



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

**DRAFT PUBLIC PARTICIPATION PLAN**

**INDUSTRIAL CONTAINER SERVICES – WA, LLC (ICS) SITE**  
**(TROTSKY PROPERTY/FORMER NORTHWEST**  
**COOPERAGE)**  
**SEATTLE, WASHINGTON**

---

**Prepared by**  
Washington State Department of Ecology  
3190 160th Avenue SE  
Bellevue, WA 98008-5452

**February 2010**

## Table of Contents

<b>Introduction</b> .....	<b>3</b>
<b>Project Description</b> .....	<b>3</b>
Location.....	3
Site Background .....	4
Contaminants of Concern .....	4
Previous Cleanup Work.....	5
Current Activity.....	6
Lower Duwamish Waterway (LDW) Site Cleanup.....	8
The Duwamish River Cleanup Coalition.....	9
Enhanced Public Participation.....	10
<b>Community Profile</b> .....	<b>10</b>
South Park Community Description.....	11
Georgetown Community Description.....	12
<b>Key Community Concerns and Issues</b> .....	<b>12</b>
<b>Public Participation Activities and Responsibilities</b> .....	<b>15</b>
Public Participation Activities .....	15
<i>Formal Public Comment Periods</i> .....	15
<i>Public Meetings and Hearings</i> .....	16
<i>Information Repositories</i> .....	16
<i>Site Register</i> .....	16
<i>Mailing List</i> .....	17
<i>Fact Sheets</i> .....	17
<i>Newspaper Display Ads</i> .....	17
Public Participation Plan Update.....	17
Points of Contact .....	17
<b>Glossary</b> .....	<b>19</b>
<b>References</b> .....	<b>23</b>

## **Introduction**

The Washington State Department of Ecology (Ecology) developed this Public Participation Plan according to the Model Toxics Control Act (MTCA). This plan is designed to promote meaningful community involvement during the investigation and cleanup of the Industrial Container Services - WA, LLC. (ICS - WA) (Trotsky Property/Northwest Cooperage) site located in Seattle, Washington next to the Lower Duwamish Waterway (“the Site”). This plan outlines and describes the tools Ecology will use to inform the public about site cleanup activities, and it describes how the community can become involved in this process.

Ecology and the potentially liable parties, Herman and Jacqueline Trotsky, property owners, and ICS - WA, site operators, negotiated a legal agreement called an Agreed Order that formally describes their working relationship. Under the Agreed Order, the Trotskys and ICS – WA will conduct a Remedial Investigation (RI) and Feasibility Study (FS) and prepare a Draft Cleanup Action Plan (CAP) at the site. The RI and FS are required under the Washington Administrative Code (WAC) 173-340-350 and are part of the cleanup process for this site. The RI will determine the nature and extent of contamination in the upland area soil, groundwater, stormwater and stormwater solids, and sediments on the site. The FS will use the results of the RI to evaluate and select cleanup action alternatives for the site. The draft CAP will be prepared to propose a cleanup action for the site.

Cleanup actions might be identified during this RI or FS process that will eliminate or minimize current releases of contamination to the Lower Duwamish Waterway (LDW) or actions that are necessary to prevent an imminent threat to human health or the environment. Ecology will consider implementing such cleanup actions as interim actions under the existing Agreed Order.

## **Project Description**

### **Location**

The Site is located at 7152 First Avenue South, in Seattle, Washington, on the west side of the LDW (see figure on page 7). The site is bordered by Boyer Towing to the east, the Trotsky inlet

on the north, First Avenue South on the west and DaVinci Gourmet on the south. The final site boundaries will be defined by the extent of contamination determined during the RI.

## **Site Background**

Drum reconditioning and manufacturing operations on the property date back to as early as the 1930s and in the early 1940s Mitzel & Co. reportedly refurbished 1,500 drums per month for the U.S. government during World War II.

