After the Wildfire: A resource guide





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Contact:

Squamish-Lillooet Regional District - Emergency Operation Centre (EOC) www.slrd.bc.ca/eoc|eocinformation@slrd.bc.ca|1-888-213-0780 Mon-Sun: 8:30 am-5:30 pm

The information and resources in this document have been drawn from numerous resources. We gratefully acknowledge the work of British Columbia Emergency Management, the First Nations Health Authority, and the Government of Alberta.

SAFETY

Following a wildfire or evacuation, significant dangers may be present on your property. Take the time to protect yourself and others from injury or illness. Take extra precautions for children, the elderly, and those with health challenges.

Always wear a mask and safety glasses, proper clothing and footwear. Mark out dangers so that everyone sees them.

Some hazards may be obvious, such as fire-damaged or broken trees, damaged utility lines, and fire-damaged structures. Not all hazards are obvious, such as residual ash, which may contain asbestos and toxic residue. When assessing hazards on your property, be sure to also consider underground hazards such as electrical lines, as well as burnt and weakened tree roots.

MENTAL HEALTH SUPPORTS

Create a support network. This may include family, friends or professionals. If you are struggling, seek or accept help. If you need to step away for a minute, day or a week, do it.

If you or someone you know is in crisis, or has suicidal thoughts

Call 1-833-456-4566

Text CONNECT to 686868.

Visit talksuicide.ca

Services are available 24/7.

Speak with a counsellor

Adults: 1-866-585-0445 Youth: 1-888-668-6810 www.wellnesstogether.ca. 211 is a free & confidential service that connects people to resources incl. food & shelter, mental health & addictions support, legal & financial support, support for seniors, & more.

Call 211

BEFORE YOU RETURN

Ensure you have:

- A full tank of gas
- Proper clothing for all types of weather
- Personal protection equipment (PPE)
- A flashlight, clean-up materials and disposable bags
- Enough bottled water for the next three days
- Food for the next three days, including any special dietary needs
- Pet foot and water (if applicable)
- Any medications you require

STRUCTURE LOSS

If a Rapid Damage Assessment (RDA) was conducted by the SLRD on your property, review the recommendations contained in the document before or when entering your property.

If the Rapid Damage Assessment indicates specific recommendations (such as securing areas on your property, or obtaining an environmental assessment), please consider what you will need in order to carry out those recommendations.

More information on Rapid Damage Assessments can be found by visiting the <u>BC Housing Post Disaster Building Assessment webpage</u>.

INSURANCE & DOCUMENTATION

If you are insured:

- Contact your insurance company or broker as soon as possible.
- Work with your insurance company and their accredited fire restoration companies to restore or rebuild your home.
- If you have questions about insurance, call your insurance company directly, or call the Insurance Bureau of Canada toll-free at 1-844-227-5422.
- Documentation will be important to access insurance & other support.
- Stay in regular contact with your insurance provider about your needs & how they can help.

Documentation:

- Use a journal or electronic document to keep track of information.
- Create an inventory of items, both interior and exterior, which have been damaged or destroyed by fire.
- Do not throw away any damaged goods until after an inventory is made by the insurance assessor.
- Take as many photos and videos of the damage as possible. Ensure the time & date on your camera is accurate.
- Take note of dates, times, & names of people & organizations you speak with.
- Keep a list of tasks that need to be completed.
- Make a list of key contacts & their contact details.
- Keep all receipts. Write a description on the back & store them away from heat and sun.

If you are not insured:

Consider contacting the Canadian Red Cross, Salvation Army, local religious organizations, provincial or municipal emergency support services (ESS), and non-profit crisis centres who may have supports and resources available for you.

ONCE YOU GET THERE:

Water

- Bottled water is recommended.
- Have your water well tested if you live in an area which was impacted by fire, even if your property was not directly impacted.

Electricity

- Stay away from BC Hydro infrastructure (lines, poles, towers, hydro boxes, etc).
- Assume that any fallen or damaged infrastructure is live and dangerous.
- If you have questions, no service, or fluctuations in service quality, contact BC Hydro at 1-888-769 3766 (1-888-POWERON) or *49376 on your cell phone.

