




STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4601 N. Monroe, Suite 202 • Spokane, Washington 99205-1295 • (509) 456-2926

August 9, 2000

TO: Attached List

FROM: Guy J. Gregory 

SUBJECT: Amendment of Orders, Pasco Sanitary Landfill

Public comment, ending August 6, 2000, indicated an error in our enforcement order sent to the attached list.

The attached amendment addresses that error. Please incorporate this amendment in your records.

Cc: Steve Thiele, AAG/Olympia

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of
Interim Actions at:

Pasco Sanitary Landfill
Pasco, Washington

NO. DE 00TCPER-1325

ENFORCEMENT ORDER
First Amendment

IO:

Advance Electroplating
Basin Disposal Company
Burlington Northern/Santa Fe Railroad, Inc.
Carr Aviation
Chempro of Oregon
John and Marjorie Dietrich
Leonard and Glenda Dietrich
E. I. du Pont de Nemours and Co., Inc.
Franklin Land Recovery, Inc.
Georgia Pacific Company
Glidden Corporation, a Subsidiary of ICI
Americas, Inc.
Harbor Oil, Inc.
Morton Chemical Company
Northwest VIP, Inc.
The O'Brien Corporation

Oregon Cutting Systems Division of Blount,
Inc.
Piute Energy and Transportation Company
PPG Industries
Puget Sound Naval Shipyards
Rhone-Poulenc AG Company
Sandvik Special Metals Corporation
United States Air Force
United States Department of Agriculture,
Forest Service
United States Department of Interior, Bureau
of Reclamation
Wood Treatment Chemical Company
Zep Manufacturing

I. JURISDICTION

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

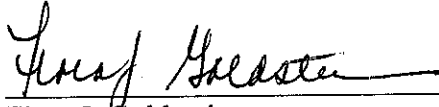
Section V. Terms and Conditions of Order, paragraph 10, Reservation of Rights, subparagraph d,
which states:

a. This Order shall not be construed as proof of liability or responsibility for any releases of hazardous substances or costs for remedial actions or as an admission by any PLP of any legal conclusion or such liability or responsibility provided, however, that the PLPs shall not challenge the jurisdiction of Ecology in any proceeding to enforce this Order.

is deleted.

No other condition or requirement of this Order is affected by this First Amendment.

Dated this 9th day of August, 2000, at Spokane, Washington



Flora J. Goldstein
Section Supervisor
Toxics Cleanup Program
Eastern Regional Office
Washington Department of Ecology

**Recipients of First Amendment
IWA Enforcement Order DE 00TCPER-1325**

Advance Electroplating

Advance Electroplating
C/O T. Boyd Coleman
Repair Technology
400 South 96th Street
Seattle, WA 98108

Basin Disposal Company

Ian Rodihan
Rodihan and Keane
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701 Fifth Avenue
Seattle, WA 98104

Burlington Northern Santa Fe Railroad, Inc.

Mr. Bruce A. Sheppard
Manager, Environmental Projects
Burlington Northern Santa Fe Railway
2454 Occidental Avenue South, 1A
Seattle, WA 98104-1105

Carr Aviation

Mr. Robert G. Schultz
Attorney at Law
2415 West Falls Avenue
Kennewick, WA 99336

John and Marjorie Dietrich

C/o Ian Rodihan
Rodihan and Keane
2410 Columbia Center
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Leonard and Glenda Dietrich

Leonard and Glenda Dietrich
4615 Hilltop Drive
Pasco, WA 99301-9489

E.I. du Pont de Nemours and Co., Inc.

Pamela Meitner
Senior Counsel
DuPont Legal D8072
1007 Market St.
Wilmington, DE 19898

Georgia-Pacific Company

Mr. Robert Davis
Lane Powell Spears Lubersky, LLP
1420 Fifth Avenue, Suite 4100
Seattle, WA 98101-2338

Glidden Corporation

Glidden Corporation
Subsidiary of ICI Americas, Inc.
925 Euclid Avenue
Cleveland, OH 44115

**Harbor Oil, Inc.
Northwest VIP, Inc.
Chempro of Oregon**

Mr. William Cundiff
President
Harbor Oil, Inc.
11535 North Force Avenue
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Morton Chemical Company

Mr. Thomas T. Terp
Taft Stettinius and Hollister
1800 Star Bank Center
425 Walnut Street
Cincinnati, Ohio 45202-3957

The O'Brien Corporation

Jerome J. Crowley
Corporate Environmental Manager
The O'Brien Corporation
1101 San Antonio Rd., Wt. 303
Mountain View, CA 94043

Oregon Cutting Systemes Division of Blount, Inc.

Mr. Larry White
Blount, Inc.
Oregon Cutting Systems Division
4909 SE International Way
Portland, OR 97269-2127

Piute Energy and Transportation Company

Bradley S. Keller
Byrnes & Keller
1000 Second Ave., 38th Floor
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(206)622-2000

PPG Industries

Anne Foulkes
Senior Attorney
PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272

Rhone-Poulenc Company

Mr. James E. Benedict
Hill, Huston, Cable, Ferris, and Haagensen
2000 Security Pacific Plaza
1001 SW Fifth Avenue
Portland, OR 97204-1135

Sandvik Special Metals

Bruce Spanner
Miller, Mehrtens and Spanner
1319 Lee Blvd.
Richland, WA 99352

Wood Treatment Chemical Company

Mr. Rodney L. Brown
Attorney at Law
1191 Second Ave., Suite 2200
Seattle, WA 98101

**Zep Manufacturing
C/o National Service Industries**

Mr. Barry R. Goldman
Assistant Counsel
National Service Industries, Inc.
1420 Peachtree Street N.E.
Atlanta, GA 30309-3002

**Puget Sound Naval Shipyards
U.S. Air Force
U.S.D.A, Forest Service
U.S.D.O.I., Bureau of Reclamation**

Eve Wilkerson-Barron, AUSA
Dept. of Justice
Environment and Natural Resources Division
Environmental Defense Section
601 "D" NW, Suite 8000
Washington D.C. 20004

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of
Interim Actions at:

Pasco Sanitary Landfill
Pasco, Washington

NO. DE 00TCPER-1325

ENFORCEMENT ORDER

TO:

Advance Electroplating
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United States Air Force
United States Department of Agriculture,
Forest Service
United States Department of Interior, Bureau
of Reclamation
Wood Treatment Chemical Company
Zep Manufacturing

Collectively referred to herein as the Potentially Liable Persons ("PLPs") or PLP Group.

I. JURISDICTION

This Enforcement Order ("Order") is issued pursuant to the authority of RCW 70.105D.050(1). This is an Order to implement interim actions for the Industrial Waste Area and Groundwater Plume Area at the Pasco Landfill Site ("Site"). Implementation of interim actions for the Sanitary Landfill Area at the Site will be addressed in a separate Order(s). Division of work for purposes of interim actions does not constitute division of the Site or creation of separate operable units. The division of work is for the purpose of commencing interim actions in an expeditious manner.

II. FINDINGS OF FACT

Ecology makes the following findings of fact, without admission of such facts by the PLPs.

