The purpose of this technical memorandum is to summarize the environmental regulatory history of the former Lincoln Steam Plant property, located along the west bank of the Willamette River north of Interstate 5, near downtown Portland, Oregon.

**HISTORY OF PLANT OPERATIONS**

Construction of the Lincoln Steam Plant began in 1917. The plant continued to operate, generating steam for heat and/or electricity, until 1985. The Portland Development Commission (PDC) acquired the property in the late 1980s in a series of property exchanges. PDC never operated the plant. The plant was demolished by PDC in the early 1990s in preparation for site redevelopment. Roadways and public infrastructure were developed by PDC in 1991-1995.

**ENVIRONMENTAL REGULATORY HISTORY**

On December 14, 1988, PDC entered into a Consent Agreement (CA) with the Oregon Department of Environmental Quality (DEQ). At that time, the property was designated as Environmental Cleanup Site Information (ECSI) #602. The CA required that PDC perform a remedial investigation and feasibility study (RI/FS), that the DEQ select a remedial action for the property, and that PDC enter into good faith negotiations toward remedial action implementation. Following execution of the original CA, PDC proceeded with assessment and remediation of the property. Six amendments to the CA agreement ensued that were principally means to provide cost reimbursement to DEQ – this process ended by mutual agreement in early 2000. After that time individual ECSI numbers were assigned and tracked by each parcel of property (except the very early developments of the South Waterfront apartment and condominium properties consisting of Area B and C).

The site (ECSI #602) originally was divided into the following areas:
- Area A Roadways (SW Moody and River Drive),
- Area B Condos/Retail (NW Quadrant),
- Area C Apartments (SW Quadrant), and
- Area D Lincoln Steam Plant (East Half) future Park, Strand, Lot 8, David Evans & Associates building.

Subsequently it was divided in half Parcel 2 (West) and Parcel 3A (North East Quadrant) Parcel 3B (South East Quadrant) with Roadway areas consisting a portion of Parcel 2 (Figure 1, attached).

Principal environmental issues at the site include:

- Metals, Polynuclear Aromatic Hydrocarbons (PAHs) and Total Petroleum Hydrocarbons (TPH) in soil from former Steam Plant and other historical uses
- Asbestos stucco fireproof painting of former Steam Plant concrete walls
- Groundwater TPH impacts from former Steam Plant and other historical uses

The assessment and remediation history took many turns in part as the property was sub-divided and redeveloped. Details are described on a geographic basis below. A summary of the regulatory history section is included in Table 1 (attached).

**PARCELS R326736, R273071, R273072, AND PARCEL 2-AREA A ROADWAYS**

In Addendum #2 to the original CA dated October 12, 1989, DEQ agreed that no further action related to soils on Parcel 2 was required provided PDC completed the following actions:

- Cap parcels R326736 and R273071 with a parking garage and a ground-floor commercial/above-ground residential structure;
- Construct SW Montgomery Street adjacent and north of parcel R326736, and SW River Drive east of parcels R326736, R273071, R273072 (Parcel 2-Area A Roadways); and
- Stockpile and cover excess soil generated during construction on parcels R273071 and R273072.

By 1997, stockpiled soil had been removed from parcel R273072, and additional multi-family residential structures constructed. With this second construction phase, the remedy stipulated by the DEQ for soils was completed and certificate of completion issued by DEQ. Groundwater remains administratively open on these parcels. Final roadway improvements and realignment of SW Moody occurred in early 2001 and DEQ issued a Conditional No Further Action (NFA) and then subsequently ended monitoring in 2010.

In 2005, re-organization of the DEQ Environmental Cleanup Site Information system files for the former Lincoln Steam Plant property occurred. Parcels R326736, R273071, R273072 were re-designated as ECSI 4420. The Parcel 2-Area A roadways were re-designated as ECSI 4421.
PARCELS R238252 AND R238253

During demolition of the former Lincoln Steam Plant building, concrete rubble was used as fill on these two parcels. Some rubble surfaces are coated with two colors of asbestos-containing paint. Following the completion of the Parcel 3 Remedial Investigation/Feasibility Study (RI/FS) program, a Record of Decision (ROD) was published for Parcel 3 (which includes R238252 and R238253) on August 24, 1998. A Conditional No Further Action letter was issued by the DEQ for parcel R238252 on January 11, 1994. A commercial office building was constructed on Parcel R238252 in 1995, and serves as a surface cap preventing exposure to soil and concrete rubble. A Conditional NFA letter was issued for parcel R238253 on September 20, 2007. A notice regarding the presence of asbestos on concrete rubble has been recorded on the deed for both R238252 and R238253. If disturbed, the rubble must be managed in accordance with DEQ Air Quality program rules. In 2005, re-organization of the DEQ ECSI system files for the former Lincoln Steam Plant property occurred. Parcel R238252 was re-designated as ECSI #4424, and parcel R238253 was re-designated as ECSI #4423.

