



September 2008, Publication No. 334-162



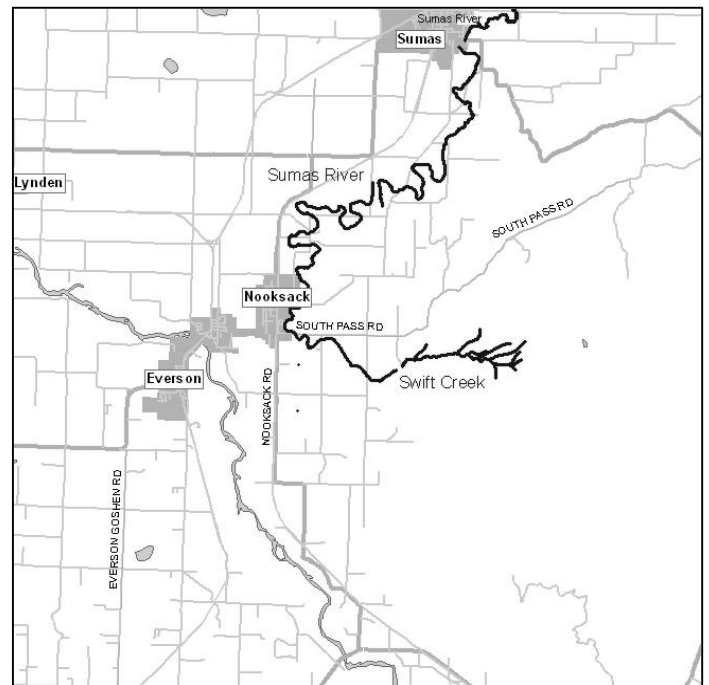
Advisory for Swift Creek Naturally Occurring Asbestos

Why is there an advisory about naturally occurring asbestos in Swift Creek?

Swift Creek, which flows into the Sumas River, has recently been found to contain high levels of naturally occurring asbestos. The asbestos is in the water and in the riverbed sediment and may become airborne when people disturb the ground by walking, cycling, or riding horses on the creek banks or dredge piles. The asbestos may also become airborne if sediment from the riverbed is used for home construction projects, such as driveways or pathways. When asbestos becomes airborne, it can be breathed into the lungs. Breathing asbestos from Swift Creek sediment can increase the risk of developing asbestos related disease.

What is naturally occurring asbestos, and how much is in Swift Creek?

Naturally occurring asbestos is a fibrous mineral that may be found in certain types of rock or soil. The source of the asbestos in Swift Creek is an area on Sumas Mountain that is eroding. As this area erodes, the asbestos is deposited along with sediment into Swift Creek. Most of the asbestos found in Swift Creek is a type of asbestos called *chrysotile*, which is the type of asbestos most commonly used in commercial products, such as brake linings. These asbestos fibers sometimes make the water in Swift Creek appear white in color. Studies of Swift Creek, conducted by the Environmental Protection Agency (EPA), indicate that samples of the riverbed sediment average just under 2% asbestos, and range up to over 4% asbestos. Samples of the dried white layers on the creek banks have been found to contain up to 43% asbestos. Asbestos that does not settle out in the Swift Creek riverbed is carried into the Sumas River.



Location of asbestos deposits (bold areas)

How can naturally occurring asbestos affect my health?

Exposure to asbestos occurs when airborne asbestos fibers are inhaled through breathing and the fibers enter the lungs. In some cases, when significant exposure to asbestos has occurred, the fibers can damage the lungs or the membranes that cover the lungs. Breathing asbestos may cause the development of asbestos related disease such as lung cancer, mesothelioma, or asbestosis. Mesothelioma is a rare cancer caused by asbestos and occurs in the lung covering or in the lining of the abdominal cavity. Asbestosis is a scarring of the lungs that decreases the lungs ability to function. Pleural plaques can also develop, which are characterized by a thickening and hardening of the lining that covers the lungs and chest cavity, and are a sign of asbestos exposure.

Will I get asbestos related disease if I have been exposed to naturally occurring asbestos?

Being exposed to asbestos does not necessarily mean that a person will develop asbestos related disease. There are many factors that contribute to the risk of developing disease. The most important of these are:

- How long and how frequently a person was exposed to asbestos.
- How long it has been since the exposure to asbestos.
- The amount of asbestos a person was exposed to.
- The size and type of asbestos a person was exposed to.
- Whether or not a person smokes cigarettes, since asbestos exposure increases the chances of a person who smokes getting lung cancer.
- Whether or not other pre-existing lung conditions are present.

