

# Landsburg Mine Site



## Cleanup Update

The Washington State Department of Ecology (Ecology) has prepared this fact sheet to update you on the status of the Landsburg Mine site in Ravensdale, Washington. We also want to make sure that you are aware of opportunities to give us your input during the cleanup process.

### Site background

The Landsburg Mine site is a former underground coal mine located approximately 1.5 miles northwest of Ravensdale in southeast King County. The site is located directly south and east of the S.E. Summit-Landsburg Road and north of the Kent-Kangley Road (see Figure). The Cedar River passes within approximately 500 feet of the site to the north. The mine site occupies property owned by Palmer Coking Coal Company and the Plum Creek Timber Company, L.P.

Coal mining began along the Landsburg coal *seam* (coal mining terms in italics are defined in the "Coal Mining Terms" box on page 4) in the 1940s. In 1959, when the Landsburg seam was exhausted, mining shifted to the Rogers seam and continued there until 1975.

*Underground mining methods* were used to extract the coal from the Rogers Seam. These methods resulted in the ground surface above the abandoned mine sinking down and forming a *subsidence trench*. This trench is roughly three-quarters of a mile long, 20- to 60-feet deep, and 60- to 100-feet wide.

During the late 1960s and early 1970s, the northern part of the trench was used as a disposal site for a variety of industrial wastes. The wastes were either contained in drums or were drained from tanker trucks. Records indicate that about 4,500 drums and 200,000 gallons of oily waste water and sludge were disposed of in this portion of the trench. A portion of the waste may have been burnt during fires. Samples taken from recovered drums indicate that this material consisted of a wide range of organic and inorganic industrial waste, including paint waste, polychlorinated biphenyls (PCBs), cyanide, metals, and oily sludge. Disposal of land-clearing debris and construction debris in the trench continued until the early 1980s.

In late 1991, at Ecology's request, four of the Potentially Liable Persons (PLPs) removed the most accessible drums from the trench and constructed a fence to restrict access to the site. Following removal of the drums, Ecology and the PLPs began negotiations for a Remedial Investigation/Feasibility Study. The results of this study were the subject of public review and comment in March 1996.

Extensive sampling of 14 private wells, seven monitoring wells installed in close proximity to the mine site, and water flowing from the two mine *portals* (the now collapsed north and south entrances to the mine) was conducted in 1996. The well water

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### Site documents can be reviewed at the following locations:

Maple Valley Library  
21844 SE 248th St., Maple Valley  
(425) 432-4620

WA Department of Ecology  
Northwest Regional Office  
3190 160th Avenue SE  
Bellevue, WA 98008  
(425) 649-7190  
(Call for an appointment)

### For technical questions:

Jerome Cruz, Site Manager  
WA Department of Ecology  
Toxics Cleanup Program  
3190 160th Avenue SE  
Bellevue, WA 98008  
E-mail: [jcru461@ecy.wa.gov](mailto:jcru461@ecy.wa.gov)  
(425) 649-7094

### To be added to the site mailing list:

Rebekah Padgett  
Public Involvement  
WA Department of Ecology  
Toxics Cleanup Program  
3190 160th Avenue SE  
Bellevue, WA 98008  
E-mail: [rpad461@ecy.wa.gov](mailto:rpad461@ecy.wa.gov)  
(425) 649-7257

and surface flows were analyzed for a wide variety of pollutants including metals, organic compounds, and inorganic compounds. The results of the testing indicate that the wastes disposed of in the mine were not affecting groundwater. Additional sampling of monitoring wells at the site was conducted in May 2000. The results indicate that the groundwater still had not been affected by the site.

A *Cleanup Action Plan* is a document that describes the cleanup action(s) that will be taken at the site.

The *Consent Decree* is a legal document, approved and entered by a court, formalizing an agreement between Ecology and potentially liable persons (PLPs). Once signed, a Consent Decree relieves liability of a PLP for known contamination once the cleanup is complete.

*Feasibility Studies* develop and evaluate cleanup options for a given site.