PARCEL 487357

Following the completion of RI/FS activities on this parcel, a ROD was published for Parcel 3 (which includes R487357) on August 24, 1998. Remedy implementation began on R487357 in 1998. Remedial activities included 1) screen chamber decommissioning, 2) abatement of asbestos-containing paint and former Steam Plant building wall demolition as necessary to achieve South Waterfront Park design grades, 3) armoring of the riverbank to prevent soil erosion, and 4) surface capping in two discreet areas. A Conditional NFA was issued by DEQ for R487357 following remedy implementation on April 3, 2007. In 2005, re-organization of the DEQ ECSI system files for the former Lincoln Steam Plant property occurred. Parcel R487357 was re-designated as ECSI #4422.

PARCEL R592350

Following the completion of RI/FS activities on this parcel, a ROD was published for Parcel 3 (which includes R592350) on August 24, 1998. Remedy implementation began on R592350 in 2005. Remedial activities included 1) management of petroleum-containing soil during construction, 2) management of concrete rubble coated with asbestos-containing paint, 3) post-construction groundwater monitoring, and 4) methane monitor installation in the subsurface parking garage. A Conditional NFA was issued by DEQ for R592350 following remedy implementation on April 3, 2007. In 2005, re-organization of the DEQ ECSI system files for the former Lincoln Steam Plant property occurred. Parcel R592350 was re-designated as ECSI #4757.

PARCEL R273073

Parcel R273077 is located outside the area included in the original 1989 CA. A Remedial Investigation was completed for parcel R273073 in October 2002. Based upon the results of the Remedial Investigation, it was determined that site contaminants presented an unacceptable risk only if site work or redevelopment is conducted below a depth of 10 feet. A Record of Decision was completed for parcel R273073 on January 28, 2004. The remedy stipulated in the Record of Decision
includes engineering and institutional controls. A temporary surface cap has been installed on parcel R273073, but the final remedy will be implemented during redevelopment of the parcel. There are no immediate plans to redevelop parcel R273073. In 2005, re-organization of the DEQ ECSI system files occurred. Parcel R273073 was designated as ECSI #2492.

**Parcels R273077**

Parcel R273077 is located outside the area included in the original 1988 CA. Environmental site assessment activities were initiated on parcel R273077 in 1997. Early assessment work identified limited contamination, and approximately 30 cubic yards of contaminated soil was removed as part of an early interim removal action. Work on a remedial investigation at parcel R273077 began in September 1998, and was completed in January 2000. In November 1999, Portland Riverplace LLC, purchased parcel R273077, and shortly thereafter constructed a 250+ room Residence Inn by Marriott. DEQ determined that no additional cleanup was necessary, because groundwater was not significantly impacted, and the proposed hotel would serve as a cap for the remaining soil contamination. DEQ issued a Conditional NFA letter for parcel R273077 in September 2001. In 2005, re-organization of the DEQ ECSI system files occurred. Parcel R273077 was designated as ECSI #2232.

**SW Moody Avenue (Right-of-Way)**

SW Moody Avenue adjacent to R273073 and R273077 was designated ECSI #1401 when the Parcel 2A roadways were reconfigured in 1999/2000. During the construction of SW Moody Avenue, soil samples were collected as storm and sanitary sewer lines were placed. Soil sampling and analysis detected the presence of elevated concentrations of petroleum products and lead in isolated pockets along the right-of-way. As requested by the DEQ, the road design was modified to mitigate impacts of potentially contaminated soil and groundwater. Design modifications included cement plugs that were placed at selected intervals in the roadbed to prevent potentially contaminated groundwater from migrating along the preferential path the utility trenches were now providing. By the installation of these plugs, DEQ’s desire to mitigate the potential for exacerbation of existing contamination was accomplished. PDC intends to request DEQ administrative closure of this area and request a NFA for this parcel.
1988 ORIGINAL CONSENT AGREEMENT

1994 ADDENDUM TO CONSENT AGREEMENT

CURRENT (2013) TAX LOTS


1 inch = 300 feet

FIGURE 1

SOUTH WATERFRONT PARCEL CONFIGURATION

PORTLAND DEVELOPMENT COMMISSION
1900 SW FOURTH AVENUE, SUITE 100
PORTLAND, OREGON
### TABLE 1
Regulatory History Summary
Former Lincoln Steam Plant Property

