



Water Treatment Plant Emergency Response Plan

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Approved by: Wes Hicks, Director of Public Works

Signature: *Wes Hicks* **Practice No:** 3.1.16

Effective: September 27, 2018 **Replaces:** July 13, 2016

Purpose:

To ensure the orderly evacuation of the facilities in response to potential Emergencies.

Scope:

This Safe work Practice applies to all employees, contractors or visitors at the Water Treatment Plant.

Definitions:

Warden: The Water Treatment Plant manager or their designate

Marshall: The most senior Water Treatment Plant operator on duty

General Procedures:

1. This Emergency Plan will be tested at least once annually with the assistance of the Coordinator Health Safety and Environment and/or Fire services personnel.
2. After each drill or actual event any issues with the orderly evacuation will be discussed at each work unit's next Tool Box talk. Any actual events will be documented on the City of PA Investigation Report form.
3. The WTP Manager will be responsible for collecting and updating this plan as required.
4. The Warden is responsible to ensure that staff has received training on this plan and that the training is documented on a tool box talk form. Staff members are to assist visitors during any emergency situation.

Emergency Procedures:

Fire:

DANGER: Fire can spread quickly and unpredictably and fill an area with poisonous gasses. First priority is the workers safety! Do not attempt to extinguish a fire if your safety is in jeopardy.

This practice applies to all instances of smoke, fire or the smell of something burning:

1. First determine the threat to your personal safety.
2. If the fire is small and the worker is trained in fire extinguisher use and the fire is burning a nonhazardous substance an attempt can be made to control the fire using up to one fire extinguisher. No staff is permitted to attempt to extinguish fires burning hazardous or unknown materials that may give off toxic fumes/smoke.
3. If a situation is deemed unsafe for any reason pull the nearest fire alarm (located at each exit door) and notify the WTP Operators of the location of the fire emergency before evacuating.
4. The fire alarm sound is accompanied with flashing white strobe type lights on each alarm device.
5. Once the alarm sounds, **EVERYONE MUST EVACUATE** the facilities through the nearest exit and meet at the Muster Point (Genset fence in front of the WTP building). With the exception of the WTP operators and Manager who will evacuate when deemed necessary.
 - a. Operators and management will attempt to identify or isolate when safely reasonable and notify Fire Services by phoning 9 - 911.
 - b. Operators will enact emergency operation procedures when appropriate for the situation at hand. Including shutdown or switching to diesel to prepare for possible evacuation.
 - c. Operators will evacuate when their safety is jeopardized or when directed by fire services.
6. When possible Operators will verify all fire doors are closed.
7. Exit the building using the closest exit and if it is blocked with smoke, use an alternate exit.

8. Once outside, all employees and visitors are to assemble at the muster point located by the Genset fence in front of the WTP building. This will assist each Warden in performing a 'head count' to ensure that all their staff is properly accounted for. Do not leave or go to your vehicle until all staff is accounted for. Any staff with information on the specifics of the fire is to provide that information to their Warden who will in turn advise the Marshall.
9. Once a head count is complete and staff is properly accounted for, the Warden is to direct the evacuees whether or not it is safe to go to their vehicles and/or proceed to another worksite.
10. No one is to re-enter the buildings until instructed to do so by Fire Services, the Marshall or other authorized personnel even if the alarms are no longer ringing.
11. Fire services will determine when reentry is safe. Complete an incident report for all instances of fire emergency.

Explosive Gas Leaks:

Danger: Explosive gases might not have uniform concentrations in a given space. Treat all instances as an explosive mixture until determined otherwise.

1. If you detect a Natural Gas or other explosive chemical leak inside the building, leave the area immediately. WARNING: do not activate or turn off any electrical or electronic equipment including fire alarms, cell phones, radios, lights or automatic door openers. , Open all exterior doors mechanically in an attempt to ventilate the area and lower the concentration levels.
2. Notify the Operators and management where the explosive gas was detected and stay in a safe area until a gas test can be conducted.
3. If the natural gas or explosive chemical leak is exterior to the building an attempt can be made to ensure all exterior doors are kept closed. If the leak is directly upwind of air intakes the ventilation systems must be turned off.
4. Contact the fire department from a clean air area by calling 9-911. These individuals can determine if the concentration levels are within explosive limits and provide advice on further steps to be taken.
5. Contact Sask. Energy for all Natural Gas leaks and request immediate dispatch of their trained personnel by calling 1-888-700-0427. This must also be done from a clean air area.
6. Initiate an evacuation by advising the warden. The evacuation must proceed in a direction upwind of any external leak. Windsock by the scrubber will provide information on wind direction.

7. Operators will evacuate when deemed appropriate and will not remotely start or stop equipment in the area until advised by emergency personnel.
8. Emergency personnel will determine when it is safe to return.
9. In situations where an LEL is detected but not sufficient to alarm, an attempt to identify the source and isolate it can be made.
10. A City of Prince Albert Investigation report is to be completed

Hazardous Product Leaks/Spills:

Warning: Know the hazards of the hazardous material before attempting any remediation. If at any time the spilled substance entered or may have entered the water treatment process, the plant operator and management shall be immediately notified,

IF ANY SPILL PRESENTS A DANGER TO THE PUBLIC PHONE 9-911 IMMEDIATELY!