The Trotsky family purchased the property in 1953 and operated the site as Northwest Cooperage. The property was paved in 1973 and a wastewater pretreatment system was installed. The pretreatment system included a “closed” drainage system that channels all drainage, including stormwater, spills, and process water into a wastewater pretreatment system to the sanitary sewer.

In 1995, the facility was sold to Consolidated Drum Reconditioning Company, Inc., (CDRCo) , who leased the property from the Trotskys. In the late 1990s, CDRCo was acquired by Palex Container Systems. In 2000 Palex Container Systems became IFCO Industrial Container Services. In 2002, the facility was acquired by Industrial Container Services – WA, LLC (ICS - WA).

ICS - WA currently leases the property from the Trotsky property owners and continues to operate a drum reconditioning facility. Operations at the site include storage, cleaning, and repainting of used, essentially empty drums, some of which may have contained food products, petroleum products, solvents, resins, paints, adhesives and hazardous wastes.

## **Contaminants of Concern**

Contamination at the Site is due to industrial use which began in the 1920's. The known contaminants of concern in the soil are:

- Metals,
- Volatile organic compounds (VOCs),

- Semi-volatile organic compounds,
- Polychlorinated biphenyls (PCBs),
- Pesticides, and
- Total petroleum hydrocarbons (TPH).

The known contaminants of concern in the groundwater are:

- Metals,
- Volatile organic compounds,
- Carcinogenic polynuclear aromatic hydrocarbons (cPAHs),
- Bis 2-Ethylhexyl phthalate (BEHP),
- Semi-volatile organic compounds,
- Polychlorinated biphenyls (PCBs),
- Pesticides,
- Total petroleum hydrocarbons (TPH).

The known contaminants of concern in the inlet sediments are:

- Polychlorinated biphenyls (PCBs),
- Metals,
- Dioxins and furans,
- Volatile organic compounds.

### **Previous Cleanup Work**

In February 1986, surface soil samples were collected from six areas. Onsite soils were contaminated with metals, volatile organic compounds, and pesticides.

In May 1986, three groundwater monitoring wells were installed, including one offsite well. Analysis indicated that the onsite groundwater was contaminated with metals and a variety of VOCs including vinyl chloride, toluene, ethylbenzene, xylenes, and 2,4-dimethylphenol. In addition, 2,4-dimethylphenol was detected in the offsite well.

In September 1986, two additional monitoring wells were installed onsite and soil borings were drilled adjacent to the two existing onsite wells. Sample results also indicated the presence of contaminants at depths over 20 feet.

A groundwater sample was collected from one of the onsite monitoring wells in March 1987. A variety of VOCs were detected in groundwater, but concentrations were not significantly higher than background concentrations.

Four surface soil samples were collected during a 1991 Site Hazard Assessment conducted for Ecology from unpaved areas of the facility east of the drum storage area in the southeast corner of the site. Chromium, copper, lead, nickel, and zinc were detected in the soil samples.

In addition, three sediment samples were collected during this sampling event from the slip adjacent to the Trotsky Property, and two sediment samples were collected from the LDW at points upstream and downstream of the slip (SAIC 2007). Metals, methylene chloride, xylene, and acetone were detected in the sediment samples from the LDW. Acetone, PCBs, methyl ethyl ketone (MEK), and methylene chloride were detected above their detection limits in the sediment samples from the slip. Chromium, copper, lead, and zinc were detected at concentrations at least three times greater than those in the adjacent LDW sediment samples.

Ecology installed three new monitoring wells and sampled two existing wells and collected samples from intertidal seeps and sediments and a stormwater outfall at the site in 2007. Contaminants above cleanup action levels in the soil, groundwater, and sediments were metals, PCBs, pesticides, petroleum hydrocarbons, and PAHs. The seeps contained metals, PCBs and PAHs above cleanup action levels, and the stormwater outfall contained metals.

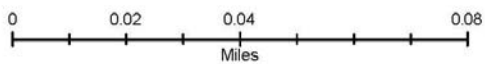
### **Current Activity**

The Agreed Order requires that the Trotskys and ICS - WA complete a

- Work Plan
- Remedial Investigation (RI)
- Feasibility Study (FS), and
- A draft Cleanup Action Plan (CAP).