Propane, Natural Gas, Oil

- If you have concerns regarding your propane, natural gas, or oil equipment, please contact your suppliers.
- If you have a propane system & you smell propane upon entering your property, contact a qualified gas fitter, turn off the valve and leave your residence until your system has been inspected. Ventilate your home and do not turn on any electrical or gas items including lights or fans until the propane is gone.
- Propane tanks are a common post-wildfire risk as many households have at least one small tank for BBQ purposes. Inspect the tank for visible damage, such as warping, dents, discoloration, or melted fittings. Propane tanks have the potential to explode or rupture when the relief valve releases pressure. If a tank has been partially punctured, there is a risk of a flammable gas release. If a damaged or compromised propane tank is discovered, maintain a safe distance and have someone from the fire department or trained professional dispose of it.

Traffic

• Give way to all emergency and fire fighting vehicles. Adhere to all traffic control efforts.

Trees

• Burnt and fire damaged trees are unstable and can fall without warning. Inquire with your insurance company about getting a dangerous tree assessment done on your property.

Structure Damage

- Fire-damaged buildings and other structures may be hazardous.
- Standing chimneys are hazardous.

HAZARDS

Obvious Hazards:

- Tripping hazards (wires, debris, etc).
- Falling hazards (uncovered wells, septic tanks).

- Sharp objects (nails, metal edges, branches).
- Smoke or haze.
- Pressurized tanks that might have been damaged (propane, acetylene, etc).
- Spoiled food, damaged cans, smoke-damaged dry goods, garden produce.

Hazards that may not be obvious:

- Wildfires may return to the area.
- Unpredictable winds.
- Dangerous trees (falling branches, ash pits, damaged roots, weakened trunks).
- Toxic fumes in debris (burning debris may contain cyanide, sulphur dioxide, asbestos).
- Hazardous materials/waste (septic tank material, contaminated soils, PCB in transformers on poles & soil, in the debris of fluorescent lights).
- Asbestos contaminated waste.
- Inhalation hazards (fiberglass, smoke particulates, mould).
- Other household hazards (batteries, solvent, paints, garden chemicals, etc).
- Using proper safety techniques and equipment, inspect your roof and check for smoke and sparks throughout the home, including the attic. The winds of wildfires can blow burning embers anywhere.

RESTORING AND CLEANING

After you have spoken to your insurance company and taken photos and an inventory of items, discard any items impacted by smoke, heat, ash and chemicals.

- Medication, cleaning products, cosmetics, and other toiletries can be damaged by heat, smoke and lingering chemical residues.
- Follow local waste disposal requirements for disposal of hazardous materials.
- Refer to the Wildfire Waste Disposal section for more information.

FOOD SAFETY

- A full chest freezer will keep food frozen for up to 48 hours.
- A half-size chest freezer will keep food frozen for up to 24 hours.
- A cooler or fridge will keep food cold for up to four hours.

When to dispose of food:

- If the temperature of the cooler or fridge was greater than 4°C at any time, or if the power outage lasted for 4 hours or more.
- Any food that has spoiled, even if the cooler or fridge remained at 4°C at all times.
- Frozen foods that have thawed. Once thawed, food should not be refrozen.
- Fire or smoke damaged foods incl. dry goods such as flour, sugar, spices, etc. even if the package isn't open.
- Unrefrigerated raw vegetables or fruits that have been smoke-damaged or may have spoiled.

- Foods that were stored in porous containers such as cardboard, foam containers, etc.
- Canned foods that are bulging, rusted or dented.
- Jarred foods, including home-canned items. The heat from the fire likely compromised the safety seal.

*Note: The temperature of your fridge may have gone above 4°C (-18°C for freezers) when the power was disrupted, then returned to 4°C (-18°C for freezers) when power was restored. In this case, the food must be disposed of.

ASSESSING YOUR FRIDGE AND FREEZER

- · Check if your refrigerator or freezer is damaged.
- If your refrigerator or freezer was damaged by the fire, contact your insurance company about coverage as an eligible expense, and refer to the Wildfire Waste Disposal Information below about its safe disposal.