- Any person locating a hazardous product spill/leak will attempt to minimize the spread or the product and identify the product name.
- If you are unaware of the substance spilled contact the plant operator for assistance.
- The individual will then consult the Safety Data Sheet (SDS or MSDS) and follow directions provided in that document.
- The individual will consult the Standard Operating Procedures manual to see if the product spilled has a pre developed handling procedure and if so follow the directions provided in the SOP in conjunction with this Emergency procedure.
- If the product is hazardous all staff in that area must be fitted with PPE as required on the safety data sheet or evacuate/isolate those areas until cleanup is completed.
- Attempts should be made to isolate any hazardous fumes to that area of the facility and ventilate them directly outside.
- If the facility needs to be evacuated the same process as outlined for a fire evacuation is to be followed including calling 9-911.
- Management shall be contacted and informed of the situation.
- A City of Prince Albert Investigation report is to be completed.

Bomb Threat:

- When a bomb threat is received the violence policy contains the guiding principles that must be followed and the report form that must be completed. This practice is to ensure the orderly evacuation of the facility in the event of a threat of this nature.
- Immediately upon receiving a bomb threat the individual will notify their manager and the Operator in person or by landline. The manager will notify police and the Operator will page all personnel to the operations console. At no point is the fire alarm to be activated, cell phones or radios to be used.
- All staff after being notified is to watch for any packages that appear out of place and if any are noted advise the Operators. Staff is encouraged to take with them any personal belongings like bags, jackets or purses and calmly proceed to the interior meeting location.
- Once all staff has been accounted for at the operations console, they will exit the building, by a rear exit point, and proceed to the normal muster location and await further direction from police services. If there is inclement weather the evacuees can proceed to their vehicles.
- Do not re-enter the building unless instructed to do so by the Police.

Medical Emergency:

Warning: Do not place yourself in harm's way. Identify hazards (survey the scene) before attempting to give aid.

- All employees should know location of the nearest first aid kit and AED locations if available.
- List of employees trained in First Aid & CPR should be posted on each area's OH&S bulletin board
- Do not panic; remain calm
- If no environmental danger is present, provide first aid (if trained to do so) if not trained - contact a trained first aider or call 9 911
- Keep calm & speak clearly
- Identify type of Emergency
- Identify Location: WTP 655 River Street West and/or Low lift building, 2nd Ave Reservoir #150 23rd Street West, Marquis Rd Reservoir #3917 Central Avenue.
- Have someone meet emergency responders at access door and escort to exact location when possible.
- Report situation to your manager as soon as reasonably possible.
- **Emergencies include:** shortness of breath, chest pains, loss of consciousness, seizures, head or eye injuries, broken bones, severe cuts & burns, amputations and signs & symptoms of shock
- If in doubtcall 9 911

Severe Weather:

Definitions:

Weather Watch:

When conditions are favorable for the development of weather or an environmental hazard that poses a significant threat to public safety and property, but the occurrence, location, and/or timing of the expected hazardous condition(s) is still too uncertain to issue a warning. It is intended to heighten public awareness of the potential impact of the event, and serves as a lead-up to a warning

Weather Warnings:

Are issued when severe weather is happening or hazardous weather is certain or imminent. For example, if a weather warning is issued for a tornado, it means that one or more tornadoes have been observed or are forecast for the specified area. Other weather warnings include those for a severe thunderstorms, blizzards, high winds, heavy snow, snow squalls, heavy rain and significant freezing rain.

1. Tornadoes or other event that could cause a partial or total collapse of the WTP with little notice.
 - a. The operators will page all personnel to the operating console.
 - b. After taking special operational preparations all personnel will proceed to the old Potassium room (second Level) and close the doors.
 - c. Wait until the event passes then determine the safest way to exit the building.
 - d. All reasonable efforts to maintain City of Prince Albert water quality and pressure should be taken.

2. Winter storms can range from a moderate snow over a few hours to a blizzard with blinding, wind driven snow that lasts for several days. Some winter storms are large enough to affect several provinces, while others affect only a single community. Many winter storms are accompanied by dangerously low temperatures and sometimes by strong winds, icing, sleet and freezing rain.
 - a. Allow for longer commuting time.
 - b. Limit outside work to snow clearing and emergency remediation.

3. A heat wave is a prolonged period of excessive heat, often combined with excessive humidity. Generally temperatures are 10 degrees or more above the average high temperature for the region during summer months, last for a long period of time and occur with high humidity as well.
 - a. Attempt to minimize work in direct sunlight.
 - b. Stay hydrated and take breaks in the shade.
 - c. Stay alert for signs of heat stroke.

4. Indoor Lightning Safety Tips, stay off corded phones, computers, and other electrical equipment that put you in direct contact with electricity, avoid plumbing, including sinks, baths, and faucets, stay away from windows and doors, and stay off porches and do not lie on concrete floors, and do not lean against concrete walls.
5. Outside Safety Tips, NO PLACE outside is safe when thunderstorms are in the area, If you hear thunder, lightning is close enough to strike you, when you hear thunder, immediately move to safe shelter, safe shelter is a substantial building or inside an enclosed, metal-topped vehicle and stay in safe shelter at least 30 minutes after you hear the last clap of thunder.
6. Last Resort Outdoor Risk Reduction Tips, NO PLACE outside is safe when lightning is in the area, but if you are caught outside with no safe shelter anywhere nearby the following actions may reduce your risk, immediately get off elevated areas such as hills, ridges, or peaks, NEVER lie flat on the ground, NEVER use a tree for shelter, NEVER use a cliff or rocky overhang for shelter, immediately get out and away from ponds, lakes, and other bodies of water and stay away from objects that conduct electricity (barbed wire fences, power lines, windmills, etc.)
7. If Someone Is Struck By Lightning, victims do not carry an electrical charge and may need immediate medical attention, monitor the victim and begin CPR or AED, if necessary/available and Call 9- 911 for help