A. Site Location

The Pasco Sanitary Landfill is located approximately 1.5 miles northeast of the City of Pasco, Washington, in the southwest quarter of Section 15, and the northwest quarter of Section 22, Township 9 North, Range 30 East, Willamette Meridian, in Franklin County, Washington. The site is near the intersection of Kahlotus Road with United States Routes 12 and 395, at latitude 46 degrees, 15' 07" North and longitude 119 degrees, 03' 13" West. The approximate location and boundaries of the Site are depicted by the diagram that is Attachment A to this Order, which is hereby incorporated by reference and is an integral part of this Order. The Site consists of the area illustrated and extends laterally and vertically as far as the plume of contamination which exceeds applicable cleanup levels in groundwater resulting from onsite contamination.

1. The Industrial Waste Area ("IWA") as this term is used in this Order is described on Attachment B.

2. The Groundwater Plume Area ("GPA") as this term is used in this Order is described on Attachment C.

3. The Sanitary Landfill Area ("SLA") as this term is used in this Order is described on Attachment D.

Attachments B, C, and D are hereby incorporated by this reference and are integral parts of this Order.

B. Site History and Operations

1. In 1958, the Franklin County Planning Commission authorized John Dietrich, d/b/a Pasco Garbage Service, to establish and operate a garbage disposal facility at this Site. The facility operated as a burning dump until 1971 when it converted to a sanitary landfill.

2. Chemical Processors, Inc. ("Chempro") and John and Marjorie Dietrich, d/b/a Basin Disposal Co., Inc. ("Basin"), agreed in 1972 to form a third company, Resource Recovery Corporation ("CR2"), to operate the landfill. CR2 was incorporated in Washington on August 8, 1972. The Resource Recovery Corporation Operational Plan, dated August 28, 1972, envisioned the development of a landfill for both drummed and liquid wastes. Drummed wastes were to be buried, and bulk liquids were to be discharged to lagoons and evaporated.

3. The Washington State Department of Ecology ("Ecology") issued an industrial waste discharge permit, No. 5301, to CR2 on March 21, 1973, to govern the operation of the disposal facility according to the operational plan. CR2 operated the industrial waste lagoons and drum disposal sites until 1974.

4. Following expiration of the permit, CR2 continued to operate the sanitary landfill portion of the facility, accepting local solid and industrial waste under permit from the Benton-Franklin District Health Department. In 1981, Pasco Sanitary Landfill, Inc. ("PSL") was formed to operate the landfill. PSL currently owns the Pasco Sanitary Landfill Property, which is depicted in Attachment A.

C. Previous Site Investigation Results

1. In February 1990, the Pasco Sanitary Landfill was listed as a National Priority List ("NPL") site by the United States Environmental Protection Agency ("EPA"). Ecology has been established as the lead agency for the cleanup investigations and remedial actions taken at the site. Ecology has consulted EPA regarding the interim actions to be performed pursuant to this Order. EPA has not objected to the proposed interim actions.

2. In 1992, a Phase I Remedial Investigation was begun by a group of PLPs. That group, including past and present owners/operators and generators, were signatories to Order DE 92TC-E105. The purpose of the Phase I Remedial Investigation was to gain additional information on the nature and extent of contamination in the air, soil, and ground water near potential contaminant sources at the site. The Phase I Remedial Investigation Report was accepted as final by Ecology in March 1994, following public notice and opportunity to comment.

3. In 1994, A Phase II Remedial Investigation ("RI") began at the Site. This work was completed by Philip Environmental Services Corporation ("Philip") on behalf of the Pasco Landfill Potentially Liable Person Group in accordance with Enforcement Order DE94TC-E103 and amendments issued by Ecology. The objective of the report was to document the Phase II RI activities and present an evaluation of the nature and extent of contamination at the Site. The Phase II RI report incorporated the findings presented in the Phase I RI report (Burlington Environmental Inc., 1994). The Phase II RI report was dated March 13, 1998, and was accepted as final by Ecology in October, 1999 following public notice and opportunity to comment.

Results of the Phase II RI report are documented in Section 3.0 of the report. Monitoring results to date indicate a release of hazardous substances to the environment, within the meaning of RCW 70.105D.020(20), has occurred at the Site.

D. Feasibility Study and Interim Actions

1. The PLP Group has completed a Feasibility Study ("FS") for the Site in accordance with WAC 173-340-350 and Enforcement Order DE94TC-E103. The FS report was dated April 23, 1999, and was accepted as final by Ecology in October 1999 after public notice and opportunity to comment.

2. Pursuant to Enforcement Order DE94TC-E103, as amended, the PLP Group has implemented certain interim actions at the Site. The Order describes further interim actions required by Ecology for the Site.

E. Conclusion

Based upon the facts set forth herein, Ecology has determined that the release and potential release of hazardous substances from the facility require interim actions to protect the public health, welfare, and the environment. This Order sets forth the interim actions necessary to protect public health, welfare, and the environment.

III. ECOLOGY DETERMINATIONS

Ecology determines, without admission on the part of any PLP, that:

1. Each PLP is potentially liable pursuant to RCW 70.105D.040 for the Pasco Sanitary Landfill, a "facility" as defined in RCW 70.105D.020(4). By letters issued pursuant to WAC 173-340-500(4), Ecology notified each of the PLPs of its status as a PLP under RCW 70.105D.040 after notice and opportunity for comment. The basis for each PLP's potential liability is set forth in those letters.

2. The facility is known as the Pasco Sanitary Landfill and is located approximately 1.5 miles northeast of the City of Pasco, Washington, in the southwest quarter of Section 15, and the northwest quarter of Section 22, Township 9 North, Range 30 East, Willamette Meridian, in Franklin County, Washington. The site is near the intersection of Kahlotus Road with United States Routes

12 and 395, at latitude 46 degrees, 15' 07" North and longitude 119 degrees, 03' 13" West. The approximate location and boundaries of the Site are depicted by the diagram that is Attachment A to this Order, which is hereby incorporated by reference and is an integral part of this Order. The Site consists of the area illustrated and extends laterally and vertically as far as the plume of contamination which exceeds applicable cleanup levels in groundwater resulting from onsite contamination.

3. The substances found at the facility as described above are "hazardous substances" as defined in RCW 70.105D.020(7).

4. Based on the presence of these hazardous substances at the facility and all factors known to Ecology, there is a release or threatened release of hazardous substances from the facility, as defined in RCW 70.105D.020(20).

5. Pursuant to RCW 70.105D.030(1) and 70.105D.050, Ecology may require potentially liable persons 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.

6. Pursuant to WAC 173-340-430, interim actions may occur prior to the selection and completion of a cleanup action if the interim action is technically necessary to reduce a threat to human health and the environment by eliminating or substantially reducing one or more pathways of exposure to a hazardous substance at a facility or is necessary for design of the cleanup action. The interim action must be approved in writing by Ecology prior to initiation of such action(s) by the PLP Group.

