



Emergency Responders' Guide to Electric and Natural Gas Emergencies



We just want
you to be safe.

800-227-9187

Protecting Life and Property

Fire and police departments are often the first responders in public safety emergencies. In instances involving natural gas and electric, Avista's primary objective is to protect life first, then property.

This pamphlet includes information on both electric and natural gas safety. You also will find Avista's Emergency Operations Plan at our local offices.



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ELECTRICITY

Upon Arrival at the Scene

- Call Avista at 800-227-9187.
- Secure the scene.
- Keep the public clear.
- Assess the hazards.
- Never park under a power line or near electrical equipment.
- Report the location number found on the nearest unaffected electric pole or transformer.

Basic Principles of Electricity

- Current kills, not voltage. The current used by a 7.5 watt Christmas tree bulb can be fatal.
- Electricity always seeks the easiest path to ground. It can travel the speed of light and heat up to 35,000°F instantly.
- Your body is a perfect conductor, so avoid becoming a path to ground.

Unsafe Equipment

- NEVER attempt to move wires yourself. Only Avista has the proper equipment.
- Gloves, protective clothing and rubber boots will not eliminate your risk of electric shock.
- Also do not use equipment from your vehicle, such as pike poles, as these may conduct electricity because of dirt/carbon buildup.
- Never use metal tools, water, green wood or other conductors near energized equipment.

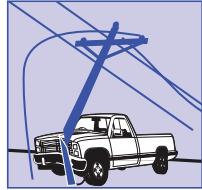
Downed Power Lines/Poles

- DO NOT TOUCH DOWNED WIRES AND KEEP OTHERS AWAY.
- Stay as far away as possible from a downed line and objects it contacts.
- Treat fallen wires and objects they touch as energized and potentially life threatening.
- Do not assume phone and cable lines are safe, as they may be in contact with an electric line elsewhere.

- Survey the area for other damage or wires that could cause problems and report to Avista.

Collisions with Poles/Padmounts and Step Potential

- **STAY CLEAR AND DO NOT TOUCH THE VEHICLE.** If a power line is touching a vehicle, consider the vehicle energized.
- Keep onlookers far back. Power lines can spring in any direction if released from the vehicle.
- Maintain distance and visually check for occupants. Keep any occupants calm and have them remain in the vehicle.
- Tell occupants to exit the vehicle **ONLY** in life-threatening situations such as fire or potential explosion.
- Instruct the endangered person to:
 - Open the door, but **DO NOT STEP OUT.** (Touching the ground and vehicle at the same time can cause electrocution.)
 - **JUMP** free of the vehicle and land with feet together.
 - **SHUFFLE** away from the vehicle keeping both feet together and on the ground at all times.
- Never touch someone inside, or jumping from, the vehicle.



Power Pole Fires

- A fire near the bottom of a power pole can be put out by water spray, dry chemicals or an approved non-conducting FOG spray.
- Fires at the top of poles should be allowed to burn until Avista can extinguish the fire or guide the fire department.
- **DO NOT** direct streams of water toward the top of a pole.
- **DO NOT** approach a pole using an elevating apparatus or other means.



- If oil leaks from a transformer, avoid contact and notify Avista for clean-up. Prevent oil from reaching storm drains/waterways.

Padmounts, Transformer Vaults and Manhole Fires

- Padmount transformers are ground-level metal boxes that protect underground electrical equipment where it surfaces above grade.
- If a padmount is hit by a car or otherwise damaged, treat it and objects it contacts (the car) as energized and potentially deadly.
- Clear the ENTIRE area, as the danger of an explosion exists.
- NEVER enter a transformer vault or manhole containing electrical circuits or equipment.
- Avista will let you know when the power has been shut off.

Structural Fires

- Shut off the power supply at the breaker panel or fuse box, if possible.
- NEVER pull the meter.
- If service wires need to be cut at the weatherhead, wait for Avista to do it. Under no circumstances should you attempt to cut these wires without proper training.

Electric Substation Fires

- Stay as far away as possible from the substation fence in case there is a ground fault.
- Wait for assistance from Avista.
- Keep the fire from spreading beyond the substation perimeter.
- NEVER spray water or FOG on metal-enclosed switchgear.
- Do not enter the area unless accompanied by Avista personnel, as there is danger of arcing, toxic smoke, oxygen deficiency and explosion.
- If oil leaks from a transformer, avoid contact and notify Avista for clean-up. Prevent oil from reaching storm drains/waterways.

NATURAL GAS

Upon Arrival at the Scene

- Call Avista at 800-227-9187.
- Park upwind and away from natural gas pipelines.
- Secure the scene. Keep the public clear.
- Assess the hazards.
- **STAY CLEAR OF DAMAGED GAS PIPELINES.**
- If necessary, turn the gas valve off at the meter or appliance. (See Meter Shut Off section.)
- Prohibit smoking, flares and the operation of electrical equipment in the immediate area.

Natural Gas Pipelines

Avista uses pipelines as a reliable means to deliver natural gas to over 329,000 customers. Natural gas pipelines are extensively regulated by federal and state codes, and Avista routinely monitors and maintains its pipeline facilities to assure safety.

Natural gas pipeline systems consist of transmission and distribution main lines, generally installed alongside streets and highways, and service lines that run from the distribution main lines into homes and businesses.