Industrial Container Services WA LLC



## **Lower Duwamish Waterway (LDW) Site Cleanup**

The Site is located adjacent to the LDW site and within the LDW source control study area. The LDW site is a Superfund site that consists of the 5.5 mile stretch of the Duwamish River that flows north into Elliot Bay at the south end of Harbor Island. The LDW site is designated as a contaminated site under both state and federal law due to contaminants in the river and intertidal sediments. The Site is one of several sites near the LDW that will be cleaned up to reduce the threat to human health and the environment from releases of hazardous substances, and to assist in preventing recontamination of the sediments after the LDW site cleanup is complete.

The sediments in the LDW site contain a wide range of contaminants due to years of industrial activity and runoff from urban areas. Ecology and EPA are working together to clean up contaminated sediments in the LDW site and to control sources of recontamination from nearby areas.

In 2000, EPA and Ecology entered into an Administrative Order on Consent with King County, the Port of Seattle, the City of Seattle, and The Boeing Company. This legal agreement requires these four parties perform a Remedial Investigation (RI) and Feasibility Study (FS) of sediment contamination in the waterway. Information about the RI/FS for the LDW site is located at <http://yosemite.epa.gov/r10/cleanup.nsf/sites/lduwamish>.

EPA is leading the RI/FS work, and Ecology is leading source control efforts. The source control efforts will prevent recontamination of the waterway after cleanup. Source control is the process of finding and then stopping or reducing releases of pollution to the river from various sources such as direct discharges via piped outfalls, bank erosion from adjacent properties, surface runoff from adjacent properties, groundwater discharge, air deposition, and spills. It includes identifying and managing sources of contamination to waterway sediments in coordination with sediment cleanups.



Ecology is coordinating these source control efforts with the City of Seattle, King County, the Port of Seattle, the City of Tukwila, and EPA. Ecology partners with these other agencies through the Source Control Work Group. Their work includes a business inspection program; monitoring sediments from storm drain systems; permitting to prevent direct discharges to the waterway; contaminated site cleanups; and testing various household products/materials to determine if they contain chemicals found in waterway sediments.

As part of these source control efforts, Ecology is developing Source Control Action Plans (SCAPs) for the 24 subbasins (or source control areas) that drain to the LDW site. The SCAPs identify potential contamination sources and the actions needed to keep sediments from being contaminated again after cleanup occurs. In addition, the SCAPs describe source control actions that are planned or currently underway, and sampling and monitoring activities that will be conducted to identify additional sources.

A SCAP has been completed for the source control area where the ICS site is located and is known as the Early Action Area-2 Source Control Area. The SCAP was based on a thorough review of information pertinent to sediment recontamination in this source control area. This SCAP is located on Ecology's website: <http://www.ecy.wa.gov/biblio/0709002.html>

### **The Duwamish River Cleanup Coalition**

The Duwamish River Cleanup Coalition (DRCC) is an advisory group to EPA and Ecology and works with the South Park and Georgetown neighborhoods and other stakeholders to ensure a Duwamish River cleanup that is accepted by and benefits the community and is also protective of aquatic life, wildlife and human health.

DRCC was formed by an alliance of community, environmental, tribal, and small business groups affected by ongoing pollution and cleanup plans for the LDW. The coalition members include: Community Coalition for Environmental Justice, the Duwamish Tribe, The Green-Duwamish Watershed Alliance, I'M A PAL Foundation, Environmental Coalition of South Seattle, Georgetown Community Council, People for Puget Sound, Puget Soundkeeper Alliance, South Park Neighborhood Association, Washington Toxics Coalition, and Waste Action Project.