7. Based on the foregoing facts, Ecology believes the interim actions required by this Order are in the public interest.

IV. WORK TO BE PERFORMED

Based on the foregoing facts and determinations, it is hereby ordered that the PLP Group take the following interim actions and that these actions be conducted in accordance with Chapter 173-340 WAC unless otherwise specifically provided for herein. This Order requires: (a) the implementation and completion of the interim actions in the Scope of Work for Interim Actions at the IWA and GPA (Attachment E); and (b) the City of Pasco and/or Franklin County will implement certain institutional controls described in the scope of work (Attachment E). Attachment E is hereby incorporated by this reference and is an integral part of this Order. These interim actions shall be conducted according to the schedule set forth in Attachment E. The reference in the schedule set forth in Attachment E to "effective date" is the effective date of Agreed Order DE 00ICPER-1324.

V. TERMS AND CONDITIONS OF ORDER

1. **Definitions.** Unless otherwise specified, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meaning of the terms used in this Order.
2. **Public Notices.** WAC 173-340-600(10)(c) requires a thirty (30) day public comment period before this Enforcement Order becomes effective. Ecology shall be responsible for providing such public notice and reserves the right to withdraw this Order should public comment disclose facts or considerations which indicate to Ecology that the Order is inadequate or improper in any respect.
3. **Ecology's Costs.** The PLPs shall pay to Ecology costs incurred by Ecology pursuant to this Order. These costs shall include work performed by Ecology or its contractors for investigations, remedial actions, preparation of this Order, oversight, and administration. Ecology costs shall be limited to remedial costs as defined in WAC 173-340-550(2). The PLPs 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. Itemized statements shall be prepared quarterly. Failure to pay Ecology's costs within ninety (90) days of receipt of the itemized statement of costs will result in interest charges.

4. Designated Project Coordinators.

The project coordinator for Ecology is:

Name: Guy J. Gregory
Address: Senior Hydrogeologist
Toxics Cleanup Program
Washington State Department of Ecology
4601 N. Monroe, Suite 202
Spokane, WA 99205-1295
Tel: (509) 456-6387
Fax: (509) 456-6175

The project coordinator for the PLP Group is:

Name: Marlys Palumbo
Address: Philip Services Corp.
955 Powell Avenue S.W.
Renton, WA 98055
Tel: (425) 227-0311
Fax: (425) 227-6191

The project coordinator(s) shall be responsible for oversight of the implementation of this Order. To the maximum extent possible, communications between Ecology and the PLP Group 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 the PLP Group change project coordinator(s), written notification shall be provided to Ecology or the PLP Group at least ten (10) days prior to the change.

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.

The PLPs shall notify Ecology as to the identity of the company or firm of any such engineers or hydrogeologists, and of any contractors and subcontractors to be used in carrying out the terms of this Order, in advance of their involvement at the Site. Upon request, the PLPs shall provide the names of individual engineers or similar experts used to carry out the terms of this Order. The PLPs 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, the PLPs shall not perform any remedial actions at the Pasco Site outside those required by this Order unless Ecology concurs, in writing, with such additional remedial actions.

If any event occurs that is beyond the PLPs' reasonable control and that causes or might cause a delay or deviation in performance of the requirements of this Order, the PLPs shall promptly notify Ecology's Project Coordinator in writing of the cause of the delay or deviation, anticipated duration, the measures that have been or will be taken to prevent or minimize the delay or deviation, and the timetable by which the PLPs propose to carry out such measures. If the PLPs demonstrate to the satisfaction of Ecology's Project Coordinator that the delay or deviation has been or will be caused by circumstances beyond the control and despite the due diligence of the PLPs, Ecology shall extend times for performance of related activities under this Order as appropriate. Increased cost of performance or changed business or economic circumstances shall be presumed not to be circumstances beyond the PLPs' control. Disputes under this paragraph will be resolved pursuant to the terms of paragraph 9 of this section.

6. Access. To the extent the PLPs can provide access, Ecology or any Ecology authorized representative shall have the authority to enter and freely move about the Site 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 the PLPs. This Order constitutes reasonable notice of access, and the PLPs, to the extent that they can provide access, shall allow access to the Pasco Site at all reasonable or necessary times for purposes of overseeing work performed under this Order and assuring compliance with this Order. Ecology shall allow split or replicate samples to be taken by the PLPs during an inspection unless doing so interferes with Ecology's sampling. Ecology will give the PLPs seven (7) days' notice before any sampling activities. The PLPs shall allow split or replicate samples to be taken by Ecology and shall provide seven (7) days' notice before any sampling activity.

7. Public Participation. The PLPs shall prepare a Public Participation Plan for the Site. Ecology shall maintain the responsibility for public participation at the Site. The PLPs shall help coordinate and implement public participation for the Site.

8. Retention of Records. The PLPs shall preserve in a readily retrievable fashion, during the pendency of this Order and for ten (10) years from the date of completion of compliance monitoring for the facility, all submittals to Ecology, QA/QC memoranda and audits, final work plans, final reports, field notes, and laboratory or testing reports and data in its possession relevant to this Order. Should any portion of the work performed hereunder be undertaken through contractors or agents of the PLPs, then the PLPs agree to include in their contract with such contractors or agents a record retention requirement meeting the terms of this paragraph.

9. Dispute Resolution. The PLPs may request Ecology to resolve disputes that 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 final. However, nothing in this Order shall be construed as a waiver of any rights or defenses the PLPs may

have under RCW 70.105D.060. Ecology agrees to use best efforts to resolve the dispute in a timely fashion. The PLPs are not relieved of any requirement of this Order during the pendency of the dispute and remain responsible for timely compliance with the terms of this Order unless otherwise provided by Ecology in writing. Failure by any PLP to comply with this Order does not relieve any other PLP from the requirement and obligation to comply with same.

10. Reservation of Rights -- No Settlement.

a. This Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority. Ecology will not, however, bring an action against the PLPs to recover remedial action costs paid to and received by Ecology under this Order.

b. In addition, Ecology will not take additional enforcement actions against the PLPs to require those interim actions required by this Order, provided the PLPs comply with this Order. Ecology reserves the right, however, to require additional remedial actions at the Site should it deem such actions necessary to protect human health and the environment. Substantial changes to the interim actions to be performed under this Order will require an amendment mutually agreed to by the PLPs and Ecology. Ecology reserves all of its enforcement authority in the event that proposed amendments are not mutually agreed to by Ecology and the PLPs. In the event Ecology determines that conditions at the Site are creating or have the potential to create a danger to the health or welfare of the people on the Site or in the surrounding area or to the environment, Ecology may order the PLPs to stop further implementation of this Order for such period of time as needed to abate the danger.

c. 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 Site.

d. This Order shall not be construed as proof of liability or responsibility for any releases of hazardous substances or costs for remedial actions or as an admission by any PLP of any legal conclusion or such liability or responsibility provided, however, that the PLPs shall not challenge the jurisdiction of Ecology in any proceeding to enforce this Order.

