Emergency Preparedness Plan Instructions for Form TCEQ-20536b

Contents

General Information

Water System Name: Enter the name of your public water system (PWS) as listed in Texas Drinking Water Watch[1] (DWW).

PWS ID: Enter the PWS ID Number of your water system. Find your unique seven-digit number in Texas DWW. If you are a new system, leave this blank and TCEQ will assign an ID.

District No.: Enter your district's unique number as listed in TCEQ's Water District Database (WDD)[2]. Water districts include:

- municipal utility districts (MUDs)
- public utility districts (PUDs)
- special utility districts (SUD)
- water control and improvement districts

CCN No.: Certain utilities have a Certificate of Convenience and Necessity (CCN). If you do not know your CCN number, search the Public Utility Commission's (PUC) Water Utility Database[3] by your utility's name. This name might differ from the PWS name on file with TCEQ.

1. www.tceq.texas.gov/goto/dww-inst
2. www.tceq.texas.gov/goto/wdd
3. puc.texas.gov/watersearch

Expected Completion Date for EPP Implementation: Enter the date you expect to implement your EPP.

Option(s) Chosen:

1. Refer to Section III - Alternate Power Options Overview.

Select one or more options from Section III - Alternate Power Options Overview that will provide energy during extended power outages for your utility. Options 1 through 6 may be used on their own. Options 7 through 13 may require you to choose one or more additional options, unless otherwise approved by TCEQ.

2. Short Explanation of Proposed Emergency Preparedness Plan (i.e., Using portable generator to power 2 out of 3 wells):

Briefly describe all option(s) you chose to maintain 20 psi in the distribution system during an emergency.

3. Will this plan provide for 20 pounds per square inch (psi) of pressure to all your direct customers during a power outage lasting more than 24 hours caused by a natural disaster?

The answer to this question should be yes. If not, reevaluate your selected options.

4. Is a timeline to implement the plan (TWC 13.1394(b)(2)(B)) provided as an attachment?

Attach a timeline with your EPP if you need to explain or do not know your expected completion date. Include dates you ordered equipment, estimated delivery date(s), etc.

Updates to Emergency Preparedness Plan (EPP)

Leave this table blank for your initial submission to TCEQ for review and approval. Complete the next row when you update your EPP after TCEQ's first approval.

Section 1 – Introduction

1. Applicability

A. Describe Your Water System. Check all that apply.

- **Residential** – Household connections such as a home(s) or apartment complex.
- **Commercial** – Businesses connections such as Walmart.
- **Industrial** – Connections that manufacture products such as an oil refinery
- **Institution** – Connections such as a prison complexes, hospitals, or schools.

B. Is This EPP For An Existing or Proposed Water System?

Answer "Yes" or "No."

2. Contact Information

List the water system officials TCEQ can contact during or after an emergency in the order they prefer to be contacted. Include phone numbers that are active outside of business hours.

3. Location of Maps

Clearly describe the physical location of your distribution maps so system personnel can find them during an emergency.

4. Diagram of Water System

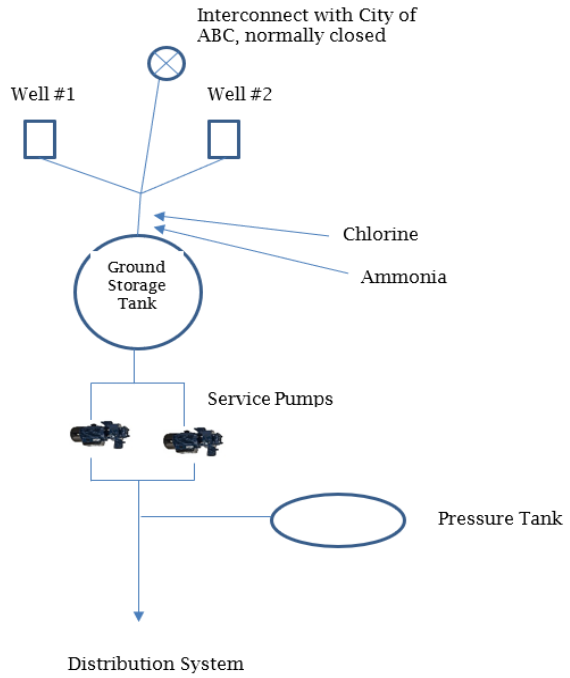
Create a basic diagram or sketch of your water system. Include the following information:

- Source(s): surface water, groundwater wells, or purchased treated water.
- Tank(s): ground storage and elevated tank(s), standpipes, clearwells, and pressure tanks.
- Pump(s): service pumps (booster pumps) and any transfer pumps (transfer water from one point in the treatment process to another).
- Treatment chemical(s): chlorine, ammonia, chlorine dioxide, ozone, etc.
- Interconnection(s): open or closed, including emergency connections.

You may combine the water system diagram with the electrical schematic requested in Section II - 8. The combined diagram must contain everything requested for each, but does not need to be an engineering drawing. See Figure 1 below for a basic example of a small groundwater system with one plant.

Include any pressure planes and the number of connections served in each pressure plane.

Figure 1. Small Water System with One Plant



Section 2 – Description of the Water System

1. Source Information

Complete all questions and tables based on your system source type.

- **Groundwater (G)**, complete A.
- **Surface water (S)**, complete B.
- **Purchased treated water (P)**, complete C.

Find your TCEQ source ID, owner's designation, and intake location using the following instructions:

1. Search Texas DWW[4] by your water system's number or name.
2. Select your hyperlinked water system number.
3. Select water system facilities at the top left.

Source IDs start with G, S, or P followed by the seven-digit PWS ID number. It ends with another letter: A for the first source, B for the second, and onwards.

4. www.tceq.texas.gov/goto/dww-inst

A. Groundwater Systems - Does Your Water System Have a Ground Water Well(s)?

If you have groundwater source, complete the corresponding table. Indicate whether you intend to use this source during an emergency.

B. Surface Water/GUI Systems: Does Your Water System Treat Surface Water or Ground Water Under the Influence of Surface Water Sources(s) (raw water intake pump information)?

If you have surface water sources, complete the corresponding table and indicate whether you will use the source during an emergency.

C. Does Your Water System Purchase (or Receive) Water?

There are two main types of purchased water systems: direct pressure or re-pressurization. Purchase systems often have facilities to re-pressurize the water such as ground storage tanks, service pumps, and pressure tanks.

If you are a direct-pressure system, contact your water provider to see if they will cover your system under their EPP. Most purchased water contracts have a clause that says the provider may not guarantee you water during an emergency. If the provider:

- **Agrees,** they must include your system in Section II - 6A of their EPP and agree to provide 20 psi throughout your distribution system during an emergency.
- **Does not agree,** consider sending a financial waiver.[5]

On your form, indicate whether your provider agreed to supply at least 20 psi to each of your customer taps during an emergency.

- See Option 2A for ways to document that they will provide service during an emergency.

2. Treatment Information

A. Does Your Water System Disinfect the Water?

If you disinfect the water in your system, list **all** disinfectants you use, such as chlorine, ammonia, chlorine dioxide, or ozone. Indicate whether you use each during an emergency.

B. Does Your Water System Provide Treatment Other Than Disinfection (example: polyphosphate, caustic etc.)?

List any other treatments you use for your water system. Indicate whether you plan to use them during an emergency.

5. www.tceq.texas.gov/goto/rg-553

C. Does Your Water System Have Transfer Pump(s) Between Treatment Units? These are the pumps located within the treatment processes of your treatment Plant(s).

List the transfer pumps in your system. These pumps move water from one point in the treatment process to another. They do not include service pumps such as well or intake pumps.

3. Distribution System Information

A. Does Your Water System Have Booster and/or Service Pumps in the Distribution system?

List all service pumps for the entire system, including inline service pumps or high service pump stations, and label them. Labels must include:

- Booster or service pump names (Example: #1, #2 or Pump 1, Pump 2).
- Name and physical address of the plant where each pump is located (Example: Plant 1, Live Oak Dr., Plant 2).
- Pressure plane or zone (Example: PP1) if you have more than one.
- Whether you will use the pump during an emergency.
- Pump capacity in gallons per minute (GPM).

