PETER D. SHEPHERD

HARDY MYERS Attorney General



October 18, 2004

Deputy Attorney General
LEGAL DEPARTMENT

04 OCT 20 AM 9: 25 PORT OF PORTLAND

David Ashton Legal Department Port of Portland 121 NW Everett Street PO Box 3529 Portland, OR 97208

Re: T4S3 Consent Judgment

Dear Dave:

Enclosed for your records are:

- 1. A copy of the conformed front page of the consent judgment as approved by the court on October 7, 2004, and a copy of the court's signature page.
 - 2. An original signature page for DEQ.

Sincerely,

Kurt Burkholder

Assistant Attorney General Natural Resources Section

KBB:lss/GENK5930 Enclosures: (3)

c w/o encls.: Tom Roick, DEQ

FILED

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FOR MULTHOMAH COUNTY



IN THE CIRCUIT COURT OF OREGON

FOR THE COUNTY OF MULTNOMAH

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STATE OF OREGON, ex rel. STEPHANIE
HALLOCK, DIRECTOR, DEPARTMENT
OF ENVIRONMENTAL QUALITY,

No. 0410 - 10234

NTAL QUALITY,

Plaintiff,) CONSENT JUDGMENT) ("General Judgment")

v.

PORT OF PORTLAND, a port district of the State of Oregon,

Defendant.

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1 This Consent Judgment ("Consent Judgment") is filed simultaneously with and for the 2 purpose of resolving the underlying complaint by the State of Oregon. Plaintiff State of Oregon 3 ex rel the Director of the Oregon Department of Environmental Quality ("DEQ") and the Port of 4 Portland (the "Port") desire to resolve this action without litigation and have agreed to entry of 5 the Consent Judgment without admission or adjudication of any issue of fact or law. 6 The mutual objective of DEQ and the Port is to protect public health, safety, and welfare 7 and the environment by the design and implementation of remedial measures in accordance with 8 ORS 465.200 through 465.410, regulations promulgated thereto, and the administrative Record 9 of Decision dated April 16, 2003. 10 2. **Stipulations** 11 A. The Port stipulates: 12 (1) To entry of this Consent Judgment; 13 (2) To perform and comply with all provisions of this Consent Judgment; 14 (3) In any proceeding brought by DEQ to enforce this Consent Judgment, not 15 to litigate this Court's jurisdiction over this matter or the validity of the Consent Judgment; and 16 (4) To waive any right the Port might have under ORS 465.260(7) or 17 465.325(2) to seek reimbursement or financial assistance for the costs incurred under this 18 Consent Judgment. 19 B. DEQ and the Port stipulate: 20 (1) The Port is a port district of the State of Oregon. 21 (2) The Terminal 4 Slip 3 upland facility ("Upland Facility") has been owned 22 by the Port since 1971. The Upland Facility occupies approximately 50 acres of the Port's

Terminal 4 in Portland, Oregon, including the riverbank and submersible land at the head of Slip

3. For purposes of this Consent Judgment, the Upland Facility does not include other adjoining

property at Terminal 4 also owned by the Port, the sediments of Slip 3, or Terminal 4 property

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under investigation or remedial action by Union Pacific Railroad Company ("UPRR"), Toyota
Corporation, or any tenant of the Port. A site location map and a site and vicinity plan for the
Upland Facility subject to this Consent Judgment, including identification of remedial action
areas, are included in Attachments A and B to this Consent Judgment and incorporated by
reference.

- owned and operated a fuel loading facility at the location of the Upland Facility as early as 1906. The City of Portland's Commission of Public Docks ("CPD") purchased approximately 117 acres from UPRR in 1917 and began the initial development of Terminal 4. In 1920, the CPD acquired an additional adjoining 5-acre parcel from UPRR; the pipeline and fuel oil dock contained within the parcel were not included in the purchase, and an easement was granted by the CPD to UPRR for continued use of the pipeline and fuel oil dock. The pipeline was used to transfer diesel, No. 6 fuel, and Bunker oil from marine vessels to bulk storage tanks located east of the Upland Facility. Rail cars were loaded from the bulk storage tanks at the loading facility located immediately east of the Upland Facility. The CPD became the Port of Portland in 1971.
- (4) According to the Port, the berthing areas at Slip 3 have historically been used for bulk cargo loading and unloading operations handling pencil pitch; diesel oil; soda ash; tale; iron, lead, zinc, and copper ores; bentonite clay; coke; and briquettes. Bulk off-loading (inbound bulks) no longer occurs at Slip 3. Handling of pencil pitch, the last in-bound bulk at Slip 3, was discontinued in June 1998. Wheeler Bay has not been used as a ship loading or unloading facility; however, it is connected to Slip 3 via Berth 410 and to T4 Slip 3 uplands by storm drains.
- (5) According to the Port, from 1953 to 1985, Quaker State operated an oil canning facility east of Slip 3. The aboveground storage tanks were removed in 1985. The abandoned Quaker State underground pipeline has been removed. Slip 3 has undergone

maintenance dredging several times over the course of its existence, including maintenance dredging of berths 410 and 411 in 1997.

- Portland Harbor Superfund Site, placed on the federal National Priorities List on December 1, 2000 by the U.S. Environmental Protection Agency ("EPA"). On February 8, 2001, DEQ entered a Memorandum of Understanding with EPA, other agencies, and Tribes ("Portland Harbor MOU"), by which DEQ is designated the lead agency for implementing environmental investigation and source control at upland facilities in the Portland Harbor using state cleanup authorities, and EPA is designated the lead agency for implementing environmental investigation and cleanup of in-water sediments using Comprehensive Environmental Response,

 Compensation, and Liability Act ("CERCLA") authorities.
- (7) The Port conducted a remedial investigation of the Upland Facility under the Intergovernmental Agreement No. WMCVC-NWR-98-05 between the Port and DEQ dated October 23, 1998.
- (8) On June 27, 2002, DEQ and the Port entered a Voluntary Agreement for Feasibility Study, DEQ No. LQVC-NWR-02-11, under which the Port agreed to complete a feasibility study of the T4 Slip 3 area based on earlier remedial investigation work approved by DEQ. The Voluntary Agreement divided the T4 Slip 3 area into two operable units, the Uplands Operable Unit and the Sediments Operable Unit. This Consent Judgment concerns remediation to be performed at the Uplands Operable Unit.
- (9) The remedial investigation indicates that the contaminants of concern are oil-range total petroleum hydrocarbons ("TPH") at the former Quaker State facility, diesel and heavier fuel oil-range TPH from underground pipeline releases and railcar loading, and associated carcinogenic and non-carcinogenic polynuclear aromatic hydrocarbons ("PAHs"). The pipelines from the UPRR tank farm to Slip 3 were approximately 4 feet below ground surface ("bgs"),

resulting in petroleum product releases and associated soil contamination starting at a depth of
about 4 feet bgs. Subsurface soil contamination is primarily located at two areas along the
northern section of underground pipeline, and at the former railcar loading area. The highest
concentration of diesel-range petroleum hydrocarbons detected was 61,000 mg/kg in soil
adjacent to the northern pipeline at soil boring IB-30, 16.5 feet bgs. At the approximate depth of
the water table, 12 to 20 feet bgs, a light non-aqueous phase liquid ("LNAPL") plume has been
observed in groundwater monitoring wells along the northern section of pipeline from well MW-
15, north of Warehouse No. 7, extending to Slip 3. Evidence of LNAPL, including stained soil
and petroleum sheens, has been observed at the Slip 3 riverbank. Historically, LNAPL has been
measured at up to 13.38 feet thick in the well casing of MW-19 with lesser thicknesses in
surrounding wells. Dissolved phase TPH and PAHs have been detected in groundwater in the
vicinity of the LNAPL plume.
(10) On February 3, 2003, based on the Port's feasibility study, DEQ issued
public notice and provided opportunity for comment on a recommended remedial action for the
Upland Facility in accordance with ORS 465.320. DEQ also submitted the recommended
remedial action as a proposed source control decision to EPA and other parties for review and
comment, in accordance with the Portland Harbor MOU. Comments received on the
recommended remedy were considered by DEQ, as shown in the administrative record.