Avista's pipelines are indicated by the use of aboveground markers that display a 24-hour emergency response number. These markers are found along the general route of the pipeline. It is important for you to know these markers do not show the exact location of distribution pipelines.

Pipelines in Your Response Area

Your department can access pipeline maps by registering with the National Pipeline Mapping System (NPMS) at www.npms.phmsa.dot.gov. NPMS will provide a list of pipelines by county or zip code, including the contact information of pipeline operators.

Avista continually monitors the integrity of our facilities used to deliver gas to customers. For information on Avista's Integrity Management program, please call **800-227-9187** (may include High Consequence Areas or HCAs).

Properties/Flammability of Natural Gas

- Natural gas is colorless and odorless in its natural state. Avista adds mercaptan (smells like rotten eggs) to make it easily detectable.
- Natural gas is non-toxic and non-poisonous.
- Natural gas is comprised mostly of methane and is lighter than air. When natural gas escapes outside, it diffuses rapidly.
- Natural gas can be ignited when there is a 4% to 15% gas-to-air mixture.

Signs of a Natural Gas Leak

Smell

We add a sulfur-like rotten egg stench so you'll know right away if there's a problem.

Hear

Gas can hiss or even roar as it escapes from pipes.

See

Gas may make bubbles, blow dirt and kill plants when leaking from underground pipes.

Escaping Gas Indoors/Outdoors

- Do not flip electric switches and eliminate other possible gas ignition sources.
- Open windows and doors to ventilate the gas.
- Turn off heating and air conditioning systems that bring air into the building, if appropriate.
- Check for gas accumulating in nearby buildings, basements and sewers.
- Only use a combustible gas indicator to check for natural gas.
- If necessary, reroute or restrict traffic until the gas leak is under control. Do not use traffic flares which can ignite the gas.

Structural Fires Indoors/Outdoors

- Call Avista immediately if a burning structure has natural gas. Unseen pipeline/facilities damage can lead to gas migration in buildings, sewers and water lines.
- Never remove the gas meter, regulator or other facilities. Avista and state or federal regulatory agencies may need to test the operation of these facilities in their present configuration.
- Shut off the gas meter and tell Avista you did so. If a fire fueled by gas does not extinguish, the gas source may be coming from outside.
- When a natural gas fire occurs outdoors, make no attempt to extinguish it unless life is in jeopardy.
- Spray water on surrounding combustibles in danger of igniting.

Carbon Monoxide (CO)

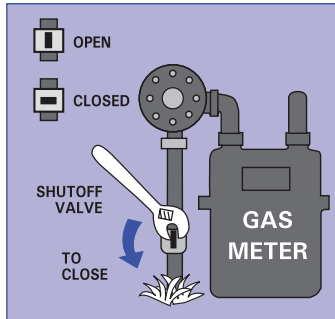
- CO is a colorless, odorless gas and is toxic to humans.
- CO can be produced if there is insufficient oxygen during the combustion of any carbon-based fuel—heating oil, gasoline, diesel fuel, propane, kerosene, natural gas, coal or wood.
- Malfunctioning appliances are often a cause of CO, as is the improper use of generators and barbecues indoors.
- Symptoms of CO poisoning may resemble the flu or include mental confusion, ringing in the ears or shortness of breath. Skin may turn pinkish and mucous membranes a cherry red.

Carbon Monoxide Detectors

- Avista will respond to calls concerning a CO detector that sets off an alarm if there is a natural gas appliance on the premises.
- Avista will test the area and attempt to discover the source of any carbon monoxide. Any malfunctioning appliances will be adjusted or turned off pending repairs.
- Avista should be notified immediately of any situation involving a natural gas appliance suspected of producing CO.

Gas Meter Shut-Off

- If necessary, you can shut off gas where it leads to an appliance or at the gas meter.
- To shut off the meter, locate the valve on the adjacent pipe and give it a quarter turn in either



- direction using a large wrench. When the valve is crossways to the pipe, the line is closed.
- If you shut off a gas valve, LEAVE IT OFF. Only trained personnel should turn it back on.
- NEVER SHUT OFF a valve at the MAIN or regulator station, even in emergencies. It may cause public safety concerns elsewhere.

Natural Disasters

In the event of an earthquake, firestorm, widespread flooding or other large disaster, immediately tell Avista the locations of any line breaks, gas odors, submerged facilities or damaged structures that may have natural gas service. Do not shut off natural gas service to homes or businesses unless there is extensive damage to structures involved or a gas odor is present. When it is necessary, turn off the gas at the meter and leave it off until Avista arrives to inspect and restore service. If you must turn off service, remind affected residents not to use a barbecue or generator indoors.



**Know what's below.
Call before you dig.**

Call before You Dig

It's the law to call 811 (or visit call811.com) two business days before digging to avoid damaging underground utilities. It is important for emergency

ELECTRIC

GAS-OIL

COMMUNICATION

WATER

SEWER

TEMPORARY SURVEY

IRRIGATION

PROPOSED EXCAVATION

responders to know about ground markings that indicate the locations of facilities below. The colors here show the types of buried utilities.

For instructional safety videos

myavista.com/er

For additional information

800-227-9187

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myavista.com

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