

## **Cleanup Agreement and Investigation Report Available for Public Comment**

The Washington Department of Ecology (Ecology) invites comments on a cleanup plan and an investigation report for the Fox Avenue Building LLC (Fox Avenue Building) Site in south Seattle.

Three documents are available for public review and comment:

- A **Remedial Investigation and Feasibility study report** which describes the contamination found on the site and what cleanup methods were considered.
- **Cleanup Action Plan (CAP)** which describes the cleanup methods selected and how they will clean up contamination.
- An **Agreed Order** which is the legal document between Ecology and the property owner and the framework for how the property owner will complete the cleanup.

You are invited to:

- **Review** the documents listed above.
- **Send** your comments to Ecology for consideration. Comments will be accepted March 1-30, 2012.

See the box at the right for details about where to review documents and submit comments.

### **What Happens Next?**

- Ecology will review and respond to all the comments received during the comment period.
- Once the documents are finalized, Ecology will work with the liable parties to begin taking cleanup actions.

### **Site Background**

The Fox Avenue Building Site is located in an industrial area near the Lower Duwamish Waterway in south Seattle. Since 1918, several companies have owned and leased this property. Past site activities include operation of coke and oil fired furnaces and bulk storage of petroleum and chemicals. From 1956 to 2001, Great Western Chemical Company operated a chemical and petroleum repackaging and distribution facility at the site.

### **COMMENTS ACCEPTED**

**March 1-30, 2012**

#### **Submit Comments and Technical Questions to:**

Sunny Becker  
Site Manager  
Washington Department of Ecology  
Toxics Cleanup Program  
Northwest Regional Office  
3190 160th Ave SE  
Bellevue, WA 98008  
Phone: (425) 649-7187  
E-mail: Sunny.Becker@ecy.wa.gov

#### **Public Involvement**

Meg Bommarito  
Public Involvement Coordinator  
Phone: (425) 649-7256  
Email: Meg.Bommarito@ecy.wa.gov

#### **Document Review Locations:**

##### **South Park Branch**

##### **Seattle Public Library**

8604 Eighth Ave S.  
Seattle, WA 98108  
Phone: (206) 615-1688

##### **Washington Department of Ecology Northwest Regional Office**

3190 160th Ave SE  
Bellevue, WA 98008  
Call for an appointment:  
(425) 649-7190

#### **Ecology Web site**

<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=5082>

**Facility Site ID #: 2282**

In 2003, Fox Avenue Building LLC bought the property. Cascade Columbia Distribution now leases the property and uses it as a chemical distribution facility. For more information about the site history, visit the web link listed on page 1.

### Previous Investigations and Cleanup Work

In 1991, Great Western Chemical (GWC) began investigating contamination under an Agreed Order with Ecology. After 2000, investigations and initial cleanup work were performed by GWC and Fox Avenue Building.

Previous cleanup work included:

- Soil, groundwater, seep and soil vapor sampling.
- Installation of groundwater monitoring wells.
- Investigations to define the nature and extent of contamination.
- Operation of a soil vapor extraction system.
- Pilot testing of various remediation technologies, including injections of chemical into groundwater to help break down contamination.
- Underground and above ground storage tank removals.

### Contamination

The primary contaminants at this site are:

#### Soil:

- Perchloroethylene (PCE)
- Benzene
- Trichloroethylene (TCE)
- Pentachlorophenol
- Total petroleum hydrocarbons

#### Groundwater:

- PCE
- Benzene
- 1,1 dichloroethene (1,1-DCE)
- Pentachlorophenol
- Total petroleum hydrocarbons
- Vinyl chloride
- TCE