11. Transference of Property. To the extent that the PLPs hold or retain any property rights at the Site, no voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated or allowed by the PLPs 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 the PLPs may have in the Site or any portion thereof, the PLPs, to the extent that the PLPs hold or retain any property rights at the Site, 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, the PLPs shall notify Ecology of the contemplated transfer.

12. Compliance with Other Applicable Laws.

a. All actions carried out by the PLPs pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in paragraph b of this section.

b. Pursuant to RCW 70.105D.090(l), the substantive requirements of chapters 70.94, 70.95, 70.105, 75.20, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals for the interim actions under this Order that are known to be applicable at the time of issuance of this Order are attached hereto as Attachment F and are binding and enforceable requirements of this Order. The PLPs have a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(l) would otherwise be required for the interim actions under this Order. In the event the PLPs determine that additional

permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the interim actions under this Order, they shall promptly notify Ecology of this determination. Ecology shall determine whether Ecology or the PLPs shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, the PLPs shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the interim actions. Ecology shall make the final determination on the additional substantive requirements that must be met by the PLPs and on how the PLPs must meet those requirements. Ecology shall inform the PLPs in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. The PLPs shall not begin or continue the interim actions potentially subject to the additional requirements until Ecology makes its final determination. Ecology shall ensure that notice and opportunity for comment is provided to the public and appropriate agencies prior to establishing the substantive requirements under this section.

c. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency which is necessary for the State to administer any federal law, the exemption shall not apply, and the PLPs shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

VI. SATISFACTION OF THIS ORDER

The provisions of this Order shall be deemed satisfied upon receipt by the PLPs of written notification from Ecology that the PLPs have completed the interim actions required by this Order, as amended by any modifications, and that all other provisions of this Order have been complied

with. Ecology shall make best efforts to respond to the PLPs within a reasonable time of receiving a request from the PLPs for notice of completion.


VII. ENFORCEMENT

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

1. The Attorney General may bring an action to enforce this Order in a state or federal court.
2. The Attorney General may seek, by filing an action if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.
3. In the event the PLPs refuse, without sufficient cause, to comply with any term of this Order, the PLPs and each individual PLP who refuses, without sufficient cause to comply will be liable for:
 - a. up to three times the amount of any costs incurred by the state of Washington as a result of its refusal to comply; and
 - b. civil penalties of up to \$25,000 per day for each day it refuses to comply.
4. This Order is not appealable to the Washington State Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.
5. Each PLP named in this Order is individually responsible for compliance with the terms and conditions of this Order. Compliance with this Order by any PLP is not conditioned on the performance of any other PLP or group of PLPs. Similarly, the right of Ecology to enforce this Order against any PLP is not conditioned on the performance or enforcement against any PLP or group of PLPs.

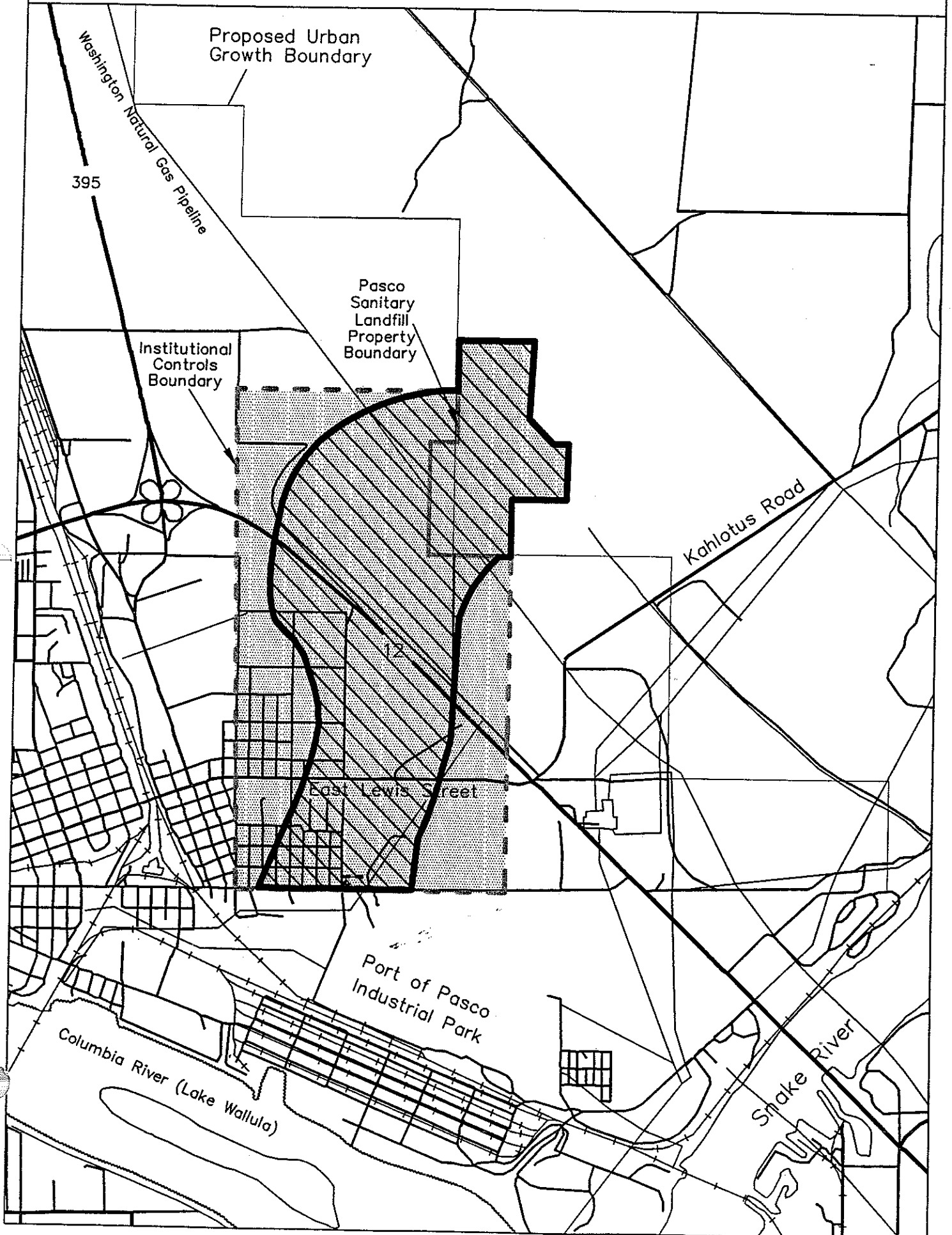
Effective date of this Order: June 30, 2000

