August/1995 Ecology letter was sent to U-Haul regarding their contaminated site at the Yakima Valley Spray facility. The letter asked if U-Haul wanted their site to be considered as a pilot project under House Bill 1810. U-Haul has since responded indicating that they do want their site to be considered as a possible pilot site. Ecology is now asking for any comments you may have regarding this proposal.

As you may be aware, the U-Haul (Yakima Valley Spray) facility is in the process of conducting a Remedial Investigation (RI) and Feasibility Study (FS). Its purpose is to determine the extent of contamination (Remedial Investigation-RI) and potential methods of site cleanup (Feasibility Study-FS). Ecology has accepted the Final RI for the site and is now reviewing the draft FS. Designating this site as a pilot site would allow U-Haul to expand these studies to demonstrate alternative cleanup standards and methods of cleanup to be used at the site.

Specifically, the PLP has indicated to Ecology that they are interested in using the pilot study process to demonstrate the integration of risk science, the development of cleanup standards and remedy selection.

September 1995

For technical questions, please contact:

Dick Bassett, site manager
Ecology Central Regional Office
Toxics Cleanup Program
15 W Yakima Ave., Suite 200
Yakima, WA 98902-3401
(509) 454-7839

Documents on this site can be reviewed at:

Ecology Central Regional Office address listed above
(509)454-7658

Continued from Page 1

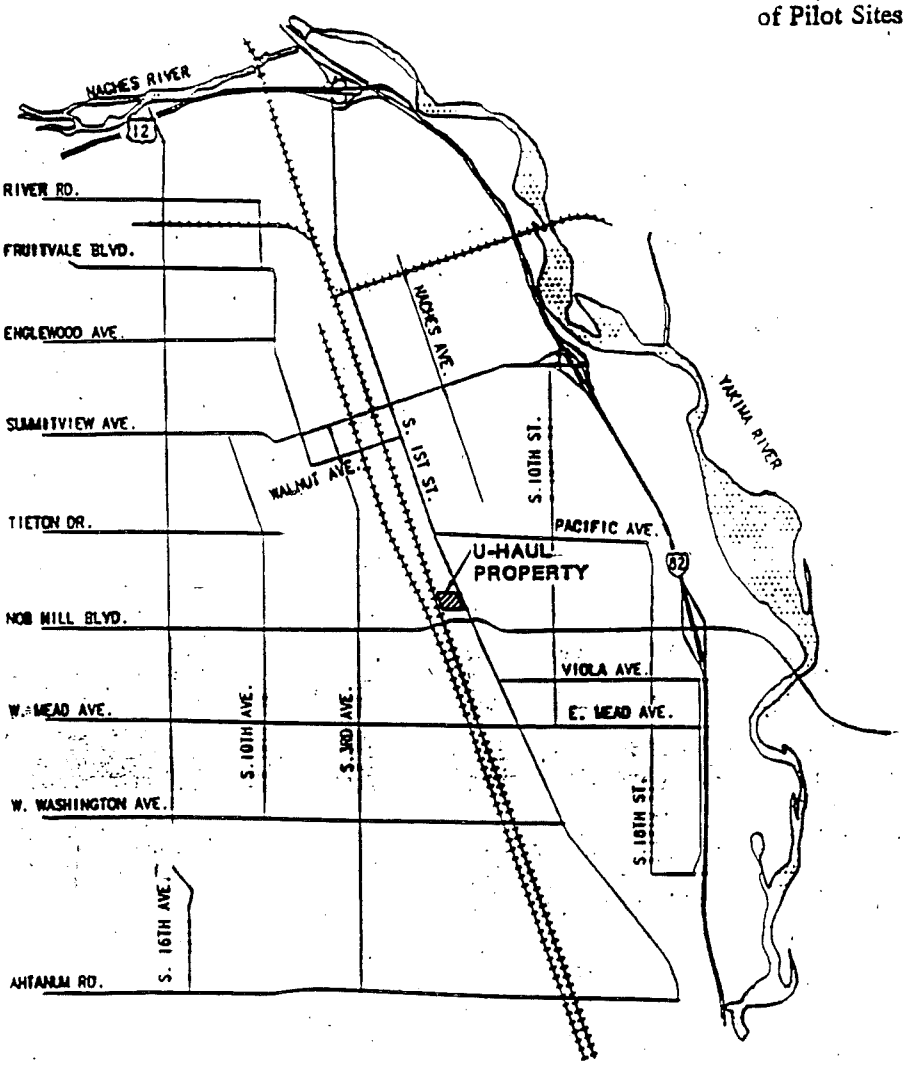
Two pilot sites will be selected by the committee established by the legislature from a list of sites provided by Ecology. One of the criteria in House Bill 1810 is that sites with "significant public opposition" to their selection as a pilot site are not eligible for selection.

