

## Milton's Dry Cleaners Cleanup Site Investigation Continues

In 2007, Ecology entered into an Agreed Order (legal agreement) with the potentially liable persons (PLPs) to cleanup contamination at the Milton's Dry Cleaners site (Figure 1). A dry cleaners operated on the property from 1969 to 2001. It is no longer in operation. During that time, a chemical used in the dry cleaning operation, tetrachloroethylene, also known as PCE, was released to the environment.

Investigations have revealed that PCE and its breakdown products are present in soil and groundwater above state cleanup levels on the property and at several locations southwest of the property. Available data suggest groundwater flows from the Milton's site in a mainly southwestern direction, which may explain why some locations southwest of the property are contaminated.

After reviewing recent soil vapor and groundwater data, Ecology has determined that more investigation is needed to fully determine the nature and extent of contamination at the site. Ecology will then decide what cleanup actions should be taken to reduce and eventually eliminate contamination in both soil and groundwater.

Ecology is working with the Washington Department of Health to determine if any of the contamination presents a health risk to the community. Ecology will continue to keep the community informed as this investigation moves forward.

The purpose of this document is to provide background on the investigation, a summary of available findings, and to describe the next steps. If you need more information about this investigation, please contact an Ecology staff member listed to the right in the purple box.

### **Q: Why is Ecology concerned about this contamination?**

**A:** Ecology is concerned about any contamination that potentially impacts human health and the environment. At the Milton's site, the contamination primarily poses a potential threat to indoor air at nearby buildings and to drinking water.

### FOR MORE INFORMATION

#### Site Investigation

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#### Public Involvement

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### Review site documents at the following locations:

#### Vancouver Regional Library

1007 E. Mill Plain Blvd  
Vancouver, WA 98663  
(360) 695-1561

#### WA Department of Ecology

Southwest Regional Office  
Toxics Cleanup Program  
300 Desmond Drive  
Lacey, WA 98503  
Call or email for an appointment  
(360) 407-6365 or  
[Debbie.Nelson@ecy.wa.gov](mailto:Debbie.Nelson@ecy.wa.gov)

#### Ecology's Web site

[http://www.ecy.wa.gov/programs/tcp/sites/milton\\_dc/milton\\_hp.htm](http://www.ecy.wa.gov/programs/tcp/sites/milton_dc/milton_hp.htm)

Facility Site ID #19779

The potential threat to indoor air occurs through vapor intrusion. Vapor intrusion occurs when volatile chemicals, like PCE and other solvents, in soil and groundwater evaporate and move as a gas through the spaces in the soil. The gas can then enter buildings that sit above the contaminated soil and groundwater through cracks or other openings in the foundation (Figure 2). For more information about protecting your drinking water, see page 4.

### **Q: What is the goal of the investigation?**

**A:** The goal of the investigation is to:

- Determine the full nature and extent of soil and groundwater contamination on the Milton's property and nearby properties.
- Assess the potential for vapor intrusion for buildings that lie above the plume of contamination.
- Ensure that human health and the environment are protected.
- Determine which areas need to be cleaned up.

### **Q: Who is going to clean this up?**

**A:** Under state law (Model Toxics Control Act (MTCA), Chapter 173-340 WAC), current and past property owners and operators, also known as potentially liable persons (PLPs), are responsible for the cleanup of contamination on their property and any other properties impacted by the contamination. Ecology has identified two PLPs that are responsible for cleaning up contamination from the Milton's Dry Cleaners site. Because the investigation is still underway, the exact site boundary is still being defined. Ecology may identify additional PLPs after more investigation results are received.

### **Q: What is Ecology going to do about the contamination?**

**A:** The PLPs, under Ecology oversight, will be completing the investigation. This will involve more groundwater, soil, and soil gas sampling. The PLPs will also conduct indoor air sampling in some buildings. Once the full extent of contamination is established, Ecology will determine the best way to clean up the contamination that poses a potential threat.

### **Q: Where is Ecology going to collect indoor air samples?**

**A:** So far, Ecology has selected four locations for indoor air testing. Additional buildings may also be selected for indoor air testing, depending on results of the investigation. Ecology has already contacted these property owners and managers to coordinate air testing.