- (11) On April 16, 2003, the Director of DEQ selected a remedial action for the Upland Operable Unit as set forth in a Record of Decision ("ROD"). The ROD requires the following work:
 - Excavation of shallow soil in an on-site remedial action area of the former Quaker State tank farm and offsite disposal at a landfill or thermal treatment facility.

1	*	LNAPL recovery in an on-site remedial action area encompassing
2		the former pipeline area.
3	*	Dual-phase extraction pilot testing and, if effective,
4		implementation.
5	*	Excavation of an on-site remedial action area of contaminated
6		riverbank soils and offsite disposal at a landfill or thermal
7		treatment facility.
8	*	Groundwater monitoring and compliance evaluation.
9	*	Institutional controls for identification and management of residual
10		contamination.
11	(12) By	letter dated April 28, 2004, DEQ required the Port to investigate pencil
12	pitch contamination and s	stormwater runoff at the Upland Facility.
13	(13) On	September 1, 2004, DEQ determined through an Explanation of
14	Significant Difference that	at the remedial action for LNAPL recovery should be modified to
15	periodic manual removal	and monitoring of LNAPL at existing wells and groundwater use
16	restrictions.	
17	(14) On	August1, 2004, DEQ published notice of a proposed consent decree
18	and provided opportunity	for public comment in accordance with ORS 465.325(4)(d). The
19	comment period ended A	ugust 31, 2004. No comments were received.
20	Based on the above	ve Stipulations, DEQ and the Port agree to entry of the following
21	Consent Judgment:	
22	///	
23	///	
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CONSENT JUDGMENT

3.	Work to	ha Da	rformed
J.	WOIK 10	DE PE	Hommed

A. Remedial Design and Remedial Action

The Port shall perform the remedial action for the Uplands Facility in accordance with the terms and schedules set forth in the Scope of Work ("SOW"), attached to and incorporated by reference into this Consent Judgment as Attachment C, and the terms and schedules set forth in work plans approved by DEQ.

B. <u>Institutional Controls</u>

- (1) The Port shall develop and implement a contaminated media management plan for the purpose of ensuring compliance with laws applicable to the management of contaminated soil or groundwater affected by subsurface construction activity in areas of the Upland Facility. Upon DEQ's request, the Port shall provide DEQ with a copy of the contaminated media management plan. To the extent that any excavated or disturbed soil does not have contamination exceeding acceptable risk levels applicable to the Upland Facility, taking into account proposed placement, such soils may be managed on-site (i.e., DEQ will not require off-site disposal).
- (2) In the event the Port proposes to install or use wells at the Upland Facility for non-remedial purposes, the Port shall develop, in accordance with the SOW, a plan for evaluating impacts on the extent of groundwater contamination from such use of the wells, and, upon DEQ approval of the plan, implement the plan.

C. Pencil Pitch and Stormwater Runoff

The Port shall submit workplans in response to DEQ's letter demand of April 28, 2004, implement the workplans upon DEQ approval, and complete any source control measures required by DEQ.

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D. Additional Measures

(1) The Port may elect at any time during the term of this Consent Judgment to undertake remedial measures, in addition to those required under this Consent Judgment, necessary to address hazardous substances at the Upland Facility. Such additional measures shall be subject to prior approval by DEQ, which shall not be unreasonably withheld. Prior approval shall not be required in emergencies; provided the Port shall notify DEQ immediately after the emergency and evaluate the impact of its actions on the remedial work required under this Consent Judgment.

in the SOW or an approved work plan, are necessary in order to implement or maintain the effectiveness of the remedy set forth in the ROD, to address unanticipated threats to human health or the environment, or to provide consistency with remedial criteria applied by EPA to inwater sediments in Portland Harbor. DEQ may require that the Port incorporate such additional remedial work into the applicable work plan and/or be performed in accordance with a DEQ-specified schedule; provided, any such additional work may be required pursuant to this paragraph only to the extent the work is consistent with the scope of the remedy set forth in the ROD and does not require amendment of the ROD. The Port shall modify the applicable work plan and/or implement the additional work in accordance with DEQ's directions and schedule, or invoke dispute resolution under Subsection 3.L below. DEQ reserves all rights to amend the ROD and to seek performance of additional remedial measures identified in an amended ROD; however, the Port is not obligated under this Consent Judgment to perform such additional remedial measures.

E. <u>Periodic Review</u>

Within the first two years of remedial action implementation, DEQ will review remedy performance and determine whether groundwater contaminant concentration levels meet

the compliance criteria set forth in Section 6.1.5 of the ROD at DEQ-approved compliance monitoring points. At least once every five years thereafter, until such time DEQ determines that periodic review is no longer necessary, DEQ will review the remedy to ensure that the remedy remains protective of public health, safety, and welfare and the environment. Periodic reviews will include but not be limited to evaluation of consistency of the Upland Facility remedy with criteria applied by EPA to remediation of in-water sediments in Portland Harbor. 4. **General Provisions** A. Supervising Contractor (1) All aspects of the work to be performed by the Port pursuant to this

- (1) All aspects of the work to be performed by the Port pursuant to this

 Consent Judgment shall be performed under the direction and supervision of a qualified

 contractor or contractors having experience in hazardous substance remediation and knowledge

 of applicable state and federal laws, regulations, and guidance.
- (2) Before initiation of work under this Consent Judgment, the Port shall notify DEQ in writing of the name, title, and qualifications of any proposed supervising contractor. DEQ may for good cause disapprove the proposed contractor. In the event of such disapproval, DEQ, within 14 days of receipt of the initial notice from the Port, shall notify the Port in writing of the reasons for its disapproval. The Port, within 14 days of receiving DEQ's notice of disapproval, shall notify DEQ of the name, title, and qualifications of an alternate supervising contractor, subject to DEQ's right to disapprove under the terms and schedule specified above. Any work schedule shall be extended in the event that a delay is caused due to DEQ disapproval of a contractor or contractors, in an amount of time corresponding to the delay but not exceeding 60 days from the date of DEQ's initial or subsequent disapproval.
- (3) If, during the course of work required under this Consent Judgment, the Port proposes to change its supervising contractor, it shall notify DEQ in accordance with the

provisions of the preceding paragraph. DEQ may disapprove such contractor, under the terms and schedule specified in the preceding paragraph.

B. Financial Assurance

DEQ reserves the right to seek financial assurance from the Port in the future, if circumstances warrant.

C. DEQ Access

- (1) The Port shall allow DEQ to enter all portions of the Upland Facility under its ownership and control at all reasonable times for the purposes, among others, of inspecting records relating to work under this Consent Judgment; observing the Port's progress in implementing the work required by this Consent Judgment; conducting such tests and taking such samples as DEQ deems necessary; verifying data submitted to DEQ by the Port; conducting periodic review; and, using camera, sound recording, or other recording equipment. Upon the Port's request, DEQ shall make available to the Port a split or duplicate of any sample taken in connection with this Consent Judgment and provide the Port with copies of all analytical data for such samples. DEQ shall also make available to the Port, upon the Port's request, any photographs or recorded or videotaped material taken. DEQ shall be responsible for the health and safety of its employees, contractors, and agents entering or moving about the Uplands Facility, and, to the extent required by Paragraph 4.P.(2) of this Consent Judgment, shall indemnify and hold the Port harmless from and against any and all claims arising out of the acts or omissions of such employees, contractors, and agents when entering or moving about the Uplands Facility.
- (2) The Port shall allow DEQ to inspect and copy all records, files, photographs, documents, and data relating to work under this Consent Judgment, except that the Port shall not be required to permit DEQ inspection or copying of items subject to the attorney-client privilege, attorney work product privilege, or any applicable public records exemption.