Use the service pump names and locations as listed in Texas DWW[6] if they are already in the system.

B. Does Your Water System Have Any Finished Water Storage/Pressurization Tanks?

List all ground storage tanks, elevated tanks, standpipes, clearwells, and hydropneumatic tanks (pressure tanks) with their capacity in gallons. Include:

- Tank names and locations as listed Texas DWW under Water System Facilities.
- Pressure plane or zone (for example, PP1) if you have more than one.
- Whether the tank will be used during an emergency.

4. Pressure Planes

Does Your Water System Have More Than One Pressure Plane?

If you have multiple pressure planes or zones, list them with unique names (Example: PP1, PP2, etc.), including all sources that feed each. If you purchase treated water from another PWS, include their TCEQ source ID or PWS ID.

6. www.tceq.texas.gov/goto/dww-inst

5. System Demand

List the average daily demand (ADD), maximum daily demand (MDD) and system production capacity for normal operations and emergency operations. Your production capacity can include:

- well production.
- surface water treatment plant normal rated design flow.
- purchase water contract amounts.

To convert gallons per minute to million gallons per day, multiply gallons per minute by 1,440 (number of minutes in a day) and divide by 1,000,000.

- For example, 100 GPM = 0.144 million gallons per day (MGD).

Use production data from past emergency situations, like hurricanes or winter storms, to estimate emergency operation needs. If historical data is unavailable divide your ADD and MMD for normal operations by two to estimate emergency operations data. Do not include any sources that you do not plan to use during an emergency. Subtract those production values from your system capacity under normal operations. If your system plans to use all sources, the system capacities are the same.

6. System Size

A. Does Your Water System Sell/Provide Water to Other Water Systems?

If you provide water to another public water system, list their information here. As a provider, if you cover a direct-pressure public water system under your EPP, answer yes to the question "Will You Provide 20 psi Throughout the Receiver's Distribution System During an Emergency?".

B. Number of Connections and Population in Each Pressure Plane in Your Water System?

List each pressure plane for your public water system, including the number of connections and population within each. If you do not know your system's population, multiply the connection count by three for the value.

7. Power Provider(s)

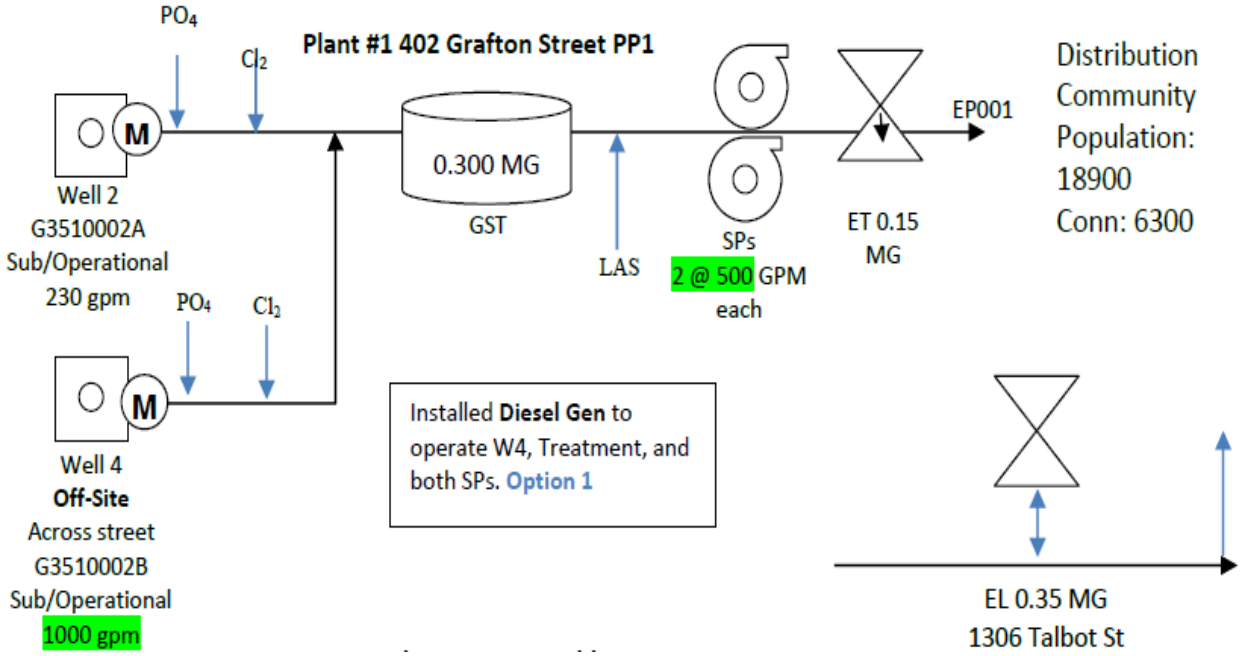
List all electric providers that you pay to power and operate your system.

