Safety Tips Gas Appliances and Flooding

With snow melt run-off or with heavy rainfall in the spring, creeks and rivers in Alberta can overflow their banks and flood surrounding communities. These safety tips can help to protect natural gas and propane appliances and to reactivate appliances that have been exposed to a flood.

What to do with Gas Appliances when a Flood is Imminent

When there is sufficient time to take action:

- Shut off the gas and power supply to gas appliances. Have a qualified person remove water heaters, clothes dryers and ranges.
- Plug or cap the gas piping to all appliances that were removed.
- Remove the electric motor, burner and control from furnaces.
- Where a propane tank is present, disconnect the service line, then cap or plug both the service line to the building and the supply outlet on the propane tank.
- Secure the propane tank with a cable or chain to prevent it from floating away.

If there is no advanced warning of flooding or a qualified person is not available:

- Turn off the natural gas on the riser to the gas meter or propane tank. Shut off valves to all gas appliances.
- Turn off the power to gas appliances.
- Shut off the water supply, but do not drain the hot water heater.
- When applicable, secure the propane tank or containers.

What to do with Gas Appliances After a Flood

Gas appliances that have been subject to flooding or other damage must not be reactivated or reconnected to the natural gas or propane supply until a person acceptable to the authority having jurisdiction, such as a gasfitter, has inspected the appliances. Floodwater can cause structural damage to the building. Therefore, all gas piping must be checked and pressure tested to ensure the system is gas-tight.

When reactivating appliances, a qualified person must follow these safety tips to ensure appliances are safe for continued use:

- Carefully inspect all appliances and components that were submerged or water damaged. Selected parts (i.e. safety valves & controls) must be replaced in accordance with manufacturers' instructions.
- Remove all burners and clean as required.
- Examine burner manifold and orifices to ensure they are clean and free of water, dirt and debris.
- With burners removed, check burner compartments and heat exchangers.
- Inspect all electrical components to ensure that they are clean and dry.
- Visually inspect appliance vent system, check vent connectors and the vent or chimney.
- Check all dirt pockets in the gas piping system for water and debris.
- After replacing burners, start the appliance to check safety controls, such as gas valves, operators and high limits for proper operation.
- Conduct a turn-down test to ensure safe operation.

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