If your refrigerator or freezer was not damaged by the fire and continues to work, take the following steps to clean refrigerators and freezers:

- Use latex or rubber gloves, eye protection, and an N95 mask while removing spoiled food and cleaning the fridge.
- Remove everything from the refrigerator or freezer.
- Use paper towels or rags to wipe up spills and leaks and dispose of them with the food waste.
- Wash the interior and exterior of the appliance with warm, soapy water.
- Disinfect the refrigerator or freezer with a mild bleach solution (1 tsp household bleach per 4 cups water).
- If the refrigerator has a water distributor, change the filter and clean the water line using the manufacturer's instructions.
- Secure doors in an open position to provide air flow. Keep children and pets away.

REMOVING ODOURS:

- To remove odours, wipe out the appliance with a mixture of water and baking soda, or keep a box of baking soda in the appliance.
- You may also want to air out the appliance for a few days before plugging it in and using it again.
- Wait until the refrigerator has returned to 4°C or freezer has returned to -18 °C before restocking with food.

CLEANING SOOT AND SMOKE DAMAGE

There may be smoke damage and soot in your home after the fire.

If you don't hire a professional fire restoration company and chose to clean your home yourself, here are some steps you can take to clean soot and smoke damage.

Asbestos is an airborne, soil and water contamination risk. If there was asbestos present in the wildfire-affected structure, the asbestos fibers have likely settled into the soil, and have potentially penetrated deeper into groundwater. It is recommended to have ongoing monitoring of air, soil, and water quality to minimize risks to the environment and public health.

Before you get started, <u>make sure you are wearing personal protective equipment</u> including gloves, an N95 mask, and safety glasses.

EXTERIOR:

 Use a garden hose, sprayer or pressure washer on the exterior of your home, driveways, walkways, vehicles, patios, decks and outdoor furniture. Rinse off air intakes and air conditioners.

DO NOT USE an air hoses or leaf blower to clean the exterior of your home – you do not want to drive more contaminants into your home.

Safety Warning

- Be careful when using pumps, pressure washers or generators in enclosed spaces. Carbon monoxide may be present and can build to dangerous levels in confined or poorly ventilated areas.
- Never use bleach! The reaction between bleach and the fire retardants will produce harmful and explosive gases.

See the section on Septic Systems in this guide for advice on how to clean your septic system.

AIR CIRCULATION

- Get the air circulating inside your house by using fans and opening windows (provided there is no smoke or air quality advisory for your neighbourhood).
- Replace your furnace filter and air conditioner filter.
- Use a humidifier to reduce airborne ash.
- Have a professional clean your ducts & air conditioning system.

INTERIOR SURFACES

- Wash all interior surfaces with mild detergent or appropriate cleaning solution and rinse thoroughly with warm water.
- Don't forget to clean the interiors of closets, cupboards, drawers and other locations to remove any ash, dust, or odour.
- Wiping surfaces with white vinegar can help to remove odour and residue from smoke. Baking soda can also help to remove odours.
- Wiping surfaces with a damp cloth and mopping floors with a wet mop is safer and more effective than sweeping or dusting. Be sure to change the water when it gets dirty and dispose of the dirty water outside of your home.
- Only vacuum with a unit which has a HEPA filter which can catch ash particles. Using unfiltered vacuums will just move the ash around the house. Change your HEPA filter frequently.
- Ash that is left in place will reduce into smaller particles and becomes harder to remove from carpets and surfaces.
- Wash and clean all ash-contaminated household items with mild detergent, changing the water frequently.

FABRIC, CARPETS AND CLOTHING

- Soot is oily and can stain carpets, curtains, clothing, and soft furnishing. It must be removed before you try to clean or deodorize those items.
- Attic insulation can retain smoke odours. You may wish to consider replacing it.
- Steam clean carpets, drapes, curtains and furniture, making sure to change the water frequently.
- Launder or dry clean all affected clothing and other materials. You may have to run numerous rinse cycles to extract all soot residue and smoke odours. Consider doing this laundering offsite using a machine tagged for heavy contaminants at a laundromat.
- Washable textiles may benefit from the addition of one to two cups of vinegar to each wash load.