8. Electrical Schematic

Provide a basic electrical schematic including all pieces of powered equipment. You may combine it with the water system diagram requested in Section I - 4, but it must include everything requested for both.

See Figure 2 below for an example. The box in the middle of the schematic represents an installed diesel generator that powers Well #4, water treatment equipment, and two service pumps.

Figure 2. Example of an Electrical Schematic



9. Other Pertinent System Information

Include any other related information here, such as:

- plant equipment not previously listed.
- system layout as related to selected EPP option(s).
- list of plant or equipment not powered during an emergency event.

Section 3 – Alternate Power Options Overview

This section in the form is for your information only and does not require any action. Review this section and choose option(s) to follow EPP requirements.

Select one or more options as required by Senate Bill 3. Options 1 through 6 may be used on their own. Options 7 through 13 may require you to choose one or more additional options, unless otherwise approved by TCEQ.

Section 4 – Alternate Power Options Details

Once you select options for your system, complete the corresponding questions for each section. Attach any requested documentation with your EPP.

Option 1: Permanently Installed Auxiliary Generator(s)

Your permanently installed auxiliary generator(s) **must** automatically switch over or start once the normal power supply is not available. If it does not have this feature, you must upgrade it or claim it under another option (5 or 14).

For more help with completing the information in this option, see the Generator and Fuel Specifics section.

Option 2A: Your System Will Rely on Your Provider During an Extended Power Outage

A distribution-only system is the same as a direct-pressure system (no ground storage tanks, service pumps or pressure tanks requiring electricity).

If you purchase water from another PWS and:

- Plan to rely on them during an extended outage, complete information for this option.
- Do not plan to rely on them and you have enough production capacity, skip this option and complete the other option(s) as appropriate.

In the table under this option, list your water provider and their PWS ID. If you do not have this information, contact them or search in Texas DWW.[7]

Indicate whether the purchased water will flow into a tank such as a ground storage tank, standpipe, elevated tank or clearwell. Direct pressure systems would answer "no," because they only have a distribution system which is under direct pressure from the purchasing PWS.

For the final question, indicate if you will rely on this provider to provide a minimum of 20 psi to your direct pressure customers. Re-pressurizing systems would answer "no," unless they can by-pass their pumping facilities and pump directly into the distribution system.

A. Is your water system solely relying on a provider(s) for emergency operations?

Does your provider's water flow directly into your distribution system? Answer "yes," if you are a direct-pressure system relying on your provider during an emergency.

i. Please provide one or more of the following:

If you are a direct-pressure system and your provider has agreed to provide your customers 20 psi during an emergency, provide one or more of the four items listed. You can request a copy of Section II - 6A from your provider's EPP that lists your PWS information. Include the receiver's connection count and population.

7. www.tceq.texas.gov/goto/dww-inst

ii. Does your water system operate any equipment such as booster disinfection that will need power during an emergency?

If you answer yes, you must supply power for the disinfection equipment. If you have disinfection equipment that does not use electricity, such as chlorine gas, make that clear in Section II 2. Treatment Information.

B. Does your water system re-pressurize the water received from the provider?

Does your provider's water flow into a tank which is then pumped into your distribution system by your own pumps? If you answer yes, you must power equipment during an emergency and must select other option(s) to supply alternate power.

