



Oregon

Kate Brown, Governor

Department of Environmental Quality

Northwest Region

700 NE Multnomah Blvd, Suite 600

Portland, OR 97232

(503) 229-6900

November 16, 2021

Craig Johnson
Lejar Enterprises, LLC
6225 NE 112th Avenue
P.O. Box 56027
Portland, Oregon 97218

RE: Conditional No Further Action Determination
Former Oregon Fir Supply Company Site – ECSI No. 1220
Portland, Oregon

Dear Mr. Johnson:

The Oregon Department of Environmental Quality (DEQ) has completed a review of the available information for the former Oregon Fir Supply Company (OFSC) site, including the Comprehensive Closure Report dated January 6, 2014, which was submitted on your behalf by Landau Associates. The approximately 11-acre property is located at 6225 NE 112th Avenue in Portland, Oregon, Multnomah County Tax Lots 2300 through 2700 (1N2E15CA).

DEQ has determined that remedial action to address environmental contamination at OFSC is complete, and no further action is required subject to conditions described below. This determination is based on DEQ regulations and the following facts as we now understand them, which are described in more detail in DEQ's Staff Memorandum, dated September 1, 2014, in support of a Conditional No Further Action (cNFA):

- Prior to 1939 the 11-acre property was used for residential and agricultural purposes. Thereafter the site has been utilized for a combination of commercial and industrial purposes, and remains zoned for these uses. Residential properties are located greater than 0.25-mile to the west-southwest.
- From 1980 to 1981, Drum Recovery Incorporated (DRI) leased a portion of the property and operated a hazardous waste storage and transfer facility. Illegal dumping of hazardous wastes on the property and on nearby properties by DRI resulted in impacts to soil and groundwater by chlorinated solvents, also known as volatile organic compounds (VOCs), including: tetrachloroethene (PCE) and trichloroethene (TCE) and their breakdown products. Pentachlorophenol (PCP) was found to have been released, though likely unrelated to the presence of the chlorinated solvents.
- In 1981 the site was purchased by OFSC and the DRI lease was terminated. In 1994, OFSC signed a Consent Order with DEQ to conduct a remedial investigation (RI) and feasibility study (FS).
- In May 1995, the property was purchased by the current property owner, Lejar LLC, who subsequently assumed OFSC's obligations. In 2004, DEQ issued a Unilateral Order LQSR-NWR-04-08 requiring completion of the RI/FS and implementation of remedial action as necessary.
- Five onsite areas of groundwater contamination were identified, referred to as Plumes 1 through 5. Plumes 1 through 4 are VOC plumes, while Plume 5 contains VOCs and PCP. Potential exposures pathways were identified depending on the aquifer depth and use.

- The following exposure pathways were identified and carried forward as posing potential risk to current and reasonable future uses: occupational, construction and excavation workers contact with shallow soil contamination; occupational worker exposure to VOCs emanating from shallow groundwater; and occupational and offsite residential exposure to groundwater contamination via inhalation and ingestion.
- Several interim cleanup actions were taken, including a 2007 pilot study of in-situ bioremediation within Plume 5. Performance monitoring demonstrated reduction in VOCs.
- The selected remedial action, documented in DEQ's February 2009 Record of Decision (ROD), consisted of treatment of groundwater contamination, monitoring, and institutional controls.
- Installation of a full-scale in-situ bioremediation system to treat Plumes 2 through 4 commenced in 2010 and continued through 2011, when groundwater concentrations were determined to have fallen below cleanup levels identified in the ROD. Additional monitoring of Plume 1 was also conducted.
- Post-treatment monitoring from a network of representative wells conducted for two years confirmed that contaminants remained below cleanup levels following treatment. Annual sub-slab soil-gas sampling was conducted below the warehouse in 2011 and 2012; no unacceptable risk was identified.
- The site is within the western portion of the City of Portland's Columbia Slough Shore Wellfield. DEQ has coordinated with the Portland Water Bureau drinking water program regarding remediation of site groundwater.
- Following satisfactory cleanup, including achievement of remedial action objectives identified in the ROD, DEQ prepared a Closure Memorandum proposing a conditional NFA determination for the site. Public notice was issued in September 2014, and no comment was received.
- Abandonment of monitoring wells and treatment infrastructure was completed in 2017 and documentation was provided in a *Well Decommissioning Report* dated April 2, 2021. One monitoring well (MW-106) located in the northwest corner of the property was not found despite extensive efforts. If found in the future, it must be abandoned consistent with Oregon Water Resources Department rules.
- A revised Soil Management Plan (SMP) has been approved by DEQ documenting requirements for contaminated media management, including the need for abandonment of MW-106 if found.
- The cNFA is conditional on institutional controls in the form of an Easement and Equitable Servitudes that: i) prohibit the extraction of groundwater for consumption or other beneficial use; ii) restrictions on residential and agriculture land uses; iii) implementation of a DEQ-approved Soil Management Plan during any future earth-disturbing activities; and iv) a prohibition on future development and subsurface activities in the MW-106 Area without attempting to locate the monitoring well, and if found, properly decommission the MW-106 well. An updated EES was recorded August 8, 2021 in Multnomah County, which supersedes a 2009 EES.

Based on the available information, conditions at OFSC are currently protective of public health and the environment in accordance with Oregon environmental cleanup law, ORS 465.200 et seq. The site requires no further action unless new or previously undisclosed information becomes available, or there are changes in site development or land and water uses, or more contamination is discovered. DEQ has updated the Environmental Cleanup Site Information System (ECSI) database to reflect this decision.

DEQ's NFA determination only applies to the release(s) discussed above. If any contaminated media are encountered in the future, they must be handled and disposed of in accordance with local, state and federal regulations.

A copy of DEQ's Staff Memo supporting this Conditional No Further Action decision can be viewed at: <https://www.deq.state.or.us/Webdocs/Forms/Output/FPController.ashx?SourceIdType=11&SourceId=1220>. DEQ recommends keeping a copy of all of the documentation associated with this remedial action with the permanent facility records. If you have any questions, please contact Erin McDonnell at 503-229-600, or via email at mcdonnell.erin@deq.state.or.us.

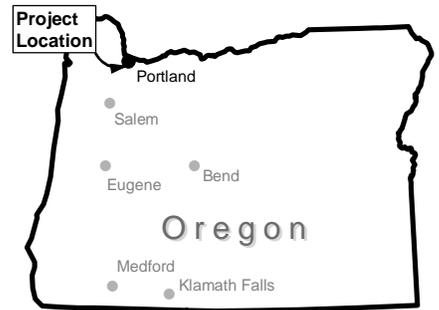
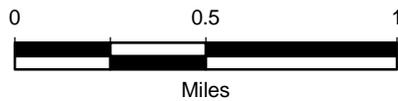
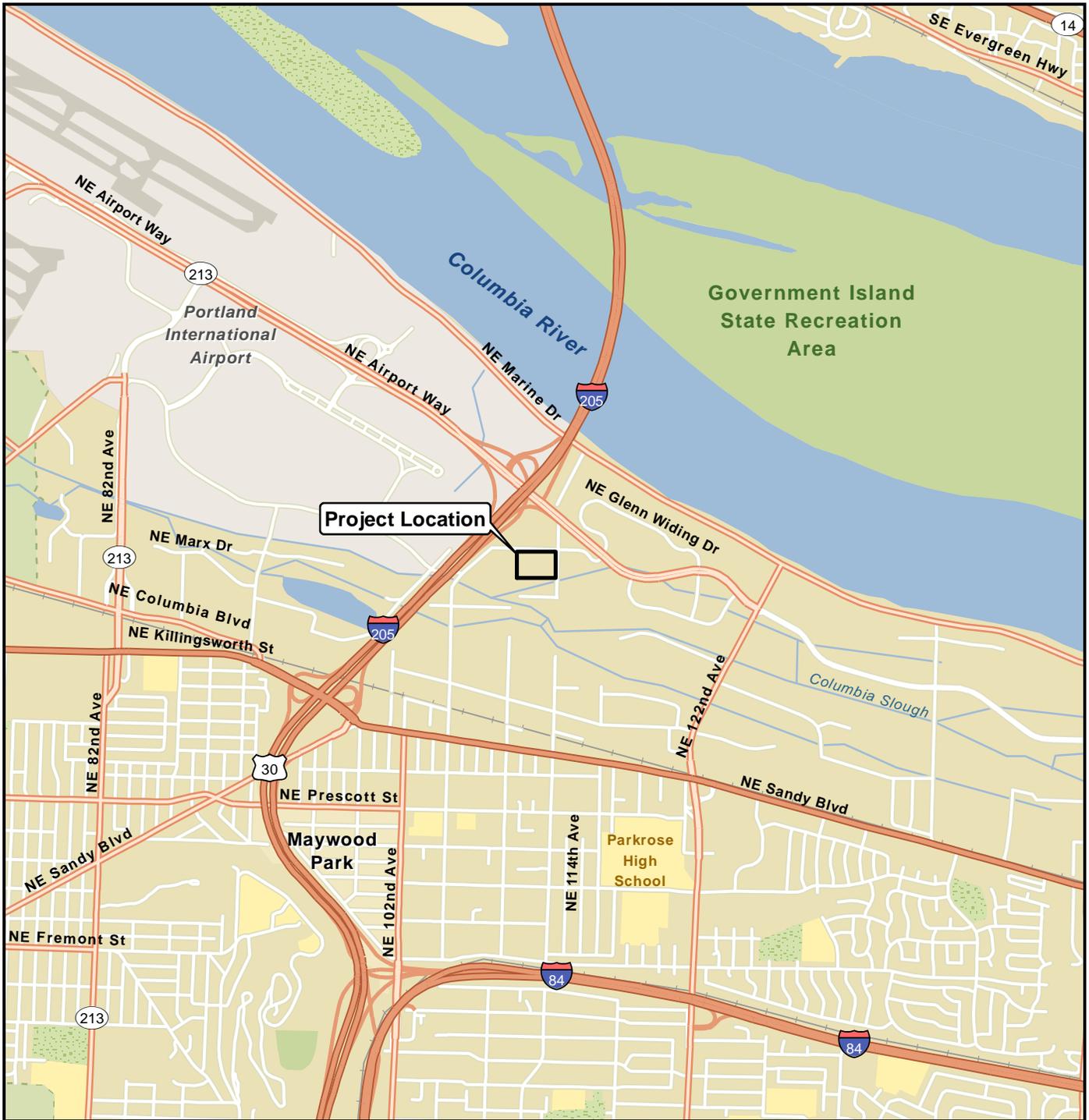
Sincerely,