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

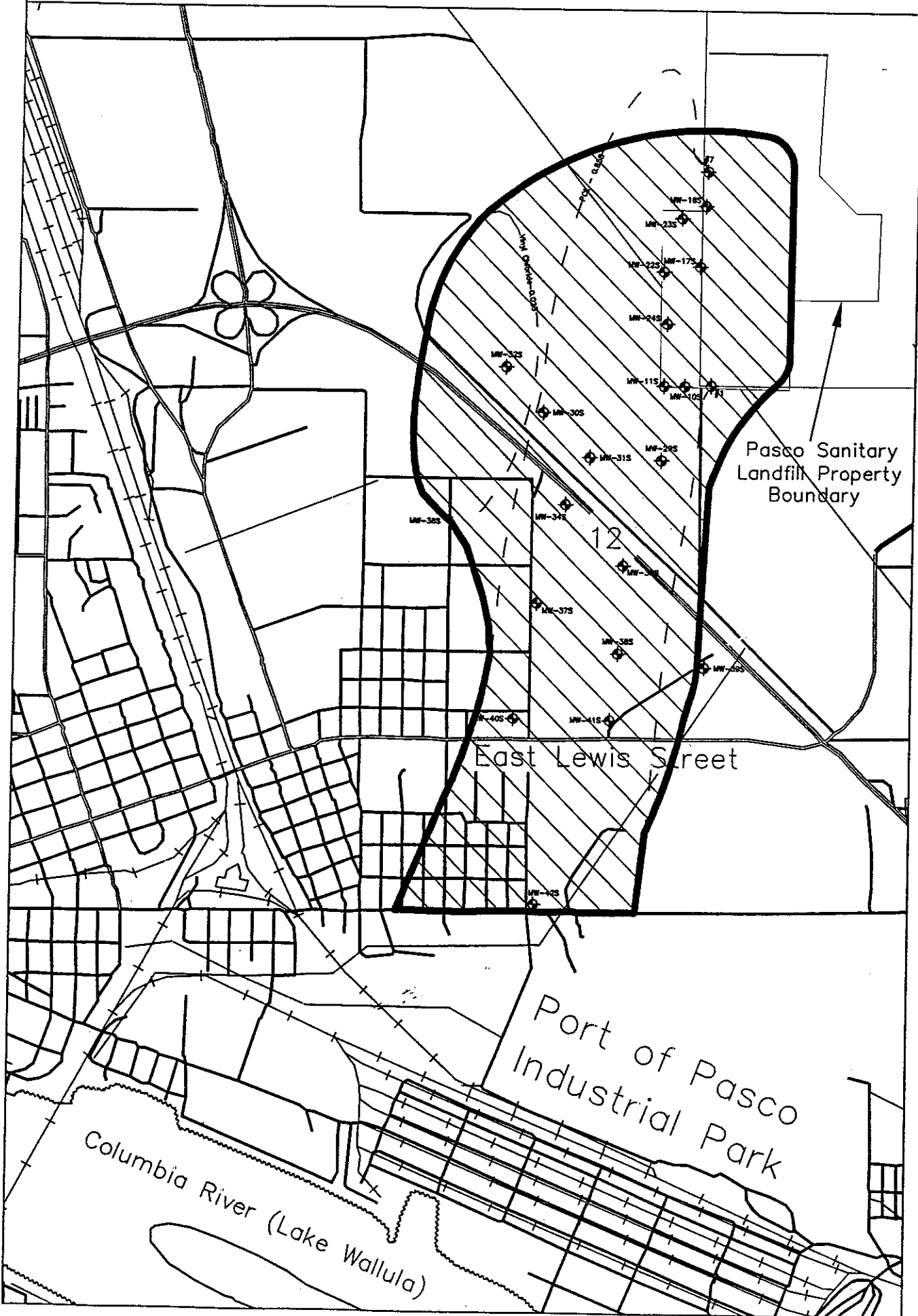
By 

Flora J. Goldstein
Section Manager
Toxics Cleanup Program
Eastern Regional Office

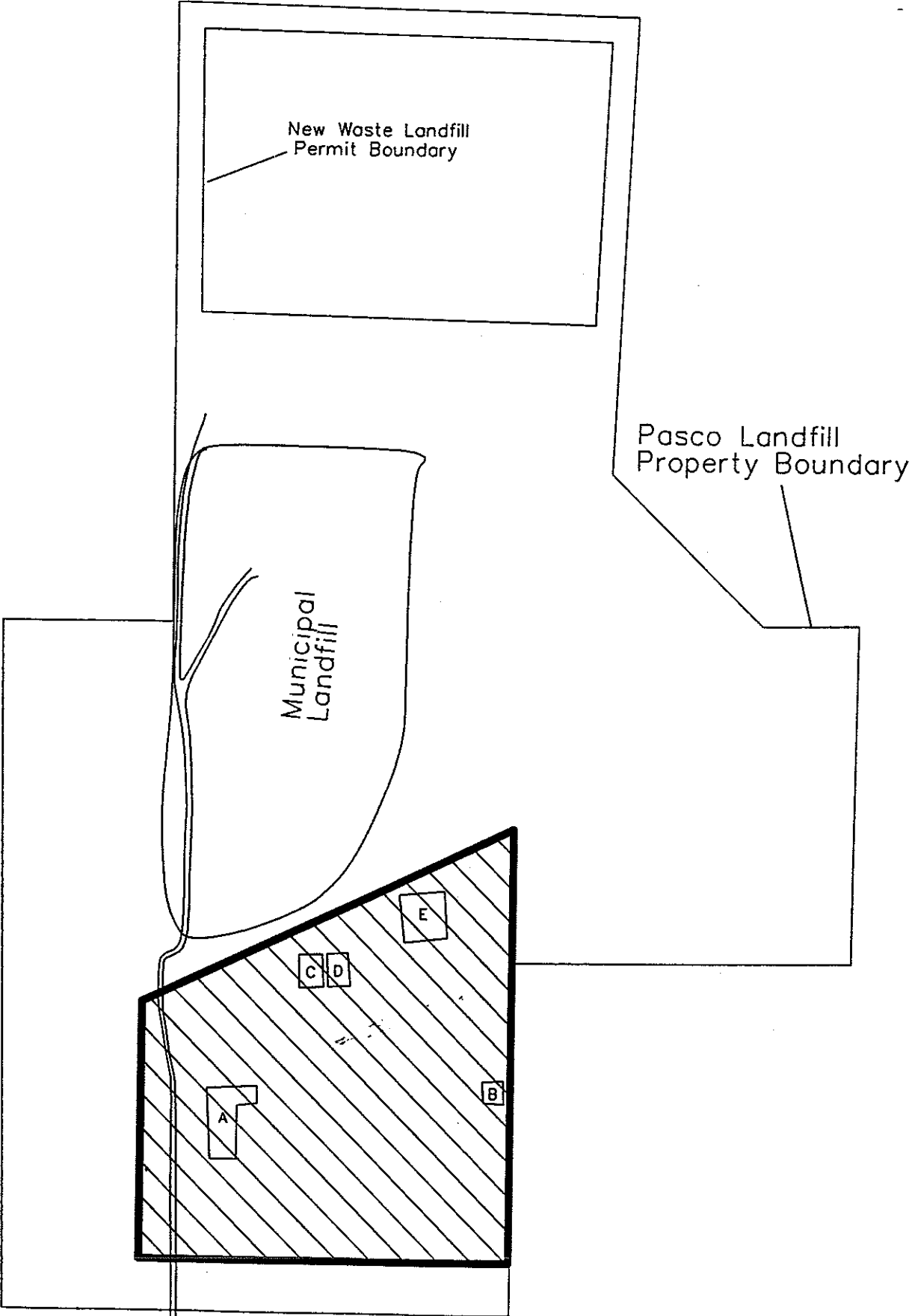
ATTACHMENT A PASCO SANITARY LANDFILL SITE