These buildings were selected because of their proximity to the source of the contamination or areas where a PCE breakdown product, trichloroethylene (TCE), was found. Ecology will determine if more buildings need to be tested based on data from the soil and groundwater investigations, as well as information gathered through a building use survey.

**Q: How will I know if my building is going to be tested?**

**A:** Ecology has already contacted the owners, property managers and occupants of the four buildings selected for indoor air testing. They are vulnerable to vapor intrusion but this does not necessarily mean that these buildings have contaminated indoor air.

At this time, there are no plans to test more buildings. However, as more data are collected during the investigation, Ecology will continue to evaluate the need to test additional buildings. If data indicate a building or residence is vulnerable to vapor intrusion, Ecology will immediately contact building owners and occupants to set up air testing. Ecology's primary concern is human health and will take precautions to eliminate human exposure to contamination.

**Q: What will happen during the sampling?**

**A:** Sampling will involve the placement of air collection devices called Summa canisters at each location. These devices will collect air for 8 hours to simulate an average work day. If residential buildings (apartments or homes) need to be sampled, air will be collected for 24 hours. After samples are collected, the canisters will be removed and sent to the laboratory to be analyzed.

**Q: When will the sampling occur?**

**A:** Sampling will begin this spring, after Ecology and the PLPs finalize the sampling plan.

**Q: What will happen if air contamination is found in my home or business?**

**A:** If the same chemicals found in soil and groundwater are found in indoor air, the levels of those chemicals will first be compared to outdoor air levels. The reason we compare indoor air levels to outdoor air levels is because outdoor air, particularly in cities and towns, often contains low levels of volatile chemicals associated with everyday activities. These outdoor air levels can affect indoor air quality.

If indoor air levels are the same or similar to outdoor air levels, this tells us the chemicals are likely unrelated to the soil and groundwater contamination. If chemicals are found above outdoor air levels, and there is no indoor air source like solvent or paints stored in the building, the contaminated soil and groundwater are the likely source. In such a case, we will determine the level of health risk associated with those levels and decide if steps need to be taken to reduce or eliminate the chemicals from indoor air.

Several methods could be used to reduce or eliminate contamination in indoor air and contamination that is entering the building. One method is to seal up crawlspaces, basements or any cracks found in the building's foundation.

**Q: Are the people using the buildings scheduled for air testing safe?**

**A:** We don't know if people are being exposed to vapors associated with the solvent-contaminated groundwater and soil that lie below some buildings. Testing will determine this. However, based on our experience at other sites, we do not think this is an immediate health problem.

Commonly, we find that vapors don't enter buildings sitting above contaminated soil and groundwater. In some cases, low levels of vapors can enter buildings but the levels are so low that they would not be expected to make people sick in the short term. Those low levels, in theory, could pose a small increased health risk if someone was exposed over a lifetime. That risk, however, could be as low as zero.

**Q: Are private drinking water wells safe?**

**A:** A total of six domestic supply and irrigation wells within ¼ mile of the Milton's Dry Cleaners were tested for volatile organic compounds (VOCs), including PCE and its breakdown products. Only one well contained contamination. PCE was found in an irrigation well in both sampling events. However, the measured concentrations (1.1 and 1.3 parts per billion) were below the Model Toxics Control Act Cleanup level (5 parts per billion). According to the owner, this well was originally used for irrigation purposes but has been inactive for more than 10 years. Ecology is planning another round of testing during the next phase of the investigation

**Q: Is the city's drinking water safe?**

**A:** Based on results to date, Vancouver's water meets or outperforms all state and federal requirements for safety and quality. The city of Vancouver goes far beyond state and federal requirements and tests its drinking water for more than 245 substances. The city tests for the tetrachloroethylene (PCE) frequently, at least once a month. Tests performed in 2009 and to date in 2010 have detected no PCE in any treated water at any of the city's water stations.

The city of Vancouver is committed to keeping customers informed about the safety and quality of their drinking water. In the event that PCE is ever detected at levels above state and federal standards, the city of Vancouver would take immediate action to shut down the source, notify water customers and conduct additional testing. To learn more, please visit [www.cityofvancouver.us/water](http://www.cityofvancouver.us/water) or call 360-696-8177.

