

APPENDIX L
Emergency Response Contingency Plans

CONTINGENCY PLAN BOMB THREAT/SABOTAGE

SCENARIO

The Town receives a call or letter containing a threat of sabotage/bomb or injection of toxic materials into water well. Location of any devices is unknown.

- Wells/Pumping Facilities – Possible target due to relative ease of access and isolated location.
 - Make provisions to take target source off line by closing isolation valves, etc.
 - Power down well (by bomb squad).
 - Open interties, if available.
 - Contamination: Restrict use of water, drain the system, and pump well to waste. Flush system from other sources.
- Storage Tanks – Likely target due to size and effect.
 - Make provisions to turn off valves to isolate tanks from system.
 - Contamination: Drain system and flush.
- Water Transmission Mains – Not likely target.
- Power Supply – Likely to be affected only as secondary target to other facilities.
 - Notify power company.
- General Response Actions – Office will take call; Police and Fire Department will respond.
 - Attempt to get caller to reveal location of bomb or method of sabotage.
 - Immediately notify Police and Fire Departments of location of bomb/sabotage or, if unknown, likely targets.
 - Train all personnel how to handle a caller making a bomb threat.
 - Keep a copy of the following checklist near the switchboards at the Town Hall, Fire, and Police Departments.

Reporting Bomb Threats

Person Receiving Call

- Attempt to retain the caller long enough to obtain all pertinent information, such as where the bomb/sabotage is located, type of bomb/sabotage, and when it is set to go off.
- Listen carefully to the exact words of the message so that you can repeat the information clearly and accurately.
- Listen for background noises, voice accent, word pronunciation, voice pitch (high or low), male or female voice, child, or adult.
- Try to signal another person near you to pick up the same telephone line and listen in.

- Prepare a list of the following information:
 - Date and time of call.
 - Type of bomb/sabotage.
 - Location of bomb/sabotage.
 - Description of bomb/sabotage.
 - What caller actually said.
 - Sex of caller.
 - Estimated age of caller.
 - Type of voice (soft, loud, whisper, normal, drunk).
 - Background noises heard, if any.
 - Your name and location.
- Report the threat to the Police Department and the Fire Department.

Town Clerk or Utilities Manager

- Notify employees to search their areas.
- Notify local law enforcement agency having jurisdiction.
- If a suspicious object or package is discovered at any time, whether or not a bomb threat call has been received, proceed as follows:
 - Do not move, touch, or disturb the object or package in any way.
 - Immediately notify the Police and Fire Departments.
- Clear all persons from the immediate area and notify the Fire Department of location and description of the suspicious object or package.
- Evaluate available information and make a decision on evacuation.
- Notify employees of evacuation decision or all-clear decision.
- When directed to evacuate, leave building.
- Take coats, jackets, purses, and briefcases when leaving the work area.
- Lock cash drawers and other valuable items.

Employees

- Search own work areas for suspicious objects or packages as follows:
 - Desks
 - Wastebaskets
 - File Cabinets
 - Supply Room
 - Closets
 - Ashtray Receptacles
 - Locked Doors
 - Underside of Horizontal Surfaces

- Turn off electrical machines or other noisemaking equipment.
- Search nonwork areas in assigned area including:
 - > Restrooms
 - > Conference Rooms
 - > Coffee Shops
 - > Store Rooms
 - > Hallways, Stairways, and Lobbies
- Notify immediate supervisor of the results of the search.

