Sumas Mountain Asbestos Update - October 2010

United States
Environmental Protection
Agency
Region 10

October 2010

Background

In January 2009, many rivers in the Nooksack Valley flooded, including Sumas River. Some mud deposited by the Sumas River north of South Pass Road came from Swift Creek and the landslide on Sumas Mountain. The landslide material contains asbestos, and asbestos is constantly moving downstream, carried by Swift Creek and Sumas River. Tests in 2009 showed higher than expected asbestos levels in some Sumas River flood deposits north of Swift Creek.

Why is this a concern?

Wind and everyday activities may kick up asbestos fibers from dried out flood deposits into the air where people can inhale them. When people breathe asbestos fibers, their risk of asbestos-related disease increases. This is a public health concern.

Federal, state and local health and environmental agencies are working with Whatcom County engineers to find ways to address the complex problems created by the landslide. This update will:

1. Let you know about some of the most recent agency activities.
2. Extend an offer of an in-person update in your community.
3. Provide a fact sheet about ways to reduce your exposure to Sumas Mountain asbestos.

Agency activities

Activity-based air sampling

To better understand the risks, particularly in areas where mud was deposited by Sumas River during flooding in 2009, the U.S. Environmental Protection Agency (EPA) and the Agency for Toxic Substances and Disease Registry (ATSDR) conducted a week of activity-based air sampling, fixed-station air sampling, soil sampling, and surface water sampling in August 2010. This sampling expands on work done in 2006 along Swift Creek.

Information from samples collected at several locations along the Sumas River will help environmental and health agencies further determine the health threat posed by the asbestos and give residents and workers additional advice about how to reduce their exposure. The results will be reported in early 2011.

Year long air sampling

ATSDR will take air samples at up to five locations in the area over the course of the year. These samples will be taken on different days in places where wind, traffic, or other disturbances could raise asbestos fibers into the air. Some samples will be taken near areas known to contain asbestos and some farther away.

Swift Creek area flood controls

This fall, Whatcom County repaired flood control structures on parts of Swift Creek using county flood control funds and a grant from the Department of Ecology. This year's work, while limited, is intended to help keep Swift Creek within its channel. It will not prevent continued movement of asbestos along Swift Creek and Sumas River.

The county, federal, and state agencies continue to work together on a long-range plan for controlling the asbestos problem, as funding allows. Having more information will help federal, state, and local governments prioritize potential solutions to asbestos erosion and transport from Sumas Mountain.

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Indoor air sampling

Northwest Clean Air Agency is offering to collect samples in the homes of interested area residents. Residents may need to cover the costs for a commercial lab to measure asbestos levels in the samples. To learn more about the air quality in your home and inquire about air sampling, please contact:

Mark Asmundson
Northwest Clean Air Agency
(800) 622-4627 ext. 0
masmundson@nwcleanair.org

In person updates

In October 2009, local, state, and federal agencies held a community meeting to provide information about health risks and flooding and to answer questions. Information provided at the meeting is available at the Everson Public Library. These materials, including health recommendations, are also posted here: **http://yosemite.epa.gov/R10/CLEANUP.NSF/sites/sumasmtndocs**

We expect to have more meetings in the future, but because this issue affects people in a variety of ways, **we are also offering to speak with smaller groups,** such as a neighborhood association, service organization, church group, or other organization.

For example, your group might be interested in general information about asbestos, steps you can take to reduce exposure to airborne asbestos, strategies to keep asbestos out of your home, flood preparation and response, land use, engineering options, funding available to help form a community group on Sumas Mountain asbestos issues, or other questions.

If your group is planning a meeting and you would like to arrange for a project staff person to come and answer your questions, please contact:

Jeff Hegedus
Whatcom County Health Department
(360) 676-6724 ext. 50895
jhegedus@co.whatcom.wa.us

Questions?

