
# PUBLIC PARTICIPATION PLAN

## Marine Trades Area
## Marine Drive and Tumwater Street
## Port Angeles, Washington

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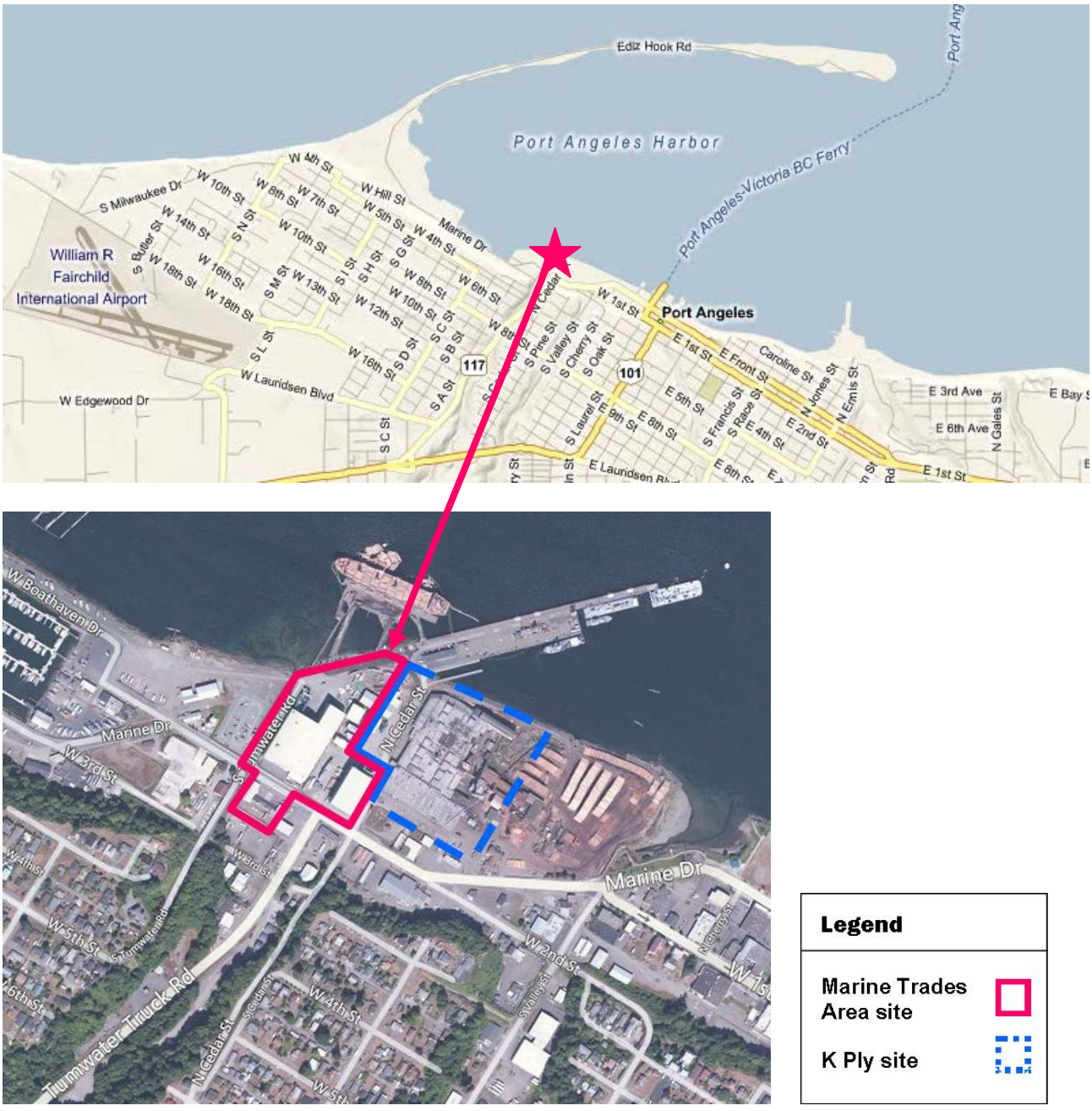
## INTRODUCTION

Public participation plans promote meaningful involvement during cleanups. This plan describes the tools the Washington State Department of Ecology (Ecology) will use to inform the public about and gather input on the Marine Trades Area cleanup.

## SITE LOCATION

The Marine Trades Area site is located at Marine Drive and Tumwater Street in Port Angeles.