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1		(3)	The Port shall identify to DEQ (by a	ddressor-addressee, date, general
2	subject matter	r, and d	istribution) any document, record, or i	tem withheld from DEQ on the basis
3	of attorney-client privilege, attorney work product privilege, or public records exemption, except			
4	to the extent that such identifying information is itself subject to a privilege. DEQ reserves its			
5	rights under la	aw to se	eek to obtain documents DEQ asserts a	are improperly withheld by the Port.
6	Attorney-clie	nt privil	ege, work product privilege, and publ	ic records exemptions may not be
7	asserted with	respect	to any records required under Paragra	ph 4.G.(1) of this Consent Judgment.
8	D.	Projec	et Managers	
9		(1)	To the extent possible, all reports, no	otices, and other communications
10	required unde	er or rela	ating to this Consent Judgment shall b	e directed to:
11		DEQ		The Port
12			et Manager:	Project Manager:
13		Tom I Depar	tment of Environmental Quality	Anne Summers Port of Portland
14		2020	up/Portland Harbor Section SW 4 th Avenue, Suite 400	Box 3529 Portland, OR 97208
15	Portland, OR 97201-4987 503-944-7308 503-229-5502 503-944-7353(fax)			
16			29-6899(fax) tom@deq.state.or.us	summea@portptld.com
17	ı	(2)	The Project Managers shall be availa	able and have the authority to make
18	day to day day	. ,		•
19			necessary to complete the SOW under	r inis Consent Judgment.
20	E.		e and Samples	
21		(1)	The Port shall make every reasonabl	
22			or sampling to be conducted under this	
23	working days before such activity but in no event less than 24 hours before such activity. Upon			
24	DEQ's verbal request, the Port shall make available to DEQ a split or duplicate of any sample			
0.5	taken pursuan	it to this	Consent Judgment. DEQ shall provi	de the Port with copies of all

analytical data from such samples as soon as practicable.

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(2) In the event DEQ conducts any sampling or analysis in connection with this Consent Judgment, DEQ shall make every reasonable attempt to notify the Port of any excavation, drilling, or sampling at least five working days before such activity but in no event less than 24 hours before such activity. Upon the Port's verbal request, DEQ shall make available to the Port a split or duplicate of any sample taken in connection with this Consent Judgment and provide the Port with copies of all analytical data for such samples. The Port shall provide DEQ with copies of all analytical data from such samples as soon as practicable.

F. Quality Assurance

- (1) The Port shall conduct all sampling, sample transport, and sample analysis in accordance with the Quality Assurance/Quality Control ("QA/QC") provisions approved by DEQ as part of the work plan. All plans prepared and work conducted under this Consent Judgment shall be consistent with DEQ's "Environmental Cleanup Division Quality Assurance Policy No. 760.000". The Port shall make every reasonable effort to ensure that the laboratory used by the Port for analysis performs such analyses in accordance with such provisions. The Port shall also make every reasonable effort to ensure that such laboratory analyzes all samples submitted by DEQ for QA/QC monitoring in accordance with such provisions.
- (2) In the event that DEQ conducts sampling or analysis in connection with this Consent Judgment, DEQ shall conduct sampling, sample transport, and sample analysis in accordance with the QA/QC provisions of the approved work plan. Upon written request, DEQ shall provide the Port with DEQ records regarding such sampling, transport, and analysis.

G. Records

(1) In addition to those reports and documents specifically required under this Consent Judgment, the Port shall provide to DEQ, within 10 days of DEQ's written request, copies of QA/QC memoranda and audits, raw data, final plans, task memoranda, field notes (not

1	made by or at the direction of the Port's attorney), and laboratory analytical reports relating to the
2	work required under this Consent Judgment.
3	(2) The Port shall preserve all records and documents in possession or control
4	of the Port or its employees, agents, or contractors that relate to work under this Consent
5	Judgment for at least five years after termination under Section 7 of this Consent Judgment.
6	Upon DEQ's request, the Port shall provide or make available for DEQ's copying, copies of such
7	records and documents to DEQ. After five years and up to 10 years after termination, the Port
8	shall provide DEQ 60 days' notice before destruction or other disposal of such records or
9	documents. Ten years after termination, the Port shall have no further obligation to DEQ to
10	preserve documents or records.
11	(3) Subject to Paragraph 4.C.(3), the Port may assert a claim of confidentiality
12	regarding any documents or records submitted to or copied by DEQ pursuant to this Consent
13	Judgment. DEQ shall treat documents and records for which a claim of confidentiality has been
14	made in accordance with ORS 192.410 through 192.505. If the Port does not make a claim of
15	confidentiality at the time the documents or records are submitted to or copied by DEQ, the
16	documents or records may be made available to the public without notice to the Port.
17	H. <u>Progress Reports</u>
18	(1) The Port shall deliver to DEQ quarterly, on or before the tenth working
19	day of the quarter, a progress report containing:
20	(a) Actions taken under this Consent Judgment during the previous quarter;
21	(b) Actions scheduled to be taken in the next quarter;
22	(c) A summary of sampling, test results, and any other data generated by the
23	Port during the previous quarter; and,
24	(d) A description of any problems experienced during the previous quarter.
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(2) Once remedial construction is completed and the only remaining activities are long-term monitoring or maintenance of engineering and institutional controls, the Port will no longer have any obligation to submit progress reports. DEQ may approve less frequent reporting at any other time, if warranted.

I. Other Applicable Laws

- (1) Subject to ORS 465.315(3), all activities under this Consent Judgment shall be performed in accordance with all applicable federal, state, and local laws and regulations.
- All actions under this Consent Judgment shall be performed in accordance with any applicable federal, state, and local laws and regulations related to archeological objects and sites and protection thereof, and with the monitoring protocol described in the SOW. If archeological objects or human remains are discovered during any investigation, removal, or remedial activities at the Upland Facility, the Port, at a minimum, shall: (a) stop work immediately in the vicinity of the find; (b) provide any notifications required by ORS 97.745 and ORS 358.920; (c) within 24 hours of the discovery, notify Fenix Grange, Portland Harbor Project Coordinator, at (503) 229-6590, or the DEQ Project Manager; and (d) use best efforts to ensure that the Port and its employees, contractors, counsel, and consultants keep the discovery confidential, including but not limited to refraining from contacting the media or any third party or otherwise sharing information regarding the discovery with any member of the public, and immediately notifying DEQ of and directing any inquiry from the media or public regarding the discovery to DEQ.

J. Reimbursement of DEO Oversight Costs

(1) For DEQ costs incurred on or after entry of this Consent Judgment, DEQ shall submit to the Port a monthly statement of costs actually and reasonably incurred by DEQ in connection with any activities related to the Upland Facility, oversight of the Port's

- (2) DEO oversight costs payable by the Port will include direct and indirect costs. Direct costs include site-specific expenses, DEQ contractor, and DEQ legal costs. DEQ's direct cost summary will include a direct labor summary showing the persons charging time, the number of hours, and the nature of work performed. Indirect costs will include those general management and support costs of the DEQ and of the Land Quality Division allocable to DEQ oversight of this Consent Judgment which are not charged as direct, site-specific costs. Indirect charges will be based on actual costs and applied as a percentage of direct personal services costs. DEQ shall maintain work logs, payroll records, receipts, and other documents to document work performed and expenses incurred under this Consent Judgment and, upon the Port's request, shall make such records available to the Port for its inspection during the term of this Consent Judgment and for at least five years thereafter. After five years and up to 10 years after termination, DEQ shall provide the Port 60 days' notice before destruction or other disposal of such records or documents. Upon the Port's request, DEQ shall provide the Port with copies of such records or documents. Ten years after termination, DEQ shall have no further obligation to preserve such records or documents.
- (3) Within 30 days of receipt of a DEQ invoice, the Port either shall pay the amount of costs billed, by check payable to the "State of Oregon, Hazardous Substance Remedial Action Fund," or invoke dispute resolution under Subsection 4.M of this Consent Judgment.
- (4) The Port shall pay 9% simple interest on the unpaid balance of DEQ oversight costs, which interest shall begin to accrue 30 days from the date of the invoice. Interest on any amount disputed under Section 4.M. shall begin to accrue 30 days from final resolution of any such dispute. Any unpaid amounts are a liquidated debt collectible under ORS 293.250 and other applicable law.