In most cases, people who develop asbestos related disease do not show signs or symptoms of these diseases until at least 10 to 20 years after they were exposed to asbestos. Some asbestos is found in air, in background concentrations, from the use of commercial products such as brake pad linings, insulation, or roofing shingles. Asbestos was banned from use in the late 1970s in drywall, popcorn ceilings, tile mastic and other products commonly found in older homes. Since the exact level of exposure to asbestos that may result in disease is not known, it is important to minimize additional exposures to asbestos.

What should I do if I have sediment from Swift Creek on my property?

The risk of developing asbestos related disease is lower if exposure to asbestos is reduced. If sediment from Swift Creek was used for a home construction project, the following steps can help reduce exposure:

- Pave or cover unpaved walkways, driveways, or roadways. The cover should be thick enough to prevent disturbance of asbestos-contaminated sediment during routine uses or activities.
- Cover known Swift Creek sediments in gardens and yards with asbestos-free soil or landscape covering. The cover should be thick enough to prevent disturbance of asbestos-contaminated soil during routine uses or activities.
- Pre-wet garden (or agricultural) areas before digging, shoveling, or disturbing soil.
- Try to keep pets from carrying dust or dirt on their fur or feet into the home by keeping them out of areas where asbestos may be present. If they do get dirty, bathe the pet (brushing can release fibers into the air).
- Remove shoes before entering homes or other buildings to prevent tracking-in dirt.
- Use doormats to lower the amount of soil that is tracked into the home.
- Keep windows and doors closed on windy days and during nearby construction.
- Use a wet rag instead of a dry rag or duster to dust.
- Use a wet mop on non-carpeted floors.
- Use washable area rugs on floors and wash them regularly.
- Vacuum carpets often using a vacuum with a high efficiency HEPA filter.
- Install a HEPA quality filter in forced air furnace systems.

Can I test the sediment on my property to see if it contains naturally occurring asbestos?

If you believe that sediment from Swift Creek was used on your property, you may test the sediment to determine if it contains asbestos. The EPA currently recommends that testing for asbestos be done using a method called Polarized Light Microscopy (commonly known as PLM). Generally, levels of asbestos fibers in Swift Creek sediment should be detected by this method. Although PLM cannot measure asbestos very well when fibers are present at very low levels, PLM is the most suitable testing method available. To determine if the sediment on your property contains asbestos, contact an asbestos consultant or laboratory listed in your Yellow Pages under "Asbestos Consulting and Testing." Ask for specific instructions on safely collecting sediment samples for testing and for interpretation of test results.

What is being done to manage the naturally occurring asbestos in Swift Creek?

Swift Creek is dredged annually in order to prevent flooding. The dredged sediment containing the naturally occurring asbestos is stockpiled on the banks of the creek. Currently, because of the high levels of asbestos that have been detected in the sediment, removal of the sediment for construction purposes or any use is prohibited. Local, state and federal agencies are working to determine the best and safest methods for managing the sediment. Additional Swift Creek site information can be found on the EPA website at <http://yosemite.epa.gov/r10/cleanup.nsf/sites/swiftcreek> .

Where can I get more information about health issues and asbestos in Swift Creek?

Washington Department of Health March, 2006 Health Consultation report on Swift Creek at: http://www.doh.wa.gov/ehp/oehas/publications_pdf/HealthConsults/swift%20creek_%20sediment%20asbestos_whatcom%20co_3-31-06_pdf

Washington Department of Health February, 2008 Health Consultation report on Swift Creek at: http://www.doh.wa.gov/ehp/oehas/publications_pdf/HealthConsults/0802swiftcreek.pdf

Agency for Toxic Substances and Disease Registry website at: <http://www.atsdr.cdc.gov/NOA/index.html>

Local information about Swift Creek, including the scheduling of upcoming public meetings, is available at the Whatcom County website at: <http://www.whatcomcounty.us/health/eh/index.jsp>

Who can I call if I have questions about how Swift Creek asbestos may affect my health?

Questions about health concerns from naturally occurring asbestos in Swift Creek may be directed to:

Jeff Hegedus

Environmental Health Supervisor
Whatcom County Health Department
360-676-6724 ext 50895
jhegedus@co.whatcom.wa.us

Barbara Trejo

Health Assessor/ Hydrogeologist
Washington State Department of Health
Office of Environmental Health Assessments
Toll free: 1-877-485-7316
barbara.trejo@doh.wa.gov

Karen Larson, Ph.D.

Toxicologist
Agency for Toxic Substances and Disease Registry
206-553-6978
KXL5@cdc.gov



PUBLIC HEALTH
ALWAYS WORKING FOR A SAFER AND
HEALTHIER COMMUNITY
Whatcom County Health Department
509 Girard Street
Bellingham, WA 98225-4005