## South Fruit Valley Neighborhood

# Results of Soil Gas and Groundwater Testing & Foundation Survey - Need for Indoor Air Sampling



Si usted no habla inglés y necesita este formulario en español, favor de comunicarse con el Sr. Gregorio Bohn al (509) 454-4174.

#### Introduction

In May 2005, you were provided information about an upcoming soil gas and groundwater investigation in the South Fruit Valley Neighborhood (South FVN). The information announced that:

- Soil gas and groundwater under your neighborhood would be tested for solvents, and
- A building foundation survey would be done. (See the attached flyer sent to you in May 2005.)

The foundation survey and installation of soil gas wells have been completed. Testing of soil gas and groundwater continues. This flyer describes the testing and survey results and the upcoming indoor air sampling at select homes.

Please be assured that groundwater beneath the South FVN is not a known source of drinking water for the area. South FVN homes, including yours, receive drinking water from the City of Vancouver's municipal system.

This investigation and cleanup are being supervised by the Washington Department of Ecology (Ecology). The Washington Department of Health is working with Ecology to address any health concerns. Please feel free to call or email the contacts listed on the



Solvents evaporating from groundwater and moving up through the soil. (Graphic courtesy of EnviroGroup Limited.)

# South Fruit Valley Neighborhood Foundation Survey

In May 2005, the Port of Vancouver's consultant, Parametrix, conducted a neighborhood survey to determine the types and condition of building foundations in the South FVN.

Knowing the foundation type and whether cracks or other openings exist helps us understand whether a building might be affected by solvent-contaminated groundwater that underlies the South FVN. Solvents in the groundwater can evaporate, move through the overlying soil as contaminated soil gas, and enter buildings.

The survey information is used in conjunction with other data to select homes for indoor air sampling.

## Soil Gas Monitoring Wells Installed and Samples Taken

In May 2005, five soil gas monitoring probes were installed in the South FVN (see attached map). The probes provide access to sub-surface soil so it can be tested for solvent vapors. These probes have been sampled three times since May. Only one well showed elevated levels of solvent vapors.

### Indoor Air Monitoring at Select Homes

Soil gas and groundwater sampling results, along with information about foundation conditions and soils underlying the South FVN show that solvent vapors may be moving up through the soil into the indoor air of some South FVN homes.

A good way to tell if solvent vapors are moving into indoor air is to collect indoor air samples from homes. Indoor air sampling will begin in the South FVN starting the week of March 20, 2006. In general, homes determined to have foundation characteristics and at

locations believed to be favorable for contaminated soil gas movement are selected for indoor air sampling.

If Parametrix has NOT contacted you about indoor air sampling, your home will not be sampled.

Soil gas and groundwater sampling will be conducted in the neighborhood at the same time indoor air samples are collected.

### **Indoor Air Monitoring and Human Health**

The Washington Departments of Ecology and Health will be evaluating the indoor sampling results when they become available to determine whether the solvent-contaminated groundwater is affecting indoor air quality. If indoor air quality is being affected, the Washington Department of Health will also evaluate whether any health risks exist. We will let you know what we discover. Individual indoor air results will be made available to residents of sampled homes.

#### Questions?

Thank you for your cooperation with this important investigation and cleanup effort. We will continue to keep you informed as the investigation moves forward.