DRCC is a formal "community advisory group" recognized by EPA and representing the interests of the community toward the cleanup work along the LDW. DRCC receives public participation grant funding from Ecology. They also receive technical assistance grants from EPA for technical advisors to review all LDW Superfund cleanup related studies and plans. They are involved in many aspects of the proposed Superfund cleanup and related MTCA cleanups. DRCC is working with Ecology to ensure that the cleanup and source control measures meet community standards.

### **Enhanced Public Participation**

Ecology will work with EPA and stakeholders according to the enhanced public participation efforts that occur for the LDW Superfund site. Ecology site managers and community involvement coordinators may participate in community meetings and events as needed. Ecology will coordinate with the DRCC throughout the public involvement process. This may include such activities as coordination for public meetings and sharing drafts of documents with DRCC for review, as appropriate.

### **Community Profile**

For decades much of the land along to the LDW has been industrialized. Current commercial and industrial operations include cargo handling and storage, marine construction, boat manufacturing, marina operations, concrete manufacturing, paper and metals fabrication, food processing, and airplane parts manufacturing.

Although the LDW is viewed primarily as an industrial corridor, two residential neighborhoods border the banks of the river: South Park and Georgetown. The South Park neighborhood is on the western shore of the LDW, and the Georgetown neighborhood is on the eastern side of the Duwamish Waterway. The residents of the community are well known for their commitment to neighborhood issues particularly related to the ongoing site cleanups along the LDW. A description of these communities is provided below.

## **South Park Community Description**

The South Park neighborhood is located in South Seattle, on the west bank of the LDW. Native Americans of the Duwamish Tribe were the first residents of South Park who lived on the shores of the Duwamish River for thousands of years. This area was once a small farming town composed of Italian and Japanese farmers who supplied fresh produce to Seattle's Pike Place Market. South Park became part of the City of Seattle in 1907. By 1920 the Duwamish River was straightened out into a straight, deep channel that would accept ocean-going ships and barges. This change in the Duwamish greatly impacted South Park. The curving meanders had been straightened, which made it easier for industry to develop along the banks of the waterway.

In the mid 1960s, South Park was rezoned as industrial. Over 4,000 people complained and the City of Seattle changed the zoning to low-density residential. The City of Seattle built the South Park Community Center in 1989 which remains a vital resource within the community. The South Park Community Center offers a wide variety of free and low cost programs and special events. Special events include free breakfasts and family events. The community center provides before and after-school programs and school break camps for students. They also offer adult classes ranging from yoga to technology to English classes. South Park is also served by the City-owned neighborhood center, managed by the South Park Neighborhood Association. The neighborhood center houses several non-profit and city services including the South Park Food Bank, City-sponsored South Park Action Agenda, and the Environmental Coalition of South Seattle.

The Seattle Public Library opened the new South Park branch at 8604 Eighth Avenue South (at Cloverdale Street) in September 2006. This new branch is 5,019 square feet and has the capacity to hold 18,700 books and materials (about one-third of the collection is Spanish-language, including bilingual children's materials and Spanish Language fiction and non-fiction). The library also has bilingual staff on hand to answer questions and to help patrons.

The South Park neighborhood is comprised of about 3,717 people of various ethnicities: 37% Hispanic, 34% white, 14% Asian, 7 % Black, 5% multiracial, 2% American Indian, 1% Native Hawaiian/Pacific Islander. The average age is 31 years old and the average income is \$20,917

(based on records from 2005). A variety of retail and service businesses are located along 14th Avenue South. Data from the Seattle Office of Economic Development lists the primary categories of employment in South Park as wholesale trade, transportation and utilities; construction/resources; manufacturing; and services.

### **Georgetown Community Description**

The Georgetown neighborhood is located in South Seattle, on the east side of the LDW across the river from South Park. Georgetown is Seattle's oldest neighborhood, settled by Luther Collins in 1851. It was incorporated as the City of Georgetown from 1904-1910, and later annexed by the City of Seattle.

According to records from 2005, just over 1,100 people live in Georgetown. The largest local employers in Georgetown are in the arts, entertainment, and recreation industries. The Georgetown neighborhood is home to large employers such as The Boeing Company and King County International Airport.