**Q: What happens next in the investigation?**

**A:** The next steps in this investigation include:

- Completing indoor air testing at four buildings that may be at some risk for vapor intrusion.
- If necessary, collecting indoor air samples from additional buildings.

- Collecting soil and groundwater data from the site and nearby properties.
- Determining which areas of the site and nearby properties will need cleanup.
- Evaluating which cleanup methods will be most appropriate.
- Requiring PLPs to design and begin appropriate cleanup measures.
- Continuing to monitor groundwater to ensure that the cleanup has been effective.

### **Q: How will the community be informed?**

**A:** Ecology will use several methods to keep the community involved and informed as the investigation moves forward. Ecology's Web site contains up-to-date investigation information:

[http://www.ecy.wa.gov/programs/tcp/sites/milton\\_dc/milton\\_hp.htm](http://www.ecy.wa.gov/programs/tcp/sites/milton_dc/milton_hp.htm). In addition, Ecology will mail updates periodically and hold public meetings when it is appropriate.

Ecology will hold public comment periods for the Remedial Investigation and Feasibility Study Reports and the draft Cleanup Action Plans when they are available. Ecology will also post legal ads in the local newspaper (The Columbian) to announce public comment periods.

If you want to be added to the mailing list, please send your contact information to Meg Bommarito via email at [Meg.Bommarito@ecy.wa.gov](mailto:Meg.Bommarito@ecy.wa.gov), or by phone to at (360) 407-6255. You can also send your contact information to:

Meg Bommarito, Public Involvement Coordinator  
Toxics Cleanup Program  
P.O. Box 47775  
Olympia, WA 98504-7775

### **Q: Who can I contact for more information?**

**A:** Please see page 1 (inside the purple box) for a list of staff members available to answer your questions.

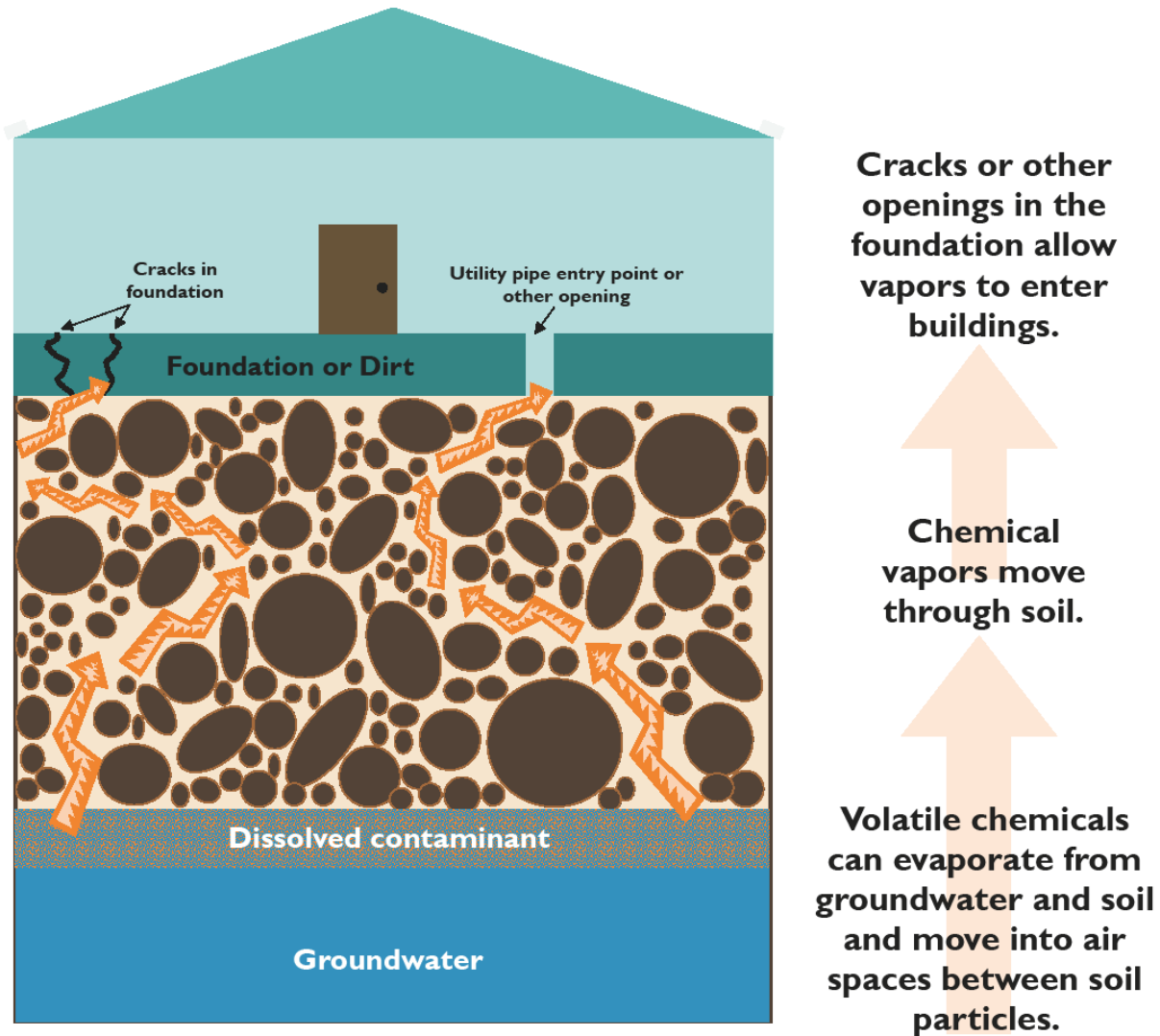
### **Q: What else can I do, in general, to improve the quality of my indoor air?**