Option 2B: Contributing Member of TXWARN

TXWARN is a resource sharing organization for water and wastewater utilities. To use this option, you must sign up and be a contributing member. As participants, utilities volunteer resources to loan to other utilities during an emergency. Shared resources can include:

- an operator.
- an electrician.
- equipment (generator).

You are not required to provide the resource if a member utility requests it through the TXWARN system.

To claim this option, you must install a quick connect system so you can hook up the generator immediately during an emergency.

A. Please provide ALL of the following items.

All water systems must include their TXWARN membership profile page. Investor- or privately-owned utilities must also submit their mutual aid agreement to TXWARN. Include a copy with your EPP.

Public entities (municipalities or counties) must check the third box. They are covered by a state-wide mutual aid system created by legislation.

For more help with completing the information in this option, see the Generator and Fuel Specifics section.

Option 3A: Negotiation of Leasing and Contracting Agreements

You can use this option if you secure an agreement with a company to provide you a generator during an emergency.

To claim this option, you must install a quick connect system so you can hook up the generator immediately during an emergency.

A. Provide a signed copy of the agreement.

You must include a signed copy of your agreement with the company supplying the generator(s).

For more help with completing the information in this option, see the Generator and Fuel Specifics section.

Option 3B: Mutual Aid Agreement With Another Water Provider(s)

Your mutual aid agreement must include resources that will ensure 20 psi during an emergency and coordination with the Texas Division of Emergency Management (TDEM). We recommend you use the TXWARN Mutual Aid Agreement template,[8] because it is National Incident Management System (NIMC) compliant. You must also provide a copy of your approved EPP and TCEQ approval letter to TDEM.

To use this option, you must install a quick connect system so the generator can be hooked up immediately during an emergency.

A. Provide ALL of the following items:

Ensure to provide the requested three items.

For more help with completing the information in this option, see the Generator and Fuel Specifics section.

Option 4: Use of Portable Generator(s) Capable of Serving Multiple Facilities Equipped With Quick-Connect System(s)

To claim this option, you must install a quick connect system so you can hook up the generator immediately during an emergency.

A. Please list the storage location of the portable generator. If sharing the generator, list the name of the water system you are sharing with and their location.

Complete this table if you share portable generators with other affected utilities. There is not a limit on how many utilities can share a generator. Use your best judgement when making this determination.

For more help with completing the information in this option, see the Generator and Fuel Specifics section.

Option 5: Use of On-Site Electrical Generation or Distributed Generation Facilities

You may use this option if you have a means of generating your own power such as solar, wind or hydroelectric. This option is not normally used for generators.

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[8] https://www.txwarn.org/page/MutualAidAgreement

A. On-Site Electrical Generation or Distributed Generation Specifications.

Describe the facilities including the method of generation (solar, wind, hydroelectric).

For more help with completing the information in this option, see the Generator and Fuel Specifics section.

Option 6: Hardening the Electric Transmission and Distribution System Serving the Water System

A. Hardening Description

Describe the hardening activities for the transmission and distribution lines from the power generating facility to each water system facility. Include whether the lines are buried and protected from flooding or the overhead lines are upgraded to withstand historical hurricane force winds.

B. Diagram

Provide the requested diagram include all transmission and distribution lines from the power generating facility to the water facility.

Option 7: Use and Maintenance of Direct Engine or Right-Angle Drives

You can use a direct engine or right angle drives. However, generally they only generate power for a single piece of equipment such as a well or a pump. Normally this is not sufficient because you may need power for multiple pieces of equipment (disinfection, service pumps, or an air compressor).

A. Direct Engine or Right-Angle Drive Specification

In the table, provide the requested information about your direct engine or right-angle drive.

For more help with completing the information in this option, see the Generator and Fuel Specifics section.

Option 8A: Designation of the Water System as a Critical Load Facility

If you plan to use this option, you must apply for critical load status with your electric provider. Please note that some electric providers have a disclaimer that the critical load status does not guarantee an uninterrupted or continuous supply of power.

A. Provide ALL of the following items for designation of Critical Load Facility.

Provide the requested information.