CONTINGENCY PLAN REGIONAL EARTHQUAKE

SCENARIO

7.5 Richter magnitude. Considerable damage to brick buildings. Foundations displaced. Ground cracks. Pipes broken.

- Wells/Pumping Facilities – Potential for damaged casing, shifted base, damage to chlorinators, and loss of power. Possible reduced yield.
 - Inspect well base.
 - If no power is available, call power company (see **Major Power Outage**).
 - Turn on pump to aid in fire fighting if damage is not severe. Pump to waste if water is turbid.
 - If pump or feeder pipes are damaged, isolate from system and commence temporary repairs.
- Treatment Facilities/Equipment – Potential for damage to buildings, metering control, injector pumps, power failure.
 - Check for spillage of sodium hypochlorite tanks.
 - If no power is available, call power company (see **Major Power Outage**).
 - Check for damage to chlorinators, injectors, analyzers, and metering control. If all is okay and there are breaks in mains and widespread fires in the transmission system, increase chlorine residual to 3.0 mg/L.
 - Maintain supply and manual metering pumps to feed sodium hypochlorite in case chlorinators are damaged.
- Storage Tanks – High potential for structural damage.
 - Close tank isolation valves.
 - Inspect tanks for structural damage. If imminent failure is suspected, drain tank; otherwise, open valves.
 - Monitor tank levels throughout emergency.
 - Implement **Water Shortage Response Plan** at level appropriate to handle emergency. Keep Fire Department informed of available water so fire-fighting efforts may be prioritized.
- Water Transmission Mains – Potential for broken pipes. Fire fighting demands may be high.
 - Stockpile repair fittings at key locations. Know location of suppliers.
 - Keep detailed system maps of isolation valves and water mains with all personnel so crews can locate valves and isolate broken pipes. Have valve wrench in each vehicle.
 - Open available interties if water is needed for fighting fires. Call adjacent water utility first to ensure water is available.

- Provide an emergency source of water at a central location for those users who are without service.
- Provide surface hose connection to connect town grid to tank complex if major leaks develop in the existing AC transmission pipe.
- Power Supply – Potential for wide-scale power outages.
 - Respond as for **Major Power Outage**.
- General Response Actions – Most taxing disaster on water system staff. Some may be injured in earthquake. Transportation impaired. Communications are down.
 - Train all personnel for earthquake response.
 - Keep Emergency Call-Up List that includes regular and a reserve force of emergency water system staff.
 - Call Department of Health for instruction.
 - Do not keep vehicles in damage prone locations.
 - Use radios or cell phones to coordinate activities.
 - Coordinate with Pierce County Emergency Response Agencies (see **Emergency Call-Up List**).
 - Inform local radio and television stations of nature and extent of water system damage.

CONTINGENCY PLAN MAJOR POWER OUTAGE

SCENARIO

Major regional power outage occurs due to earthquake, windstorm, or other disaster with loss of power to all water production facilities for more than 12 hours.

- Wells – Tubbs Road or School Yard Well out of service.
 - Call power company and alert them of emergency nature of the situation.
- Treatment Facilities/Equipment – Hypochlorite injector pumps and/or Fe/Mn filters cease to operate.
 - Monitor chlorine residual in storage tanks.
 - All facilities should be checked after power is restored to ensure return to normal operations.
- Storage Tanks – Water levels may drop if wells are down for extended period.
 - Monitor storage tank levels.
 - Adhere to **Water Shortage Response Plan**.
- Water Transmission Mains – No effect.
- Power Supply – Interruption in power may create the need to recalibrate telemetry equipment.
- General Response Actions
 - All personnel should obtain portable lights.
 - Check all facilities after power restoration to ensure telemetry and metering controls are in operation.

CONTINGENCY PLAN FLOODING/WASHOUTS

SCENARIO

100-year flood in the South Prairie River. Heavy rains cause washouts of roads and embankments.

- Wells – Tubbs Road Well is above 100-year flood plains. School Yard Well is within the flood plain.
 - If pump buildings become filled with water, provide protective diking around the pump house.
- Treatment Facilities/Equipment – Tubbs Road Well is above 100-year flood plains. School Yard Well is flooded.
 - See “Wells” above.
- Storage Tanks – Above flood plains, no effect.
- Water Transmission Mains – May break due to road washouts. Some sections of the system may become contaminated.
 - Isolate breaks.
 - Eliminate cross connections by keeping buildings from flooding.
 - Sterilize all lines that are affected.
 - Provide a source of emergency water at a central point for all who are affected by the loss of service.
- Power Supply – Some localized outages could occur. See **Major Power Outage** if system is affected.
 - Keep all electrical equipment dry.
- General Response Actions
 - Use alternate routes in event of road washouts.
 - Keep Emergency Call-Up List that includes regular and a reserve force of emergency water system staff.

CONTINGENCY PLAN HAZARDOUS SPILL

SCENARIO

A hazardous chemical spill occurs in the watershed, and one or both well sources become contaminated.

