



Emergency Responders' Guide to Electric and Natural Gas Emergencies



**We just want
you to be safe.**

Dispatch: 800-372-1645

Avista Customer Service: 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 can learn more about Avista's Emergency Response Planning by contacting your local Avista office.

Upon Arrival at the Scene of an Electric or Natural Gas Emergency:

- **Contact Avista Dispatch at (800) 372-1645 (Call 911 in absence of a dispatch number)**
- **Secure the scene and keep the public clear.**
- **Assess the hazards.**

For Electricity:

- **Never park under a power line or near electrical equipment.**
- **Report the location number found on the nearest unaffected electric pole or transformer.**

For Natural Gas:

- **Park upwind and away from natural gas pipelines. Migrating natural gas smells like rotten eggs or sulfur.**
- **Secure the Scene. Keep the public clear, if possible at least 330 feet away, per DOT recommended guidelines.**
- **STAY CLEAR OF DAMAGED GAS PIPELINES.**
- **If necessary, turn the gas riser 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.**

Contents

Electricity

Upon Arrival at the Scene
Basic Principles of Electricity
Unsafe Equipment
Downed Power Lines/Poles
Collisions with Poles/Padmounts and Step Potential
Power Pole Fires
Padmounts/Transformer Vaults/Manhole Fires
Structural Fires
Electric Substation Fires

Natural Gas

Upon Arrival at the Scene
Natural Gas Pipelines
Pipelines in Your Response Area
Properties/Flammability of Natural Gas
Signs of a Natural Gas Leak
Escaping Gas Indoors/Outdoors
Structural Fires Indoors/Outdoors
Gas Meter Shut-Off
Natural Disasters
811 Ground Marking Colors
Carbon Monoxide
Carbon Monoxide Detectors

ELECTRICITY

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

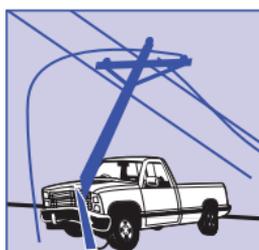
- NEVER attempt to move wires yourself. Only Avista has the proper equipment.
- Gloves, protective clothing and rubber boots will not eliminate your risk of electric shock.
- Also do not use equipment from your vehicle, such as pike poles, as these may conduct electricity because of dirt/carbon buildup.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

Wildland Fires

- Contact Avista or the appropriate utility company (call 911 or dispatch) for assistance with a spreading wildland fire and stay in communication.
- Emergency Responders can call 811 for an emergency wildfire locate.
- Avoid contact with all power lines and all other metal lines. Objects such as barbed wire fences may be electrified by a downed power line a long distance away.
- Do not use a solid water stream around power lines until you know for certain the line is not energized.
- Be careful near smoke as it can hide power lines and also be a possible conductor. (We ask loggers to never burn slash piles under power lines due to this danger.)
- Watch out for downed power lines, some of which may be obscured by vegetation. Turn-out gear and rubber boots will not protect you from an energized power line.
- Beware that underground natural gas lines may exist in a wildfire location and could rupture during a fire. (See additional pipeline precautions in the Natural Gas section under **Pipelines in Your Response 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 yellow markers that display a 24-hour emergency response number. These yellow markers are found along the general route of the pipeline. It is important for you to know these yellow markers do not show the exact location of distribution pipelines.

Avista's
uses yellow
markers to
indicate its
natural gas
pipelines are
nearby.



Pipelines in Your Response Area

Your department can access transmission 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. (Note the majority of Avista's natural gas pipelines are distribution.)

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).

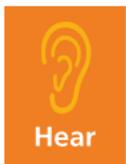
Properties/Flammability of Natural Gas

- Natural gas is comprised mostly of methane.
- Natural gas is colorless and usually odorless, but Avista adds a scent similar to rotten-eggs or sulfur for easy detection.
- Natural gas is non-toxic and non-poisonous but can cause asphyxiation or possibly explode when trapped in enclosed spaces.
- Natural gas it is lighter than air and diffuses rapidly outdoors.
- Natural gas in a 4% to 15% gas-to-air mixture is highly flammable and easily ignited by heat or sparks.

Signs of a Natural Gas Leak



We add the scent similar to rotten eggs or sulfur to our natural gas, so you'll know right away if there's a problem.



Gas can hiss, whistle or even roar as it escapes from pipelines.



Dirt blowing from a hole in the ground, an area of dead vegetation or bubbling in pooled water may indicate an underground gas leak. You may also see fire come up from or burn atop the ground.

Escaping Gas Indoors/Outdoors

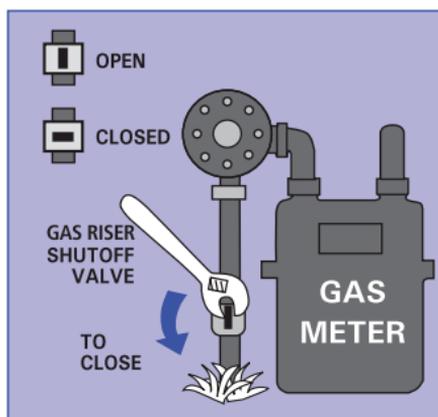
- Be cautious if you smell natural gas (smells like sulfur or rotten eggs)
- Do not flip switches or use cell phones and portable radios, which may cause a spark.
- Look for and eliminate all possible gas ignition sources.
- Open windows and doors to ventilate the gas.
- Turn off heating and air conditioning 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.
- Consult with Avista's first responders concerning how else to proceed safely.

Natural Gas Fires Indoors/Outdoors

- Call Avista immediately (via dispatch or 911) 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 another source or 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.
- Beware that underground natural gas lines may exist in a wildfire location and could rupture during a fire. (See additional wildfire precautions in the Electric section under Wildland Fires).

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 riser valve, LEAVE IT OFF. Only trained Avista personnel should turn it back on.
- NEVER SHUT OFF a valve that is buried or at a 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 never to use a barbecue or generator indoors.

Carbon Monoxide (CO)

- CO is a colorless, odorless gas and is toxic.
- 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. (Such as a BBQ or generator)
- 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 should be notified immediately of any situation involving a natural gas appliance suspected of producing CO.
- 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.

811 Ground Marking Colors

While emergency responders will not be digging, it may be helpful in certain situations to know that some ground markings can indicate the approximate locations of various underground facilities (such as a wildfire). The colors here show the types of buried utilities often marked by service crews of 811 Call Before You Dig. Remember there is a two foot tolerance zone around the markings.

ELECTRIC: RED

GAS-OIL: YELLOW

COMMUNICATION: ORANGE

WATER: BLUE

SEWER: GREEN

TEMPORARY SURVEY: PINK

RECLAIMED WATER/IRRIGATION: PURPLE

PROPOSED EXCAVATION: WHITE



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

For instructional safety videos

myavista.com/er

For additional information

(800) 227-9187

publicsafety@avistacorp.com

myavista.com

Avista
1411 East Mission MSC 20
P.O. Box 3727
Spokane, WA 99220-3727

The Avista logo, which consists of a stylized 'A' made of horizontal lines followed by the word 'VISTA' in a bold, sans-serif font. The logo is white and set against a dark blue background.