**Figure 1. Marine Trades Area Site Location**



## SITE BACKGROUND

Before the 1920s, the site was a tidal flat with several small wood mills. In the mid-1920s, the area was filled in. The Port of Port Angeles (port) then began operating a log yard and Standard Oil (now Chevron) built a pier and began using the property to unload oil barges. In the past, parts of the property also housed logging truck repair shop, retail grain supply store, undersea cable saline cure tanks, ship repair, and railroad lines.

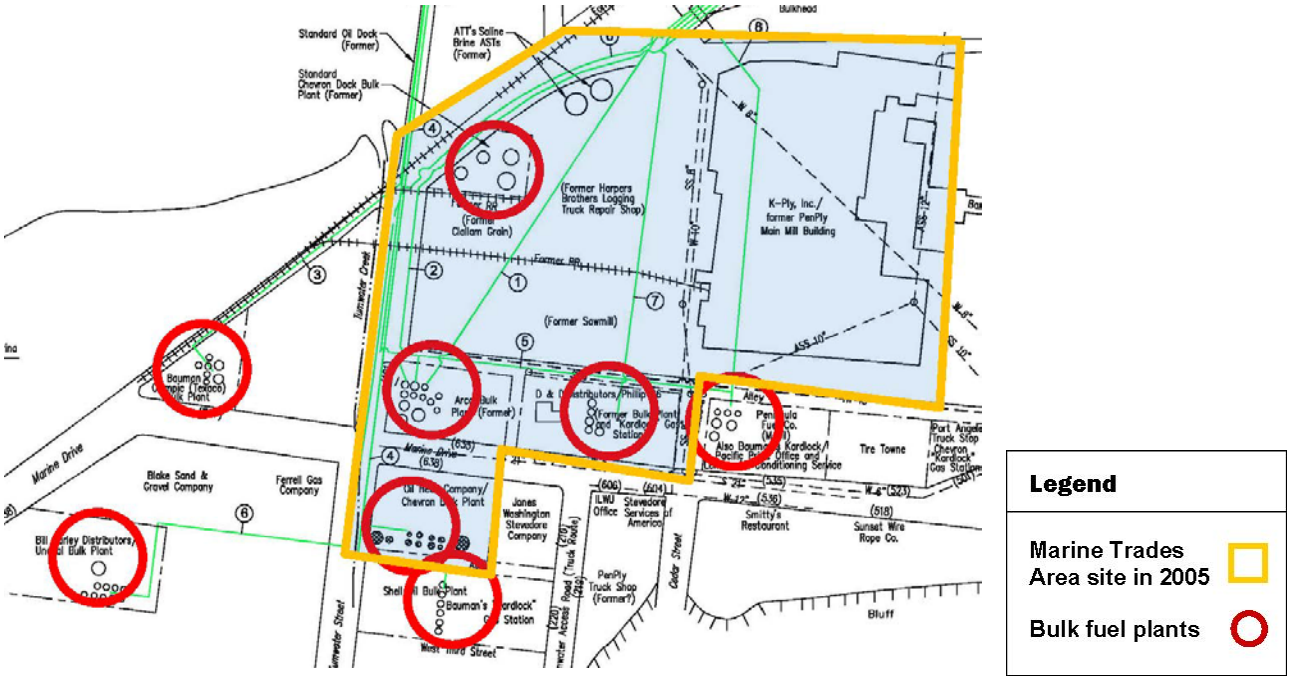
Starting in the 1920s through the late 1960s, fuel from the Standard Oil pier or Marine Terminal No. 1 was delivered to eight bulk fuel plants in the general area though buried pipelines. Bulk fuel facilities were operated by Standard Oil, Atlantic Richfield, and other companies. After 1967, the fuel plant operators stopped unloading fuel at Marine Terminal No. 1. Several petroleum spills happened during the time the pipelines were used. By the early 1980s, five of the eight plants closed. By 1989, the fuel pipelines were abandoned where they were, filled with water, or removed. After the pipelines were abandoned, fuel was delivered to the bulk plants by trucks.

Now, the port owns the part of the property that is north of Marine Drive, except for the Westport Marine facility. The north part of the site is mostly used for marine-related businesses, such as boatbuilding or repair. The Pettit Oil bulk fuel plant (formerly Chevron) is south of Marine Drive and is still in use.

### 2005 Agreed Order

Beginning in the late 1980s, environmental testing found petroleum related contamination in soil and groundwater at the site. In 1992, Ecology assessed the Marine Trades Area for its potential risk to human health and the environment. Ecology ranked the site a 1 on a scale of 1-5, with 1 being the highest degree of risk.