A *Potentially Liable Person* is defined as any individual(s) or company(s) potentially responsible for, or contributing to, the contamination problems at a site. Whenever possible, Ecology requires these PLPs, through administrative and legal actions, to clean up hazardous waste sites for which they may be liable.

A *Remedial Investigation* is used to characterize the site and define the extent of contamination.

## Recent activity

In October 2003, further sampling was conducted to check the groundwater for contaminants. The results of this work have just come in and again the results indicate that the groundwater has not been contaminated.

In late November 2003, you may have heard about the bankruptcy of Philip Services Corporation (PSC), one of the PLPs for the Landsburg Mine site. PSC's liability for the Landsburg Mine site is being settled through an agreement with Ecology. The agreement requires PSC to comply with a separate agreement PSC has with the other PLPs for the site: Browning-Ferris Industries, Burlington Northern and Santa Fe Railway Company, PACCAR, Palmer Coking Coal Company, Plum Creek Timber, and Time Oil. Under this separate agreement, PSC will make payments over time into an account to benefit cleanup of this site. Cleanup work will continue at this site under cooperation between the remaining PLPs and Ecology. Any questions about the PSC bankruptcy should be directed to Ecology's Stacie Singleton at (360) 407-6708 or by e-mail at [ssin461@ecy.wa.gov](mailto:ssin461@ecy.wa.gov).

Recently, Ecology approved a workplan for a hydrogeologic investigation at the former mine's south portal. Fieldwork is anticipated to begin in February 2004. Results of this study will provide a better understanding of groundwater flow both within and out of the abandoned mine over time. This will include:

- Direction of groundwater flow out of the mine (whether it goes to the north or the south portal, or both) and
- Direction of groundwater flow within the collapsed south portal (upward or downward flow) in order to understand whether the water is discharging to the surface from the abandoned mine or from a different source.

Information gained from this study is needed to move forward with cleanup plans for the site.