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K. Force Majeure

- (1) If any event occurs that is beyond the Port's reasonable control and that causes or might cause a delay or deviation in performance of the requirements of this Consent Judgment despite the Port's due diligence ("force majeure"), the Port shall promptly, upon learning of the event, notify DEQ's Project Manager verbally of the cause of the delay or deviation, its 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 Port proposes to carry out such measures. The Port shall confirm in writing this information within five working days of the verbal notification.
- (2) If the Port demonstrates to DEQ's satisfaction that the delay or deviation has been or will be caused by force majeure, DEQ shall extend times for performance of related activities under this Consent Judgment as appropriate. Circumstances or events constituting force majeure might include but not be limited to acts of God, unforeseen strikes or work stoppages, fire, explosion, riot, sabotage, war, discovery of contaminants or other environmental conditions materially different from those described in the ROD, unanticipated site conditions, power outages, delays caused by DEQ excavation, drilling, or sampling, and delays in receiving a governmental approval or permit. Increased cost of performance or changed business or economic circumstances shall not be considered force majeure.

L. <u>DEQ Approvals</u>

(1) Where DEQ review and approval is required for any plan or activity under this Consent Judgment, the Port shall not proceed to implement the plan or activity until DEQ approval is received. Any DEQ delay in granting or denying approval shall correspondingly extend the time for completion by the Port. Prior approval shall not be required in emergencies; provided, the Port shall notify DEQ immediately after the emergency and evaluate the impact of its actions on the remedial work required under this Consent Judgment.

1	(2) After review of any plan, report, or other item required to be submitted for
2	DEQ approval under this Consent Judgment, DEQ shall:
3	(a) Approve the submission in whole or in part; or
4	(b) Disapprove the submission in whole or in part and notify the Port of its
5	deficiencies and/or request modifications to cure the deficiencies.
6	(3) In the event of two deficient submittals of the same deliverable that are
7	deficient for the same reasons due to the Port's failure in good faith to cure the original
8	deficiency, DEQ may modify the submission to correct the deficiency.
9	(4) DEQ approvals, rejections, or identification of deficiencies shall be given
10	within the time specified in the SOW or as soon as practicable in writing, and state DEQ's
11	reasons with reasonable specificity.
12	(5) In the event of approval or modification of the submission by DEQ, the
13	Port shall implement the actions required by the plan, report, or other item, as so approved or
14	modified.
15	(6) In the event of DEQ disapproval or request for modification of a
16	submission, the Port shall, within 30 days of receipt of the DEQ notice or such longer time as
17	may be specified in the notice, either correct the deficiencies and resubmit the revised report or
18	other item for approval, or institute dispute resolution under Subsection 4.M of this Consent
19	Judgment.
20	M. <u>Dispute Resolution</u>
21	(1) In the event the Port disagrees with DEQ regarding review and approval of
22	any plan or activity, interpretation of data, DEQ modifications of a deliverable, or performance of
23	an obligation under this Consent Judgment, the Port shall promptly notify DEQ in writing of its
24	objection. DEQ and the Port shall then make a good-faith effort to resolve the disagreement
25	within 14 days of the Port's written objection. At the end of the 14-day period, DEQ shall

provide the Port with a written statement of its position from the DEQ's Voluntary Cleanup
Program Manager. If the Port still disagrees with DEQ's position, the Port, within 14 days of
receipt of DEQ's position from the Cleanup Manager, may provide the Port's position and
rationale in writing to DEQ's Northwest Region or Land Quality Division Administrator. The
DEQ Administrator may discuss the disputed matter with the Port and, in any event, will provide
the Port with DEQ's final position in writing as soon as practicable after receipt of the Port's
written position.

- (2) If the Port refuses or fails to follow DEQ's final decision pursuant to Paragraph 4.M.(1) above, and DEQ seeks to (a) enforce its final decision, (b) collect stipulated penalties, (c) assess civil penalties, or (d) collect costs related to any removal or remedial action performed by DEQ, the Port, subject to Subsection 2.A of this Consent Judgment, shall be entitled to such rights, remedies, and defenses as are provided by applicable law.
- (3) During the pendency of dispute resolution as provided in this subsection, the time for completion of work or obligations to be performed under this Consent Judgment affected by the dispute shall be extended for a period of time not to exceed the actual time taken to resolve the dispute. Elements of work or obligations not affected by the dispute shall be completed in accordance with the applicable schedule approved pursuant to this Consent Judgment.

N. Stipulated Penalties

(1) Subject to Subsections 4.K., 4.L, and 4.M. of this Consent Judgment, upon any violation by the Port of any provision of this Consent Judgment, and upon the Port's receipt from DEQ of written notice of violation, the Port shall pay the stipulated penalties set forth in the following schedule:

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1	(a)	Up to	\$5,000 for the first week of violation or delay and up to
2	\$2,500 per day of violation	or delay	thereafter, for failure to allow DEQ access or provide records
3	under Subsections 4.C or 4.G above.		
4	(b)	Up to	\$2,500 for the first week of violation or delay (but not
5	exceeding \$500 for any one	day du	ring the first week) and up to \$1,000 per day of violation or
6	delay thereafter, for:		
7		(i)	Failure to submit a final work plan, addressing in good faith
8	DEQ's comments on the dr	aft work	plan, in accordance with the SOW's schedule and terms;
9		(ii)	Failure to complete the work in accordance with the
10	approved work plan schedu	le and to	erms; or
11		(iii)	Failure to submit a final report, addressing in good faith
12	DEQ's comments on the dr	aft repo	rt, in accordance with the approved work plan schedule and
13	terms.		
14	(c)	Up to	\$500 for the first week of violation or delay (but not
15	exceeding \$250 for any one	day du	ring the first week) and up to \$500 per day of violation or
16	delay thereafter, for:		
17		(i)	Failure to submit a good faith draft work plan in accordance
18	with the SOW's schedule as	nd terms	S;
19		(ii)	Failure to submit good faith reports in accordance with the
20	SOW's schedule and terms	or	
21		(iii)	Any other violation of the Consent Judgment, SOW, or an
22	approved work plan.		
23		(2)	Violations arising out of the same facts or circumstances or
24	based on the same deadline	will be	treated as one violation per day.
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- (3) Stipulated penalties shall not begin to accrue under this subsection until the Port receives a notice of violation from DEQ describing the violation and what is necessary to correct it. If the Port corrects the violation within 30 days of receipt of such notice of violation or such other period as may be specified in the notice, DEQ may waive the stipulated penalties. This opportunity to cure does not apply to violations that are intentional or incapable of cure, or to failure to allow access or provide records.
- (4) Subject to the opportunity to cure under the preceding paragraph, the Port, within 30 days of receipt of DEQ's written notice of violation, shall pay the amount of such stipulated penalty by check made payable to the "State of Oregon, Hazardous Substance Remedial Action Fund". The Port shall pay interest of 9% per annum on the unpaid balance of any stipulated penalties, which interest shall begin to accrue at the end of the 30-day period. Any unpaid amount that is not the subject of a pending contested case, or that has been determined tobe owing after a contested case, is a liquidated debt collectible under ORS 293.250 and other applicable law.
- (5) In assessing a penalty under this subsection, the Director may consider the factors set forth in OAR 340-12-045, provided that such factors may not be used to increase a penalty beyond the amounts stipulated in this subsection. The Port may request a contested case hearing regarding the penalty assessment in accordance with OAR Chapter 340, Division 11. The scope of any such hearing shall be consistent with the stipulations set forth in Subsection 2.A of this Consent Judgment; shall be limited to the occurrence or non-occurrence of the alleged violation, or conditions precedent to the requirement allegedly violated; and shall not review the amount of the penalty assessed. Further penalties shall not accrue pending any contested case regarding the alleged violation.