Kevin Parrett, Manager
Northwest Region Cleanup and Tanks Section

Attachment(s): Site Map
2021 EES
Soil Management Plan

cc: Erin McDonnell, DEQ
Dan Hafley, DEQ
Jack Dahl, Portland Water Bureau
Water Resources Department Well Construction Program Coordinator
ECSI No. 1220 File



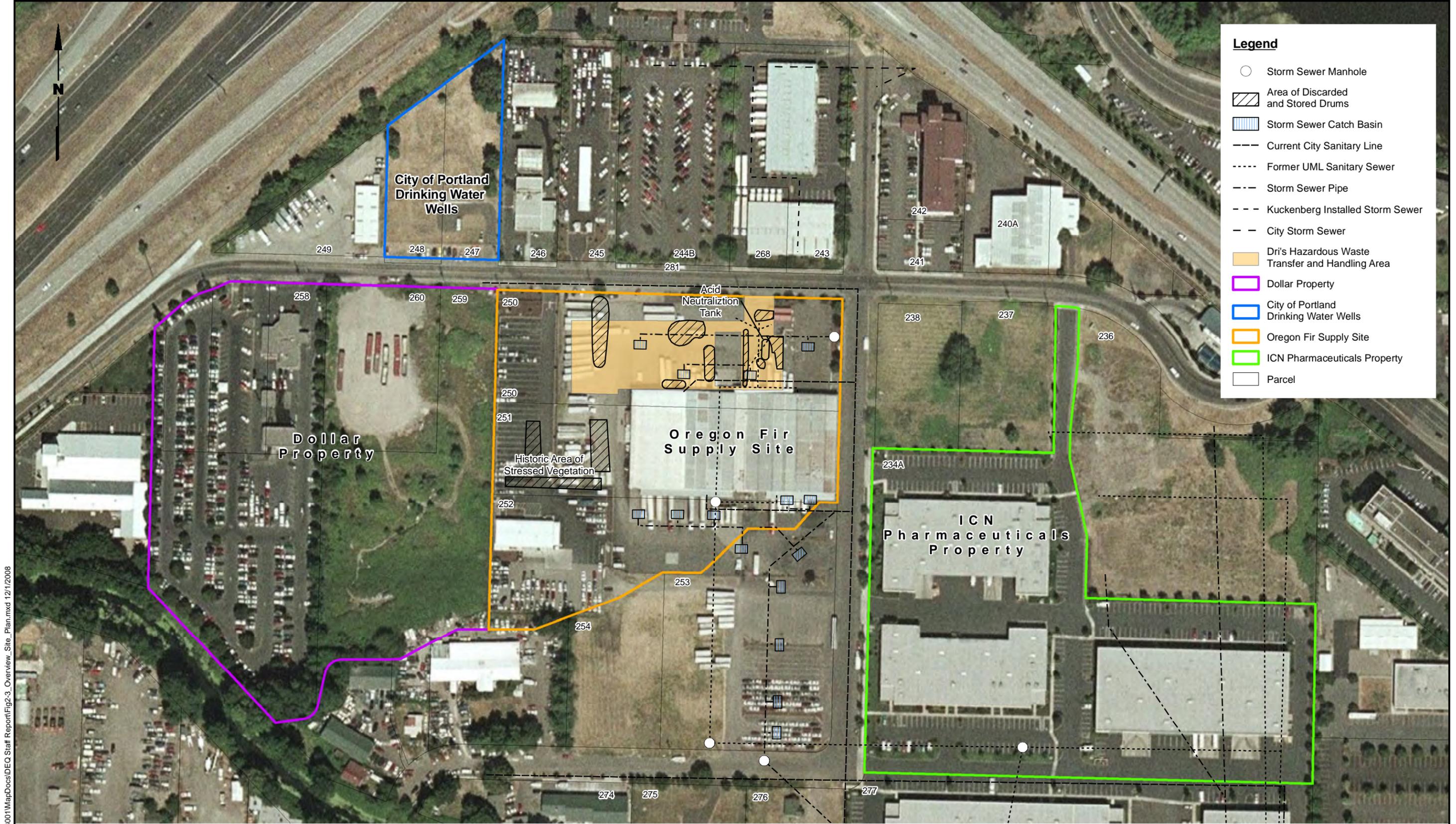
Data Source: ESRI 2012



Lejar Enterprises, LLC
Former Oregon Fir Supply
Portland, Oregon

Site Vicinity

Figure
1a

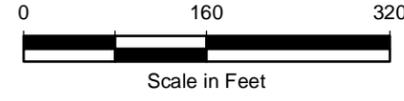


Legend

- Storm Sewer Manhole
- ▨ Area of Discarded and Stored Drums
- ▩ Storm Sewer Catch Basin
- Current City Sanitary Line
- Former UML Sanitary Sewer
- - - Storm Sewer Pipe
- - - Kuckenbergh Installed Storm Sewer
- - - City Storm Sewer
- Dri's Hazardous Waste Transfer and Handling Area
- ▭ Dollar Property
- ▭ City of Portland Drinking Water Wells
- ▭ Oregon Fir Supply Site
- ▭ ICN Pharmaceuticals Property
- Parcel

Y:\Projects\918001\MapDocs\DEQ Staff Report\Fig2-3_Overview_Site_Plan.mxd 12/1/2008

Data Source: GeoDesign, Inc., "Former Oregon Fir Supply Site, Portland, OR" figures, April-October 2005



Multnomah County Official Records	2021-127949
E Murray, Deputy Clerk	08/20/2021 10:57:15 AM
EASE-EASE Pgs=9 Stn=67 ATMH	
\$45.00 \$11.00 \$10.00 \$60.00	\$126.00

Space above this line for Recorder's use.

After recording, return to:

Grantee

Oregon DEQ
700 NE Multnomah Street
Suite 600
Portland, OR 97232
Attention: Erin McDonnell

Grantor

Lejar Enterprises, LLC
6225 NE 112th Avenue
Portland, Oregon 97220

EASEMENT AND EQUITABLE SERVITUDES

This grant of Easement and acceptance of Equitable Servitudes ("EES") is made on August 13, 2021 between Lejar Enterprises, LLC ("**Grantor**") and the State of Oregon, acting by and through the Oregon Department of Environmental Quality ("DEQ" or "**Grantee**").

RECITALS

A. Grantor is the owner of certain real property located at 6225 NE 112th Avenue, Portland, Oregon 97220, Multnomah County Tax Map T.1N., R.2E., Section 15, Tax Lot 2300, 2400, and 2500 (the "**Property**") the location of which is more particularly described in Exhibit A to this EES. The Property is referenced under the name Former Oregon Fir Supply Site, ECSI #1220 in the files of DEQ's Environmental Cleanup Program at Northwest Region office located at 700 NE Multnomah Street, Suite 600, Portland, Oregon, and telephone 503-229-5696. Interested parties may contact the Northwest Region office to review a detailed description of the risks from contamination remaining at the Property and described in the Remedial Investigation Report (August 2002) and Record of Decision Selected Remedial Action for Oregon Fir Supply Site, Portland, Oregon, Prepared by Oregon Department of Environmental Quality, February 2009.