#### Air:

- PCE
- TCE

**There are three main areas of the site that require cleanup actions (see map on next page):**

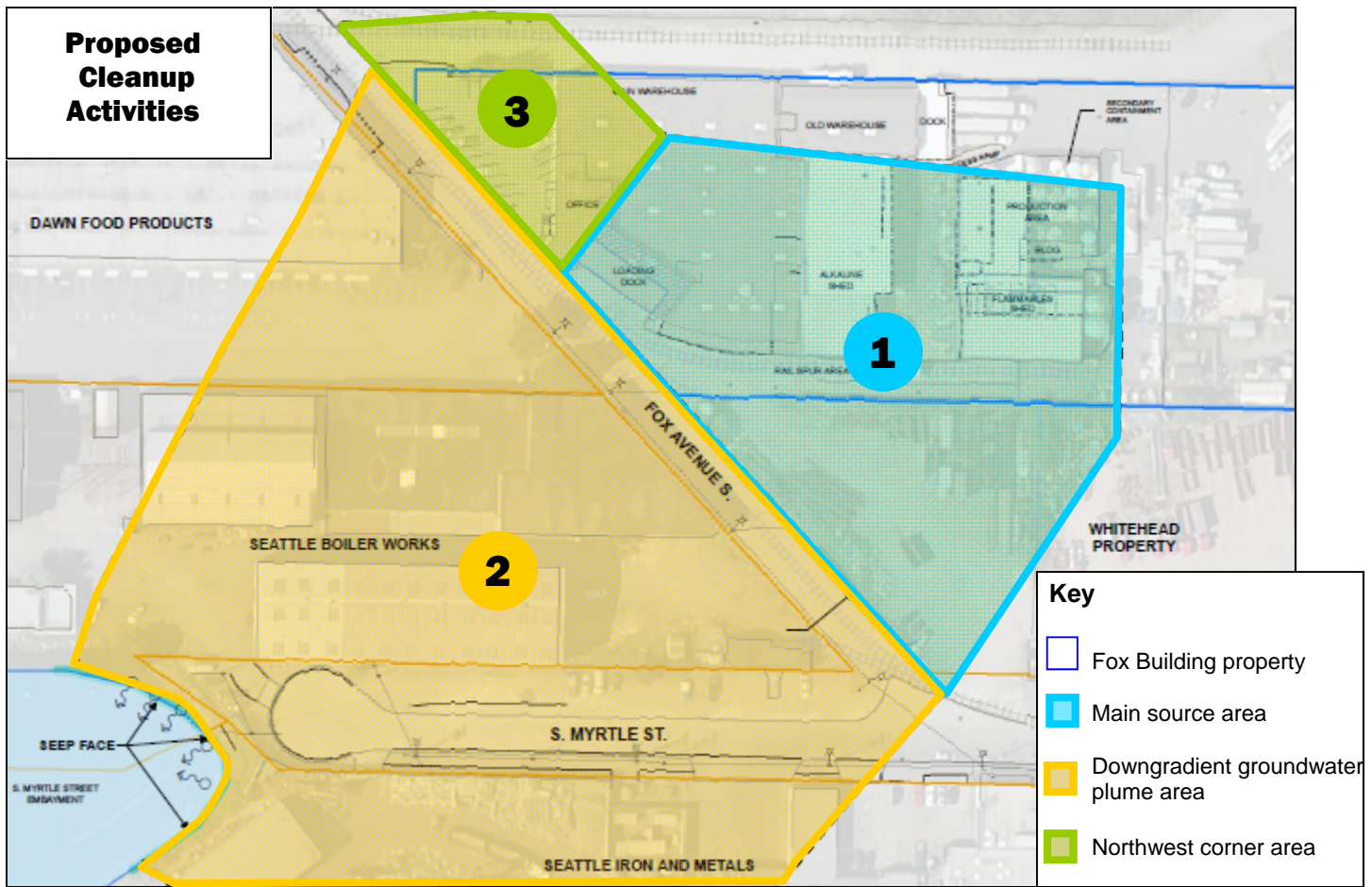
1. **Main source area:** Areas where past releases have occurred and the underlying soil is now a source of a plume (area of contamination) in groundwater.
2. **Downgradient groundwater plume area:** This is the area that has been impacted by the main source area. PCE, TCE and other chemicals have traveled into the groundwater from the soil in the main source area.
3. **Northwest corner source area:** A smaller groundwater plume of contamination is found in this area of the site.

### What will be done to clean up the site?

The contamination will be cleaned up using several methods, including those listed below. The map on page 3 shows where the different methods will be used.

- **Electrical Resistance Heating (ERH):** Soil and groundwater are heated to move the chemicals from the soil and groundwater into underground wells. Once the chemicals are moved to the wells, they are pumped out of the ground and collected and destroyed. The heat can also evaporate and destroy certain chemicals.
- **Soil Vapor Extraction (SVE):** Contaminants are removed from soil using a vacuum system. Wells are drilled into the soil. A pump system is put into place to create a vacuum to pull chemicals out of the soil and collect them at the wells.
- **Enhanced Reductive Dechlorination (ERD):** Certain contaminants, like TCE, can be broken down by microscopic organisms in the soil. Certain treatment materials can be added to the soil to feed these organisms and speed up the break down of the toxic chemicals.