ELECTRONICS

- Take electronic equipment outside and "blow out" the components with an air hose before
 using them. Ash can cause static charges. Before blowing out electronics, close all the
 windows to your home and work well away from your home. Ensure you are wearing a mask
 and eye protection when doing this work.
- If electronic equipment is damaged, see the Wildfire Waste Disposal Information section about its safe disposal.

REPAIR WATER DAMAGE

Before starting any work, ensure the everyone entering your home is wearing proper personal protective equipment such as an N95 mask, gloves, and proper footwear.

Let your insurance company and restoration contractor know as soon as possible if you find any visible water damage, mould growth, or if you smell mould inside your home.

If your home was damaged by water, you will need to get rid of all excess water to prevent mould growth.

- To help prevent mould growth, check any appliances, items, and surfaces including carpet, drywall and structural wood that may have been in contact with water.
- Assess items that might be safe for salvage & repair, including:
 - surfaces that do not absorb water.
 - fabrics that can be laundered and bleached.
 - o surfaces not affected by the water.
- Clean the affected areas using warm water and soap. Then, sanitize all surfaces using a mild bleach solution (one tablespoon of bleach to four litres of water).
- Thoroughly dry all wet items and surfaces as soon as possible.
- Dry any wet or waterlogged carpeting as quickly as possible. Any underlay should be removed and disposed of.
- Steam clean carpets with a disinfectant.
- Remove excess moisture from the air inside your home using a dehumidifier and fans.
- If you discover a small amount of mould (typically under 10 square feet), and you wish to complete the remediation work yourself, more information is available at www.healthlinkbc.ca/healthlinkbc-files/airquality-mould.

CLEAN YOUR YARD AND OUTDOOR PLAY AREAS

Your yard and surrounding areas may be impacted by fire, ash and soot. These materials may contain polycyclic aromatic hydrocarbons (PAH) as well as heavy metals. A fire restoration contractor will be able to provide clean-up services.

If you decide to manage the restoration work yourself:

- Use appropriate personal protective equipment, such as an N95 mask, rubber gloves, rubber boots, long-sleeved shirt and pants or disposable coveralls.
- Using clean water, mist down remaining fire debris. Do not wash the fire debris into the road.

- Scrape up fire ash and soot remaining on your property as much as possible. Place the ash and soot in plastic bags or other containers that will prevent it from being disturbed. Refer to the Wildfire Waste Disposal section of this guide for more information about disposal.
- Use mild detergent and clean water to wash outdoor toys, play equipment, and recreational equipment.
- Sand, gravel or other loose materials placed beneath playground equipment should be removed and replaced whenever there is visible presence of ash, soot, silt or small debris.
- If you suspect or know a sand box was impacted by fire or firefighting materials, the sand should be replaced.

RESIDENTIAL POOLS, HOT TUBS AND WHIRLPOOLS

Wildfires may have impacted residential pools and made them unsafe to use.

- There may be structural damage to the pool basin or equipment.
- Ash, soot, and chemicals used to fight the fire may have impacted the quality of the water.
- If the pool water was not circulating or was not treated, harmful bacteria may have grown in the stagnant water.

Work with a pool service company to restore your swimming pool and ensure it is safe to use.

- Small whirlpools (hot tubs) should be drained, scrubbed clean, and refilled.
- Balance the water prior to using the whirlpool.

CLEAN UP FIRE-RETARDANT AND RESIDUE

The health and safety of retardants used in BC has been reviewed. In the long term, environmental toxicity is low because products degrade over time and turn into fertilizer.

The following precautions are recommended.

If your home was sprayed with fire retardants or was impacted by windblown fire retardant, these products need to be removed from the outside siding and roof of your house, your vehicles, and any outside toys, furniture, tools, etc. before you move back home. A fire restoration contractor will be able to help you with this.

If you decide to manage this yourself:

- Use personal protective equipment, such as an N95 mask, safety glasses, rubber gloves, rubber boots, long-sleeved shirt and pants or disposable coveralls.
- Keep pets and children away from any water pooling from these cleaning activities.
- Consult your family physician as soon as possible if you experience a reaction.