B. On February 26, 2009, the Director of the Oregon Department of Environmental Quality or delegate selected the remedial action for the Property set forth in the Record of Decision (ROD) for the Property Former Oregon Fir Supply Site. The remedial action selected requires, among other things: treatment of groundwater contamination source areas using bioremediation with pump and treat as a contingency measure for the Troutdale Gravel Aquifer, remedy performance monitoring, development of a soil and groundwater management plan, and implementation of institutional controls.

C. On July 14, 2004, Grantor entered into a Unilateral Order LQSR-NWR-04-08 (Order) with DEQ, under which Grantor agreed to implement the selected remedial action, including the required institutional controls.

D. This EES is intended to further the implementation of the selected remedial action and protect human health and the environment.

E. Nothing in this Easement and Equitable Servitude constitutes an admission by Grantor of any liability for the contamination described in the Easement and Equitable Servitude.

1. DEFINITIONS

1.1 "Beneficial use" has the meaning set forth in OAR 340-122-0115.

1.2 "DEQ" means the Oregon Department of Environmental Quality, and its employees, agents, and authorized representatives. "DEQ" also means any successor or assign of DEQ under the laws of Oregon, including but not limited to any entity or instrumentality of the State of Oregon authorized to perform any of the functions or to exercise any of the powers currently performed or exercised by DEQ.

1.3 "Ecological receptor" has the meaning set forth in OAR 340-122-0115.

1.4 "Hazardous substance" has the meaning set forth in ORS 465.200

1.5 "Owner" means any person or entity, including Grantor, who at any time owns, occupies, or acquires any right, title, or interest in or to any portion of the Property or a vendee's interest of record to any portion of the Property, including any successor, heir, assign or holder of title or a vendee's interest of record to any portion of the Property, but excluding any entity or person who holds such interest solely for the security for the payment of an obligation and does not possess or control use of the Property.

1.6 "Remedial Action" has the meaning set forth in ORS 465.200 and OAR 340-122-0115.

2. GENERAL DECLARATION

2.1 Grantor, in consideration of decision to require limits on land and water use, grants to DEQ an Easement for access and accepts the Equitable Servitudes described in this instrument and, in so doing, declares that the Property is now subject to and must in future be conveyed, transferred, leased, encumbered, occupied, built upon, or otherwise used or improved, in whole or in part, subject to this EES.

2.2 Each condition and restriction set forth in this EES touches and concerns the Property and the equitable servitudes granted in Section 3 and easement granted in Section 4 below, runs with the land for all purposes, is binding upon all current and future owners of the Property as set forth in this EES, and inures to the benefit of the State of Oregon. Grantor further conveys to DEQ the perpetual right to enforce the conditions and restrictions set forth in this EES.

**3. EQUITABLE SERVITUDES
(REQUIRED ACTIONS AND RESTRICTIONS ON USE)**

3.1. **Groundwater Use Restriction.** Owner may not extract through wells or by other means or use the groundwater at the Property for consumption or other beneficial use. This prohibition does not apply to temporary dewatering activities related to construction, development, or the installation of sewer or utilities at the Property. Owner must conduct a waste determination on any groundwater that is extracted during such monitoring, treatment, or dewatering activities and handle, store and manage waste water according to applicable laws.

3.2. **Land Use Restrictions.** The following operations and uses are prohibited on the Property:

- a. Residential use of any type.
- b. Agricultural (food-crop) use of any type.
- c. Excavation into subsurface soil unless the work is done in accordance with the DEQ-approved soil management plan. The Soil Management Plan, revised in March 2021, was submitted to DEQ and incorporated into the final Well Decommissioning Report required for site closure after completion of the Remedial action.
- d. Future development and subsurface activities in the Monitoring Well MW-106 Area, without attempting to locate monitoring well MW-106. [All site monitoring wells excepting MW-106 were previously decommissioned under Oregon Water Resources Department (ORD) rules. MW-106 was not found and may remain on-site, completed to a depth of 26 feet below ground surface and penetrating the water table aquifer.] If found, notify DEQ and decommission the well consistent with ORD regulations (Oregon Administrative Rule 690-240-0510). Monitoring Well MW-106 Area is located in the northwest corner of the Property shown in Exhibit B.

3.3 **Use of the Property.** Owner may not occupy or allow other parties to occupy the Property unless the controls listed in this Section 3 are maintained.

**4. EASEMENT
(RIGHT OF ENTRY)**

During reasonable hours and subject to reasonable security requirements, DEQ may enter upon and inspect any portion of the Property to determine whether the requirements of this EES have been or are being complied with. Except when necessary to address an imminent threat to human health or the environment, DEQ will use its best efforts to notify the Owner 72 hours before DEQ entry to the Property. DEQ may enter upon the Property at any time to abate, mitigate, or cure at the expense of the Owner the violation of any condition or restriction contained in this EES, provided DEQ first gives written notice of the violation to Owner describing what is necessary to correct the violation and Owner fails to cure the violation within

the time specified in such notice. Any such entry by DEQ to evaluate compliance or to abate, mitigate, or cure a violation may not be deemed a trespass.

5. RELEASE OF RESTRICTIONS

5.1. Owner may request release of any or all of the conditions or restrictions contained in this EES by submitting such request to the DEQ in writing with evidence that the conditions or restrictions are no longer necessary to protect human health and the environment. The decision to release any or all of the conditions or restrictions in this EES will be within the sole discretion of DEQ.

5.2. Upon a determination pursuant to Subsection 5.1, DEQ will, as appropriate, execute and deliver to Owner a release of specific conditions or restrictions, or a release of this EES in its entirety.

6. GENERAL PROVISIONS

6.1. **Notice of Transfer/Change of Use.** Owner must notify DEQ within 10 days after the effective date of any conveyance, grant, gift, or other transfer, in whole or in part, of Owner's interest in or occupancy of the Property. Such notice must include the full name and address of the Party to whom Owner has transferred an interest or right of occupancy. In addition, Owner must notify DEQ a minimum of 10 days before the effective date of any change in use of the Property that might expose human or ecological receptors to hazardous substances. Such notice must include complete details of any planned development activities or change in use. Notwithstanding the foregoing, Owner may not commence any development inconsistent with the conditions or restrictions in Section 3 without prior written approval from DEQ as provided in Subsection 3 of this EES or removal of the condition or restriction as provided in Subsection 5.1. This subsection does not apply to the grant or conveyance of a security interest in the Property.

6.2. **Zoning Changes.** Owner must notify DEQ no less than 30 days before Owner's petitioning for or filing of any document initiating a rezoning of the Property that would change the base zone of the Property under the Multnomah County zoning code or any successor code. As of the date of this EES, the base zone of the Property is General Industrial (IG2).

6.3. **Cost Recovery.** Owner will pay DEQ's costs for review and oversight of implementation of and compliance with the provisions in this EES, including but not limited to periodic review and tracking of actions required by this EES. This EES constitutes the binding agreement by the Owner to reimburse DEQ for all such eligible review and oversight costs. DEQ will establish a cost recovery account for tracking and invoicing DEQ project costs. DEQ will provide the Owner with a monthly statement and direct labor summary. DEQ costs will include direct and indirect costs. Direct costs include site-specific expenses and legal costs. Indirect costs are those general management and support costs of the State of Oregon and DEQ allocable to DEQ oversight of this EES and not charged as direct site-specific costs. Indirect charges are based on actual costs and are applied as a percentage of direct personal services costs.

6.4. **Reference in Deed.** A reference to this EES, including its location in the public records, must be recited in any deed conveying the Property or any portion of the Property. Each condition and restriction contained in this EES runs with the land so burdened until such time as the condition or restriction is removed by written certification from DEQ, recorded in the deed records of the County in which the Property is located, certifying that the condition or restriction is no longer required to protect human health or the environment.

6.5. **Effect of Recording.** Upon the recording of this EES, all future Owners are conclusively deemed to have consented and agreed to every condition and restriction contained in this EES, whether or not any reference to this EES is contained in an instrument by which such person or entity occupies or acquires an interest in the Property.

6.6. **Enforcement and Remedies.** Upon any violation of any condition or restriction contained in this EES, the State of Oregon, in addition to the remedies described in Section 4, may enforce this EES as provided in the Order or seek available legal or equitable remedies to enforce this EES, including civil penalties as set forth in ORS 465.900.

6.7. IN WITNESS WHEREOF Grantor and Grantee have executed this Easement and Equitable Servitude as of the date and year first set forth above.