# Fox Avenue Building Site



- 1 Main Source Area:**

  - **Groundwater:** After use of Electrical Resistance Heating (ERH), Enhanced Reductive Dechlorination (ERD) will help to break down remaining contamination.
  - **Soil:** ERH
- 2 Downgradient Groundwater Plume Area:**

  - **Groundwater:** After use of ERH in the Source Area, ERD will help to break down remaining contamination.
  - **Soil:** No soil cleanup is needed in this area. Only the groundwater is contaminated.
- 3 Northwest Corner Source Area:**

  - **Groundwater:** ERD will be used since ERH was already used as part of an interim (partial) cleanup action.
  - **Soil:** Soil vapor extraction will remove PCE from the soil to reduce the amount of PCE moving into the groundwater.

**Lower Duwamish Waterway Cleanup**

The Fox Avenue Building Site is located within the Lower Duwamish Waterway (LDW) cleanup site. The LDW site is both a state and federal cleanup covering about 5.5 miles of the Duwamish River south of Harbor Island. The LDW sediments are contaminated with several hazardous substances. Cleanup of this site will reduce source of pollution to the waterway. For more information visit Ecology’s Web site: [http://www.ecy.wa.gov/programs/tcp/sites\\_brochure/lower\\_duwamish/lower\\_duwamish\\_hp.html](http://www.ecy.wa.gov/programs/tcp/sites_brochure/lower_duwamish/lower_duwamish_hp.html) or the U.S. Environmental Protection Agency Web Site: <http://yosemite.epa.gov/r10/cleanup.nsf/sites/LDuwamish>. Ecology and EPA are working together to clean up and reduce sources of pollution to the waterway.

## **Agreed Order and Documents Ready for Public Review**

The Washington State Department of Ecology (Ecology) invites comments on an Agreed Order, Cleanup Action Plan and a site investigation report for the Fox Avenue cleanup site located at 6900 Fox Avenue South in Seattle on the east side of the Duwamish River. Contamination resulted from historical site activities including operation of coke and oil fired furnaces, bulk storage and chemical and petroleum repackaging and distribution. Soil, groundwater are contaminated.

The Agreed Order requires the property owner to implement the cleanup action plan. The cleanup action plan outlines how the property owner will clean up contamination at the site. The investigation report summarizes what was found at the site and how the cleanup actions were chosen.

The public comment period for these documents is from March 1 – 30, 2012. Site documents are available for review at: Washington State Department of Ecology – Northwest Regional Office, 3190 160<sup>th</sup> Ave SE., Bellevue, WA 98008; South Park Library – 8604 Eighth Ave. South, Seattle, WA 98108; and Ecology's web site at: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=5082>.

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## **La Orden Acordada y los Documentos Listos para Revisión Pública**

El Departamento de Ecología del estado de Washington (Ecología) le invita a someter sus comentarios referentes a la Orden Acordada, el Plan de Acción para la Limpieza y un informe sobre la investigación del sitio, para el sitio de limpieza de Fox Avenue que está ubicado a 6900 Fox Avenue South en Seattle en el lado este del río Duwamish. La contaminación resultó por las actividades históricas del sitio, incluyendo la operación de hornos de coque y aceite, almacenamiento de combustible a granel, y el re envasado y distribución de sustancias químicas y petróleo. El suelo y el agua subterráneo están contaminados.

La Orden Acordada requiere que el dueño de la propiedad lleve a cabo el plan de acción para la limpieza. El plan de acción para la limpieza resume la forma de que el dueño de la propiedad limpiará la contaminación del sitio. El informe de la investigación resume lo que encuentran en el sitio y como eligieron a las acciones para la limpieza.

El periodo de aceptar comentario público sobre estos documentos es entre el 1 y el 30 de marzo de 2012. Los documentos del sitio están disponibles para revisar [en inglés](#) a: Washington State Department of Ecology – Northwest Regional Office, 3190 160<sup>th</sup> Ave SE., Bellevue, WA 98008; South Park Library – 8604 Eighth Ave. South, Seattle, WA 98108; y el sitio Web de Ecología a: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=5082>.