If you have questions about the **activity-based sampling effort**, please contact:
Ellie Hale
U.S. Environmental Protection Agency (EPA)
(206) 553-1215 or (800) 424-4372 ext. 1215
E-mail ***hale.ellie@epa.gov***

If you have questions about the fixed-station air sampling effort, please contact:
Karen L. Larson, Ph.D.
Agency for Toxic Substances and Disease Registry (ATSDR)
E-mail ***KXL5@cdc.gov***
(206) 553-6978

To learn more about the **air quality** around your home and inquire about **indoor air sampling**, please contact:
Mark Asmundson
Northwest Clean Air Agency
(800) 622-4627 ext. 0
E-mail ***masmundson@nwcleanair.org***

For information about how to **minimize exposure** to naturally occurring asbestos **in the workplace**, please contact:
David Johnson
Washington Department of Labor and Industries
(360) 902-5514
E-mail ***joda235@lni.wa.gov***

For general questions about Sumas Mountain asbestos, please contact your local health department:

Jeff Hegedus
Whatcom County Health Department
(360) 676-6724 ext. 50895
E-mail ***jhegedus@co.whatcom.wa.us***

If you need materials in an ***alternative format,*** *please contact Caryn Sengupta at (206) 553-1275*

TTY users please call the Federal Relay Service: (800) 877-8339

Swift Creek and Sumas River Flooding Fact Sheet

Steps you can take to reduce your family's exposure to airborne asbestos

EPA United States Environmental Protection Agency Region 10

Revised October, 2010

The Sumas Mountain landslide, near the headwaters of Swift Creek, releases up to 120,000 cubic yards of sediment into Swift Creek each year. The landslide material contains natural deposits of asbestos. Swift Creek joins the Sumas River near the town of Nooksack. The Sumas River continues north past the town of Sumas and into Canada.

Swift Creek and Sumas River contain asbestos

- Floodwaters from the creek and river leave behind deposits that contain asbestos.
- Individual asbestos fibers are too small to see.

Before flooding —

- Use sandbags to reduce the possibility of flood water from reaching the living area of your property or your house.
- Do not fill sandbags with materials from the river.

After flooding —

- Avoid handling flood deposits
- If you *must* handle flood deposits, wet them down before you dig into or move them.
- Dried river mud is more likely to release asbestos fibers into the air than wet mud.
  - Use a hose to flush the material off of your driveway or walkway into an area where people will not contact it.
  - Do not use fans to dry out the soil or sediment.
  - Do not sweep the material when it is dry. This can stir up the asbestos fibers.
- When working with the flood deposits, wear a disposable work suit (available in most hardware stores) or coveralls that can be taken off and kept outside.
- Use respiratory protection (see below) when you spend time in areas that have been flooded, or where material containing asbestos may be disturbed.
- Rinse off your shoes after walking in areas with flood deposits.
- Remove your shoes prior to entering your home or vehicle so that you do not track in small fibers.
- Double bag any contaminated materials, such as work suits or gloves, before disposing of them.

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Protect your lungs

Do not rely on a dust mask or surgical mask.

These will not remove asbestos from the air you breathe.

Whenever you move or disturb material deposited by Swift Creek and Sumas River flooding, we recommend that you **use a respirator and filter cartridges specifically designed to filter asbestos from the air you breathe.**

Look for a NIOSH/MSHA certified half-face respirator equipped with a pair of HEPA filter cartridges (color coded purple) with N-100, P-100, or R-100 NIOSH rating.

To be effective, your respirator must be properly selected, fitted, and used. The respirator must fit your head and face snugly (beards, long mustaches, and stubble allow unfiltered air to leak into the respirator and should be shaved before respirator use). Use the respirator all the time you are working in an area where you know or suspect asbestos is present.

Reusable half-face respirators and HEPA filter cartridges can be purchased from a reputable safety equipment store and from some hardware stores. For example, Sanderson's Safety Supply has suitable respirators from $12 to $25 and HEPA filters around $10.