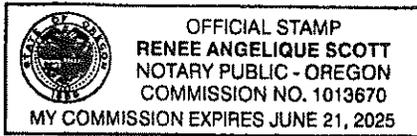
BY SIGNATURE BELOW, THE STATE OF OREGON APPROVES AND ACCEPTS THIS CONVEYANCE PURSUANT TO ORS 93.808.

GRANTOR: Lejar Enterprises, LLC

By: [Signature] Date: 8/20/2021
Craig Johnson, Member and Manager

STATE OF OREGON)
County of MULTNOMAH) ss.

The foregoing instrument is acknowledged before me this 20th day of August, 2021, by Craig Johnson of Lejar Enterprises, LLC, on its behalf.



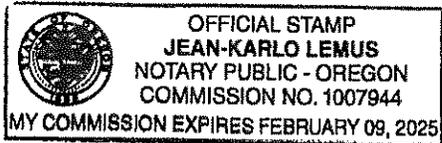
[Signature]
NOTARY PUBLIC FOR OREGON
My commission expires: 6-21-25

GRANTEE: State of Oregon, Department of Environmental Quality

By: [Signature] Date: 8/13/21
Kevin Parrett, Manager, NW Region Cleanup Program

STATE OF OREGON)
County of Multnomah) ss.

The foregoing instrument is acknowledged before me this 13 day of August, 2021, by Kevin Parrett of the Oregon Department of Environmental Quality, on its behalf.

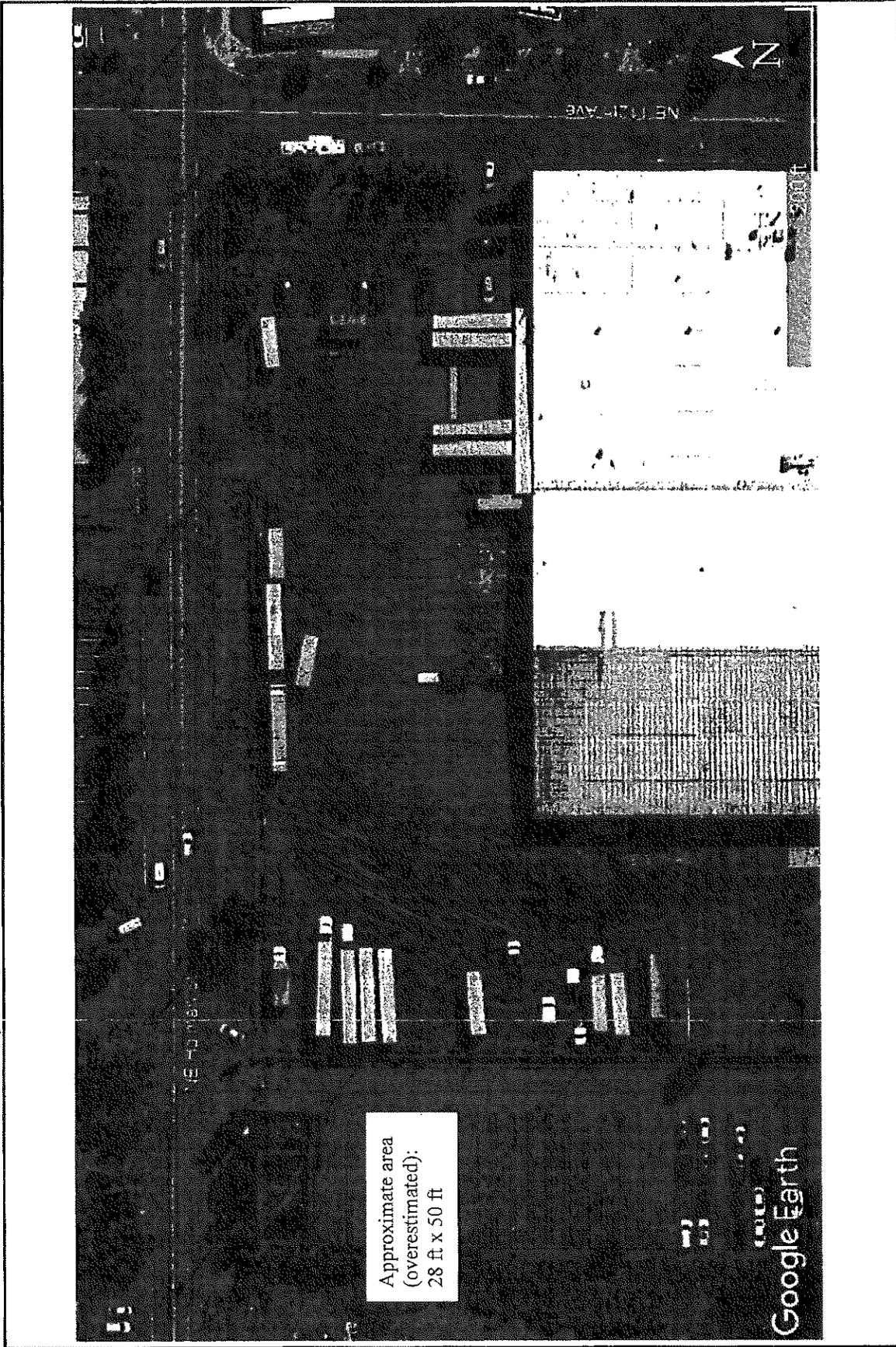


[Signature]
NOTARY PUBLIC FOR OREGON
My commission expires: Feb 9, 2025

EXHIBIT A

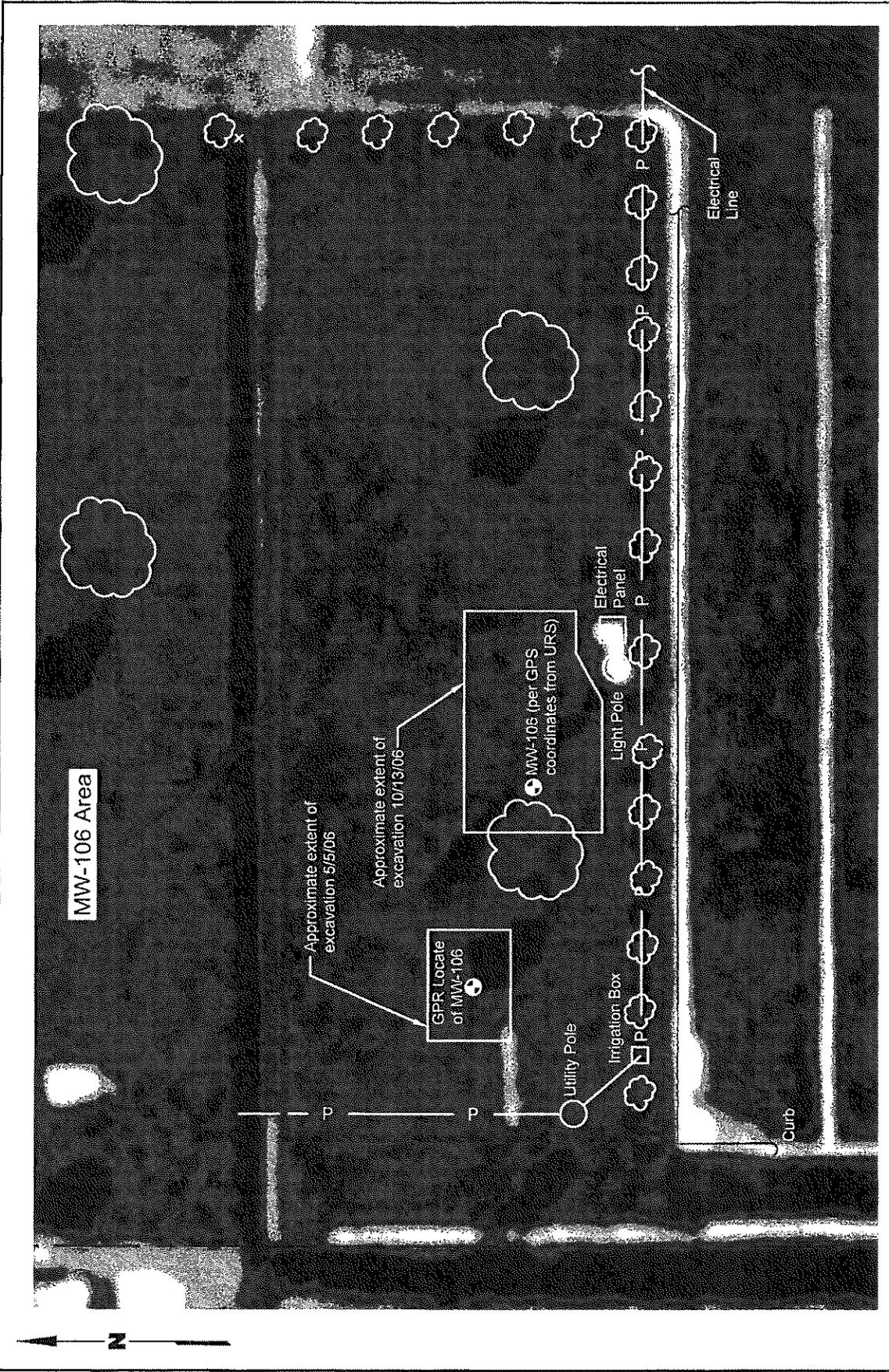
Legal Description of the Property

The former Oregon Fir Supply site is located at 6225 NE 112th Avenue in Portland Oregon; Section 15, Township 1 North, Range 2 East, Tax Lots 2300, 2400, and 2500. Parcels 250 through 252. Site latitude is approximately 45°34'5" North, and longitude is 122°32'55" West. The site is bordered to the north by NE Holman Avenue, to the east by NE 112th Avenue, to the south by NE Simpson Avenue, and to the west by the Dollar property.