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## **Kêu gọi ý kiến cho Sắc lệnh đồng thuận và các tài liệu liên hệ**

Bộ Môi Sinh tiểu bang Washington (gọi tắt Ecology) mời quý vị đóng góp ý kiến cho Sắc lệnh đồng thuận, Kế hoạch Hành động Dọn sạch và bản tường trình liên quan đến cuộc điều tra ô nhiễm ở địa điểm Fox Avenue tại

Sắc lệnh này buộc chủ đất và người sử dụng đất thi hành cuộc điều tra, đánh giá, và đề cử các hoạt động dọn sạch cho nơi này. Mục đích của việc điều tra phục hồi (RI) là để xác định tầm mức của chất độc hại trong nước trên mặt, cặn bùn, nước ngầm và đất nơi đây. Thông tin và dữ liệu thu được trong giai đoạn nghiên cứu RI này sẽ được sử dụng để đánh giá và lựa chọn các giải pháp dọn sạch. Một khi phương pháp dọn sạch được chọn, chúng sẽ được mô tả trong bản dự thảo kế hoạch hành động dọn sạch (dCAP). Bản Kế hoạch Hợp tác Công cộng này sẽ có sẵn sàng để công chúng duyệt xét. Phương cách tham gia và thể thức thông báo đến công chúng sẽ được trình bày trong văn bản này.

Thời gian thu nhận ý kiến bắt đầu từ ngày 1 tháng 8 đến ngày 30 tháng 8 năm 2011. Các tài liệu sẽ có sẵn sàng tại địa chỉ: Washington State Department of Ecology – Northwest Regional Office, 3190 160th Ave SE, Bellevue, WA 98008 và ở South Park Library – 8604 Eighth Ave South, Seattle, WA 98108; đồng thời ở Trang web của Ecology tại: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=5082>

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華盛頓州生態部歡迎民眾在公眾意見征詢期提供對Duwamish海洋中心進行調查清理工作的意見。華盛頓州生態部邀請公眾對Duwamish海洋中心的同意命令 (Agreed Order) 和公眾參與計劃 (Public Participation Plan) 的草案提供建議。Duwamish海洋中心位于西雅圖 Duwamish河的東側 6365南第一大道(6365 First Avenue S.)。該址的歷史上的工業使用, 比如海洋造船廠, 鐵路調車廠, 垃圾經銷商, 各項建築服務公司, 和駁船運輸終端站, 遺留下污染。從1940年到20世紀70年代中期, 海洋鐵路也在西南部海岸線附近經營。目前土壤, 地下水和河里的沉積物有重金屬, 多氯聯苯 (PCB), 石油烴, 多環芳香烴 (PAHs), 和溶劑化學污染品。

此同意命令 (Agreed Order) 要求地產所有者和經營者調查, 評估, 并提出清理工作計劃。調查的目的地是確定地表水, 河里的沉積物, 地下水和土壤的污染程度。這些信息和數據將被用于評估和選擇“清理工作”。當清理行動計劃被確定, 華盛頓州生態部會在計劃草案 (draft CAP) 中描述清理行動計劃。公眾參與計劃將描述華盛頓州生態部如何通知民眾和民眾如何參與方式。

民眾對這些文件提供建議期是從2011年8月1日起到8月30日止。文件審查地點: Washington State Department of Ecology (華盛頓州生態部), Northwest Regional Office, 3190 160th Ave SE., Bellevue, WA 98008, South Park Library, 8604 Eighth Ave. South, Seattle, WA 98108。

或到華盛頓州生態部的網址: <https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=5082>

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DEPARTMENT OF  
**ECOLOGY**  
State of Washington  
3190 160th Ave SE  
Bellevue, WA 98008

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## **Fox Avenue Building Site King County, WA**

### **Public Comment Period on an Agreed Order for a Cleanup Plan**

**Public Comment Period:  
March 1-30, 2012**

**Facility Site ID #: 2282**

If you need this publication in an alternative format, call reception at (425) 649-7070. Persons with hearing loss, call 711 for Washington Relay Service. Persons with speech disability call 877-833-6341.

#### **Want to get more involved with efforts to clean up the Duwamish River?**

Contact the Duwamish River Cleanup  
Coalition at  
[contact@duwamishcleanup.org](mailto:contact@duwamishcleanup.org) ,  
(206) 954-0218 or visit [http://  
www.duwamishcleanup.org/index.html](http://www.duwamishcleanup.org/index.html)