B. Indicate all facilities that are included in critical load status.

Refer to the facilities listed for your PWS in Section II – Description of the Water System and use the exact same naming convention. Complete the table with the requested information.

Option 8B: Designation of the Water System as Having Redundant, Isolated, or Dedicated Electrical Feeds

Some water facilities may have a redundant or dual power feeds. Others may have a dedicated feed that only supplies power to the water facility, or they may have an isolated power feed.

A. Provide the following if facility has redundant, isolated, or dedicated electrical feeds.

Provide the requested information.

B. Indicate all facilities that are included in having redundant, isolated, or dedicated electrical feeds.

Refer to the facilities listed for your PWS in Section II – Description of the Water System and use the exact same naming convention. Complete the table with the requested information.

C. Indicate the facilities not included in having redundant, isolated, or dedicated electrical feeds.

Refer to the facilities listed for your PWS in Section II – Description of the Water System and use the exact same naming convention. Complete the table with the requested information.

Option 9: Provide Water Storage Capabilities

A. Explain how the water in storage will flow to customers, and how it will be replenished (with or without electricity)?

Ground storage tanks normally require service pumps to supply water to the distribution system at 20 psi, unless elevated at least 46 feet above the highest connection. Explain how you will replenish the tanks with water during an emergency.

B. Does the water system have an existing, valid exception or alternative capacity requirement (ACR) for elevated or ground storage capacity? [30 TAC §290.45(g) and or 30 TAC §290.39(l)].

Public water systems can request an ACR to any of the minimum capacity requirements listed in Title 30 Texas Administrative Code (30 TAC) Chapter 290 Subchapter D Rules and Regulation for Public Water System. If you have an ACR that is ***less than*** the required minimum capacity requirements, you must choose a different option.

C. What is the useful storage capacity of all storage tanks that maintain distribution pressures above 20 psi (46 feet of residual hydraulic head above the highest connection)?

Provide the useful storage capacity of the tank(s), but do not include any dedicated fire storage. Useful storage is contained between the bottom pumping level and the overflow pipe. See the graphic on page 28 of the EPP form for additional information.

D. Using the water systems Maximum Daily Demand (MDD) listed in question 5 under Section II – Description of the Water System, divide the useful storage volume (million gallons) for maintaining distribution pressures above 20 psi by the MDD under emergencies.

Provide the number of storage days based on the MDD of the system under emergency operations. This is the number of days you can provide water if storage was full before the start of the emergency.

E. Please choose other option(s) to ensure your utility can maintain 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

List other option(s) to ensure you can maintain 20 psi in your system.

Option 10A: Water is Delivered to Your Distribution System From Outside Your Service Area Using Emergency Interconnects

A. List water system(s) that will be providing your connections with water during an emergency, where the providing system obtains its water, and the number of connections that will be provided water.

List the water source, PWS ID, and name of the water system that can supply water through the emergency interconnection (provider system). If it receives water from another public water system, list their PWS ID and name. Note if they have groundwater, surface water, or purchased water sources. Examples:

- Purchased water from the City of Austin
- 4 groundwater wells
- Surface water from Lake Travis

If you are unsure of their sources, use Texas DWW[9] or contact the provider directly. Include the number of connections in your system that the emergency interconnection serves.

9. www.tceq.texas.gov/goto/dww-inst

B. Provide the following information:

Provide the requested information.

C. Will both water systems be using the same type of disinfection?

Mixing free chlorine with chloramines can destroy the chloramines and create taste and odor problems. To blend free chlorine and chloramines, you must get approval for an exception[10] from TCEQ's Water Supply Division.

D. If the disinfection used is not the same for both water systems, explain how the water system will notify customers of the change for health purposes? [30 TAC §290.47(h)]

When you switch disinfectants from free chlorine to chloramines, you must notify your customers. Chloramines have health implications for people on dialysis machines, so you must completely remove chloramines them before the water enters a dialysis unit.

E. If only part of your system will have service maintained by interconnection, please provide information on what option applies to the rest of the system. Option _____ and complete that section of the EPP.