Approximate area
(overestimated):
28 ft x 50 ft

Exhibit B-1	Monitoring Well MW-106 Area	Lejar Enterprises, LLC Former Oregon Fir Supply Portland, Oregon
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Adapted from: GeoDesign, Inc., "Former Oregon Fir Supply Site, Portland, OR" figures, April-October 2005

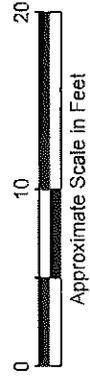


Exhibit
B-2

Extent of Exploration for MW-106

Lejar Enterprises, LLC
Former Oregon Fir Supply
Portland, Oregon

Soil Management Plan Former Oregon Fir Supply Site Portland, Oregon

July 24, 2009
Revised April 2, 2021

Prepared for

Lejar Enterprises, LLC
Portland, Oregon



1500 SW 1st Avenue, Suite 1015
Portland, OR 97201
(503) 542-1080

Soil Management Plan Former Oregon Fir Supply Site Portland, Oregon

This document was prepared by, or under the direct supervision of, the technical professionals noted below.

Document prepared by: *E. Waibel* Erin Waibel, RG
Project Manager

Document reviewed by: *Christine Kimmel* Christine Kimmel, LHG
Quality Reviewer

Date: April 2, 2021
Project No.: 0918001.100
File path: P:\918\001\WIP\R\100\Well Decommissioning Rpt\Attachment 5 - SMP\SMP signature page.docx
Project Coordinator: KJG

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FIGURES

<u>Figure</u>	<u>Title</u>
5-1	Historical Groundwater Plume and Well Locations
5-2	Monitoring Well MW-106 Area

ATTACHMENT

<u>Attachment</u>	<u>Title</u>
5-1	MW-106 Well Log

LIST OF ABBREVIATIONS AND ACRONYMS

cis-1,2-DCE	cis-1,2-Dichloroethene
COCs.....	Contaminants of Concern
CFR.....	Code of Federal Regulations
Ecology.....	Washington State Department of Ecology
EPA.....	U.S. Environmental Protection Agency
ft.....	foot/feet
gal	Gallon
GPS.....	global positioning system
IC.....	institutional control
LAI	Landau Associates, Inc.
Lejar	Lejar Enterprises, LLC
mg/kg.....	milligrams per kilogram
mg/L.....	milligrams per-liter
NIOSH.....	National Institute of Occupational Safety and Health
OAR	Oregon Administrative Rule
ODEQ.....	Oregon Department of Environmental Quality
ORS.....	Oregon Revised Statute
OSHA.....	Occupational Safety and Health Administration
PCE	Tetrachloroethene
PCP	Pentachlorophenol
PPE.....	Personal Protective Equipment
ppm.....	parts per pillion
RBC.....	risk-based concentration
ROD	Record of Decision
SMP	Soil Management Plan
SVOC	Semivolatile Organic Compound
TCE	Trichloroethene
TCLP	Toxicity Characteristic Leaching Procedure
UO	Unilateral Order
USGS.....	U.S. Geological Survey
VC.....	vinyl chloride
VOC	Volatile Organic Compound
yd ³	Cubic Yards

1.0 INTRODUCTION

This Soil Management Plan (SMP), prepared by Landau Associates, Inc. (LAI), describes specific institutional controls (ICs) for management of soil and groundwater, potentially contaminated with constituents of concern, that may be encountered during capital improvement and maintenance projects at the Lejar Enterprises, LLC (Lejar) site, also known as the former Oregon Fir Supply site, located at 6225 NE 112th Avenue in Portland, Oregon. The Lejar site remedy was overseen by the Oregon Department of Environmental Quality (ODEQ) and requirements in the Unilateral Order (UO, ODEQ No. LQSR0NWR-04-08) and the 2009 Record of Decision (ROD; ODEQ 2009), for selected remedial action to address environmentally impacted soil and groundwater. After successful cleanup, ODEQ issued a Closure Memorandum proposing a conditional no further action determination (ODEQ 2014). The ROD lists ICs for Lejar as including Easement and Equitable Servitudes (EES), an SMP, and a Remedy Performance Monitoring Plan. An IC is a legal or administrative tool or action taken to reduce the potential for exposure to a hazardous substance. ICs may include, but are not limited to, use restrictions, environmental monitoring requirements, and site access and security measurements. Lejar is in the process of updating the EES resulting from well decommissioning activities in preparation for a conditional No Further Action issuance by ODEQ.

This SMP provides protocols for management of potentially contaminated soil and groundwater during any future, post-treatment, invasive site development activities such as building construction or repair, or utility installation. Soil and/or groundwater will be removed during subsurface trenching and/or excavating, and waste will be generated during decontamination of equipment and soil sampling activities. This SMP provides field-screening methods, soil and groundwater management procedures, and waste disposal and reuse protocols.

Figure 5-1 depicts prominent site features, historical lateral extent of the groundwater plume, and former well locations which have been decommissioned with the exception of MW-106 which is described in Section 7.0. This figure should be consulted when determining management activities for subsequent subsurface activities at the Lejar site.

2.0 POTENTIAL CONTAMINANT SUBSTANCES IN SITE MEDIA

For purposes of this SMP, the term “soil” includes soil, rock chips, and sediment. Water includes groundwater, surface water, and stormwater encountered during trenching or excavation activities. The location of historical groundwater contamination plume is shown on Figure 5-1.

2.1 Soil

The primary historical constituents of concern in site media are pentachlorophenol (PCP) and volatile organic compounds (VOCs). The following VOCs had been detected at concentrations above the UO cleanup standard; tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride (VC). Additional VOCs detected at low concentrations in soil samples collected during preliminary investigations were acetone, benzene, ethylbenzene, xylenes, methylene chloride, toluene, and 1,1,1 trichloroethane. Semivolatile organic compounds (SVOCs) concentrations were detected in only two soil samples during the preliminary investigations included di-n-butylphthalate and 2-butanone; however, based on the minimal low-level detection of these SVOCs, it is not anticipated that these constituents will require consideration for waste management purposes.

Metals have also been detected in soil samples collected during previous investigations. Detected metals include arsenic, beryllium, barium, cadmium, chromium, copper, lead, manganese, mercury, nickel, and zinc. These metals also occur naturally in soils and the presence of metals is not necessarily an indication of a release to the environment.

2.2 Water

Primary historical constituents of concern for groundwater included PCE; TCE; cis-1,2-DCE; trans-1,2-dichloroethene; 1,1-dichloroethene; and VC. In addition, concentrations of PCP were detected in relation to former Plumes 3 through 5, as shown on Figure 5-1.

3.0 HEALTH AND SAFETY

The following section describes the health and safety planning procedures for protection of site workers during subsurface activities.

3.1 Health and Safety Planning

Workers should have appropriate health and safety training prior to continuing excavation work within the suspected contaminated areas, in case contaminated media is encountered. Health and safety plans must be prepared for all parties with exposure risk.