The community is host to local events such as art walks, an annual Arts and Garden Tour. The neighborhood is home to historic buildings such as the Old Georgetown City Hall, and the Georgetown Steam Plant. The South Seattle Community College has recently revitalized its Georgetown Campus and is home to the Puget Sound Industrial Excellence Center Apprenticeship and Education Center. The campus offers more than 25 apprenticeship programs including masonry, meat cutters, electricians, iron workers, and cosmetology. The neighborhood is also home to The Georgetown Community Council which meets once a month and is very active in the community.

### **Key Community Concerns and Issues**

Ecology and EPA conducted interviews with community members, environmental organizations, and community organizations in October 2002 for the LDW site Community Involvement Plan. The ICS site is located within the larger LDW site. Ecology conducted an abbreviated version of community interviews in 2006 and determined that the concerns raised in 2002 were still pertinent. In 2008 stakeholder groups provided comments to EPA and Ecology on the LDW

Remedial Investigation Draft Report developed for the LDW Superfund site. Although these comments are directed to the entire Superfund site, they are relevant for the ICS site because it is part of the larger Superfund site. The stakeholder comments indicated that their concerns have remained constant with the concerns outlined below.

There is clear interest in this cleanup process along the LDW. The following is representative of significant concerns and issues expressed during the community interviews. Ecology will work to respond to community concerns through the cleanup process and through coordination with EPA, other organizations, such as state and local health agencies, and the community advisory group that has been established for the site.

- **Health:** Stakeholders are concerned that living close to the LDW could affect their health. They expressed concern about consumption of all bottom fish and parts of other fish, as well as contamination from chemicals, bacteria and viruses. There is concern about exposure to contaminated sediments through contact at public access parks, employment at industries on the waterway, restoration work, and other cleanup work. Some said that there should be limited access to the river if there is a health risk.
- **Wildlife:** Stakeholders expressed concern for fish and wildlife. Sea lions, salmon, bottom fish, crabs, mussels, clams, shrimp, opossums, squirrels, ducks and other birds were mentioned, as well as concern about the disappearance of herons and for herons on Kellogg Island in the Duwamish Waterway.
- **Domestic animals:** There is concern about dogs eating garbage from the river and horses being on a greenbelt above the river.
- **River and groundwater contamination:** There is concern that the river is dying and that it contains contaminants, including PCBs and mercury. There is concern about the effect of septic systems near the river; sewer overflows; surface water runoff, including oil, antifreeze and fertilizers; unreported spills and illegal dumping; and pumping of waste into the river or groundwater. There is concern that permits for discharges to the river are not being enforced

or will be revised to be less strict. There is concern that sources of PCBs are not being addressed and that calculated cleanup levels for many contaminants will not be strict enough. There is also concern that the current efforts to control ongoing sources of pollution will not be enough to actually control the sources.

- **Economics:** Some people interviewed are concerned about contamination lowering property values. Others are concerned that businesses will leave the area due to the designation of the LDW as a Superfund site.
- **Cleanup:** Some people are concerned that South Park and the businesses on the water will be affected by cleanup activities, such as increased truck or barge traffic and potential accidents. There are concerns about the costs of damages to natural resources and the possibility that parties responsible for contamination will do some early cleanup activities but nothing more.
- **Information:** Several people expressed concern about a lack of warning signs for fishermen and recreational users and suggested that such signs should be installed. People are concerned about whether adequate information reaches the Spanish-speaking and other non-English-speaking communities and whether the average person and immigrants understand the risks.
- **Image:** While some people described the LDW neighborhood as an industrial area, others are concerned that it is perceived as a dumping ground.
- **Tribal Rights:** Some community members are concerned that the tribal rights to harvest fish and shellfish in the LDW are not being honored at a level protective of these treaty rights.

Other public concerns may be identified over the course of the cleanup through: public comment periods; further community interviews; surveys; meetings; and other contacts with individuals, community groups, or organizations.