Attached is a summary of the House Bill language related to the pilot project. Because of the tight statutory deadline, we are asking for your comments to be submitted to Ecology no later than September 26, 1995. Your comments should indicate either your support or opposition to designation of the U-Haul (Yakima Valley Spray) facility as a pilot site.

Below is a map showing the location of the U-Haul (Yakima Valley Spray). More information about this site is available at the information repository located at the Department of Ecology (15 W. Yakima, Suite 200).

PILOT SITES– PROPOSED SCHEDULE

16 August	PAC Meeting ■ Preliminary list of eligible sites ■ Solicit sites from PAC members
18 August	Letters to PLPs
30 August	PLP Response Deadline
6 September	Public Notices Issued
26 September	End 20 day Public Comment Period
29 September	PAC Selects 2 Pilot Sites
1 October	Statutory Deadline for Selection of Pilot Sites



If you have special accommodation needs, please call (509) 575-2491.
To receive this message in an alternative format, contact the TOXICS CLEANUP PROGRAM at 1-800-826-7716 (Voice) OR (360) 407-6006 (TDD)

SUMMARY OF PILOT STUDIES PROVISIONS IN HB 1810

Purpose

- Evaluate alternative methods for accomplishing faster, less expensive and equally protective cleanups at complex sites.
- Conduct supplemental or additional risk assessments or other analyses to explore improved methods of accomplishing cleanu under the Model Toxics Control Act (MTCA) at the Potentially Liable Person's expense.
- Provide information to the Policy Advisory Committee regarding progress at pilot sites for the committee's use in developing policy recommendations.

Eligibility of Pilot Sites

- Site is conducting remedial actions under an order, agreed order, or consent decree.
- There is no significant opposition from the public potentially affected by the site.

Other Criteria for Pilot Site Selection

- Presence of multiple parties and a willingness of these persons to participate in a pilot project.
- Preference is given to sites contaminated as a result of current or past industrial activities.
- Preference is given to sites that are in the process of preparing or for which there is a recently completed remedial investigation/feasibility study (RI/FS).
- The degree of community support for selecting a site as a pilot project site.

Constraints

- Pilot projects shall comply with the MTCA and the rules adopted under MTCA.
- Public participation in the cleanup process for these sites shall be as provided in the MTCA rules.

Process

- To determine the degree of community support, the department shall first consult with interested community and environmental groups.
- Before proposing a site as a pilot project the department shall issue a public notice identifying the site and seeking pu comment on the potential for the site to be a pilot project site.
- The Policy Advisory Committee shall select two pilot projects from a list of proposed pilot sites provided by the department.

Schedule

- Select 2 pilot projects no later than October 1, 1995.
- The department shall submit a status report to the Policy Advisory Committee on progress of pilot projects no later th March 31, 1996.
- Submit a report highlighting the policy issues raised by the pilot projects to the Policy Advisory Committee within 9 days after the comment period ends on the remedial investigation/feasibility study for the site.

Ecology Responsibilities

- Include any alternative risk assessment or other analyses in the remedial investigation/feasibility study requirements.
- Provide technical assistance to identify an appropriate scope for such supplemental analyses.
- Establish a reasonable schedule for the preparation of any supplemental analyses.
- The analyses shall be included in the Remedial Investigation/Feasibility Study regardless of whether the department concurred in their scope.
- The department may simultaneously prepare or commission its own supplemental analyses at its own expense, as dist from department conducted or department commissioned or contracted technical review of supplemental analyses prepared by PLPs.
- In consultation with the Potentially Liable Persons and the affected public for each site, the department's site manage shall to the fullest extent possible use the administrative principles set forth, for both the cleanup process and the cle standards, as well as other flexible tools available in the rules adopted under MTCA.
- The public participation plan for each site shall be designed or revised to educate and involve the public on the natur the pilot project, the specific issues being explored at the site, and the purpose and scope of any alternative or supplemental analyses.
- Prepare a report on each pilot project highlighting any policy issues raised as a result of the pilot project.
- Provide a copy of the RI/FS and any supplemental analyses and public comments received for each pilot project to t PAC.

