

Worker Protection During Cleaning and Rebuilding After a Wildfire

Cleaning up after a wildfire involves many dangers. The ash and dust that remain can be toxic, since all kinds of materials have been burned such as plastics, lead, asbestos, electronics, chemical products, etc. This is why cleanup after a wildfire is performed by employers with specially trained workers.

It is important that workers participating in reconstruction and cleanup are well informed of the risks they may face, the precautions they must take to take care of their health and safety and also that of their coworkers. Employers who hire workers to cleanup and rebuild in areas affected by wildfires are required to identify and evaluate hazards, fix any conditions that are not safe or healthy and provide training and instruction to employees (Some of the most common Cal/OSHA standards that apply to wildfire cleanup work include: [California Code of Regulations, title 8, sections 1509, 1511, 1518 and 3203](#)).

CONSIDER THE FOLLOWING HAZARDS AND BEST PROTECTIVE PRACTICES:

ASH, SOOT AND DUST

Hazard:

Ash, soot and dust can contain tiny particles made up of asbestos, metals, plastics and other toxic materials. When disturbed during cleaning, these particles can be inhaled and cause irritation or damage to the skin and the lungs. In some cases, they may also cause illnesses in the long term.



Protections Include:

- Wear a respirator such as an N95 or a half-face respirator with filters to protect you from breathing in particles.
- Wear nitrile gloves, long sleeves and long pants to avoid skin contact.
- Avoid generating or raising dust. Do not sweep or use a leaf blower or other actions that will lift the ash. Spray water on the ground and structures being disturbed by vehicles and heavy equipment (make sure there are no powerlines or sources of electricity).
- Use a vacuum cleaner with HEPA filters.
Spray a little water on surfaces with the ash to clean it up without dispersing it into the air. A wet cloth or mop is sufficient in low dust areas. When using water, make sure there are no power lines or sources of electricity nearby.
- Avoid walking directly behind someone who may be kicking up dust or ash.
Change out of work clothes to avoid bringing ash and dust home. Be sure to take a shower before or upon returning home.

HEAVY LIFTING

Hazard:

When doing cleanup and reconstruction work, there are ergonomic hazards present. Lifting and carrying heavy objects, working in awkward positions or twisting while lifting can injure muscles, tendons and nerves and can lead to serious injuries.

Protections Include:

- Avoid lifting—use mechanical devices where feasible.
- Have multiple people help lift heavy objects and use proper lifting techniques.
- Divide the weight to load several lighter packages.
- Switch from one task to another so you don't lift or carry weight for too long.



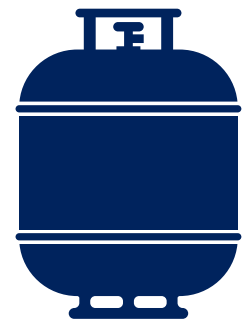
UNKNOWN HAZARDOUS MATERIALS

Hazard:

Tanks, pipes, and other equipment containing hazardous materials such as propane gas or sewage may have been damaged.

Protections Include:

- Never disturb tanks or pipes that appear damaged until cleared to do so by your supervisor. Only people who are specially trained for this work should remove them if they are possibly hazardous (e.g., under pressure or still contain a gas/liquid).
- Be on the lookout for containers that hold paint, cleaning supplies or pesticides. Also look out for discolored soil and water, which may be a sign of a chemical spill. These also have to be removed by people with training and special protective clothing.



UNSTABLE STRUCTURES AND SURFACES

Hazard:

Any structure, street, sidewalk or parking lot where the fire happened or near the fire could have structural damage that is not noticeable. In addition, walking on areas with a lot of debris or ash brings the risk of slipping and falling, or stepping on sharp things that cannot be seen (broken glass, nails, etc.). Watch for trees that are unstable due to fire.

Protections Include:

- Before starting work, inspect the area for hazards.
- Never use ladders or climb to a higher level or on the roof without being certain that they have already been inspected.
- If you feel the structure you are working on is moving, feels unstable or hear unusual noises, immediately get out and get as far away as possible.
- With or without visible damage, assume structures are dangerous and do not work in that area until a qualified person has inspected the area and says it is safe to work there.
- Wear personal protective equipment such as a helmet, leather gloves, safety glasses, boots, pants (not shorts) and a long-sleeved shirt to protect from injuries.



MACHINERY SUCH AS VEHICLES, EARTH-MOVING EQUIPMENT, PUMPS, GENERATORS AND PRESSURE WASHING MACHINES

Hazard:

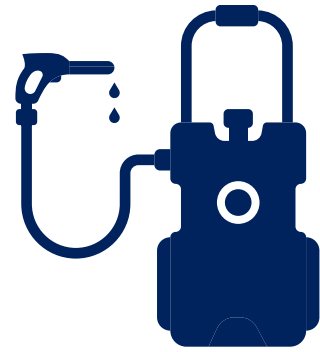
These types of machines may be used in cleanup and reconstruction work. They can emit carbon monoxide, an odorless or colorless gas that can kill in minutes. These machines can also produce a lot of noise.

Protections Include:

- Never operate gasoline or diesel-powered equipment inside a building.
- If you experience nausea, headache, shortness of breath, drowsiness and weakness while operating such equipment, open all windows and doors and leave the building immediately.

Protections Include (continued):

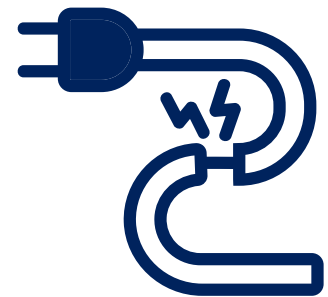
- If the machines are noisy, use earplugs to protect your hearing.
- Be careful to not direct the pressure washer on any part of your or someone else's body.
- Be aware of the electrical hazards associated with generators, particularly where water is being used.
- Such machines can have moving parts that can be a serious hazard. Don't ever remove protective covers, and let your supervisor know if you encounter such a hazard.
- Vehicle traffic must be carefully controlled and you need to stay clear of earth moving equipment, or at least always be in plain sight of the operator.



OTHER HAZARDS YOU MAY FIND

In accordance with occupational safety and health regulations, hazards must be identified before starting a post-wildfire cleanup in a house or other area. Other possible threats to workers' health and safety include:

- Damaged electrical wires, burned wires or wires near water
- Closed or confined spaces
- Dust and noise from concrete or brick demolition
- Stored chemicals
- Work in the heat or cold
- Electric tools



For more information, visit:

<https://www.dir.ca.gov/dosh/wildfire/Worker-Health-and-Safety-During-Fire-Cleanup.html>

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