



DOH 334-211 July 2009



Advisory for Naturally Occurring Asbestos in the Northern Part of the Sumas River

Why is there an advisory about naturally occurring asbestos in the Sumas River?

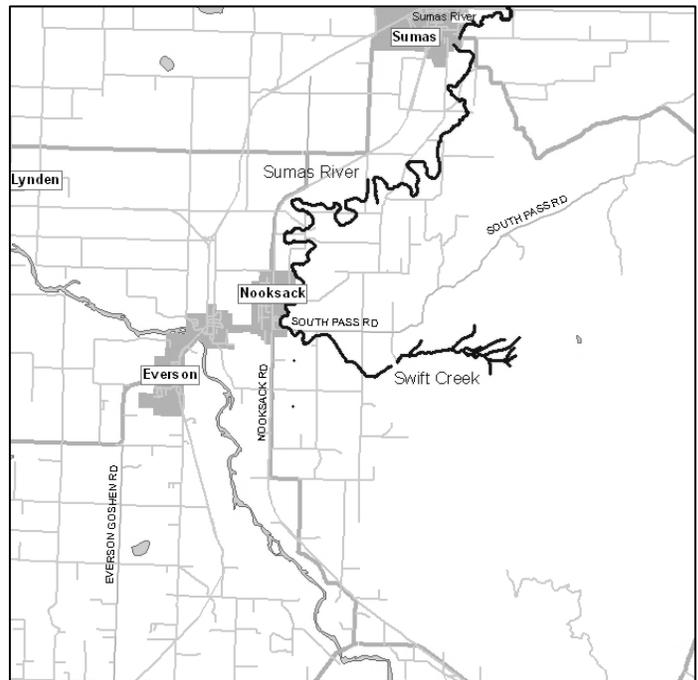
Recent U.S. Environmental Protection Agency (EPA) sampling confirms that Swift Creek asbestos has traveled into the northern portion of the Sumas River. This has occurred between the point where Swift Creek enters the river and the Canadian border. High levels of asbestos have been found in the water and the sediments deposited next to the river. It has also been found in some upland soils near the river where flooding occurred in winter 2008-2009.

Asbestos may become airborne when people disturb the ground by walking, digging, plowing, riding horses or bikes, or otherwise disturbing the ground. The asbestos may also become airborne if sediment from the riverbed is used for home, farm, or other types of construction projects, such as driveways or pathways.

When asbestos becomes airborne, people may breathe it into their lungs. Breathing asbestos can increase the risk of developing asbestos related disease.

What is naturally occurring asbestos, and how much is in the Sumas River?

Naturally occurring asbestos is a fibrous mineral that may be found in certain types of rock or soil. Most of the asbestos found in this area is a type of asbestos called *chrysotile* — the type of asbestos most commonly used in commercial products, such as brake linings. The asbestos is coming from an area that is eroding on Sumas Mountain. As this area erodes, the asbestos-containing sediment travels into Swift Creek. Asbestos that does not settle-out in Swift Creek is may be carried into the Sumas River. These asbestos fibers sometimes make the water appear white. Recent studies of the Sumas River, conducted by the EPA, show that sediments along the bank contained from about 2 to 23 percent asbestos while the upland samples collected in some of the 2008-2009 flooded areas have about 0.5 to 27 percent asbestos. These levels exceed drinking water standards set by EPA.



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 asbestos-related diseases 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 or more 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 for 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 the Sumas River on my property?

The risk of developing asbestos-related disease is lower if exposure to asbestos is reduced. If sediment from the Sumas River is on your property, or was used for home, farm, or other types of construction projects, 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 Sumas River 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.
- Avoid working or playing in or next to the river or areas with flood deposits.
- Minimize soil disturbing 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 or the Sumas River 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, the levels of asbestos fibers in these sediments 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.

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

Washington Department of Health March, 2006 Health Consultation report on Swift Creek
at: <http://www.wa.gov/health/consultation/swiftcreek/200603>

Washington Department of Health February, 2008 Health Consultation report on Swift Creek
at: <http://www.wa.gov/health/consultation/swiftcreek/200802>

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>

Additional Swift Creek site information can be found on the EPA website at:
<http://yosemite.epa.gov/r10/cleanup.nsf/sites/swiftcreek>

Who can I call if I have questions about how asbestos in the Sumas River may affect my health?

Questions about health concerns from naturally occurring asbestos in the Sumas River may be directed to:

Jeff Hegedus

Environmental Health Supervisor
Whatcom County Health Department
360-676-6724 ext 50895
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Barbara Trejo

Health Assessor/ Hydrogeologist
Washington State Department of Health
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