Health and safety plans should be prepared using guidance from, but not limited to:

- National Institute of Occupational Safety and Health (NIOSH)/OSHA/UASCG/EPA, Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, Department of Health and Human Services Publication No. 85-115, October 1985 and electronically updated information: <https://www.cdc.gov/niosh/npg/default.html>
- 29 Code of Federal Regulations (CFR) 1910.120, Hazardous Waste Operations and Emergency Response
- 29 CFR 1926, Safety and Health Regulations for Construction
- Oregon Hazardous Waste Management Act (Oregon Revised Statute [ORS] Chapter 466)
- Oregon Solid Waste Management (ORS Chapter 459 and Oregon Administrative Rule [OAR] 340-093 and 340-095)
- OAR 340-122-0010 to 0115, Hazardous Substances Remedial Action Rules
- Oregon Occupational Safety and Health Administration (OSHA), Construction Safety and Health Standards, Subdivision P, 1926.650, 651, and 652, Excavation Standards
- American Conference of Governmental Industrial Hygienists, Threshold Limit Values and Biological Exposure Indices for 1991-1992, or most recent version
- Contractor health and safety plans should contain information related to the following:
 - Procedures to monitor worker safety (e.g., monitoring equipment, frequency of monitoring, required actions if monitoring indicates a dangerous situation)
 - List of responsible individuals, including the site safety officer, and their respective duties
 - Site organization, describing work zones (exclusion zone, contamination reduction zone, and support zone), access and mobility between zones, and site security
 - List of physical and chemical hazards associated with anticipated work tasks
 - Description of personal safety equipment, and appropriate action levels
 - Routes to the nearest hospital and actions to be taken in case of a medical emergency
 - Decontamination procedures for personnel and equipment. Section 7 provides typical decontamination procedures of sampling and heavy construction equipment.

3.2 Personal Protective Equipment

As discussed in Section 2.0, VOCs, SVOCs, and metals were previously detected in soil and/or water at the site, prior to remediation activities. Based on known contamination levels, most subsurface activities at the site can be completed under U.S. Environmental Protection Agency (EPA) modified Level D specified personal protective equipment (PPE). It is important to avoid contact with contaminated soil and groundwater by wearing nitrile or Neoprene gloves. Level D protection should include:

- Protective overalls during excavation activities
- Safety boots with steel toe and shank
- Safety glasses with side shields or goggles
- Nitrile and/or Neoprene gloves when handling samples
- High-visibility orange safety vest with reflective striping when working in areas with vehicle traffic
- Hearing protection when noisy equipment is operating
- Rain gear as needed.

If organic vapor concentrations are present in the breathing zone of field personnel at levels greater than 1 part per million (ppm) of background VOC concentrations for five consecutive minutes, workers will be required to upgrade to Level C personal protective equipment until the situation can be adequately characterized. In addition to the requirements of Level D, Level C protection will include dual-cartridge air purifying half-face or full-face respirators equipped with organic vapor cartridges and high efficiency particulate air filters, and disposable chemical-resistant outer boots.

4.0 FIELD-SCREENING METHODS AND FREQUENCY

The following section describes field screening procedures to assist with the identification of potentially environmentally impacted soil and water. Analytical testing should be conducted to verify field screening results and to assist with disposal characterization.

4.1 Field-Screening Methods

The following field-screening methods will be used if evidence of contamination is present. Indicators of contaminated soil may include unusual odor, discolored soil, or sheen on either soil or water.

4.1.1 Required Actions when Contaminated Soil is Encountered

If soil is encountered that, due to color, texture, sheen, laboratory results, or odor, appears contaminated, the following steps should be taken:

- Implement appropriate health and safety measures
- Document location and characteristics of affected soil
- If soil has already been excavated:
 - Stage at a designated location and segregate from other “clean” excavated soil to allow sampling and evaluation, or send off site for treatment/disposal, provided the proper arrangements have been made
 - Line each stockpile area with 30-millimeter-thick plastic to prevent infiltration of water to the underlying soil, and berm to prevent surface water run-on/runoff. The contractor will maintain the stockpile area(s) and be prepared to cover stockpiles(s) with 6-millimeter-thick plastic to protect the soil from precipitation.
- If soil has not been excavated, but excavation is part of construction:
 - The soil should be excavated and handled as described above.
- If soil has not been excavated and excavation is not planned as part of construction:
 - The soil should not be disturbed unless excavation is necessary to prevent construction delays.
- Collect and analyze samples of excavation sidewalls and bottoms to document soil quality
- Collect and chemically analyze samples of the excavated soil (i.e., stockpiles) for contaminants based on observed characteristics and constituents already present or likely to be present at the work area based on site history. Procedures for stockpile sample collection are discussed in Section 5.2.

4.2 Evaluation of Potentially Hazardous Waste

The EPA considers contaminated environmental media to no longer contain hazardous waste: 1) when the media no longer exhibit a characteristic of hazardous waste; and 2) when concentrations of hazardous constituents from listed hazardous wastes are below health-based levels. Historical PCE

and TCE concentrations observed for site soil and groundwater were below toxicity characteristic limits and have not required follow-up Toxicity Characteristic Leaching Procedure (TCLP) analysis. Based on the minimal low-level detection of SVOCs, it is not anticipated that these constituents will require consideration for waste management purposes. Determination of waste material disposal as hazardous shall be based upon laboratory analytical results for VOCs, as discussed in Section 6.0.

Soil will be sampled and analyzed for PCE and TCE by EPA TCLP Method 1311. Alternatively, soil can be sampled and analyzed for total constituent analysis of PCE and TCE by EPA Method 8260 and compared with the leaching criteria for protection of groundwater listed below. Leaching to groundwater criteria are used in the determination of hazardous waste because they are the most conservative criteria. However, follow-up TCLP analysis Method 1311 maybe required based on the disposal facility acceptance requirements.

Constituent	Maximum Concentration of Contaminant for Toxicity Characteristic (TCLP)	Leaching to Groundwater Constituent (Residential Receptor) ^a
PCE	0.7 mg/L	0.46 mg/kg
TCE	0.5 mg/L	0.013 mg/kg

Notes:

^a ODEQ risk-based concentrations revision May 2018

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

Soil with PCE and TCE concentrations at or below maximum concentration of contaminant toxicity characteristic or soil that has no detectable concentrations at the laboratory reporting limits, may be considered clean fill or may be disposed of as solid waste. Soil with detected PCE and TCE concentrations above the listed levels must be disposed of at a solid waste Subtitle D landfill by a waste removal contractor.

5.0 ANALYTICAL SAMPLE COLLECTION METHODS AND FREQUENCY

The following sections describe the types of analytical samples to be collected and the frequency of the sampling. Sample collection and handling is described in detail in the site Sampling and Analysis Plan (LAI 2009).

Samples will be collected for the following purposes:

- To document appropriate disposition of excavated soil including consistency with waste disposal profiles and identification of soil for reuse on site
- To evaluate disposal options for contained groundwater and surface water runoff.

5.1 Confirmation Soil Sample Collection

If soil is encountered that, due to color, texture, sheen, laboratory results, or odor, appears contaminated, discrete soil confirmation samples will be collected along the limits of the excavation (e.g., at the sidewalls and bottom), and analyzed for VOCs, SVOCs, and metals to document the concentrations present in the soil left in place. Observations of the location, depth, and field-screening results (sheen test, visual, and olfactory) will be noted on the daily field log. Contamination will not be removed beyond the planned limits of the excavation (for construction purposes) unless there is specific direction from the Project Engineer.

Confirmation soil samples will be collected directly from the exposed face or from near the middle of the excavator bucket. Samples will be collected using a decontaminated stainless steel spade. Soil for VOC, SVOC, and metals analyses will be directly packed into laboratory-supplied containers. Filled sample containers will be stored on ice in a cooler and will be delivered to the laboratory within 24 hours after sample collection.

Depending on field-screening results, one confirmation sample will be collected every 50 to 100 feet (ft) along trenches within areas of suspected contamination. Samples for confirmation purposes will be selected from the most impacted soil within the 50- to 100-ft area based on field-screening measurements.

5.2 Stockpile Sample Collection and Frequency

Stockpile soil samples for disposal characterization purposes will be collected at representative locations within the piles. Samples will be collected using a clean hand auger or shovel to collect soil from at least 2 ft below the surface of the stockpile to minimize the volatilization of volatile constituents.

All equipment used to collect soil samples will be decontaminated after each sample is collected. At each sample location, discrete soil samples will be collected from the interior of the stockpile.

Stockpile samples will be collected by directly placing the selected soil in a laboratory-supplied container. Field screening will also be conducted on the stockpile samples.

The number of soil samples to be collected from a stockpile is dependent on the size of the stockpile (Ecology 1995). Field personnel will map the stockpile sample locations and record measurements on the sampling and/or daily field log. The table below will be used as a guide to determine sampling frequency.

Cubic Yards of Soil (yd ³)	Minimum Number of Samples
0 – 100	3
101 – 500	5
501 – 1000	7
1001 – 2000	10
>2000	10 plus 1 for each additional 500 yd ³

5.3 Water Characterization Sample Collection

Water that accumulates in an excavation where soil contamination is suspected will be pumped to drums or containment tanks for characterization sampling to evaluate disposal options. Water samples will be collected using a disposable hand bailer or collected directly into sample containers. Field parameters (pH, temperature, oxygen reduction potential, dissolved oxygen, and conductivity) will be measured in the field at the time of sample collection using a portable field meter and recorded on a sample log.