Potentially Liable Person Responsibilities

- Willing to participate in a pilot project.
- Incur expense of supplemental analyses.
- Preparation and evaluation of any supplemental analyses shall not result in a delay in remedial actions at the pilot sit
- Comply with MTCA rules.

FILE COP

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

[illegible] • (509) 575-2490
15 West Yakima Avenue, Suite 200, Yakima, Washington 98902-3401

October 20, 1995

RE: U-Haul (Yakima Valley Spray) named Pilot Site

Dear Interested Parties:

The U-Haul (Yakima Valley Spray) site, a complex contaminated MTCA site located at 1108 South First Street in Yakima, was named recently as a Pilot Site by the 22 member Policy Advisory Committee (PAC). Ecology and U-Haul had requested that this site be considered for designation for this evaluation. Also named at the September 29, 1995 meeting was the L-Bar site in Chewelah (north of Spokane).

As you may be aware the Pilot Site Study was one item in the 1995 Legislature's House Bill 1810. A provision of this Bill was for the PAC to designate two complex sites, and for Ecology to then evaluate alternative methods for accomplishing faster, less expensive, and equally protective cleanups.

Ecology will now, in terms of this new legislative directive, review new U-Haul initiatives in terms of cleanup speed, cleanup expense, and equal site protection. Should any new initiatives result in significant change to site work or schedule, we will seek public comment prior to accepting these changes. In any event, we will keep you updated regarding these site activities, and invite your comments as it unfolds in future months.

Thank you for your time and interest in this matter. If you have additional questions regarding the U-Haul site, please feel free to contact me at (509) 454-7839.

Sincerely,

Dick Bassett

Dick Bassett
Site Manager
Toxics Cleanup Program

cc: Doug Little, Perkins-Coie

g:\dickb\pilotpub.wp

APPENDIX E
GLOSSARY OF TERMS

Cleanup Action Plan: means the document prepared by the Department of Ecology under WAC 173-340-360 which selects the cleanup action and specifies cleanup standards and other requirements for the cleanup action.

Contaminant: means any hazardous substance that does not occur naturally or occurs at greater than natural background levels.

Exposure Pathways: means the path a hazardous substance takes or could take from a source to an exposed organism. An exposure pathway describes the mechanism by which an individual or population is exposed or has the potential to be exposed to hazardous substances at or originating from the site. Each exposure pathway includes an actual or potential source or release from a source, an exposure point, and an exposure route. If the source exposure point differs from the source of the hazardous substance, exposure pathway also includes a transport/exposure medium.

Feasibility Study (FS): means the study of a site and selected remedy to determine the feasibility of the remedy for the proposed site cleanup standards.

Hazardous Sites Register: means the list of hazardous waste sites maintained under WAC 173-340-330.

Hazardous Substance: means any dangerous or extremely dangerous waste which present a threat to human health or the environment if released into the environment.

Hazardous Waste Site: means any facility where there has been confirmation of a release or threatened release of a hazardous substance that requires remedial action.

Maximum Contaminant Level (MCL): means the maximum concentration of a contaminant established by either the Washington State Board of Health or the Environmental Protection Agency under the Federal Safe Drinking Water Act.

PLP (potentially liable person): means any person or party whom the Department of Ecology finds, based on credible evidence, to be liable under RCW 70.105D.040.

Remedial Investigative Study (RI): means a site investigation to collect, develop, and evaluate information on the site an its contamination in order to select a remedy for cleanup.

Remedy: means any action or expenditure consistent with the purposes of identifying, eliminating, or minimizing any threat posed by hazardous substances to human health or environment including any investigative and monitoring activities with respect to any release or threatened release of hazardous substance and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

RCAC (Regional Citizens Advisory Committee): means a group of concerned citizens from around the State of Washington who consult with the Department of Ecology on appropriate ways to involve public participation at MTCA sites.

Risk Assessment: means the determination of the probability that a hazardous substance, when released into the environment, will cause an adverse effect in exposed humans or other living organisms.

YRRA (Yakima Railroad Area): means a six square mile industrial area located in the City of Yakima, currently under study by the Department of Ecology for possible hazardous substance release.