1 If DEO assesses stipulated penalties pursuant to this section for any failure (6) 2 of the Port to comply with this Consent Judgment, DEQ may not seek civil penalties for the same 3 violation under ORS 465.900 or other applicable law. 4 Enforcement of Consent Decree; Reservations O. 5 (1) In addition to assessment of stipulated penalties under Subsection 4.N 6 above or, in the alternative to stipulated penalties, administrative civil penalties under ORS 7 465.900, DEQ may seek enforcement of this Consent Judgment by this Court. If DEQ seeks 8 enforcement of this Consent Judgment by this Court, DEQ may seek monetary sanctions, such as 9 civil penalties, only if DEQ has not assessed and collected any stipulated penalties under this 10 Consent Judgment or administrative civil penalties under ORS 465.900 regarding the same 11 violation. 12 (2) The Port does not admit any liability, violation of law, or factual or legal 13 findings, conclusions, or determinations made by DEO under this Consent Judgment. 14 (3) Nothing in this Consent Judgment is intended to create any cause of action 15 in favor of any person not a party to this Consent Judgment. 16 (4) Neither this Consent Judgment nor any judgment enforcing this Consent 17 Judgment shall be admissible in any judicial or administrative proceeding, except for proceedings 18 by DEQ to enforce this Consent Judgment, resolution of disputes under this Consent Judgment, 19 imposition or mitigation of sanctions for violation of this Consent Judgment, in response to a 20 citizen suit, or when offered by the Port for admission in any proceeding. 21 (5) Subject to Paragraph 2.A.(4) of this Consent Judgment, nothing in this 22 Consent Judgment shall prevent the Port from exercising any rights of contribution or 23 indemnification the Port might have against any person regarding activities under this Consent 24 Judgment.

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(6) Unless specified otherwise, the use of the term "days" in this Consent Judgment means calendar days.

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(7) If EPA orders any conflicting or duplicative activities concerning the releases of hazardous substances addressed by this Consent Judgment, this Consent Judgment may be modified in accordance with Subsection 4.R below, as necessary, to prevent or minimize conflicting or duplicative obligations. Any other additional EPA-imposed obligations may be addressed by modification of this Consent Judgment in accordance with Subsection 4.R or by separate agreement or order.

P. Indemnification and Insurance

(1) To the extent permitted by the Oregon Constitution and by the Oregon Tort Claims Act, the Port shall indemnify and hold harmless the State of Oregon and its commissions, agencies, officers, employees, contractors, and agents from and against any and all claims arising from acts or omissions related to this Consent Judgment of the Port or its officers, employees, contractors, agents, receivers, trustees, or assigns. The State of Oregon shall notify the Port of any such claims or actions as soon as practicable after receiving notice that such a claim or action is threatened or has been filed. The Port shall have the right to participate fully at its own expense in the defense or settlement of such claims, including the right to promptly receive related correspondence with the claimant and the opportunity to participate in related meetings and telephone conferences with the claimant. The State will confer with the Port regarding litigation and settlement strategy and, to the extent practicable, will afford the Port the opportunity to review and comment on all pleadings and settlement documents before they are filled with the court or sent to the claimant. The Port shall have no obligations under this paragraph with respect to any claim settled or otherwise compromised without the Port's having been provided the opportunity to participate in accordance with this paragraph. DEQ shall not be considered a party to any contracts made by the Port or its agents in carrying out activities under this Consent Judgment.

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Constitution and by the Oregon Tort Claims Act, the State of Oregon shall indemnify and hold harmless the Port and its commissioners, officers, directors, employees, contractors, and agents from and against any and all claims arising from acts or omissions related to this Consent Judgment of the State of Oregon or its commissions, officers, employees, contractors, agents, receivers, trustees, or assigns (excepting acts or omissions constituting DEQ approval of the Port's activities under this Consent Judgment). The Port shall notify the State of Oregon of any such claims or actions as soon as practicable after receiving notice that such a claim or action is threatened or has been filed. The State of Oregon shall have the right to participate fully at its own expense in the defense or settlement of such claims, including the right to promptly receive related correspondence with the claimant and the opportunity to participate in related meetings and telephone conferences with the claimant. The Port will confer with the State of Oregon regarding litigation and settlement strategy and, to the extent practicable, will afford the State of Oregon the opportunity to review and comment on all pleadings and settlement documents before they are filed with the court or sent to the claimant. The State of Oregon shall have no obligations under this paragraph with respect to any claim settled or otherwise compromised without its having been provided the opportunity to participate in accordance with this paragraph. The Port shall not be considered a party to any contract made by DEQ or its agents in carrying out activities under this Consent Judgment.

To the extent permitted by Article XI, Section 7, of the Oregon

(3) Before commencing any on-site work under this Consent Judgment, the Port shall obtain and maintain for the duration of this Consent Judgment comprehensive general liability and automobile insurance with limits of \$1 million, combined single limit, naming as an additional insured the State of Oregon. If the Port demonstrates by evidence satisfactory to DEQ that its contractor(s) or subcontractor(s) maintain equivalent coverage, or coverage for the same

risks but in a lesser amount or for a lesser term, the Port may provide only that portion of the insurance that is not maintained by its contractor(s) or subcontractor(s).

Q. Parties Bound

This Consent Judgment shall be binding on the parties and their respective successors, agents, and assigns. The undersigned representative of each party certifies that he or she is fully authorized to execute and bind such party to this Consent Judgment. No change in ownership or corporate or partnership status relating to the Uplands Facility shall in any way alter the Port's obligations under this Consent Judgment, unless otherwise approved in writing by DEQ.

R. Modification

DEQ and the Port may modify this Consent Judgment by mutual written agreement, subject to approval by this Court. DEQ and the Port may modify the SOW or work plan without having to obtain court approval, provided the modification is consistent with the ROD.

S. Service

The Port agrees to accept service of process by return receipt requested mail, to its General Counsel, Port of Portland, 121 NW Everett, Portland, Oregon 97209, with respect to all matters arising under or relating to this Consent Judgment. The Port waives any other service requirements set forth in the Oregon Rules of Civil Procedure or any local rules of this Court, including but not limited to service of a summons. DEQ and the Port agree that the Port need not file an answer to the complaint in this action unless or until the Court expressly declines to approve this Consent Judgment.

5. <u>Contribution Actions</u>

A. Pursuant to ORS 465.325(6)(b), the Port shall not be liable for claims for contribution regarding matters addressed in this Consent Judgment. The "matters addressed" in

this Consent Judgment means all remedial investigation, feasibility study, source control, removal, and remedial actions taken or to be taken at the Upland Facility and all remedial action costs incurred by DEQ or any other person with respect to the Upland Facility. The "matters addressed" in this Consent Judgment do not include those remedial actions or remedial action costs as to which DEQ has reserved its rights under this Consent Judgment (except for claims for failure to comply with this Consent Judgment), in the event DEQ asserts rights against the Port coming within the scope of such reservations.

B. Subject to Paragraphs 2.A.(4) and 4.P.(2) and Subsection 6.D of this Consent Judgment, nothing in this Consent Judgment shall prevent the Port from exercising any rights of contribution or indemnification the Port might have against any person regarding activities under this Consent Judgment.

6. Covenants Not To Sue

- A. Upon certification of completion under Subsection 7.B of this Consent Judgment, the State of Oregon covenants not to sue or take any administrative action against the Port concerning any liability to the State of Oregon with regard to the release or threatened release of hazardous substances addressed by the certification of completion; provided, this covenant shall not release the Port from future liability to DEQ resulting from (1) failure of the remedial action, or (2) information unknown to DEQ at the time of certification of completion showing that the remedial action is not protective of public health, safety, and welfare or the environment.
- B. Notwithstanding certification of completion, DEQ reserves all rights against the Port with respect to any other matters, including but not limited to:
- (1) Claims based on failure by the Port to meet any requirement of this Consent Judgment, including but not limited to any required long-term groundwater monitoring after certification of completion;

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1	(2) Liability arising from disposal of nazardous substances removed from the
2	Uplands Facility;
3	(3) Liability under federal or state law for natural resource damages;
4	(4) Claims based on criminal liability;
5	(5) Any matters as to which the State of Oregon is owed indemnification
6	under Subsection 4.P of this Consent Judgment;
7	(6) Liability for violations of federal or state law occurring during
8	implementation of the work required under this Consent Judgment; and
9	(7) Liability for oversight costs incurred by DEQ in connection with this
10	Consent Judgment.
11	C. The Director of DEQ has determined that the above covenant not to sue will
12	expedite the remedial action and is in the public interest, based on consideration of the factors set
13	forth in ORS 465.325(7)(a) and (d).
14	D. The Port covenants not to sue or take any other action against the State of Oregon
15	concerning any liability to the Port with regard to the release or threatened release of hazardous
16	substances addressed by the certification of completion.
17	7. <u>Certification of Completion; Termination</u>
18	A. Upon approval of this Consent Judgment by the Court, DEQ and the Port deem
19	the Voluntary Agreement for Feasibility Study, DEQ No. LQVC-NWR-02-11, satisfactorily
20	completed and terminated in satisfaction of Subsection II.R of the voluntary agreement.
21	B. For purposes of certification of completion under ORS 465.325(10), the remedial
22	action required by this Consent Judgment shall be considered to include: (i) performance of
23	remedial design; (ii) remedial action construction; (iii) source control measures for pencil pitch
24	and stormwater runoff, if any; and (iv) groundwater monitoring and evaluation, at the first
25	periodic review undertaken within two years of remedial action implementation under Subsection