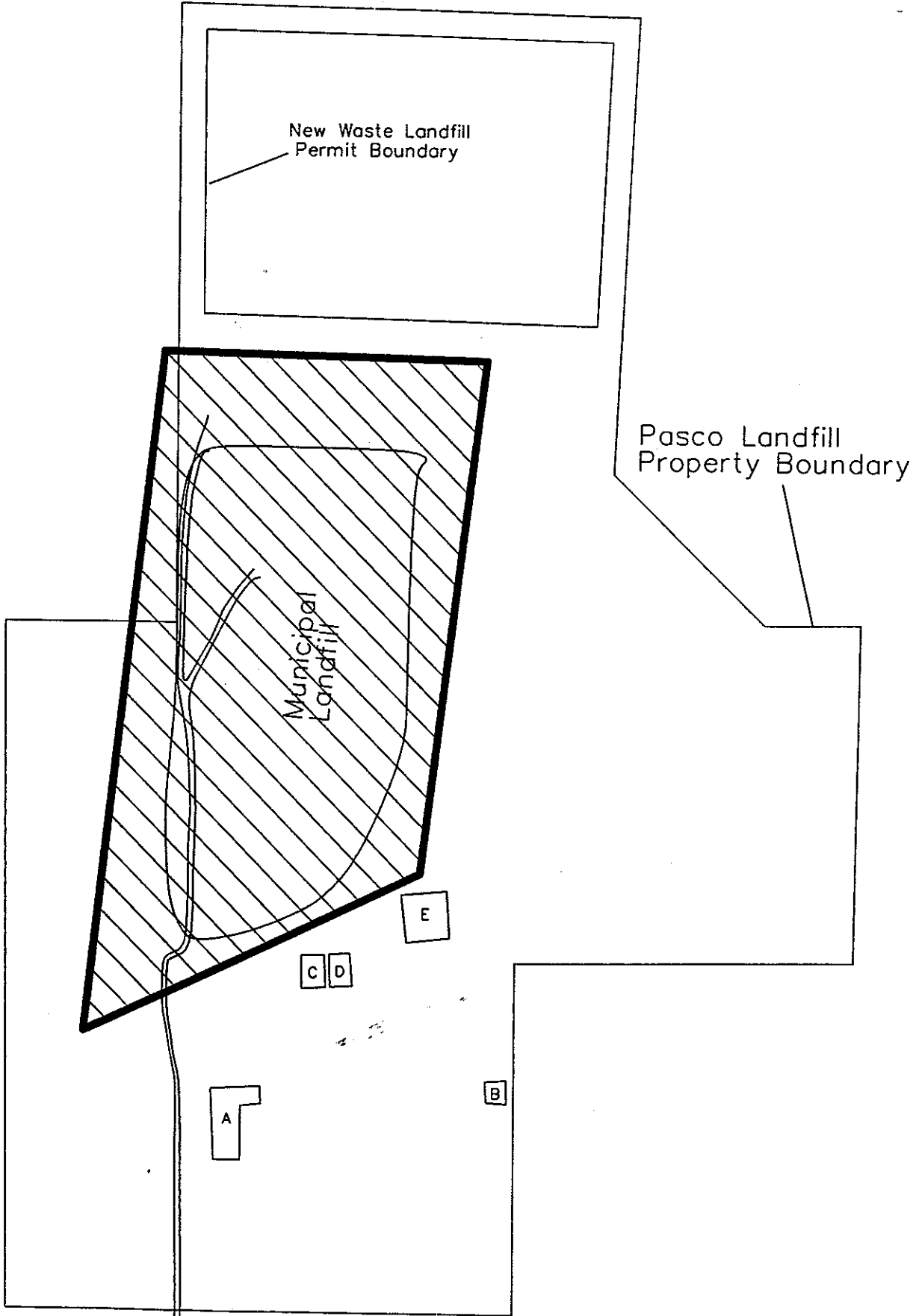
ATTACHMENT B
GROUND WATER PLUME AREA



ATTACHMENT C
INDUSTRIAL WASTE AREA



ATTACHMENT D
SANITARY LANDFILL AREA



Attachment E
Pasco Sanitary Landfill
Industrial Waste and Ground Water
Interim Action Scope of Work

Task I: Interim Action Work Plan
[WAC 173-340-430(6)]

The Interim Action Work Plan shall contain sufficient detail in initial design to facilitate meaningful public review of interim action elements. The work plan shall address the following elements:

Major Elements:

Initial Design: Industrial Waste Closure Cap Systems

Initial Design: Ground Water Treatment System

(All above WAC 173-340-400)

Initial Ground Water Monitoring and Interim Action Systems Monitoring Plan (WAC 173-340-410)

Initial Institutional Control Plan (WAC 173-340-440)

Project Applicable or Relevant and Appropriate Rule and Guidance List

Site Health and Safety Plan (WAC 173-340-810)

Public Participation Plan (WAC 173-340-600)

SEPA Checklist

General requirements of these design documents are as follows:

Closure Cap System Design Documents

All Closure Cap System design documents will include:

- 1: Background, including goals of the action and specific performance requirements, existing and expected site conditions, and location of the action;
2. Characterization of the waste and quantity of materials to be contained and/or managed;
3. Engineering justification for design and operation parameters, including general material specifications, design criteria, assumptions and calculations; expected treatment, destruction, or immobilization efficiencies, pilot or treatability data, results from similar operations, and literature evidence;
4. Schedules, including copies of local permits or schedules to obtain permits;

5. Additional information, as needed, regarding applicable state, federal and local requirements, and property access issues.

Project Applicable or Relevant and Appropriate Rule and Guidance List

The PLPs shall consult with state and local government agencies and shall obtain a written determination of the applicable substantive requirements of chapters 70.94, 70.95, 70.105, 75.20, 90.48 and 90.58 RCW and the substantive provisions of any laws requiring or authorizing local government permits or approvals for remedial actions.

Health and Safety Plans

Health and Safety Plans will contain:

1. Design of special features for the control of hazardous substance spills or discharge, including air emissions;
2. Health and Safety feature design, including monitoring device specifications;
3. Additional information, as needed, regarding health and safety requirements to meet or exceed the hazardous waste operations and emergency response requirements of Occupational Safety and Health Act of 1970 (29 U.S.C. Sec. 651 et seq.) as well as requirements of the Washington Industrial Safety and Health Act (Chapter 49.17 RCW) and the regulations promulgated thereto.

Construction Quality Assurance Plans

The CQAP and OMP documents will address all elements required by applicable regulation and relevant and appropriate guidance for construction quality assurance procedures.

Public Participation Plan

A Public Participation Plan shall be prepared to address Interim Action activities. It shall be consistent with the requirements of WAC 173-340-600.