NEVER USE BLEACH! THE REACTION BETWEEN BLEACH AND THE FIRE RETARDANTS WILL PRODUCE HARMFUL AND EXPLOSIVE GASES.

- Wash your home's roof and siding, vehicles, and outdoor patio furniture with clean water.
- To clean windows and glass, use clean water and a razor blade tool to help to remove the sticky residue.
- Rinse retardant off vegetation (shrubs, grass, etc).
- You should not consume fruits, vegetables, or other consumables that have come into contact with fire retardant.
- Use mild detergent and clean water to wash outdoor toys, play equipment, and recreational equipment to remove any residual fire retardant.

DRINKING WATER SUPPLIES

Have your well water tested:

- After a wildfire even if the property wasn't directly affected by the wildfire.
- If there is visible fire retardant on the property.

Fire retardant contaminated water is not considered harmful. Open sources, such as ponds or dugouts may receive small amounts of retardant overspray during wildfire fighting operations. This will have no appreciable effect on the quality or toxicity of the water supply.

Water containing small amounts of retardant could taste slightly salty and may not, consequently, be palatable.

Immediate medical attention would not be considered necessary except in rare cases involving adverse reactions based on individual intolerances or allergic reactions.

FRUIT AND VEGETABLE GARDENS

It may not be safe to eat fruits or vegetables that were growing above ground during the fire, especially if they came into contact with fire retardants.

- Discard fruits and vegetables if visible fire-suppressant residues are present.
- Rinse fire retardant off vegetation such as trees, shrubs and plants, if possible.
- Regularly wet down your garden and lawn until the smoke and ash have been diluted.
- Ash and soot on vegetation will continue to emit smoke odours for some time.

SEPTIC SYSTEMS

If a property is directly impacted by a wildfire, there is a possibility that some parts of the sewage disposal system may be damaged. There is also the possibility that wildfire response activities (eg. heavy equipment or trucks driving over the dispersal field) may have damage the sewage system.

- After a visual assessment, if there are concerns about the functionality or safety of the sewage disposal system, a Registered On-site Wastewater Practitioner (ROWP) should be retained to perform an assessment of the system and make recommendations for its repair. These individuals can be found by searching https://asttbc.org/registrants/registrant-directory/#.
- There may be some damage to a sewerage system that is not visible. Take a safety-minded approach when determining whether to retain the services of a ROWP. Systems with additional electrical components, such as dosing pumps or secondary treatment, should also be assessed to ensure safety.
- If you return to your property and find that the on-site sewerage systems are not operating as intended (e.g. drains are flowing slowly, signs of wastewater breaking out on soil), a ROWP should be contacted immediately for assessment and repair.

SEPTIC SYSTEM AND PLUMBING SAFETY

Wear rubber gloves when working with plumbing fixtures and sewer piping. They can contain high levels of bacteria. If you suspect a problem with your septic field, contact the Interior Health Authority.

TREES:

- Watch for ash pits and mark them for safety. Ash pits are holes full of hot ashes, created when trees burn to the roots and stumps. People and pets can be seriously burnt by falling or tripping into ash pits.
- Visually check the stability of all trees. Any tree that has been weakened by fire may be hazardous. These hazards may increase in windy conditions.
- Where fire has burnt deep into the trunk, the tree should be considered unstable.
- If the bark on the trunk of a tree has been burnt off or scorched by very high temperatures around the circumference of the tree, the tree will not survive.

- Look for burnt roots by probing the ground with a rod around the base of the tree and several feet away from the tree base. Roots are generally six to eight inches below the surface. If the roots have been burnt, you should consider the tree very unstable. Unstable trees may easily be toppled. This risk increases in windy conditions.
- A scorched tree is one that has lost part or all of its leaves or needles. Healthy deciduous (leafy)
 trees are resilient and may produce new branches and leaves as well as sprouts at the base of
 the tree within a year. Coniferous (needled) trees may survive when partially scorched. A
 coniferous tree that has been damaged by fire is subject to bark beetle attack.
- The wind patterns in your area may have changed as a result of the loss of adjacent tree cover.

USE CAUTION AND EXERCISE GOOD JUDGMENT WHEN RE-ENTERING A FIRE-AFFECTED AREA. HAZARDS MAY STILL EXIST, INCLUDING HOT SPOTS THAT CAN FLARE UP WITHOUT WARNING.