If only part of your system will be served by the emergency interconnection, list the other option(s) that the remainder will rely on.

F. If water is delivered into a storage tank, please choose other option to ensure your utility can maintain 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

If water delivered by the interconnection airgaps into a storage tank, choose other option(s). Make sure you have the necessary power to maintain 20 psi in your distribution system during an emergency.

10. www.tceq.texas.gov/drinkingwater/trot/exception

Option 10B: Water is Delivered to Your Distribution System From Outside Your Service Area Using Water Hauler(s)

A. Provide documentation that the water hauler is approved and registered to haul water by the TCEQ.

Water haulers must be approved by TCEQ. Once approved, they are assigned a PWS ID number or approved water hauler ID. Find this information by searching the following resources by water system name:

- Texas DWW[11]
- TCEQ's Approved Water Hauler List[12]

B. List all water providers utilized by the water hauler and the type of disinfection used by each provider to ensure compatibility with disinfection protocols.

List the water provider ID and the type of disinfectant used (free chlorine or chloramines). Mixing free chlorine with chloramines can destroy the chloramines and create taste and odor problems. To blend free chlorine and chloramines, you must get approval for an exception[13] from TCEQ's Water Supply Division.

C. Explain how the water will be pumped from the water hauler into the storage tank?

Most approved water haulers have a permanently attached pump to the trailer or truck.

D. Which storage tanks will be filled by the water hauler?

List the plant name and which storage tanks will be filled by the approved water hauler.

E. Explain how the water will be pumped from the storage tank into the distribution system?

Most ground storage tanks use service pumps to pressurize the distribution system. During an emergency, power may not be available to the service pumps and may require other option(s) for alternate power.

F. Will the water hauler be able to supply enough water to the distribution system in a timely manner?

The water hauler(s) used must be able to deliver enough water to maintain 20psi in the distribution system.

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11. www.tceq.texas.gov/goto/dww-inst
12. www.tceq.texas.gov/goto/waterhauler
13. www.tceq.texas.gov/drinkingwater/trot/exception

G. If only part of your system will have service maintained by water hauling, please provide information on what option applies to the rest of the system.

If only part of your system will be served by the emergency interconnection, list the other option(s) that the remainder will rely on.

H. If water is delivered into a storage tank, please choose another option(s) to ensure your utility can maintain 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

List the other option(s) that you will use to meet requirements. Complete those sections of the EPP form.

Option 11: Water System Has the Ability to Provide Water Through Artesian Flows

Artesian flow is groundwater that can flow to the surface under pressure and may not require a well pump. If the water system has disinfection equipment requiring power or service pumps, additional option(s) are required.

A. Please provide the well identification number of the approved artesian source: TX_____

Locate and enter the TCEQ source ID in Texas DWW.[14]

B. What is the flow of the source in GPM? _____

List the production capacity of the well in gallons per minute.

C. How will the source water get treated and distributed consistently to the distribution system?

Even during an emergency, you must treat and disinfect the water. You may need an alternate power source for disinfection equipment.

D. How will pumps be powered?

You may need an alternate power source for pumps.

14. www.tceq.texas.gov/goto/dww-inst

E. Please choose other option(s) to ensure your utility can continuously treat, disinfect, and pressure your system to 20 psi, if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

You may not be required to provide additional options if you can document that your utility can continuously treat, disinfect, and pressure your system to 20 psi during emergencies. List the other option(s) that you will use to meet requirements. Complete those sections of the EPP form.

Option 12: Redundant Interconnectivity Between Pressure Zones

If your system has multiple pressure zones separated by closed valves, you might be able to open them during an emergency to provide 20 psi to the entire distribution system.

A. Explain how the water will flow to customers within one or more pressure zones, and how it will be replenished (with or without electricity)?

Describe how you will manage the interconnection between pressure zones. Explain how you intend to supply water to these pressure zones during an emergency.

B. Please provide the following:

- system map.
- useful storage capacity of the tank(s).
- capacity report.
- areas that need inline booster pumps installed.

Installation of inline booster pumps require an exception to the rule and submission of plans and specifications prepared by a Texas-licensed professional engineer.