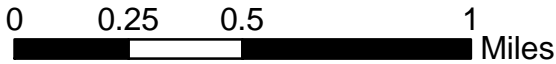
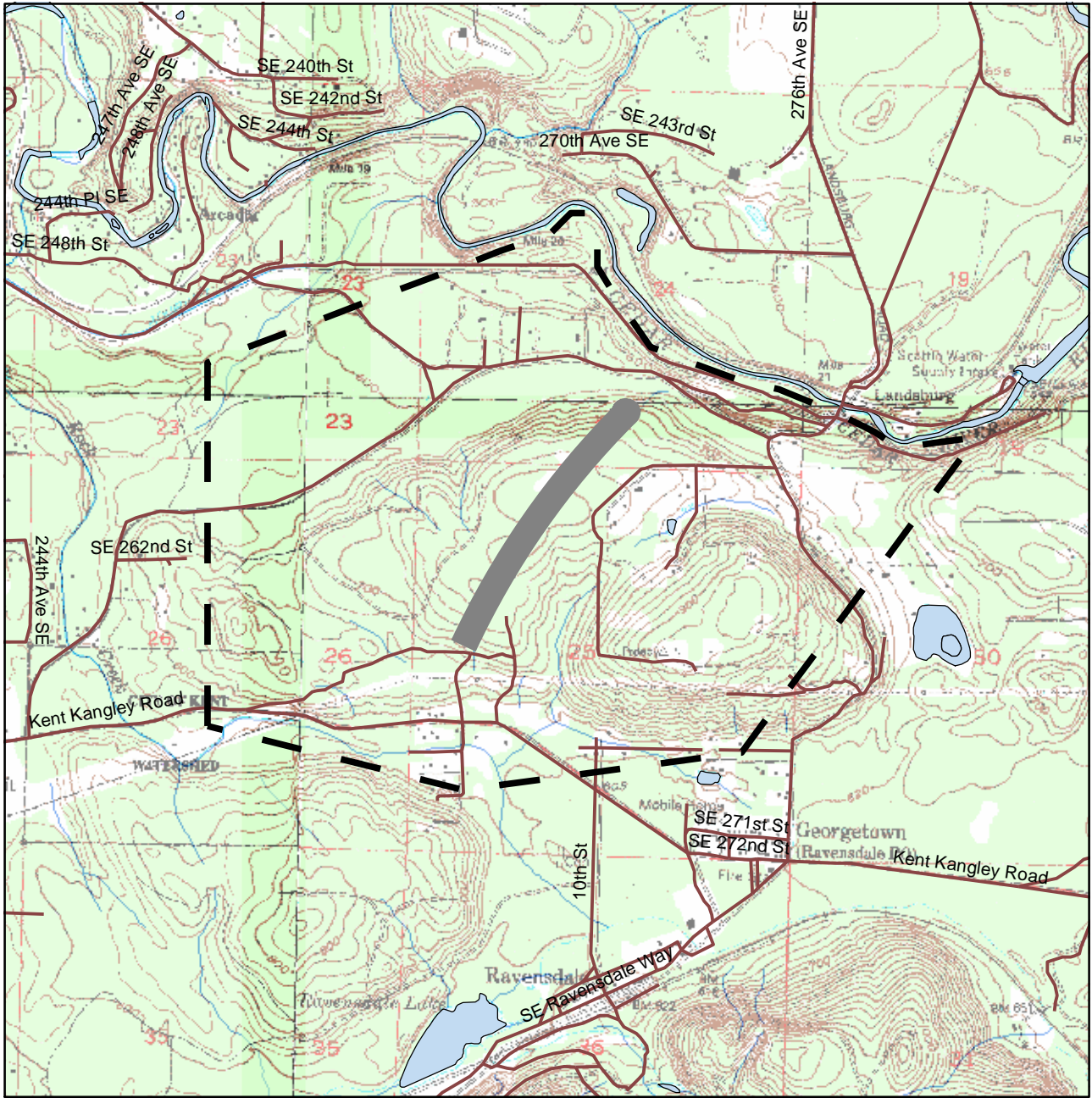
Ecology and the PLP group have been negotiating a Cleanup Action Plan describing in detail the cleanup actions to be taken. You will have an opportunity to comment on the actions before they are finalized. At this point, no cleanup alternative has been formally selected. A Consent Decree also is being negotiated to implement the cleanup work.

## Next steps

Once Ecology and the PLP group have negotiated a Cleanup Action Plan and Consent Decree, you will have an opportunity to review and comment on these documents during a 30-day public comment period. These negotiations can take several months, and Ecology anticipates that the comment period will be held in late 2004.

## How can you be involved?

Ecology encourages you to stay informed and involved in the cleanup by getting on the site mailing list (see box on page one for a contact), attending Ecology meetings, reading related documents as they become available, becoming familiar with the cleanup process, and providing feedback through public meetings and comment periods. You can provide valuable local input and knowledge that will be helpful as the cleanup plan is developed and implemented.



Approximate Location  
of Site Boundary



Approximate Location  
of Subsidence Trench



**Location Map of Landsburg Mine Site, Ravensdale**



3190 160th Avenue SE  
Bellevue, WA 98008-5452

## **Landsburg Mine Site: Cleanup Update**

### **Coal Mining Terms**

*Portal:* The entrance to a mine.

*Seam:* A layer of coal typically surrounded by sedimentary rock, locally known as bedrock or “the Puget Group,” and generally consisting of sandstone, siltstone, claystone, and carbonaceous shale.

*Subsidence Trench:* Subsidence is the gradual sinking, or sometimes abrupt collapse, of overlying rock and soil layers into an underground mine. At the Landsburg Mine, the land surface collapsed to form a narrow, deep trench along the line of the Roger’s coal seam.

*Underground Mining Methods:* The Roger’s mine was operated by driving a series of tunnels in the coal seams at depths of up to 600 feet. The coal was loosened by blasting, removed mechanically, and hauled to the surface in coal cars.