Monthly Progress Reports

Progress Reports shall be completed on a monthly basis. They shall contain:

1. A list of on-site activities that has taken place during the period;
2. A detailed description of any deviations from required tasks not otherwise documented in project plans;

3. Descriptions of all deviations from the schedule, and planned deviations in the upcoming month;
4. Work in progress;
5. A list of deliverables for the upcoming month.

Task II: Industrial Waste Containment Systems Design Documents

Major Elements:

Industrial Waste Containment Systems in accordance with WAC 173-303
Zone A Soil Vapor Extraction (SVE) System

Deliverables:

60 and 100% Industrial Waste Containment System Design documents, including
Runoff Control systems
Revised SVE System Operation and Maintenance Plan
Construction Quality Assurance Plan (IW CQAP)
Operations and Maintenance Plan (IW OMP)

Preliminary design of the Industrial waste containment systems are found in the following sections of the 1999 Pasco Landfill Feasibility Study Report, dated:

- Zone A Cap - Section 5.3.3.2
- Zone A SVE System - Section 5.3.3
- Zone CD Cap - Section 5.3.5.2
- Zone E Cap - Section 5.3.6.2

If the 60% design submittal is sufficient for final Ecology approval it may be approved as the final design. Ecology requires review of all changes made prior to issuance of bid documents.

Task III: Zone B Removal

Major Elements

Intrusive Investigation
Removal and Disposal of drums and visually impacted soil

Both the intrusive investigation and the removal action at Zone B must be completed during a seasonal window beginning on November 1 and extending to March 15. This requirement will have a significant impact on the schedule for Zone B activities. For this reason the implementation schedule for Zone B is described separately from other site activities

Deliverables:

Zone B Removal Investigation Work Plan, including:

Field operations plan

Field sampling plan

Action-specific Health and Safety Plan.

Zone B Removal Investigation Results and Final Waste Disposition Plan

The Waste Disposition Recommendation Report will describe alternative actions considered and why the proposed alternative was selected. WAC 173-340-430(6)(b)(ii)

Zone B Removal and Final Waste Disposition Plan will include, for the removal action:

Construction Quality Assurance Plan (Zone B CQAP)

Health and Safety Plan (Zone B HSP)

Operations and Maintenance Plan (Zone B OMP)

Zone B Removal Report, in compliance with WAC 173-340-400(7) including complete documentation of waste disposition actions in accordance with applicable or relevant and appropriate state and federal law and guidance.

Task IV: Ground Water Treatment and Interim Action Systems Monitoring Plan

Major Elements:

NoVOCs™ System Expansion

Performance Ground Water Monitoring

Protection Ground Water Monitoring

Interim Action Systems Performance Monitoring

Deliverables

NoVOCs System Expansion Initial Design

Revised NoVOCs™ Operations and Maintenance Plan

Ground Water and Interim Action Systems Monitoring Plan

Sampling and Analysis Plan

Quarterly and Annual Ground Water and Interim Action Systems Performance Monitoring Reports

Performance and Protection Monitoring

The groundwater monitoring conducted at each of the industrial waste zones and the municipal landfill shall consist of monitoring for the constituents that have been historically present downgradient of the zones or represent the predominant source material in a zone. In addition to these constituents, selected wells downgradient of each industrial waste zone and the municipal landfill will monitor a more extensive list of analytes. These "sentinel wells" will be used to detect chemicals that records show

were placed in a zone and may be released, but to date have not been detected or have been detected infrequently at very low levels.

The table below outlines the field and chemical analyses to be conducted on groundwater samples for the industrial waste zones and the municipal landfill.

Zone	General Analyses	Sentinel Well Analyses
Municipal Landfill	VOCs Appendix I Inorganics and Appendix II Constituents	VOCs, SVOCs, Appendix I Inorganics and Appendix II constituents
Zone A	VOCs Appendix I Inorganics and Appendix II constituents	VOCs, SVOCs, Appendix I Inorganics and Appendix II Constituents Chlorinated Herbicides
Zone B	SVOCs, Chlorinated Herbicides Appendix II Field parameters	VOCs, SVOCs, Chlorinated Herbicides, Appendix II Field Parameters
Zone CD	VOCs Appendix I Inorganics and Appendix II Constituents	VOCs, SVOCs, Appendix I Inorganics and Appendix II constituents
Zone E	VOCs Appendix I Inorganics and Appendix II Constituents	VOCs SVOCs Appendix I Inorganics and Appendix II Constituents
Off-property Groundwater	VOCs Appendix II Field Parameters	

Appendix I Inorganics include those determinations listed in WAC 173-351-990 Appendix I, (1) through (16), except that analyses shall be performed on unfiltered samples, unless the conditions of WAC 173-340-720(8) can be demonstrated.

Appendix II Constituents include all determinations listed in WAC 173-351-990 Appendix II, including Field Parameters, Geochemical Indicator Parameters, and Leachate Indicators.

Appendix II Field Parameters includes those determinations listed in WAC 173-351-990 Appendix II, Field Parameters, specifically pH, Specific Conductance, Temperature, and Static Water Level.

VOCs includes those analyses listed in USEPA Method 8260,
SVOCs includes those analyses listed in USEPA Method 8270.

Chlorinated Herbicides includes those analyses listed in USEPA Method 8150 by Gas Chromatography, Atomic Emission Detector or equivalent.

Interim Action Systems Performance Monitoring

Wells installed specifically to evaluate interim action system performance shall include the following analyses:

VOCs
Appendix II Field Parameters
Dissolved Oxygen

Monitoring of air streams for recirculation wells and soil vapor extraction systems, air and vapor treatment systems, and air treatment process residuals and waste disposal shall be done in accordance with applicable regulation.

Sampling and Analysis Plan

The Sampling and Analysis Plan will include objectives, methods, locations, equipment, and parameters to be analyzed for all samples in all media. Separate plan sections are suggested for air, soil, waste, and ground water monitoring as objectives differ.

The Sampling and Analysis Plan shall be prepared in accordance with the Model Toxics Control Act, (Ch. 70.105D RCW) and Cleanup Regulation (Ch. 173-340 WAC) and appropriate federal guidance.

A project-wide Quality Assurance Project Plan (QAPP) will be prepared. The QAPP will address, at a minimum, the following issues for all media:

Field QA/QC

1. Standard Operating Procedures for field sampling methods
2. Field documentation methods
3. Frequency of QA/QC samples (duplicates, rinsate, and blank)
4. Field instrument calibration
5. Chain of Custody procedures
6. Decontamination procedures, including: entry and exit controls, equipment and personnel decontamination.

Investigative and treatment system derived waste management plans

Laboratory QA/QC program

Laboratory identifications

1. sample custody
2. analytical turn-around time
3. calibration procedures and frequency
4. data reduction, validation, and reporting
5. internal quality control checks
6. performance system and audits
7. specific procedures for routine assessment of data precision, accuracy, and completeness
8. Tabulated detection limits for all chemicals to be analyzed.