Water samples for VOCs, SVOC, and metals will be directly packed into laboratory-supplied containers. Filled sample containers will be stored on ice in a cooler and will be delivered to the laboratory within 24 hours after sample collection.

6.0 MANAGEMENT AND DISPOSAL

This section describes management and disposal protocols for soil, water, and other associated wastes.

6.1 Soil

If contaminated soil is generated through excavation and trenching activities (primarily), the soil will be placed into appropriate containers (i.e., 55-gallon [gal] drums or a 10-cubic yards [yd³] covered roll-off box, depending on the quantity of soil to be generated during a particular activity). Each container will be properly labeled to indicate the point of generation (i.e., excavation location), contents, date of generation, analytical results, and final disposition. Individual containers will be covered and secured at the end of each workday. For larger excavations containing soils that have been characterized for disposal, excavated soil can be loaded directly into trucks for offsite transport.

Historical PCE and TCE concentrations observed for site soil and groundwater were below toxicity characteristic limits and have not required follow-up TCLP analysis. Based on the minimal low-level detection of SVOCs, it is not anticipated that these constituents will require consideration for waste management purposes. In addition, metals detected in site soils are naturally occurring and do not require TCLP analysis.

Soil disposal characterization will consist of the collection of one sample from each container, which will be analyzed for PCE and TCE (VOCs) by EPA TCLP Method 1311. The laboratory will provide sampling jars, and samples will be submitted for analysis within 24 hours of collection. Based on existing data, it is not anticipated that any soil generated will be designated as containing a hazardous waste. Soil that is determined to not contain hazardous waste will be disposed of at a permitted solid waste landfill in accordance with applicable regulations.

6.1.1 Reuse of Soil

Clean excavated soil will be reused on site as for fill or for other construction purpose. If onsite reuse is not practical or cost-effective, clean waste soil will be disposed of in an acceptable landfill. Clean soil for this site is defined as soil with PCE and TCE concentrations at or below TCLP values (Section 4.2) and/or soil with no field screening results indicating the presence of contamination.

6.2 Water

Shallow, perched groundwater and/or surface water may be encountered during excavation and trenching activities. When water is generated during trenching activities, dewatering may be required. Generated water will be discharged into the sanitary sewer, when possible.

In the event that the water cannot be discharged into the sanitary sewer due to the possible presence of contamination, water will be drummed for offsite disposal. Representative samples will be collected

and analyzed by EPA Method 8260 for disposal characterization. Drummed water will be labeled as non-hazardous pending analytical results and the start date of accumulation will be listed clearly on the drum. Following receipt of analytical results of wastewater, action levels of 0.7 milligrams per liter (mg/L) for PCE and 0.5 mg/L for TCE will be used to determine if the wastewater can be disposed of without considering it as hazardous waste. A waste removal contractor will be contacted to dispose of the water in accordance with applicable regulations.

6.3 Personal Protective Equipment and Equipment Disposal

If contamination of disposable PPE is suspected due to color, texture, sheen, laboratory results, field-screening measurements, odor, or appearance, it will be double-bagged or placed in 55-gallon drums and will then be disposed of as solid waste in an appropriate solid waste facility. Excavation and sampling equipment will either be disposed of or decontaminated between uses. Equipment will be decontaminated with a water rinse and/or steam-cleaned, as appropriate.

7.0 MONITORING WELL MW-106 AREA

A total of 81 wells (75 groundwater monitoring and remediation wells and six soil vapor wells) were historically used during the remediation phase of the project. Upon completion of the remediation and meeting of the UO requirements, the wells were decommissioned in accordance with the well decommissioning work plan (LAI 2017). All wells (monitoring, injection, and extraction) located onsite were decommissioned by August 8, 2017 with the exception of MW-106 located in the northwest corner of the site. The approximate location of well MW-106 is shown on Figure 5-1.

7.1 MW-106 Locate History and Well Information

In 2006, the property where well MW-106 is located underwent development activities for a paved parking lot. Construction plans, provided by Lejar, indicated that the well was to be protected during site grading activities, and the top of the casing was to then be raised to the new final grade elevation. However, on March 23, 2006, LAI attempted to locate MW-106 during a quarterly monitoring event and discovered that MW-106 was covered. Multiple unsuccessful attempts to locate the monitoring well were conducted in 2006 and 2017. Attempts to locate the well included using ground penetrating radar and magnetometer, and conducting limited excavations based upon global positioning system (GPS) coordinates for the well (Figure 5-2). It is believed that the monitoring well is likely buried beneath 6 ft of fill.

Well MW-106 is constructed as a 0.75-inch diameter PVC well casing with a shallow screen extending from 16 to 26 ft below ground surface. The well is screened in the overbank deposits aquifer (MULT 60023; Attachment 5-1). Historical analytical data from 1998 through 2004 indicate VOCs were below EPA drinking water maximum contaminant levels.

7.2 Future Development in Monitoring Well MW-106 Area

If future development and/or subsurface activities occurs in the vicinity of MW-106 (Figure 5-2), additional steps are necessary to attempt to locate the well. If the monitoring well is found, the well must be decommissioned properly by a licensed and bonded Monitoring Well Constructor per OAR 690-240-0510. Pursuant to OAR 690-240-510(1), well decommissioning (abandonment) will be completed by re-drilling the borehole to the full depth of the original boring (26 ft), with a minimum of the original diameter (2 inches). All casing, screen, annual sealing material, drill cuttings, and filter pack material shall be removed prior to sealing. The well monument should be removed and the surface restored.

8.0 RECORDKEEPING AND REPORTING

Recordkeeping associated with soil management will include sampling and analysis documentation (i.e., chain-of-custody forms, sampling logs); entries in field notebooks regarding container identification and disposition, along with dates of water discharge; analytical results for soil samples; and documentation of proper soil disposal.

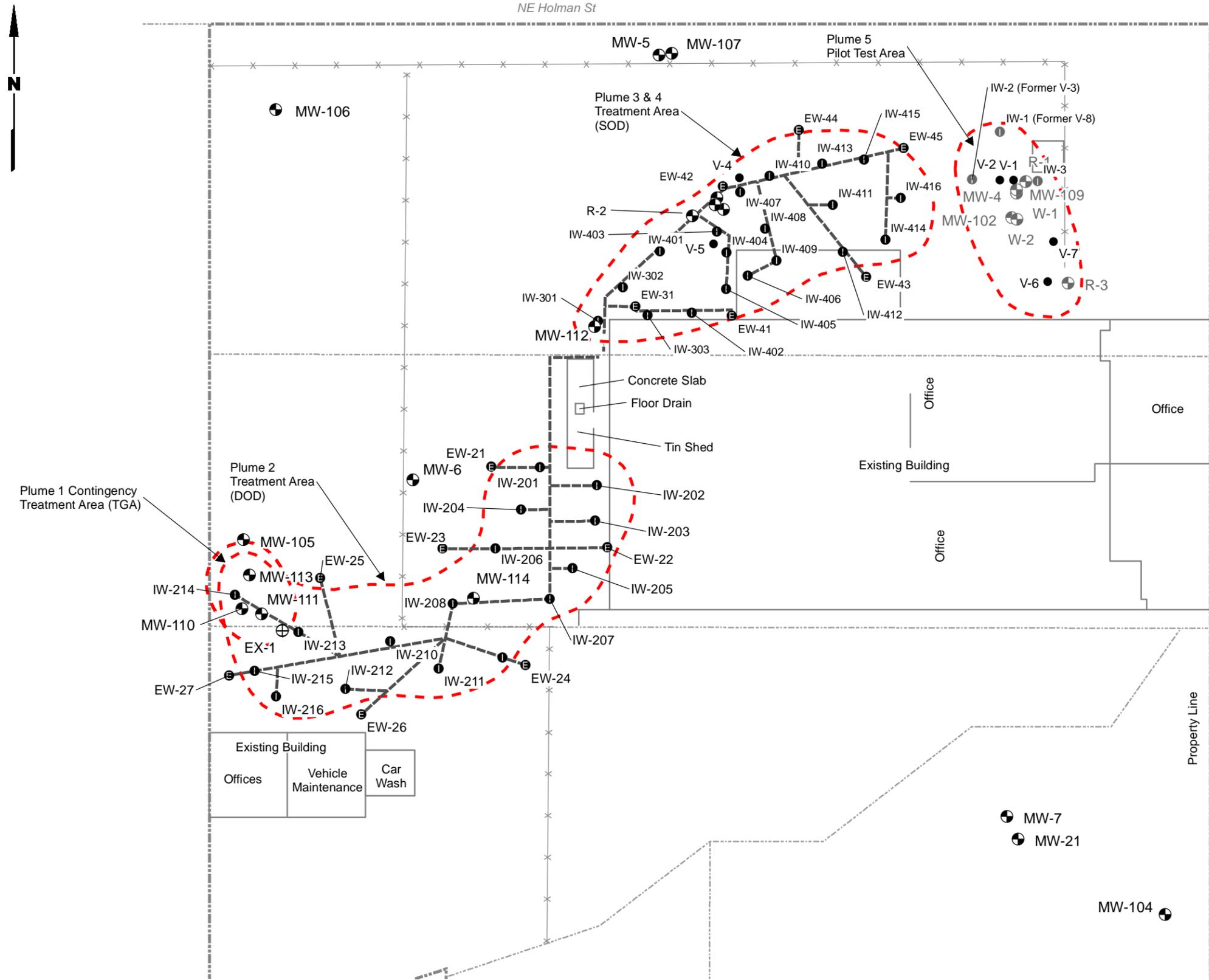
9.0 USE OF THIS REPORT

This Soil Management Plan has been prepared for the exclusive use of Lejar Enterprises, LLC and its designated agents for specific application to the former Oregon Fir Supply site. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. LAI makes no other warranty, either express or implied.