WASTE MANAGEMENT

IMPORTANT: When handling dangerous or potentially dangerous waste, use appropriate personal protective equipment such as an N95 mask, safety glasses, rubber gloves, proper clothing and footwear. Follow WorkSafeBC (www.worksafebc.com/en) protocols to properly protect yourself.

Follow the SLRD disposal and recycling guidelines outlined on our Recycling and Waste Centres page www.slrd.bc.ca/services/recycling-composting-waste-landfill/recycling-waste-centres/area-upper-bridge-river-valley-facilities.

For any questions regarding waste disposal, visit <u>www.slrd.bc.ca/services/recycling-composting-waste-landfill/recycling-waste-centres/area-upper-bridge-river-valley-facilities</u> or contact the SLRD Resource Recovery Coordinator at utilities@slrd.bc.ca or 604-894-6371 ext. 236.

Insurance

Always check with your insurance provider first regarding disposal of solid waste related to wildfires. Insurance may cover the cost of removal and disposal. Remember to take pictures and keep an inventory of items that are being disposed of.

Fridges & Freezers

The Gold Bridge Transfer Station accepts appliances. All appliances have to be cleaned before being disposed. Secure or remove doors so children or pets cannot get inside.

A Hazardous Waste Survey may be required prior to disposing of items. Contact the SLRD Resource Recovery Coordinator to discuss disposal requirements. The following are subject to special disposal regulations to protect the health and safety of workers and the public:

- Burnt and fire-damaged materials.
 - *If your property was damaged by fire, be aware that burnt buildings and residual ash may contain hazardous materials such as asbestos and toxic residue.
- Topsoil that is contaminated with ash will need to be disposed of. Ash can contain heavy metals, hydrocarbons, and asbestos, among other hazardous materials.
- Burnt vehicles.
- Asbestos/suspected asbestos/toxic waste.

A list of abatement companies is available at www.slrd.bc.ca/services/recycling-composting-waste-landfill/recycling-waste-centres/area-upper-bridge-river-valley-facilities.

All asbestos-contaminated waste must be double bagged with 6 mil bags and requires SLRD Asbestos Form approval prior to being sent to the landfill. The form can be found on the above website.

- Drywall manufactured before 1990
- Concrete
- Small animal carcasses
- Large animal carcasses can be accepted under special handling authorization at the Lillooet Landfill and requires the landfill to be notified in advance. Contact the SLRD Resource Recovery Coordinator to discuss disposal requirements.

The Gold Bridge Transfer Station will accept:

- Drywall made after 1990 with proof of manufacturing date.
- Vinyl Siding –If not asbestos contaminated (proof must be available), vinyl siding can be disposed as construction and demolition waste.
- Wood (Construction/Demolition) Small quantities of burnt wood such as lumber or plywood,
- Brush and branches clean wood debris (no nail, paint, etc.), pruned branches, shrubs, stumps, and fallen trees.
- Scrap metal

Recycling

The following materials are required to be cleaned, sorted and recycled:

Gold Bridge Transfer Station:

- used oil and filters
- electronics
- batteries (household and vehicles)
- cell phones
- large appliances
- tires
- metal and package recycling (mixed containers, paper & cardboard, foam packaging & flexible plastics)

Lillooet Landfill & Recycling Centre:

- light bulbs
- small appliances & power tools
- used paint
- smoke alarms and CO2 alarms
- used antifreeze.
- household hazardous and package recycling (glass bottles and jars)

Important Contacts

Interior Health	(250) 851-7300 1-866-847-4372
Health Protection Office	(250) 851-7340 1-855-744-6328
Homeowner Protection Office	1-800-407-7757
Technical Safety BC	1-866-566-7233
Ministry of Transportation & Infrastructure	(250) 828-4220
Telus	1-888-811-2323
BC Hydro	1-888-769-3766
SLRD Waste Disposal	604-894-6371 ext. 236 utilities@slrd.bc.ca
SLRD Emergency Operation Centre	1-888-213-0780 eocinformation@slrd.bc.ca