#### Updated 12/11/13

<table>
<thead>
<tr>
<th>Property ID</th>
<th>Tax Lot</th>
<th>Site Name</th>
<th>Address</th>
<th>ECSI #</th>
<th>Environmental Work Completed</th>
<th>Remedial Actions Performed</th>
<th>DEQ Steps Completed</th>
<th>Current Regulatory Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>&quot;Parent Lincoln Steam Plant Site&quot;</td>
<td>(Below)</td>
<td>602</td>
<td>Consent Order</td>
<td>Six Addenda to Consent Order</td>
<td>(See Separate ECSI Actions Below)</td>
<td>Active</td>
</tr>
<tr>
<td>R487357</td>
<td>1S1E03CD 102</td>
<td>Parcel 3A/3B - Lot 7</td>
<td>South Waterfront Park</td>
<td>1816 SW Montgomery Street</td>
<td>4422 Remedial investigation</td>
<td>Risk Assessment</td>
<td>ROD - 8/24/1998</td>
<td>Conditional NFA Groundwater Closed</td>
</tr>
<tr>
<td>R592350</td>
<td>1S1E03CD 90000</td>
<td>Parcel 2A - Lot 6</td>
<td>The Strand Condominiums</td>
<td>1930 SW River Drive</td>
<td>4757 Remedial investigation</td>
<td>Risk Assessment</td>
<td>ROD - 8/24/1998</td>
<td>Conditional NFA Groundwater Closed</td>
</tr>
<tr>
<td>R238253</td>
<td>1S1E03CD 200</td>
<td>Parcel 3B - Lot 8</td>
<td>None assigned</td>
<td>4423</td>
<td>Preliminary Assessment</td>
<td>Feasibility Study</td>
<td>ROD - 8/24/1998</td>
<td>Conditional NFA Groundwater Closed</td>
</tr>
<tr>
<td>R238282</td>
<td>1S1E03CD 300</td>
<td>Parcel 3B - Lot 9</td>
<td>David Evans &amp; Associates Building</td>
<td>2100 SW River Parkway</td>
<td>4424 Remedial investigation</td>
<td>Surface Cap</td>
<td>ROD - 8/24/1998</td>
<td>Conditional NFA Deed Notice - Buried Asbestos</td>
</tr>
<tr>
<td>R273071</td>
<td>1S1E03CD 500</td>
<td>Parcel 2C - Lot 1</td>
<td>Place Housing</td>
<td>2025 SW River Drive</td>
<td>4420 Remedial investigation</td>
<td>Engineering Controls</td>
<td>ROD - 8/24/1998</td>
<td>Cert. of Completion</td>
</tr>
<tr>
<td>R236736</td>
<td>1S1E04CA 1200</td>
<td>Parcel 2B</td>
<td>River Place Athletic Club</td>
<td>0306 t0320 SW Montgomerity Street</td>
<td>4420 Remedial investigation</td>
<td>Engineering Controls</td>
<td>ROD - 8/24/1998</td>
<td>Cert. of Completion</td>
</tr>
<tr>
<td>R273072</td>
<td>1S1E03CD 600</td>
<td>Parcel 2C - Lot 2</td>
<td>Place Housing</td>
<td>2025 W1SW River Drive</td>
<td>4420 Remedial investigation</td>
<td>Engineering Controls</td>
<td>ROD - 8/24/1998</td>
<td>Cert. of Completion</td>
</tr>
<tr>
<td>NA</td>
<td>NA</td>
<td>Parcel 2A</td>
<td>Parcel 2A Roadways</td>
<td>4421</td>
<td>Remedial investigation</td>
<td>Surface Cap</td>
<td>ROD - 8/24/1998</td>
<td>Cert. of Completion Groundwater Closed</td>
</tr>
<tr>
<td>R273077</td>
<td>1S1E03CD 1000</td>
<td>Marriot Residence Inn</td>
<td>2115 SW River Parkway</td>
<td>2232</td>
<td>Remedial investigation</td>
<td>Surface Cap</td>
<td>CNFA - 5/11/2001</td>
<td>Conditional NFA</td>
</tr>
<tr>
<td>R273073</td>
<td>1S1E03CD 800</td>
<td>SWF Redevelopment Lot 3</td>
<td>SWF River Parkway</td>
<td>2095 SW River Parkway</td>
<td>2492 Remedial investigation</td>
<td>Risk Assessment</td>
<td>ROD - 1/28/2004</td>
<td>Awaiting Development/Final Remedy</td>
</tr>
<tr>
<td>NA</td>
<td>NA</td>
<td>SW Moody Ave. - Right-Of-Way</td>
<td>Moody Avenue</td>
<td>1401</td>
<td>Site Investigation</td>
<td>Cement Utility Plugs</td>
<td>None</td>
<td>PDC To Request DEQ Termination</td>
</tr>
</tbody>
</table>

---

**Notes:**
- ECSI: Environmental Compliance Suitability Index
- ROD: Record of Decision
- CNFA: Clean Northwest Fund Action
- E&ES: Environmental & Economic Study
- MCM: Media Contamination Management Plan
- PDC: Portland Development Commission