**A:** Make sure that indoor sources of volatile chemicals like paints, solvents, glues, and other chemical products are stored in sealed containers. The best place to store these sealed containers is outside in a shed or other unoccupied building. The U.S. Environmental Protection Agency has a number of publications available to help businesses and residents improve their indoor air quality. Those publications can be found at <http://www.epa.gov/iaq/pubs/index.html>.




Figure 1. Milton's Dry Cleaners Cleanup Site. The site boundary in this figure is approximate and will be changed once the Remedial Investigation is complete and Ecology is able to determine the full extent of contamination.



**Figure 2.** Vapor Intrusion. When volatile chemicals, like PCE (tetrachloroethylene) and TCE (trichloroethylene), are released into soil and groundwater they can evaporate and move through soil and up into buildings through cracks in the foundation and other openings.



**Diagram Key**

-  Chemicals in vapor form
-  Soil particles
-  Air between soil particles

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## **Department of Ecology is investigating pollution in your community at the Milton's Dry Cleaners Cleanup Site in Vancouver, WA**

Esta hoja informativa contiene información importante sobre la investigación de la contaminación del Departamento de Ecología en su comunidad. Si necesita esta hoja informativa en español, por favor llame a Meg Bommarito al (360) 407-6255 o visite el sitio Web de Ecology en [http://www.ecy.wa.gov/programs/tcp/sites/milton\\_dc/milton\\_hp.htm](http://www.ecy.wa.gov/programs/tcp/sites/milton_dc/milton_hp.htm).

*Эта фактическая справка содержит важную информацию о расследовании загрязнения окружающей среды, которое Департамент экологии проводит в вашем районе. Если вам нужно получить эту фактическую справку на русском языке, пожалуйста, звоните Meg Bommarito по телефону (360) 407-6255 или смотрите веб-сайт Департамента экологии по адресу: [http://www.ecy.wa.gov/programs/tcp/sites/milton\\_dc/milton\\_hp.htm](http://www.ecy.wa.gov/programs/tcp/sites/milton_dc/milton_hp.htm).*

La thu nay chua dung nhung tin tuc rat quan trong cua co quan doc hai va o nhiem khong khi dang dieu tra tai noi qui vi cu ngu. Neu can chuyen dich sang tieng Viet, lam on goi Meg Bommarito so (360) 407-6255 hay vao mang Ecology's tai [http://www.ecy.wa.gov/programs/tcp/sites/milton\\_dc/milton\\_hp.htm](http://www.ecy.wa.gov/programs/tcp/sites/milton_dc/milton_hp.htm)

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