Ecology will work to respond to community concerns through the cleanup process and coordination with other regulatory agencies and property owners as necessary.

## **Public Participation Activities and Responsibilities**

The purpose of this Public Participation Plan is to promote public understanding and participation in the MTCA activities planned for this site. This section of the plan addresses how Ecology will share information and receive public comments and community input on the site activities.

### **Public Participation Activities**

Ecology uses a variety of activities to facilitate public participation in the investigation and cleanup of MTCA sites. Ecology will integrate this input into its decisions as much as is feasible.

The following is a list of the public involvement activities that Ecology will use, their purposes, and descriptions of when and how they will be used during this site's investigation and cleanup.

### ***Formal Public Comment Periods***

Comment periods are the primary method Ecology uses to get feedback from the public on proposed investigation and cleanup decisions. Comment periods usually last 30 days and are required at key points during the investigation and cleanup process before final decisions are made.

During a comment period, the public can submit comments in writing, orally, and via e-mail. After formal comment periods, Ecology reviews all comments received and may respond in a document called a Responsiveness Summary.

Ecology will consider the need for changes or revisions based on input from the public. If significant changes are made, then a second comment period may be held. If no significant changes are made, then the draft document(s) will be accepted and finalized.

Future public comment periods will be held for other documents and legal agreements that are developed for the site.

### ***Public Meetings and Hearings***

Public meetings may be held at key points during the investigation and cleanup process. Public comment is accepted during public meetings. Ecology also may offer public meetings for actions expected to be of particular interest to the community. These meetings will be held at locations convenient to the community.

### ***Information Repositories***

Information repositories are places where the public may read and review site information, including documents that are the subject of public comment.

Ecology has established two repositories for the Site.

- Washington State Department of Ecology, 3190 160th Avenue SE, Bellevue, WA 98008, (425) 649-7190. Please call for an appointment.
- Seattle Public Library - South Park Branch, 8604 Eighth Ave S. at Cloverdale St. Seattle, WA

Site information also will be posted on Ecology's web site at:

[http://www.ecy.wa.gov/programs/tcp/sites/lower\\_duwamish/sites/early\\_action\\_area\\_2/early\\_action\\_area2.htm](http://www.ecy.wa.gov/programs/tcp/sites/lower_duwamish/sites/early_action_area_2/early_action_area2.htm)

### ***Site Register***

Ecology's Toxics Cleanup Program uses its bimonthly *Site Register* to announce all of its public meetings and comment periods, as well as many other activities. To receive the *Site Register* in electronic or hard copy format, contact Linda Thompson at (360) 407-6069 or by e-mail at ltho461@ecy.wa.gov. It is also available on Ecology's web site at:

[http://www.ecy.wa.gov/programs/tcp/pub\\_inv/pub\\_inv2.html](http://www.ecy.wa.gov/programs/tcp/pub_inv/pub_inv2.html)



### ***Mailing List***

Ecology has compiled a mailing list for the site. The list includes individuals, groups, public agencies, elected officials, private businesses, potentially affected parties, and other known interested parties. The list will be maintained at Ecology's Northwest Regional Office and will be updated as needed.

To have your address added or deleted from this mailing list, please contact the Ecology Site Manager, **Victoria Sutton at (425) 649-7219 or vsut461@ecy.wa.gov.**

### ***Fact Sheets***

Ecology will mail fact sheets to persons and organizations interested in the ICS site to inform them of public meetings and comment opportunities and important site activities. Ecology also may mail fact sheets about the progress of site activities.

### ***Newspaper Display Ads***

Ecology may place ads in the *Seattle Times* and other appropriate newspapers to announce public comment periods and public meetings or hearings for the site.

Ecology's goal is to be transparent to the community and all other stakeholders. This will be done by posting electronic documents on Ecology's website for stakeholder review at key points in the Site cleanup process. The stakeholders will be able to see the planned schedule for the next phase of work at the Site by reviewing the Agreed Order for the site.