**Figure 2. Marine Trades Area Site in 2005 Agreed Order and Bulk Fuel Plant Locations**



In 2005, Ecology entered into an agreed order (legal agreement) with the port and Chevron for the Marine Trades Area site. At that time, the Marine Trades Area site included the Marine Trades Area, the former Chevron bulk plant south of Marine Drive (currently Pettit Oil), and the K Ply plant. The agreed order required the port and Chevron to do:

- A remedial investigation to determine the full nature and extent of contamination.
- A feasibility study to evaluate cleanup options.

Atlantic Richfield agreed to fund a share of the work required by the agreed order.

## CURRENT ACTIVITY

Since the 2005 agreed order, the port and Chevron have investigated the site (see below). Tests showed that there are separate sources of contamination on the Marine Trades Area and K Ply properties. As a result, Ecology is separating K Ply into its own site (see maps on pages 3 and 6). Ecology held a public comment period on a new legal agreement for the K Ply site in November – December 2012. For more information about K Ply, see the K Ply website at https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=28.

Now, for the Marine Trades Area site, Ecology is holding a public comment period on:

- A proposed **agreed order amendment**. It:
    - Removes the K Ply property from the Marine Trades Area site.
    - Requires the port and Chevron to develop a draft cleanup action plan for the Marine Trades Area site.
- The draft **remedial investigation and feasibility study (RI/FS) report**, which describes the nature and extent of contamination, and evaluates cleanup options.

After the comment period, Ecology will:

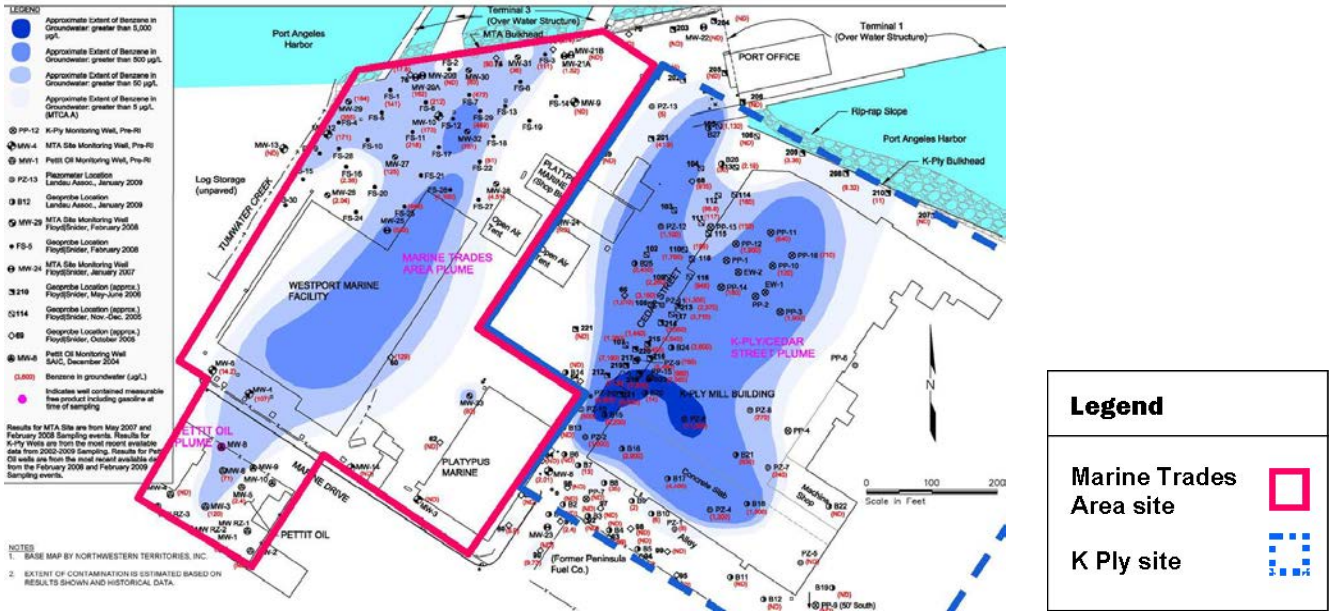
- Review and consider all comments we received during the comment period.
- Respond to comments in a responsiveness summary. We will send this document to those who commented and post it online.
- Finalize the agreed order amendment and approve the RI/FS report, or make changes if needed based on public comment.

After the comment period, the port and Chevron will:

- Make changes to the RI/FS report if needed based on public comment.
- Develop a draft Cleanup Action Plan (CAP) and submit it to Ecology.

Ecology will hold a public comment period on the draft CAP and a legal agreement for cleanup at a later date.