- Wells – Source of supply is contaminated.
 - Immediately isolate source from the system.
 - Call Department of Health emergency spill response number.
 - Increase chlorine residual in affected tank to 3.0 mg/L or greater to oxidize or disinfect the contaminants.
 - If health threat is immediate, notify users to stop using water.
 - Attempt to determine contaminating substance. Call professional services as required.
 - Coordinate with professionals to treat water to highest safe, feasible extent.
- Treatment Facilities/Equipment – No effect.
- Storage Tanks – No effect.
 - Initiate **Water Shortage Response Plan** if necessary.
- Water Transmission Mains – No effect.
 - Initiate **Water Shortage Response Plan** if necessary.
- Power Supply – No effect.
- General Response Actions – Some may be sick from ingesting tainted water.
 - Train personnel in hazardous waste cleanup, emergency water treatment, and use of protective equipment.
 - Inform public of possible health effects of contaminant (see **Public Notification**).

CONTINGENCY PLAN EXTENDED DROUGHT

SCENARIO

Extended drought conditions severely tax available water supply: Demand increases.

- Wells – Well drawdown may increase with less recharge, though this effect will be long term and seasonal.
 - Monitor static and dynamic water levels in wells. Make records of any changes.
- Treatment Facilities/Equipment – No effect.
- Storage Tanks – No effects.
- Water Transmission Mains – No effects.
 - Open interties with utilities (if available).
- Power Supply – No effect.
- General Response Actions
 - Familiarize personnel with **Water Shortage Response Plan**.
 - Initiate **Water Shortage Response Plan**.

CONTINGENCY PLAN

WATER SYSTEM PERSONNEL INJURY

SCENARIO

Due to injury or sickness, the water system staff is unable to work.

- Wells – No effect.
 - Ensure telemetry is functioning between wells.
- Treatment Facilities/Equipment – Requires monitoring of hypochlorite solution and adjusting chlorine dose. Routine maintenance may be delayed.
 - Adjust chlorine injection to maintain desired residual. See Routine Operations in Section 7.3.2 for mixing of hypochlorite solution.
- Storage Tanks – Not vulnerable to short-term work stoppages.
 - Check tank water levels during periods of high demand.
- Water Transmission Mains – Not vulnerable to short-term work stoppages.
- Power Supply – No effect.
- General Response Actions
 - Familiarize more than one operator with each part of the system.
 - In the event of serious accident, call an ambulance.
 - For accidents resulting from fire, gas, explosion, etc., call the Fire Department.
 - Never move a seriously injured person unless necessary to prevent further injury.
 - Train all personnel in first aid and CPR.
 - Maintain medical histories and information cards on all employees. Use this card when accidents, illness, or injuries occur.
 - All injuries, no matter how minor, should be reported immediately to the Town Clerk or the Mayor.
 - Once proper medical treatment is received, complete an accident report form and submit it to the Mayor's office.
 - If work stoppage persists, consider obtaining help from local water district operators on a part-time basis.

CONTINGENCY PLAN MECHANICAL FAILURE

SCENARIO

A major source is incapacitated by large mechanical failure. To fix equipment, manufacturer's technicians are needed.

- Wells – Pump out of service.
 - Prepare a list showing pump manufacturer's local supplier and service representatives.
 - If pump fails during peak demand period, implement **Water Shortage Response Plan**.
 - Call manufacturer or service representative if problem cannot be repaired in-house.
- Treatment Facilities/Equipment – Injector pumps and regulators subject to failure.
 - Switch to backup injector, etc.
 - If both injectors are damaged, manually inject chlorine (sodium hypochlorite) until repaired.
 - Call manufacturer or service representative if problem cannot be repaired in-house.
- Storage Tanks – No mechanical parts.
 - Monitor tank levels.
- Water Transmission Mains – No mechanical parts.
- Power Supply – No effect.
- General Response Actions
 - During repairs, some personnel may neglect routine duties.
 - Keep backup stocks of repair parts.

CONTINGENCY PLAN SUB-ZERO WEATHER

SCENARIO

Extended freezing weather has promoted deep frost penetration in the soil. Local service connection lines are freezing. Conditions are similar throughout the county.