- Look for NIOSH certification and N-100, P-100, or R-100 on the filter label.
- Ask the sales person for a fit test to ensure that the respirator will keep out unfiltered air.
- Ask the sales person to demonstrate how to check for a good face seal before each use.
- Follow the use, cleaning, and care instructions provided with the respirator.
- Learn more at **www.cdc.gov/niosh/npptl/topics/respirators/disp_part/default.html**

We do not recommend disposable respirators but certain disposable NIOSH-certified respirators provide an airtight seal to your face and, with adequate filters, may reduce your asbestos exposure. When a reusable respirator as recommended above is unavailable, disposable 3M Brand 9210 or 8211 with HEPA filters rated at N-95, P-95, or R-95 (or higher) are available at most hardware stores. They should be used only one time and then disposed of.

The following links explain how to use respirators properly:

www.health.state.mn.us/divs/eh/asbestos/homeowner/ppe.html

www.youtube.com/watch?v=Tzpz5fko-fg

www.nycosh.org/environment_wtc/GulfCoast/Katrina_respirator_FS.pdf

NOTE: For employees doing asbestos work, disposable respirators are not approved. At a minimum, NIOSH certified HEPA respirator must be worn and, when asbestos is above the levels allowed for short-term exposures, workers must wear full respiratory protection. For workplace questions, contact Washington State Labor & Industries (L&I): David Johnson (360) 902-5514 or **joda235@lni.wa.gov**

Cleaning your home

If you suspect tracked dirt or mud from a flooded area into your home

- Consider having a certified asbestos abatement (removal) contractor clean your home. These contractors use a special HEPA vacuum to clean up contaminated material.
- Use a wet cloth for dusting rather than a dry cloth or feather duster.
- Wash or vacuum your carpets and curtains using a vacuum with a high efficiency HEPA filter.

Stop flood deposits from entering your home

- Pave or cover walkways, driveways, or roadways affected by or made of material from Swift Creek or Sumas River. The cover should be thick enough to prevent asbestos-contaminated soil from being disturbed during everyday activities.
- Cover Swift Creek or Sumas River deposits in gardens and yards with asbestos-free soil or landscape covering. The cover should be thick enough to prevent asbestos-contaminated soil from being disturbed during everyday use.
- Wet your garden or agricultural areas before digging, shoveling, or disturbing the soil.
- Try to keep pets from carrying dust or dirt into the home on their fur or paws by keeping them out of areas where asbestos may be present.
- When pets do get dirty, bathe them. Remember, brushing the dirt off will release asbestos fibers into the air.
- Remove shoes before entering homes or other buildings to avoid tracking in dirt.
- Use doormats to lower the amount of dirt tracked inside.
- Keep windows and doors closed on windy days and when construction or roadwork is being done nearby.
- Consider wearing coveralls or other work clothes while gardening. Remove coveralls and wash up outside.

Cleaning techniques for reducing exposure to asbestos

- Use a wet rag instead of a dry rag or duster.
- 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.

For more information

If you have additional questions about these recommendations please contact Julie Wroble at (206) 553-1079
wroble.julie@epa.gov

or Dave Blake at the Northwest Clean Air Agency at (360) 428-1617 ext. 212
dave@nwcleanair.org

United States
Environmental Protection
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Region 10

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Sumas Mountain Asbestos Update and Flooding Fact Sheet for Residents

Look Inside for

- *Updates on sampling and flood controls*
- *Steps you can take to reduce your family's exposure to airborne asbestos*

Learn More on the Web

Whatcom County Health Department Website
www.co.whatcom.wa.us/health/environmental/solidwaste/asbestos_swift_creek.jsp

EPA Sumas Mountain Information
www.epa.gov/region10/asbestos/sumasmountain.html

Health Information
www.arb.ca.gov/toxics/asbestos/1health.pdf

Ways to Control Naturally Occurring Asbestos Dust
www.arb.ca.gov/toxics/asbestos/3control.pdf

Naturally-Occurring Asbestos Around Your Home
www.arb.ca.gov/toxics/asbestos/4home.pdf