**Figure 3. Benzene in Groundwater and Site Boundaries**




## Site Investigation

Soil and groundwater at the site have been contaminated with many different pollutants from several sources. Over years, the bulk fuel plants leaked petroleum from their tank and piping systems. Pollutants found above state cleanup levels at the locations of former bulk plants that Chevron and Atlantic Richfield Company operated included:

Total Petroleum Hydrocarbons (TPH) - These chemicals are found in gasoline and include many toxic compounds. Humans can be exposed to petroleum hydrocarbons by breathing them in air, swallowing them in water, food, or soil, and through skin contact with fuels. The port and Chevron found diesel-, and gasoline-range petroleum hydrocarbons.

Benzene, toluene, ethylbenzene, and xylenes (BTEX) – These chemicals are found in petroleum products, some manufacturing processes, smoke, and exhaust. Humans can be exposed by breathing these chemicals in a vapor form. Long term exposure to lower levels of these chemicals can cause various health effects: benzene has been linked to blood and bone marrow problems; toluene may affect the nervous system; and ethylbenzene has been linked to kidney damage.

More information about these pollutants and their health effects is available at http://www.atsdr.cdc.gov and http://www.epa.gov.

## Feasibility Study

A feasibility study evaluates different possible cleanup options. For this study, the port and Chevron divided the site into the **bulkhead cleanup area**, the **upgradient cleanup area**, and the **Pettit Oil cleanup area** (see map on page 7).

**Figure 4. Marine Trades Area RI/FS Cleanup Areas**


In the feasibility study, the responsible parties evaluated possible cleanup options in these cleanup areas. Their preferred cleanup options are underlined. Ecology will identify recommended cleanup methods in a cleanup action plan.

For the **bulkhead cleanup area**, the port and Chevron looked at:

- Doing nothing.
- Pumping out and treating contaminated groundwater.
- Using an air sparging system to strip, or remove, pollutants from groundwater.
- Building a subsurface wall next to Port Angeles Harbor to keep contaminated groundwater from reaching the harbor. The groundwater would be pumped out and treated.

For the **upgradient cleanup area**, the port and Chevron looked at:

- Doing nothing.
- Placing an asphalt cap over contaminated soil, and monitoring contamination levels to see if they are decreasing over time.
- Removing accessible contaminated soil and monitoring contamination levels to see if they are decreasing over time.

For the **Pettit Oil cleanup area**, the port and Chevron looked at:

- Doing nothing.
- Removing free-floating contamination (NAPL) with an engineered recovery system.

- Excavating (digging out) and removing free-floating contamination and contaminated soil.

## SITE CLEANUP PROCESS

Cleanup activities at the Marine Trades Area site fall under Washington's Model Toxics Control Act (MTCA) and accompanying regulations (Revised Code of Washington (RCW) 70.105D and Washington Administrative Code (WAC) 173-340). MTCA has procedures for cleaning up contaminated sites to standards that are safe for both human health and the environment.

Toxic sites are cleaned up in stages, described below. Each stage has a related report or plan that the public is welcome to review and comment on.

### Remedial Investigation & Feasibility Study (RI/FS)

The RI looks at the extent and type of pollution on the site. It also looks at possible human health and environmental impacts. The FS identifies and evaluates different cleanup options.

### Interim Actions

Ecology may allow Interim Actions to partly clean up a site before the final cleanup plan is complete.

### Cleanup Action Plan (CAP)

The CAP describes the cleanup methods and how they will meet Ecology's cleanup standards.

### Cleanup

Cleanup removes contaminants from the site, contains them on the site, or treats them to make them less toxic. Based on the information in the RI/FS, Ecology selects a cleanup action and develops a new legal agreement for cleanup. CAPs require a public comment period.

### Delisting

Ecology keeps track of toxic cleanup sites on the Hazardous Sites List. Once cleanup is complete, the public will have a chance to comment before Ecology takes a site off the list.

You can find more information about toxic cleanups on Ecology's website: http://www.ecy.wa.gov/programs/tcp/cu_support/cu_process__steps_defns.htm.

## PUBLIC PARTICIPATION ACTIVITIES AND RESPONSIBILITIES

The purpose of this Public Participation Plan is to promote public understanding and participation in the cleanup. This section of the plan describes how Ecology will share information and receive public comments on cleanup activities. Ecology will use the following public involvement activities during the Marine Trades Area site cleanup:

### Formal Public Comment Periods

Comment periods are the primary method Ecology uses to get feedback from the public on proposed cleanup decisions. Comment periods usually last 30 days. WAC 173-340-600 requires them at key points during the investigation and cleanup process, before final decisions are made. During a comment period, the public can comment in writing. Ecology can only take verbal comments during a public hearing.