### **Public Participation Plan Update**

This Public Participation Plan may be updated as the project proceeds. If a substantial update is necessary, the revised plan will be submitted to the public for comment.

### **Points of Contact**

If you have questions or need more information about this plan or the Site, please contact:

Victoria Sutton, Site Manager  
Washington State Department of Ecology  
3190 160th Avenue SE  
Bellevue, WA 98008

Tel: (425) 649-7219  
Email: vsut461@ecy.wa.gov

## Glossary

**Agreed Order:** A legal document issued by Ecology which formalizes an agreement between the department and potentially liable persons (PLPs) for the actions needed at a site. An agreed order is subject to public comment. If an order is substantially changed, an additional comment period is provided.

**Carcinogen:** Any substance or agent that produces or tends to produce cancer in humans.

**Cleanup Action:** Any remedial action, except interim actions, taken at a site to eliminate, render less toxic, stabilize, contain, immobilize, isolate, treat, destroy, or remove a hazardous substance that complies with cleanup levels; utilizes permanent solutions to the maximum extent practicable; and includes adequate monitoring to ensure the effectiveness of the cleanup action.

**Cleanup Action Plan:** A document which identifies the cleanup action and specifies cleanup standards and other requirements for a particular site. After completion of a comment period on a Draft Cleanup Action Plan, Ecology will issue a final Cleanup Action Plan.

**Cleanup Level:** The concentration of a hazardous substance in soil, water, air or sediment that is determined to be protective of human health and the environment under specified exposure conditions.

**Comment Period:** A time period during which the public can review and comment on various documents and proposed actions. For example, a comment period may be provided to allow community members to review and comment on proposed cleanup action alternatives and proposed plans.

**Cleanup Process:** The process for identifying, investigating, and cleaning up hazardous waste sites.

**Contaminant:** Any hazardous substance that does not occur naturally or occurs at greater than natural background levels.

**Exposure:** Subjection of an organism to the action, influence or effect of a hazardous substance (chemical agent) or physical agent.

**Facility:** Any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly-owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, or aircraft; or any site or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed or, placed, or otherwise come to be located.

**Feasibility Study (FS):** A study to evaluate alternative cleanup actions for a site. A comment period on the draft report is required. Ecology selects the preferred alternative after reviewing those documents.

**Groundwater:** Water found beneath the earth's surface that fills pores between materials such as sand, soil, or gravel. In aquifers, groundwater occurs in sufficient quantities that it can be used for drinking water, irrigation, and other purposes.

**Hazardous Substance:** Certain categories of substances defined by law and regulation that pose a threat to human health and/or the environment. Typical hazardous substances are materials that are toxic, corrosive, ignitable, explosive, or chemically reactive.

**Hazardous Waste Site:** Any facility where there has been a confirmation of a release or threatened release of a hazardous substance that requires remedial action.

**Information Repository:** A file containing current information, technical reports, and reference documents available for public review. The information repository is usually located in a public building that is convenient for local residents such as a public school, city hall, or library.

**Interim Action:** Any remedial action that partially addresses the cleanup of a site.

**Model Toxics Control Act (MTCA):** Washington State's law that governs the investigation, evaluation and cleanup of hazardous waste sites. Refers to RCW 70.105D. It was approved by voters at the November 1988 general election and known as Initiative 97. The implementing regulation is WAC 173-340.

**Monitoring Wells:** Special wells drilled at specific locations on or off a hazardous waste site where groundwater can be sampled at selected depths and studied to determine the direction of groundwater flow and the types and amounts of contaminants present.

**Natural Background:** The concentration of hazardous substance consistently present in the environment which has not been influenced by localized human activities.

**Owner or Operator:** Any person with any ownership interest in the facility or who exercises any control over the facility; or in the case of an abandoned facility, any person who had owned or operated or exercised control over the facility any time before its abandonment.