### If you have general questions about this project, please contact:

Craig Rankine Washington Dept. of Ecology, Vancouver Phone: (360) 690-4795

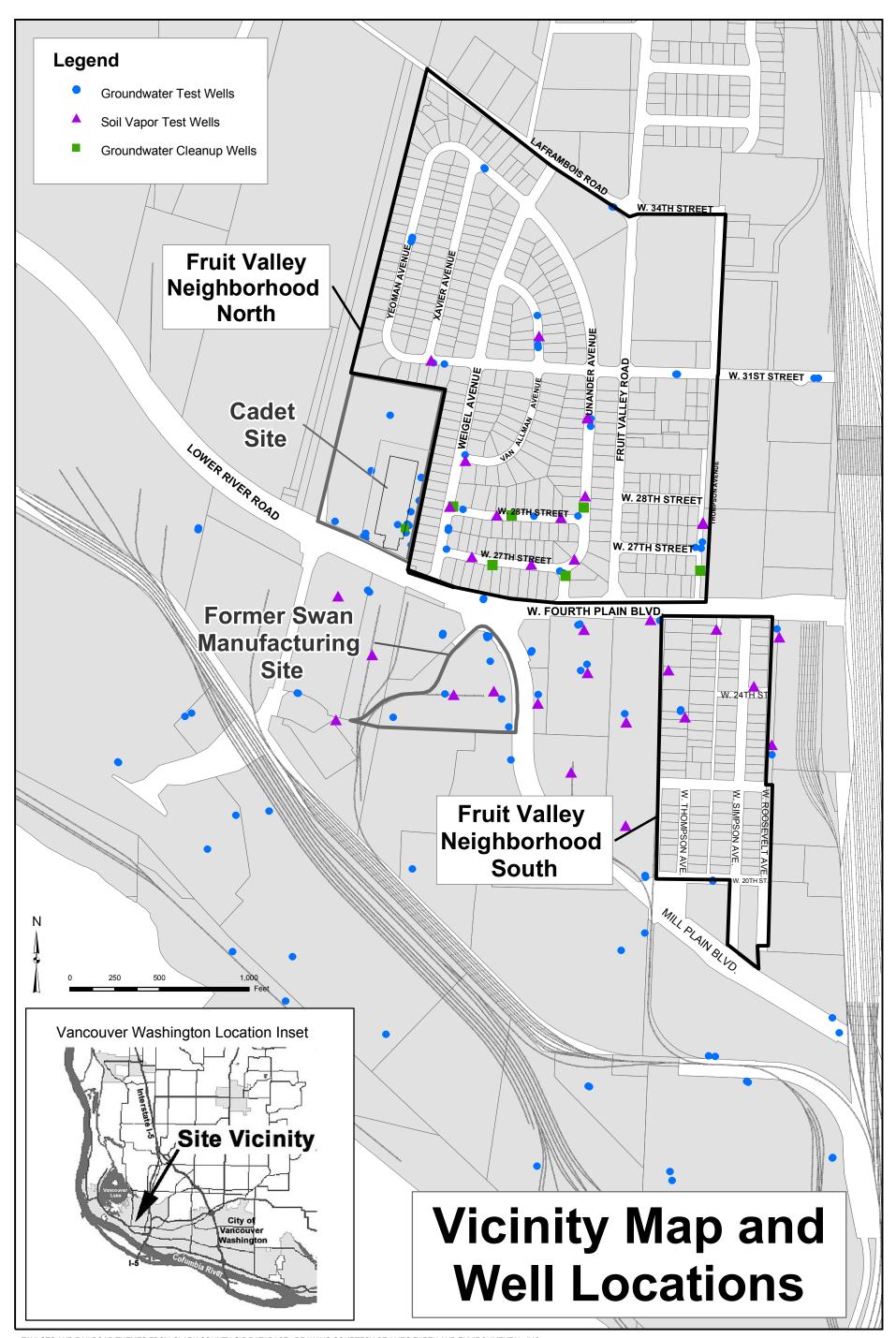
Email: cran461@ecy.wa.gov

#### If you have health-related questions, please contact:

Barbara Trejo
Washington Dept. of Health, Tumwater
Toll Free Phone: 1-877-485-7316
Email: Barbara.Trejo@doh.wa.gov

For more information about the North Fruit Valley Neighborhood investigation and cleanup efforts, please visit Cadet's website:

http://www.cadetco.com/environment/index.php



### South Fruit Valley Neighborhood

# **Groundwater & Soil Investigation Work Upcoming Door-to-Door Survey & Well Installation**



Если вы не говорите поанглийски и вам нужно помощь с этом "анкета" по-русски или поукраински, пожалуйста звоните по телефону: Игорь Верн (Igor Vern) (360) 407-0281.

Si usted no habla inglés y necesita este formulario en español, favor de comunicarse con el Sr. Gregorio Bohn al (509) 454-4174.

The Washington Departments of Ecology (Ecology) and Health (Health), Cadet Manufacturing (Cadet), and the Port of Vancouver (Port) are working to investigate and clean up contaminated groundwater in your area.

This flyer provides information about work planned for your neighborhood.

#### Background

Solvents were used at the Cadet and former Swan Manufacturing (Swan) sites (see map). These solvents entered the groundwater underneath the sites and have traveled beneath both the Northern and Southern parts of the Fruit Valley Neighborhood (FVN). Groundwater beneath the FVN is not a known source of drinking water.

Cadet produces electric home heaters and is located at 2500 W. Fourth Plain Boulevard. Swan was located between 2001 and 2501 W. Fourth Plain Boulevard, and also produced electric home

heaters until the plant closed in 1964. The Port now owns the property where the Swan plant was located.