After comment periods, Ecology reviews all comments and may respond in a document called a responsiveness summary. Ecology considers whether a document or decision needs to be changed or revised based on public input. If there are major changes, Ecology may hold a second comment period. If there are no major changes, Ecology finalizes the draft document(s).

### Public Meetings and Hearings

Ecology may hold public meetings at key points during the investigation and cleanup. Ecology also may offer public meetings for actions expected to be of particular interest to the community. Ecology will also hold a public meeting if ten or more people request one. These meetings will be at places and times convenient to the public.

### Information Repositories

These are places where the public can read and review site information, including public comment period documents. Ecology has three repositories for this site:

- Port Angeles Library, 2210 South Peabody St, Port Angeles, WA 98362. (360) 417-8500
- Washington State Department of Ecology, 300 Desmond Drive, Lacey 98516. Please call (360) 407-6365 for an appointment.

See also Ecology's website: https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1301

### Site Register

Ecology's Toxics Cleanup Program uses its bimonthly Site Register to announce public meetings and comment periods, and many other activities. To receive the Site Register by e-mail, contact Seth Preston at (360) 407-6848 or Seth.Preston@ecy.wa.gov. You can also read it on Ecology's website at http://www.ecy.wa.gov/programs/tcp/pub_inv/pub_inv2.html.

### Mailing List

Ecology's mailing list for this site includes neighboring landowners and businesses, public agencies, and other known interested parties. Ecology's Southwest Regional Office maintains the list and will update it as needed. Please contact Diana Smith at (360) 407-6255 or Diana.Smith@ecy.wa.gov if you would like to have your address added to or deleted from this mailing list.

### Fact Sheets

Ecology will mail fact sheets to people and groups interested in this cleanup. Fact sheets will announce comment periods and public meetings. Ecology also may mail fact sheets with updates on cleanup progress.

### Newspaper Display Ads

Ecology will place ads in *The Peninsula Daily News* to announce public comment periods and public meetings for the site.

### Plan Update

Ecology may update this Public Participation Plan as the project moves forward. The public will have a chance to comment on any major changes to the plan.

### Contacts

If you have questions or need more information about this plan or the Marine Trades Area cleanup site, please contact:

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## GLOSSARY

**Agreed Order:** A legal agreement between Ecology and a Potentially Liable Person (see below) to conduct work toward a cleanup.

**Cleanup:** Actions that deal with a release or threatened release of hazardous substances that could affect public health or the environment. Ecology often uses the term "cleanup" broadly to describe response actions or phases of cleanup, such as the Remedial Investigation/Feasibility Study.

**Cleanup Action Plan (CAP):** A plan that explains which cleanup option(s) will be used at a site. The Remedial Investigation and Feasibility Study provide the data and analysis to write a CAP. It also takes into account public comments and public concerns.

**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.

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

**Feasibility Study:** This study develops and evaluates cleanup options for a given site.

**Groundwater:** Water found beneath the earth's surface that fills spaces between materials such as sand, soil, or gravel. In some aquifers, ground water occurs in large enough amounts to be used for drinking water, irrigation and other purposes.

**Information Repository:** A file containing site information and reports for public review. It is usually located in a public building convenient for local residents, such as a public school, city hall, or library.

**Model Toxics Control Act (MTCA):** A law passed by Washington voter initiative in 1988. Its purpose is to find, investigate, and clean up places where hazardous substances have been released. It defines Ecology's role and encourages public involvement in cleanup decisions.

**Potentially Liable Person:** Any individual(s) or company(s) potentially responsible for, or contributing to, the contamination problems at a site. Whenever possible, Ecology requires PLPs to clean up sites.

**Public Notice:** At a minimum, adequate notice mailed to all persons who have made a timely request of Ecology and to persons residing in the potentially affected vicinity of the proposed action; mailed to appropriate news media; published in the local (city and county) newspaper of largest circulation; and the opportunity for the interested persons to comment.

**Public Participation Plan:** A plan prepared to encourage coordinated and effective public involvement designed to the public's needs at a particular site.

**Remedial Investigation:** This study characterizes the site and defines the extent of contamination.

**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 especially valuable during the Cleanup Action Plan phase at a site when it highlights community concerns.

**Risk:** The probability that a hazardous substance, when released into the environment, will cause an adverse effect in the exposed humans or living organisms.

**Sediments:** Settled particles located at the bottom of a lake, river or in wetlands. Sediment(s) also includes settled particulate matter exposed by human activity (e.g., dredging) to the biologically active aquatic zone or to the water column.

**Site:** Any area where a hazardous substance, other than a consumer product in consumer use, has come to be located.

**Toxicity:** How much harm a substance causes to living organisms, including people, plants and animals, at a certain concentration.