**Polycyclic Aromatic Hydrocarbon (PAH):** A class of organic compounds, some of which are long-lasting and carcinogenic. These compounds are formed from the combustion of organic material and are ubiquitous in the environment. PAHs are commonly formed by forest fires and by the combustion of fossil fuels.

**PCBs (polychlorinated biphenyls):** A group of toxic, persistent chemicals. Due to their non-flammability, chemical stability, high boiling point and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including transformers and capacitors for insulating purposes, and in gas pipeline systems as a lubricant. PCBs are a serious threat to public health because they have been proven to cause cancer in animals. In 1977 they were made illegal to produce, yet large amounts still remain in the environment.

**Potentially Liable Person (PLP):** Any person whom Ecology finds, based on credible evidence, to be liable under authority of RCW 70.105D.040.

**Public Participation Plan:** A plan prepared under the authority of WAC 173-340-600 to encourage coordinated and effective public involvement tailored to the public's needs at a particular site.

**Release:** Any intentional or unintentional entry of any hazardous substance into the environment, including, but not limited to, the abandonment or disposal of containers of hazardous substances.

**Remedial Action:** Any action to identify, eliminate, or minimize any threat posed by hazardous substances to human health or the environment, including any investigative and monitoring activities of any release or threatened release of a hazardous substance and any health assessments or health effects studies.

**Remedial Investigation (RI):** A study to define the extent of problems at a site. When combined with a study to evaluate alternative cleanup actions it is referred to as a Remedial Investigation/Feasibility Study (RI/FS). In both cases, a comment period on the draft report is required.

**Remedial Investigation/Feasibility Study:** Two distinct but related studies. They are usually performed at the same time, and together referred to as the "RI/FS." They are intended to:

- Gather the data necessary to determine the type and extent of contamination;
- Establish criteria for cleaning up the site;
- Identify and screen cleanup alternatives for remedial action; and
- Analyze in detail the technology and costs of the alternatives.

**Responsiveness Summary:** A summary of oral and/or written public comments received by Ecology during a comment period on key documents, and Ecology's responses to those comments. The Responsiveness Summary is mailed, at a minimum, to those who provided comments and its availability is published in the Site Register.

**Site:** Any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, vessel, or aircraft; or any site or area where a hazardous substance, other than a consumer product in consumer use, has been deposited, stored, disposed of, or placed, or otherwise come to be located.

**Site Hazard Assessment (SHA):** An assessment to gather information about a site to confirm whether a release has occurred and to enable Ecology to evaluate the relative potential hazard posed by the release. If further action is needed, an RI/FS is undertaken.

**Site Register:** Publication issued every two weeks of major activities conducted statewide related to the study and cleanup of hazardous waste sites under the Model Toxics Control Act. To receive this publication, please call (360) 407-7200.

**Superfund:** The federal government's program to clean up the nation's uncontrolled hazardous waste sites.

**Surface Water:** Lakes, rivers, ponds, streams, inland waters, salt waters, and all other non-underground waters and courses within the state of Washington or under the jurisdiction of the state of Washington.

**Total Petroleum Hydrocarbons (TPH):** A scientific measure of the sum of all petroleum hydrocarbons in a sample (without distinguishing one hydrocarbon from another). The “petroleum hydrocarbons” include compounds of carbon and hydrogen that are derived from naturally occurring petroleum sources or from manufactured petroleum products (such as refined oil, coal, and asphalt).

**Underground Storage Tank (UST):** An underground storage tank and connected underground piping as defined in the rules adopted under Chapter 90.76 RCW.

**Zinc:** Zinc is a metallic chemical element; it has a white color with a bluish tinge. It has a high resistance to atmospheric corrosion. A major use is as a protective coating for iron and steel sheet and wire. Excess zinc in the body interferes with the metabolism of other minerals in the body.

## References

SAIC. 2007. Lower Duwamish Waterway Early Action Area 2, Summary of Existing Information and Identification of Data Gaps, Prepared for Washington State Department of Ecology. Prepared by Science Applications International Corporation. February 2007.