- See our website for how to get approval for an exception[15] from TCEQ's Water Supply Division.

C. Please choose other option(s) to ensure your utility can continuously treat, disinfect, and pressurize your system to 20 psi, if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

List the other option(s) that you will use to meet requirements. Complete those sections of the EPP form.

15. www.tceq.texas.gov/drinkingwater/trot/exception

D. A hydraulic study will be required if you are unable to demonstrate that your water system can maintain a minimum of 20 psi in distribution based on the information provided in Items A and B.

Provide the requested hydraulic study if necessary. For example, if either of the following apply:

- The elevation contour difference exceeds the feet of useful storage
- Your water supply does not appear adequate for an electrical outage lasting more than 24 hours.

Option 13: Use Emergency Water Demand Rules to Maintain Emergency Operations

During an emergency, you can implement provisions of your Drought Contingency Plan to:

- conserve water.
- provide 0.35 gallons per minute (GPM) minimum per connection.
- maintain at least 20 psi in the distribution system.

A. How will you communicate with your customers that you have instituted your Drought Contingency Plan during an extended power outage?

Explain how you intend to notify your customers of the water use restrictions. Common options include utility websites, social media, radio, TV, reverse 911, door tags, and signs posted at subdivision entrances.

B. Please choose additional option to ensure your utility can maintain 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

List the other option(s) that you will use to meet requirements. Complete those sections of the EPP form.

C. Explanation and Authority

Provide an explanation of authority. See the example language below:

During periods of drought, a major leak, a system failure, or excessive consumption beyond the capacity of the system, etc., the _____ *(e.g. PWS name, owner name, owner representative, Operator, etc*.) has the capability to conserve and restrict water use based upon the local water system regulations found in _____ (drought contingency plan, rental agreement, city ordinance, etc.). During times of drought or other problems that limit the availability of water, public notice of water use restrictions will be issued by: _____ *(e.g. PWS name, owner name, owner representative, operator, etc.)*.

D. Water Restriction Stages

Complete the corresponding water restriction stages table or attach a copy of your approved drought contingency plan with your EPP submission.

Option 14: Any Other Alternative Determined by the Commission to be Acceptable

You can propose and describe an alternative means to maintain 20 psi during an emergency. Use this space to explain. You cannot use the methods listed.

Section V – Emergency Communications

A. Emergency Contacts

At a minimum, provide the county judge and sheriff's office information.

B. through H.

Complete the remaining tables (tables B through H) under Section V as needed for your system. Completing the remaining tables is voluntary but recommended to help your staff in an emergency.

Attachments

See Attachment A for submission requirements. Do not send these pages with your EPP. Attachments B through D are guidance tools for your facility.

Generator and Fuel Specifics

Generator Specifications.

In the table, provide the requested information about your generator(s) and all equipment that needs power during an emergency, including kilowattage. You can group treatment and monitoring equipment into one value.

Your generator power output should be greater than the total power requirements of the equipment listed. If it is not, the generator is undersized and will not power all necessary equipment during emergency operations.

If you do not know the kilowatt usage of pumps but have the horsepower, use the following conversion factor:

1 horsepower = 0.735 kilowatt

Estimate your generator's fuel consumption by calculating 7% of your generator's max kilowatt power. For example, a 100-kilowatt generator will use approximately 7 gallons of fuel per hour.

Fuel Location

Provide the GPS location or address where you store your fuel supply.

Fuel Re-supply.

You must have a fuel supply to cover at least 48 hours of operation and maintain 20 PSI during an emergency. These events may last longer than 48 hours, so use your best estimate.

i. How much fuel is stored on site?

List the amount of fuel stored on site in gallons (gal).

ii. How much fuel does the generator use per hour?

Estimate your generator's fuel consumption by calculating 7% of your generator's max kilowatt power. For example, a 100-kilowatt generator will use approximately 7 gallons of fuel per hour.

- See the form's Attachment B for more help.

iii. Does the water system have access to additives/other methods to prevent fuel from freezing as per manufactures recommendations (example diesel additives)?

We recommend you use fuel additives to prevent freezing. Refer to the manufacturer's recommendations.