10.0 REFERENCES

- Ecology. 1995. *Guidance for Remediation of Petroleum-Contaminated Soils*. Publication No. 91-30. Washington State Department of Ecology, Toxics Cleanup Program. Updated November.
- LAI. 2009. *Sampling and Analysis Plan, Former Oregon Fir Supply Site, Portland, Oregon*. Prepared for Lejar Enterprises, LLC, by Landau Associates, Inc. May 19.
- LAI. 2017. Letter Re: *Revised Well Decommissioning Plan, Former Oregon Fir Supply Site, 6225 NE 112th Avenue, Portland, Oregon*. To Erin McDonnell, Oregon Department of Environmental Quality, from James Rapsen, Landau Associates, Inc. May 31.
- ODEQ. 2009. *Record of Decision, Selected Remedial Action for Oregon Fir Supply Site, Portland, Oregon, ESCI #1220*. Oregon Department of Environmental Quality. February 26.
- ODEQ. 2014. Memorandum: Proposed Conditional No Further Action Determination, Oregon Fir Supply Company, ECSI#1220. From Erin McDonnell, Oregon Department of Environmental Quality. September 1.

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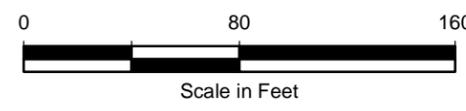


Legend

- Soil Vapor Monitoring Well
- ⊕ Monitoring Well
- ⊗ Pump and Treat Extraction Well
- ⊖ Bioremediation Extraction Well
- ⊙ Bioremediation Injection Well
- ISD™ Treatment System Trenching and Piping
- Property Boundary
- Parcel Boundary
- Existing Building
- × Fence
- - - Former Groundwater Plume

Notes

1. RAO = Remedial Action Objective
2. DOD = Deep Overbank Deposits
3. TGA = Troutdale Gravel Aquifer
4. SOD = Shallow Overbank Deposits
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Data Source: Esri World Imagery

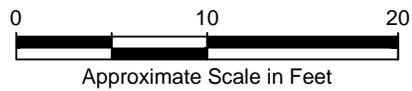
Lejar Enterprises, LLC
Former Oregon Fir Supply
Portland, Oregon

**Historical Groundwater Plume
and Well Locations**

Figure
5-1



Adapted from: GeoDesign, Inc., "Former Oregon Fir Supply Site, Portland, OR" figures, April-October 2005



Lejar Enterprises, LLC
Former Oregon Fir Supply
Portland, Oregon

Extent of Exploration for MW-106

Figure
5-2

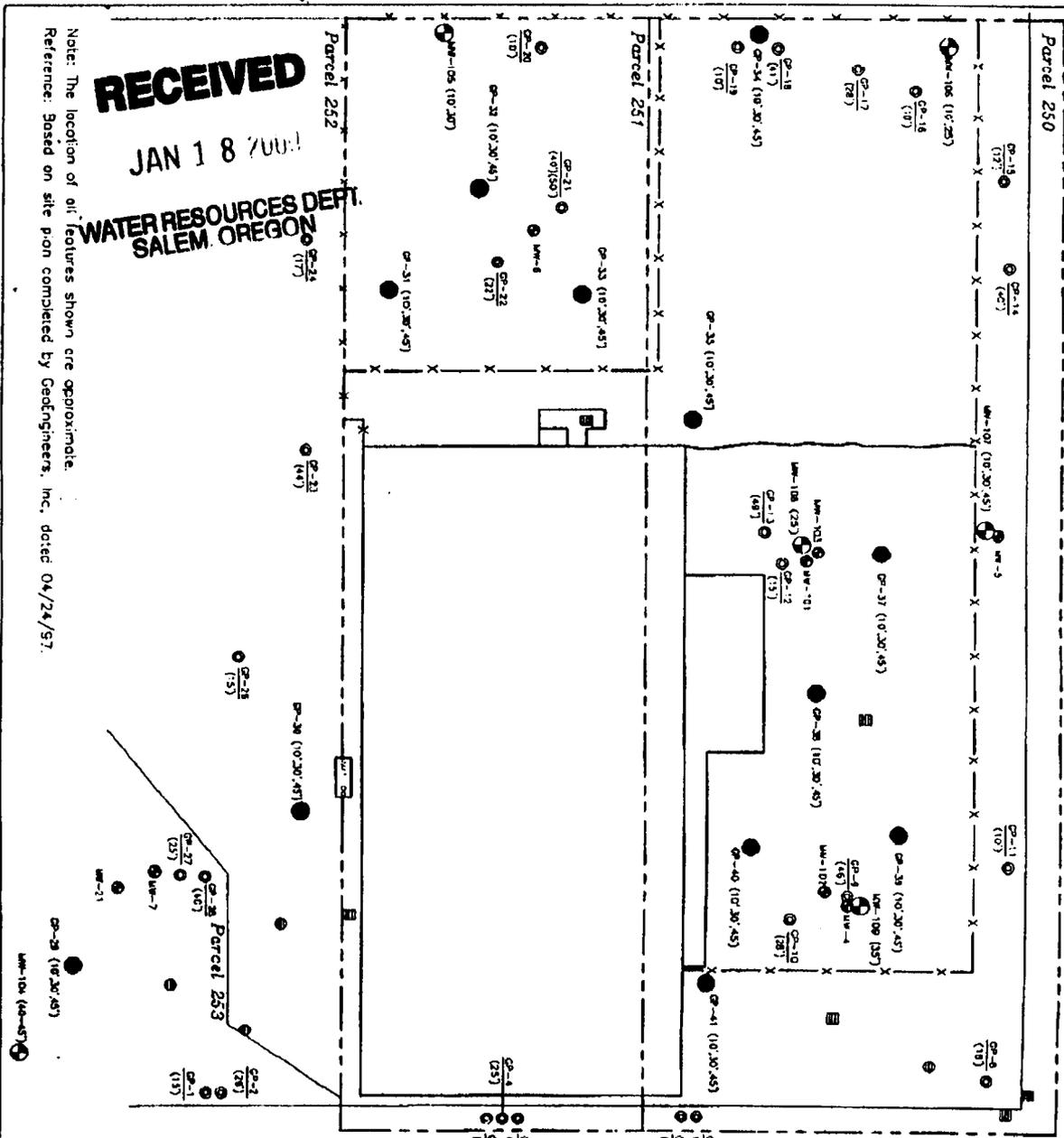
ATTACHMENT 5-1

MW-106 Well Log

Parcel 250

NORTHEAST HOLMAN STREET

NORTHEAST 112TH AVENUE



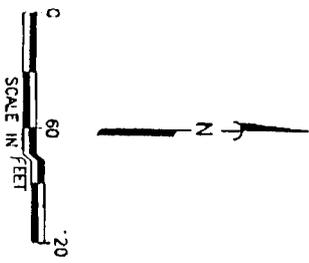
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WATER RESOURCES DEPT.
SALEM, OREGON

Note: The location of all features shown are approximate.
 Reference: Based on site plan completed by Geodesign, Inc. dated 04/24/97.

EXPLANATION:

- ☐ CATCH BASINS
- MONITORING WELL
- GEOPROBE BORING / (GEOPROBE DEPTH, FEET)
- GEOPROBE WATER / SAMPLE DEPTH (FEET)
- ⊕ GEOPROBE WITH SMALL DIAMETER MONITORING WELL / WATER SAMPLE DEPTH (FEET)



GEO DESIGN, INC.

PHASE IV EXPLORATIONS

JE1DELIVERY-4

AUGUST 1999

FIGURE 2