- Wells – Minor parts not well oiled are subject to freezing shut.
 - Exercise pumps daily.
 - Keep moving parts oiled and moisture free.
 - Keep buildings warm with space heaters.
 - Keep space heaters in storage at Public Works building and in chlorination buildings. Rentals cannot be relied upon due to heavy demand in the region causing shortages.
- Treatment Facilities/Equipment
 - Keep buildings warm with space heaters.
- Storage Tanks – Broken lines and open faucets may result in increased water demand.
 - Monitor tank levels.
 - Implement **Water Shortage Response Plan** if required.
- Water Transmission Mains – Effects are unlikely. Routine maintenance will be disrupted.
 - Fill meter boxes with insulating material to resist pipe freezing.
 - Areas of widespread problems should be documented and examined for preventive measures, such as deeper mains, insulated meter boxes, special customer notification, etc.
- Power Supply – Outage possible due to snow-weighted falling trees.
 - Inform power company of problem priority.
 - Check all electrical equipment throughout freezing weather to ensure continued function.
 - **See Major Power Outage.**
- General Response Actions
 - Ensure staff is wearing proper cold weather clothing to prevent hypothermia and frostbite.
 - Noncritical routine maintenance can be temporarily halted.
 - Prior to cold weather season, stock items for frozen line repair, fuels, and equipment for emergency power. Suppliers will most likely be out of stock during cold weather.

CONTINGENCY PLAN WATERSHED FIRE

SCENARIO

A massive watershed fire threatens wells, treatment facilities, and storage tanks. Local efforts cannot stop blaze.

- Wells – Wood structures/building elements may burn.
 - Turn off supply that is immediately threatened.
 - Implement **Water Shortage Response Plan** if required.
 - Turn on other well to aid in fire fighting.
 - Hose down building and surrounding area.
 - Create firebreaks around building.
- Treatment Facilities/Equipment – Metal buildings subject to intense heat.
 - Create firebreaks around building.
 - Hose down facilities.
 - Avoid spraying hazardous fire retardants in the watershed.
- Storage Tanks – Threatened by high heat. Heavy demand will cause levels to drop.
 - Create firebreaks around tanks.
 - Keep tanks as full as possible to provide insulating capacity.
 - Monitor tank levels.
- Water Transmission Mains – No effect expected.
- Power Supply
 - Monitor power to chlorination facilities.
- General Response Actions
 - Keep line of communication open with Fire Department.
 - Inform emergency response personnel that the area is a watershed and fire retardants that are toxic cannot be used.

CONTINGENCY PLAN WINDSTORM

SCENARIO

High winds knock down trees and block access roads.

- Wells – Buildings subject to damage by falling trees.
 - Top large trees annually that have a potential to fall on facilities.
- Treatment Facilities/Equipment – Buildings subject to damage by falling trees.
 - Top large trees that have a potential to fall on facilities.
- Storage Tanks – No severe damage expected.
 - Check roofs to ensure they are securely fastened.
- Water Transmission Mains – No damage expected.
- Power Supply – Power outages may occur.
 - **See Major Power Outage.**
- General Response Actions
 - Equip personnel with chainsaws to check watershed after storm.
 - Keep flashlights, chainsaws, crowbars, leather gloves, etc., in stock at a location not prone to damage.

CONTINGENCY PLAN

VANDALISM

SCENARIO

Vandalism causes damage to the water system.

- Wells – Unlikely target of vandalism. Fencing of well areas restricts entry.
 - Maintain active presence at Tubbs Road Well to check for signs of human passage.
 - Keep all tap box lids locked and secured.
 - Post signs near spring taps with the following description:
 - Town of South Prairie Water Supply**
 - Do Not Disturb**
 - (Ordinance Number if Available)**
 - Keep pump building door and gates locked at all times.
- Treatment Facilities/Equipment – Unlikely target of vandalism. Fencing of well areas restricts entry.
 - See “Wells” above.
- Storage Tanks – Target of graffiti.
 - If graffiti is observed, paint or clean immediately to discourage its spread.
 - Keep gates and fences around tanks locked at all times.
- Water Transmission Mains – No effects expected.
 - Fire hydrants may be subject to vandalism. Inspect all hydrants regularly according to a rotating schedule.
- Power Supply – Not likely target.
- General Response Actions
 - Visit all facilities regularly and inspect for signs of vandalism.
 - Alert Police of all vandalism.
 - Look for patterns, such as times, days of the week, and seasons when vandalism is likely to occur.
 - If problems persist, consider staking out a high-risk facility to catch perpetrators.
 - Design underground facilities in preference to aboveground facilities.
 - Keep stockpiled materials out of sight.