3.E above, demonstrating that the compliance criteria set forth in Section 6.1.5 of the ROD have been satisfied; and to *exclude* any required long-term groundwater monitoring. Upon the Port's completion of this remedial action in accordance with the SOW and work plans, the Port shall submit a project completion report in accordance with the SOW and a request for certification of completion. DEQ shall preliminarily determine whether the remedial action has been fully and satisfactorily performed in accordance with this Consent Judgment. Upon such determination, DEQ shall provide public notice and opportunity to comment on a proposed certification decision in accordance with ORS 465.320 and 465.325(10)(b). After consideration of public comment, if any, and within 90 days after receiving the Port's project completion report, the Director of DEQ shall issue a final certification decision, which certification decision shall be submitted to this Court. A certification of completion may be issued subject to performance of any required long-term groundwater monitoring, compliance evaluation, and compliance with institutional controls.

C. Subject to the jurisdiction of this Court under ORS 465.325(10)(c), this Consent Judgment shall be deemed satisfied and terminated upon filing of DEQ's certification of completion and payment by the Port of any and all outstanding costs and penalties. Termination of this Consent Judgment shall not affect any continuing obligations of the Port or DEQ under this Consent Judgment, including but not limited to long-term groundwater monitoring (Subsection 3.A), institutional controls (Subsection 3.B), access (Subsection 4.C), records preservation and confidentiality (Subsection 4.G), , and indemnification (Subsection 4.P).

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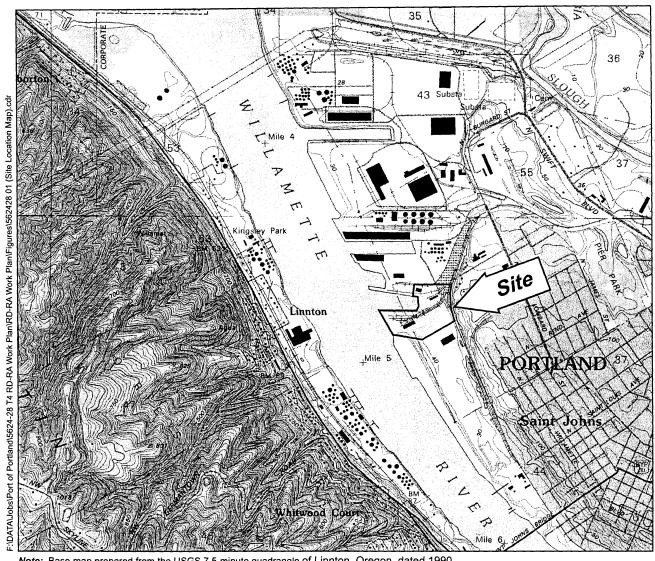
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1	D. Notwithstanding termination of this Consent Judgment, the Court retains			
2	jurisdiction over both the subject matter of this Consent Judgment and the Parties regarding			
3	continuing obligations referenced in Subsection 7.C above.			
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5	IT IS SO ORDERED this day of, 2004.			
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7	Circuit Court Judge			
8	Multnomah County			
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1	STATE OF OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY By:		
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3		Date: 9/30/01	
4	Dick Pedersen Administrator of Northwest Region		
5			
6	ATTORNEY GENERAL STATE OF OREGON		
7	By: Kurt Burkholder, OSB No. 80465 Senior Assistant Attorney General Oregon Department of Justice 1515 SW Fifth Avenue, Suite 410 Portland, OR 97201	Date: 18-1-04	
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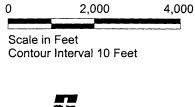
1	THE PORT OF PORTLAND	
2	By: Durrant	Date: 9-27-04
3	Bill Wyatt Executive Director	
4	APPROVED AS TO LEGAL SUFFICIENCY:	
5	1	0 nO 0/.
6	By: David Ashton, OSB No. 01019	Date: 9.27.04
7	Port of Portland Legal Department	
8	121 NW Everett	
9	Portland, OR 97209	
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Consent Judgment Attachment A Site Location Map Port of Portland, Terminal 4 Slip 3 Upland Facility



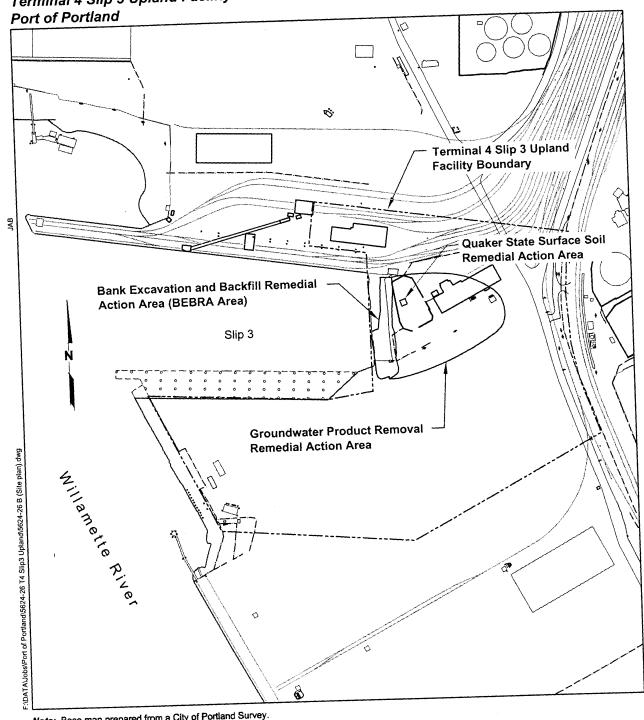
Note: Base map prepared from the USGS 7.5-minute quadrangle of Linnton, Oregon, dated 1990.







Consent Judgment . : achment B Facility Plan Terminal 4 Slip 3 Upland Facility



Note: Base map prepared from a City of Portland Survey.





ATTACHMENT C

VOLUNTARY REMEDIAL DESIGN/REMEDIAL ACTION SCOPE OF WORK

I. SCHEDULE AND OBJECTIVES

Within 30 days of entry of the Consent Judgment, the Port of Portland (the Port) will submit for DEQ review and comment a draft work plan for Remedial Design and Remedial Action (RD/RA) at the facility. Within 30 days of receipt of DEQ's written comments on the draft RD/RA work plan, the Port will submit to DEQ for approval a final RD/RA work plan addressing DEQ's comments.

The objectives of the Remedial Design and Remedial Action are to attain the degree of cleanup of hazardous substances and control of further release of hazardous substances as established in the Remedial Action Record of Decision for Port of Portland, Terminal 4, Slip 3 Upland, signed by DEQ's Northwest Region Division Administrator on April 16, 2003 (ROD), as modified by the Explanation of Significant Differences dated September 1, 2004. The objectives must be consistent with the requirements set forth in the Environmental Cleanup Rules, Oregon Administrative Rules (OAR) 340-122-0010 to 0110, and the Environmental Cleanup Laws, Oregon Revised Statutes (ORS), Chapter 465, and applicable federal and tribal environmental law.

II. REMEDIAL DESIGN AND REMEDIAL ACTION DELIVERABLES

A. RD/RA WORK PLAN

The RD/RA Work Plan will be developed in conformance with the ROD; this Scope of Work; and as appropriate, EPA's "Superfund Remedial Design Remedial Action Guidance", OSWER Directive 9355.0-4A, 1986; "Guidance on Expediting Remedial Design and Remedial Action", OSWER Directive 9355.5-02; and any additional guidance documents as directed by DEQ.