Chlorinated solvents, including Trichloroethylene (TCE), were used in degreasing metal parts at both sites. Cadet discontinued the degreasing process that involved solvents in the 1970s.

### Investigation & cleanup efforts

Cadet and the Port are working with Ecology and Health to investigate the contamination and evaluate cleanup options.

Numerous test wells have been installed to evaluate the amount and location of solvents in the groundwater associated with these two sites. Water samples taken from these wells have been tested. Results show contaminated groundwater from the Cadet and Swan sites has traveled beneath the FVN.

While residents in the FVN would not normally come in contact with contaminated groundwater, solvents can evaporate from the groundwater and move up through the soil toward the ground surface, then potentially into indoor air.

Solvent vapors believed to come from the ground have entered the indoor air of some North FVN homes through their foundations. Cadet installed vapor filtration systems at six of these homes where TCE levels were the highest.

### May 2005

### The following locations have more information:

### Vancouver Regional Library Reference Desk

1007 E. Mill Plain Blvd. Vancouver, WA 98663 (360) 695-1566

#### **WA Department of Ecology**

SW Regional Office Toxics Cleanup Program 300 Desmond Dr. Lacey, WA 98503 (360) 407-6365 sfle461@ecy.wa.gov

Note: Ecology's SW office has more detailed documents than the Vancouver Regional Library.

#### Web sites

Ecology's web site: www.ecy.wa.gov/programs/tcp/sites/cadet/cadet\_hp.htm

Cadet Manufacturing's web site: www.cadetco.com/environmental/

### If you have questions about the survey, please contact:

Mr. Michael Harrison Parametrix Phone: (360) 694-5020

### If you have general questions about this project, please contact:

Mr. Craig Rankine Washington Department of Ecology Vancouver Field Office Phone: (360) 690-4795 Email: cran461@ecy.wa.gov

#### For health-related questions:

Ms. Barbara Trejo

Washington Department of Health Toll Free Phone: 1- 877-485-7316 Email: <u>Barbara.Trejo@doh.wa.gov</u>

### To receive additional copies of this flyer:

Ms. Cedar Bouta Washington Department of Ecology Olympia Office

Phone: (360) 407-6245 Email: <u>cebo461@ecy.wa.gov</u>

#### SOUTH FRUIT VALLEY NEIGHBORHOOD

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### **Upcoming survey**

There is a need to assess the types and condition of building foundations in the South FVN.

The Port's consultant, Parametrix, will conduct a foundation survey within a few days after you receive this flyer. The survey will also help identify potential sources of solvent vapors in your home and how air moves in your living space, basement and crawlspace.

Parametrix employees will go door-to-door in your neighborhood and ask to interview you and your neighbors in person.

The survey will take place on weekdays and Saturdays, and will take about 15 minutes of your time.

If you are not home when the survey crew stops by, they will leave a survey for you to complete and mail to Parametrix.

Please call Parametrix at (360) 694-5020 if you were not interviewed and did not receive a survey. (The number is a local call.)

The survey results will:

- help us begin to understand how solvent vapors may enter your home, and
- be used to select locations for test wells to be installed in the street right-of-way.

The wells will measure the amount of solvent in the soil vapors, or "soil gas". Installation of these soil gas wells will be done by Cadet's consultant, AMEC Earth and Environmental, using a truck mounted drill.

Additional information about the test well drilling will be provided to you in another publication at a later date.

Additional work may include sampling of air inside homes and investigating pathways by which vapors enter homes, such as utility lines. A vapor pathway investigation may be used to identify areas requiring sealing or other measures to prevent solvent vapors from entering indoor air. Sealing work typically has been done in homes with basements.

There is no cost to homeowners for investigation or cleanup efforts, or for additional work that may be needed.

### Schedule of upcoming work

- The foundation survey will start a few days after you receive this flyer and will take approximately two weeks to complete for the neighborhood.
- Well drilling will start about three weeks after you receive this flyer and will take approximately two weeks to complete. You will be sent

- another notice just before well installation begins.
- Following installation of the wells, sampling will take three to four days to complete.
- Ecology will share with you the results of the survey and sampling, and keep you wellinformed of any additional work to be done in the South FVN.
- It is our understanding that groundwater in the south FVN is not a source of drinking water for the area. If you or anyone else is using groundwater from underneath your neighborhood, please call Craig Rankine (Washington Department of Ecology) at (360) 690-4795 right away.

#### **Next steps**

Parametrix will be contacting you within a few days to request your participation in the survey.

Please see the front of this flyer for who to contact with questions or comments.

Thank you for your participation in this important investigation and cleanup effort.

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