The Sampling and Analysis Plan shall include a Data Management Plan. The Data Management Plan shall be prepared to ensure quality assured data is available for review, tabulation, and analysis. The plan will ensure data submitted is consistent with the requirements of the Order and of sufficient quality to establish cleanup levels in accordance with the Model Toxics Control Act Cleanup Regulation.

Data Submittals

In accordance with Chapter 173-340-840(5), the PLPs shall submit sampling data according to the Ecology Environmental Information Data Submittal Guide.

The Sampling and Analysis Plan shall include an Investigative Waste Management Plan, addressing handling, storage, and disposal of waste materials generated as a result of interim action and investigative activities.

Task V: Institutional Controls

Institutional Controls shall be implemented to limit exposure of humans to chemicals from the Pasco Sanitary Landfill Site, in the area shown on Attachment A to this Order, in accordance with WAC 173-340-440(1)(c). Any restrictive covenants shall contain all elements of WAC 173-340-440(5). Demonstration of financial assurances in accordance with WAC 173-340-440(7) shall be required. Ground water restrictions in the form of zoning and/or building overlays shall be implemented by the City of Pasco and Franklin County through an agreement between these municipalities and the PLPs. These ground water restrictions shall apply within the area shown on Attachment A and shall provide for appropriate access and enforcement provisions. Ecology retains the right to review and approve any legislative action taken by the City of Pasco and/or Franklin County to institute the required ground water restrictions. The PLPs retain ultimate overall responsibility for implementation of institutional controls at this site

Major elements

Site Access Controls, including restrictive covenants
Ground Water Restrictions in the form of zoning and/or building overlays
Annual Update of Beneficial Use Survey within Ground Water Protection Area

Deliverables

Institutional Controls Plan, including:

Site Access Restriction Design
Draft Ground Water Restriction documents
Draft Plan to Update Beneficial Use Survey
Financial Assurance Documents

Annual Report on Institutional Controls and Beneficial Use Survey

Task VI: Completion Report
[WAC 173-340-400(7)]

Following completion of implementation of containment, ground water, and Zone B actions, a report is required. The report will be prepared by the engineer responsible for the supervision of the construction and will include:

As-Built drawings of the facility
A report documenting all aspects of facility construction;
Documentation of Zone B waste disposal;
Compliance monitoring data to date;
A statement from the engineer, based upon testing results and inspections, as to whether the interim action was performed in substantial compliance with the plans and specifications and related documents;
Certified copies of property deeds, or ordinances and other instruments which document operational institutional controls.
Final Operations and Maintenance Plans

Schedule:

Task I - Interim Action Work Plan

45 Days following Effective Date of Order

Task II: Industrial Waste Containment Systems (IWCS) Design Documents

60% IWCS Design Document: 90 Days following approval of Interim Action Work Plan

Includes: 60 % Cover System Design Documents and Revised SVE System Operation and Maintenance Plan, Draft Construction Quality Assurance Plan, Operation and Maintenance Plan

Final IWCS Design Document 60 Days following approval of 60% IWCS Design Document

Includes: 100 % Cover System Design Documents, Final SVE System Operation and Maintenance Plan, Final Construction Quality Assurance Plan, Final Operation and Maintenance Plan

Task III: Zone B Removal

Draft Zone B Removal Investigation Plan September 15, 2000

Draft Zone B Removal Investigation Results and Final Waste Disposition Plan: June 1, 2001

Draft Zone B Removal Report May 1, 2002.

Task IV: Ground Water and Interim Action Systems (GWIS) Design and Monitoring Plan

Draft GWIS Monitoring Plan 90 Days following approval of Interim Action Work Plan

Includes: Draft Recirculation Well System Expansion Initial Design
Revised Recirculation Well Operations and Maintenance Plan
Draft Ground Water and Interim Action Systems Monitoring Plan
Draft Sampling and Analysis Plan

Final GWIS Monitoring Plan 60 Days following approval of Draft GWIS Monitoring Plan

Quarterly and Annual Ground Water and Interim Action Systems Performance Monitoring Reports: commencing at the first available quarter following approval of the GWIS Monitoring Plan, and continuing as follows:

First quarter Calendar Year Monitoring Report: Due first business day following June 15 of the calendar year

Second Quarter Calendar Year Monitoring Report: Due first business day following September 15 of calendar year

Third Quarter Calendar Year Monitoring Report: Due first business day following December 15 of calendar year

Fourth Quarter and Annual Calendar Year Monitoring Report (including Annual Report on Institutional Controls and Beneficial Use Survey Due first business day following March 15 of following calendar year

Task V: Institutional Controls

Draft Institutional Control Plan: 45 Days following Order signing, with Interim Action Work Plan Final
Institutional Control Plan: 60 Days following approval of the Interim Action Work Plan

Task VI: Interim Action Construction Completion (IACC) Report

Monthly Progress Reports

Beginning on the 10th day of the month following the effective date of the order, continuing monthly through Ecology approval of the Draft IACC Report

Draft Completion Report: 540 calendar days following approval of Interim Action Work Plan

Including

As-Built drawings of the facility
A report documenting all aspects of facility construction;
A copy of the Zone B Removal Report.
Compliance monitoring data to date;
A statement from the engineer, based upon testing results and inspections, as to whether the interim action was performed in substantial compliance with the plans and specifications and related documents;
Certified copies of property deeds, or ordinances and other instruments which document operational institutional controls
Final Operations and Maintenance Plans

Final Completion Report: 30 Days following Approval of Draft IACC Report

Interim Action Performance Evaluation Report

Draft Interim Action Performance Evaluation Report: Six calendar years following approval of the Draft Interim Action Work Plan

Includes technical evaluation of the performance of all interim action systems, statistical and time series plots of all ground water data gathered to date, and documentation of all maintenance and operational actions taken to date. The document may include an evaluation of additional actions and new technologies available to address the site in accordance with remedy selection procedures available under remedy selection provisions of regulations developed pursuant to the Model Toxics Control Act, Ch. 70.105D RCW.

Attachment F
Identified Substantive Requirements and other Applicable Rules

Substantive Requirements

RCW 70.94 Clean Air Act

WAC 173-400 General Regulations for Air Pollution Sources

WAC 173-460 Controls for New Sources of Toxic Air Pollutants

WAC 173-490 Emission Standards and Controls for Sources Emitting Volatile Organic Compounds (VOCs)

RCW 70.95 Solid Waste Management Act

WAC 173-351 Criteria for Municipal Solid Waste Landfills

WAC 173-304 Minimum Functional Standards for Solid Waste Handling

RCW 70.105 Hazardous Waste Management Act

WAC 173-303 Dangerous Waste Regulations

RCW 70.105D Model Toxics Control Act

WAC 173-340 Model Toxics Control Act Cleanup Regulation

Action-specific applicable or relevant and appropriate requirements: The following, in addition to the above, may be applicable or relevant and appropriate to individual actions taken under this order:

RCW 90.48 Water Pollution Control Act

WAC 173-216 State Waste Discharge Program

WAC 173-200 Ground Water Quality Standards for the state of Washington

RCW 18.104 Water Well Construction

WAC 173-160, Minimum Standards For Construction And Maintenance Of Wells