The Port shall prepare the RD/RA Work Plan for all activities conducted during remedial design and remedial action including the following phases of work:

1. Excavation of shallow soil in the former Quaker State tank farm and off-site disposal at a landfill or thermal treatment facility.

- Excavation of contaminated riverbank soils, off-site disposal at a landfill or thermal treatment facility, and backfill of the excavation with adsorptive, amended fill.
- 3. LNAPL removal and groundwater monitoring/contingency measures.
- 4. Residual contaminated soil and groundwater management.

For each phase of the RD/RA Work Plan the Port will include the following where applicable (items completed prior to entry of the Consent Judgment may be summarized and/or referenced):

- 1. Description of proposed RD/RA activities to be performed.
- 2. A proposed schedule for submittal of RD/RA deliverables and implementation of all proposed RD/RA activities.
- 3. Description of duties, responsibilities, authorities, and qualifications of the personnel involved in the remedial design and remedial action.
- 4. Project organization and identification of reporting relationships, lines of communication, and authorities.
- 5. Summary of the selected remedy and cleanup levels.
- 6. General description of the remedial actions to be performed.
- 7. Description of design objectives.
- 8. Description of design criteria and performance standards that will be applied to the remedial activities conducted by the Port.
- 9. A summary of the applicable tribal and federal laws and, pursuant to ORS § 465.313(5), a summary of the substance of the state, or local laws, regulations, or guidance applicable to the remedial action and associated activities explaining how they will be incorporated into the design and implementation of the remedial action and assessing off-site permitting or onsite substantive legal requirements, including any constraints arising from Oregon Department of Fish and Wildlife in-water work windows ("Applicable Legal Requirements").

- 10. Provide a protocol regarding the protection of cultural resources, including inadvertent discovery.
- 11. Describe any site access agreements required to implement RA activities.
- 12. Describe any bench scale or pilot scale studies, treatability studies, or unit process evaluations. Include study objectives, design parameters, data requirements, size and scale, mobilization procedures, and schedule for conducting the tests.
- 13. Identify and describe additional sampling, geotechnical, or other site civil evaluations or engineering studies required to supplement available technical data.
- 15. Describe any property, utility, right-of-way, topographic, or other site surveys required.
- 16. Describe any special design/implementation problems anticipated and how they will be addressed. Include any special technical problems, anticipated community relations problems, access, easements, rights-of-way, transportation, utilities, and logistics problems.
- 17. Describe any institutional controls to be imposed during and/or after the remedial activities.
- 18. Describe construction methods and equipment to be used.
- 19. Describe procedures for documentation and validation of remedial action activities.

B. SAMPLING AND ANALYSIS PLAN (SAP)

The SAP will be prepared for any proposed sampling and monitoring activities conducted during the remedial design and remedial action phases, including those for any further evaluation of the potential for presence in the remedial action area of significant cultural resources. The SAP will also address confirmation sampling conducted following excavation or treatment to verify that the remedial action requirements and specified cleanup levels have been attained. This SAP need not address long-term groundwater monitoring, which is addressed in Item I, Groundwater Monitoring/ Contingency Plan.

The following guidance documents will be utilized to prepare the SAP: DEQ's Quality Assurance Policy 760; and as appropriate, "Data Quality Objectives for Remedial Response Activities", EPA/540/G-87/004 (OSWER Directive 9355.0-7B), March 1987; "Test Methods for Evaluating Solid Waste", SW-846; and "A Compendium of Superfund Field Operations Methods", EPA/540/P-87/001 (OSWER Directive 9355.0-14), December 1987.

The SAP will include, at a minimum:

- 1. Proposed sampling locations, frequency, parameters, and rationale.
- 2. Sample collection techniques, sampling equipment, sample handling, and decontamination procedures.
- 3. Proposed analytical or test methods. For each test, provide a list of analytes along with the method reporting limit for that analyte.
- 4. A description of quality assurance and quality control (QA/QC) procedures for both field and laboratory activities, and a data quality objectives plan. For each target compound compare the method reporting limit and the remedial action standard determined in the ROD for each matrix being remediated (soil, water, sediment or air).
- 5. A description of documentation and data reporting. Include a proposed schedule for data report submittals.
- 6. A description of data analysis and interpretation methods, including statistical methods, sensitivity methods, or mathematical models for:
 - i. Evaluating attainment of remedial action cleanup levels.
 - ii. Evaluating bench or pilot scale tests for full-scale application of the technology.
- 7. A description of residuals management procedures.

C. RD/RA SITE HEALTH AND SAFETY PLAN

A Site Health and Safety Plan will be prepared to address all field activities conducted during the remedial design and remedial action phases and must include construction

hazards, chemical exposure hazards, on-site worker safety, and measurement of and protection from potential off-site impacts.

The Site Health and Safety Plan will be developed in accordance with "Standard Operating Safety Guides", EPA, Office of Emergency and Remedial Response, 1988; and applicable standards promulgated by the U.S. Occupational Safety and Health Administration including Hazardous Waste Operations and Emergency Response, 29 CFR 1910.120; General Industry Standards, 29 CFR 1910; and the Construction Industry Standards, 29 CFR 1926.

The previously submitted Pilot Study Work Plan Site Health and Safety Plan Update (Hart Crowser, August 30, 2002) will be relied upon and complied with for field or lab activities conducted during the remedial design phase. A revised Site Health and Safety Plan to address all proposed remedial action activities will be submitted within 30 days of entry of the Consent Judgment.

The Site Health and Safety Plan will include at a minimum:

- 1. Scope and applicability of plan.
- 2. Identification and responsibilities of key health and safety personnel.
- Task/operation safety and health risk analysis for each site task and operation, including description of known hazards and risks and procedures for assessing risks.
- 4. Personnel training requirements [including requirements to be followed by archeologists or other observers under any cultural resource protection protocols].
- 5. Personal protective equipment to be used.
- 6. Medical surveillance requirements.
- 7. Air monitoring requirements, including types and frequency. Describe air monitoring methods to be used.
- 8. Site control measures, including communication, site security, and work zone delineation.
- 9. Decontamination plan for personnel, equipment, and facilities.

- 10. Emergency response/contingency plan.
- 11. Confined space entry procedures.
- 12. Spill containment program.
- 13. Identification of potential construction hazards and precautionary measures to minimize hazards.
- 14. Identification of potential electrical hazards and precautionary measures to minimize hazards.

Please provide two copies of the Site Health and Safety Plan.

D. DESIGN DOCUMENTS (Plans and Specifications)

Construction plans and specifications and related design information, to accomplish the remedial action selected by DEQ, will be submitted to DEQ for review and approval. Design documents will be submitted in the following phases:

- 1. PRELIMINARY DESIGN MEETING (Completed April 19, 2004)
- 2. DRAFT DESIGN (Submitted to DEQ on April 19, 2004).

The Draft Design will include drawings, specifications, and design reports as appropriate containing a compilation of major design items reflecting an approximate 90% completion. The drawings and specifications will include:

- a. Drawing index and final drawings.
- b. Final specifications.
- c. Detailed description of remedial action activities to be performed, including methods and equipment for:
 - i. mobilization.
 - ii. site preparation.
 - iii. excavation or treatment.

- iv. demolition, clearing, and removal of buildings, structures, equipment, vehicles, existing pavement, foundations, and floors, as applicable.
- v. site restoration to include backfilling, grading, and revegetation.
- d. Estimates of soil volumes to be excavated, or volume of media to be treated.
- e. Detailed site layout drawings, delineating the areas to be excavated or treated.
- f. Excavation or treatment methods to include area delineation, slope stabilization, characterization and management of excavated materials, dewatering and water management, and incorporation of confirmation sampling.
- g. Description of Applicable Legal Requirements, including:
 - i. construction/operating permits or substantive requirements.
 - ii. permitting authorities and specific permit or substantive requirements.
 - iii. if applicable, permit application processing procedures, schedule, and fees.
 - iv. monitoring and compliance testing requirements.
- h. Identification and description of construction quality assurance/quality control (QA/QC) program requirements and procedures for construction QA/QC program implementation.
- Description of proposed control measures to minimize releases of hazardous substances to all environmental media during construction or installation activities.
- j. Description of proposed surface water runoff control measures during construction.

- k. Identification and description of dust control and noise abatement measures to minimize and monitor environmental impacts of construction or installation activities.
- I. Identification and description of any site security measures necessary to minimize exposure to hazardous situations during remedial action.
- m. Identification and description of transportation requirements to include haul route selection, load limits, truck haul schedule, restricted routes, traffic control needs, accident prevention and response, and decontamination.
- n. Land disposal requirements to include:
 - i. identification and description of off-site land disposal facilities.
 - ii. specific treatment/disposal requirements.

The design reports were submitted to the DEQ in several documents as follows:

- o Bank Excavation and Fill Design Requirements, April 29, 2003.
- o Product Removal and Groundwater Monitoring Report, June 25, 2004.
- o Bank Fill Material Testing Results, April 29, 2003.
- Extraction and Aquifer Test Results, April 20, 2003.
- o Extraction and Aguifer Test Results, April 2004, June 25, 2004.

3. FINAL DESIGN

The Final Design will incorporate revisions resulting from DEQ's review and comments on the Draft Design. The Final Design will provide the basis for the remedial action activities to be undertaken at the facility. The Final Design will include the elements described above, plus bid packages for construction contractors, as necessary.

The final drawings and specifications were transmitted to DEQ on July 1, 2004.

E. CONSTRUCTION QUALITY ASSURANCE PLAN

The Construction Quality Assurance and Control (CQA/QC) plan is a document that describes the site-specific components of the construction quality assurance program.

The purpose of the CQA/QC Plan is to ensure, with a reasonable degree of certainty, that a completed project meets or exceeds all design criteria, plans, and specifications. The CQA/QC Plan will be reviewed and approved by the person with the overall responsibility for the design and submitted within 30 days of entry of the Consent Judgment. The CQA/QC Plan will address the following:

- 1. Construction quality assurance objectives, specific quality control performance requirements, and standards to be followed during implementation of remedial actions.
- 2. Identification of responsibilities and authorities of all organizations and key personnel involved in the design and construction of the site remediation.
- 3. Description of the construction quality assurance personnel qualifications.
- 4. Description of inspection activities, observation and tests to be conducted, schedules, and scope.
- 5. Procedures for scheduling and managing submittals, including those of subcontractors, off-site fabricators, suppliers, and purchasing agents.
- 6. Sampling strategies to include sampling types, locations, size, frequency of testing, acceptance and rejection criteria, and plans for implementing corrective measures.
- 7. Documentation of inspections and sampling events.
- 8. Proposed inspection and sampling report submittal schedule.

F. CONSTRUCTION COMPLETION REPORT

At the completion of the excavation and disposal of soil from the former Quaker State tank farm; and excavation, backfill, and disposal of the contaminated riverbank soil, the Port will prepare a Construction Completion Report. . The Report will include, at a minimum:

 A detailed description of all work conducted in accordance with the approved final design plans and specifications, and certification by an Oregon-Registered Professional Engineer and the Port's Project Coordinator that the work was performed in accordance with all approved plans and specifications.

- 2. Explanation of any modifications to the approved plans and specifications and why these modifications were necessary.
- 3. Final, as-built drawings where applicable.
- 4. Copy of final permits if applicable, or documentation that substantive requirements were met.

G. OPERATIONS AND MAINTENANCE PLAN

The Operations and Maintenance (O&M) Plan details the specific operation and maintenance requirements for each constructed or installed component of the completed project.

Submit an O&M Plan with each Construction Completion Report identified in Item F, if necessary, and include at a minimum:

- 1. Description of equipment and monitoring components and equipment replacement schedule.
- 2. Description of normal O&M tasks, prescribed treatment or operation conditions, and frequency schedule of O&M tasks.
- 3. Description and analysis of potential operating problems, sources of information for trouble-shooting, and common remedies.
- 4. Identification of performance measures and compliance criteria, including consistency with remedial criteria applied by EPA to in-water sediments in Portland Harbor.
- 5. Description of routine monitoring, inspection, and laboratory testing requirements, associated QA/QC requirements, and monitoring locations, parameters, and frequency.
- 6. Description of alternate O&M to prevent undue hazard in the event of system failure.
- 7. Description of safety procedures and equipment required for operators during normal operations and in the event of systems failure.

- 8. Records management plan to include daily operating logs, laboratory results, operating costs, and maintenance activities.
- 9. Reporting procedures to address emergencies.
- 10. Proposed schedule for O&M report submittals to DEQ and periodic review by DEQ.

H. PROJECT COMPLETION REPORTS

When the identified performance measures and compliance criteria of the remedial action have been met, the Port will prepare a Project Completion Report. This report will include, at a minimum:

- 1. A detailed description of all work conducted.
- 2. Explanation of any modifications to the selected remedial action and approved plans and specifications and why these modifications were necessary.
- 3. Results of verification sampling, including data validation, and certification that the required remedial action criteria have been attained, and/or sampling results verifying that the remediation performs according to design specifications, as appropriate for remedial design and remedial action phases.
- 4. Residual risk following completion of the RA.
- 5. Explanation of additional O&M (including monitoring, see I. below) to be undertaken at the site.

I. LNAPL REMOVAL AND GROUNDWATER MONITORING/CONTINGENCY PLAN

LNAPL will be removed periodically from existing wells. Groundwater monitoring and contingencies will be established to monitor variations in groundwater quality at target remediation areas; provide a contingency for LNAPL removal as needed based on monitoring; and confirm attaining the remedial action goals and specified cleanup levels. The plan shall also propose response actions to occur in the event of statistically significant exceedances of the groundwater remediation criteria during the long-term monitoring program.

The LNAPL Removal and Groundwater Monitoring/Contingency Plan shall be submitted according to the schedule of deliverables in the RD/RA work plan and include at a minimum:

- 1. Proposed LNAP removal methods and frequency.
- 2. Proposed frequency and duration of groundwater monitoring period.
- 3. Proposed groundwater monitoring locations and parameters.
- 4. A description of sample collection techniques, sampling equipment, and sample handling procedures.
- 5. Descriptions of proposed analytical or test methods. For each test, provide a list of analytes along with the method reporting limit for that analyte.
- A description of quality assurance and quality control (QA/QC) procedures for both field and laboratory activities, and include a data quality objectives plan.
 For each target compound compare the method reporting limit and the remedial action standard determined in the ROD.
- 7. Documentation and data reporting, including a proposed schedule for data report submittals.
- 8. Description of methods for data analysis, including modeling and statistical methodology for evaluating improvements in groundwater quality and attainment of remedial action objectives as specified in the ROD.
- 9. Identification of compliance criteria and trigger levels for response actions.
- 10. Contingency plan to include an evaluation of potential response actions and description of procedures and process for evaluating and implementing potential response actions.
- 11. Description of assessment criteria for modifications to long-term groundwater monitoring program, including termination criteria.
- 12. Description of performance evaluations to be conducted for LNAPL removal, to include performance criteria, methodology, schedule, and termination criteria.

13. Description of periodic reviews of local land and beneficial water uses to be conducted to include procedures and schedule.

J. CONTAMINATED MEDIA MANAGEMENT PLAN

The Contaminated Media Management Plan details the requirements for management of contaminated soil or groundwater if encountered during future construction or site maintenance activities.

Submit the Contaminated Media Management Plan concurrent with the Groundwater Monitoring Plan and include at a minimum:

- 1. Description of the type and extent of residual contaminated soil and groundwater.
- 2. Description of a process for notification to Port workers, contractors, or tenants and their contractors of the presence of contamination and the applicability of the Plan.
- 3. Description of mechanisms available to enforce compliance with the terms of the Plan.
- 4. Description of safety procedures and equipment required for people working in areas where residual contaminated soil and groundwater is present.
- 5. Description of soil and groundwater screening for contamination, laboratory testing requirements, and associated QA/QC requirements.
- 6. Description of likely contaminated media management and disposal options.
- 7. Description of contaminated media records management.
- 8. Identification of groundwater use restrictions, and description of a plan for evaluating impacts on the extent of groundwater contamination if the Port proposes use of non-remedial wells.