ATTACHMENT B – Generator Information

If you plan on utilizing options 1, 2, 4, 5, or 6, you will need to estimate the gallons per hour of fuel that will be used by the generator. This is essential in determining the volume of fuel required to maintain emergency operations. Below is a chart from the FEMA Resource Typing Manual which may be of assistance in determining fuel needs and generator types. **Supplemental information only.**

RESOURCE: GENERATORS						
Category:	Public Works & Engineering (SEF 3)			**Kind:**	Equipment	
Minimum Capabilities:		Type I	Type II	Type III	Type IV	Type V
Component	**Metric**					
Equipment	KW	**XQ2000** 2000 kW Generator; Sound attenuated; Trailer mounted (semi tractor); Up to 3015 Amps@ 480 Volts, 3 Phase, 60 Hz. Dry weight 89,000 lbs; Fuel tank capacity 1250 Gallons; Dimensions 40' Long x 8' Wide x 13'.5" Tall; Potential application example—Single or multiple units for: Power plants, heavy industrial facility, high-rise buildings. Setup time (cables from generator to main power feed estimated at 5+ hours)	**XQ1500** 1500 kW Generator; Sound attenuated; Trailer mounted (semi tractor); Up to 2260 Amps@ 480 Volts, 3 Phase, 60 Hz; Dry weight 59,000 lbs; Fuel tank capacity 1250 Gallons; Dimensions 40' Long x 8' Wide x 13'.5" Tall; Potential application example—Single or multiple units for: Universities, hospitals, medium to large manufacturing facility. Setup time (cables from generator to main power feed estimated at 5+ hours)	**XQ600** 600 kW Generator; Sound attenuated; Trailer mounted (semi tractor); Up to 2080 Amps@ 208 Volts, 3 Phase, 60 Hz / up to 902 Amps@ 480 Volts 3 Phase, 60 Hz; Dry weight 37,000 lbs; Fuel tank capacity 660 Gallons; Dimensions 40' Long x 8' Wide x 13'.5" Tall; Potential application examples: Retail stores, HVAC system power, multi-story/buildings, light manufacturing, apartment buildings; Setup time (cables from generator to main power feed estimated at 3+ hours)	**XQ400** 400 kW Generator; Sound attenuated; Trailer mounted (pull behind); Multi-voltage distribution panel; Up to 1390 Amps @ 208 Volts, 3 Phase, 60 Hz/up to 602 Amps@ 480 Volts 3 Phase, 60 Hz; Dry weight 16,800 lbs; Fuel tank capacity 470 Gallons; Dimensions 23' Long x 8'.5" Wide x 11' Tall; Potential application example: Large office building, public schools, libraries, and communication equipment. Setup time (cables from generator to main power feed estimated at 2+ hours)	**XQ125** 125 kW Generator; Sound attenuated; Trailer mounted (pull behind); Multi-voltage distribution panel; Up to 433 Amps@ 208 Volts, 3 Phase, 60 Hz / up to 188 Amps @ 480 Volts 3 Phase, 60 Hz; Dry weight 10,610 lbs; Fuel tank capacity 223 Gallons; Dimensions 18'.5" Long x 6'.5" Wide x 9' Tall; Potential application example: Small office building, emergency mobile trailers & operations, restaurants. Setup time (cables from generator to main power feed estimated at 1 hour)
Comments:	2500-gallon external fuel tanks available. Fuel consumption is estimated at 7% of the kW usage (example: fuel consumption on a 100 kW Generator operating at full load is approximately 7 gallons per hour). Technicians are available for hookup and monitoring of equipment. 4/0 Quick connect (Cam-Lock) cable is available for tie-in to power feed, rated at 400 Amps each cable. Fuel supply, and/or fuel vendors available. Power distribution equipment available. Transformers & Load Banks are available.					

XQ2000	XQ1500	XQ600-400	XQ125
			
			

ATTACHMENT C – RECOVERY CHECKLIST – Supplemental Information Only

Returning to normal operations is vital to rapid restoration of clean, safe water to the community and is essential to the assessment and recovery process. The following is a checklist of actions to be taken during the recovery period. Also included is a preliminary damage assessment that can be used to assist in the recovery process.

Assessment and Recovery Period Checklist

☐ Perform in-depth damage assessment of system to determine long-term effects of damaged areas (use assessment form below).

☐ Notify TCEQ of system operational status and situation.

☐ Will there be a need to use mutual aid agreements and/or implement standby contracts or other emergency agreements for equipment and operations?

☐ Prepare written documentation of emergency work performed for possible compensation by emergency agencies. Make sure that crews make a record of work effort, written logs (see Work Order Log) and take pictures. This will all be helpful in recovery of funds.

☐ Notify appropriate insurance carriers. Provide written and photo documentation of damage.

☐ Assist in the survey of emergency repairs and scheduling of permanent repairs.

☐ Servicing of emergency equipment, when able (oil changes, lubrication, etc.).

☐ Make sure the public is kept informed throughout the extent of the emergency.

Preliminary Damage Assessment

Following the Damage Assessment, you should notify TCEQ of your operational status.

A. General Overview:

☐ Determine need to repair, replace, or abandon facilities

☐ Estimate cost to repair damage

☐ Evacuate buildings in danger of collapse

B. Treatment Plants:

☐ Check if power is available and condition of mechanical and electrical equipment

☐ Check for chemical spills or releases

C. Confirm that field crew does the following:

☐ Check for structural damage

☐ Closes and tags damaged facilities and equipment

D. Tanks:

☐ Check for evidence of failure of subbase

E. Reservoirs:

Check for:

☐ Leaks and Seepage

☐ Cracks

☐ Broken inlet/outlet pipes, underdrains

☐ Landslides or Embankment slump

☐ Buckling

F. Distribution System:

Check for:

☐ Leaks

☐ Breaks

☐ Pressure loss in lines

☐ Cross-connections

☐ Check mechanical couplings

☐ Lower water levels to reduce possibility of structural damage

G. Wells:

☐ Check for physical damage to facilities

☐ Test for contamination

☐ Name, address, phone # for private lab

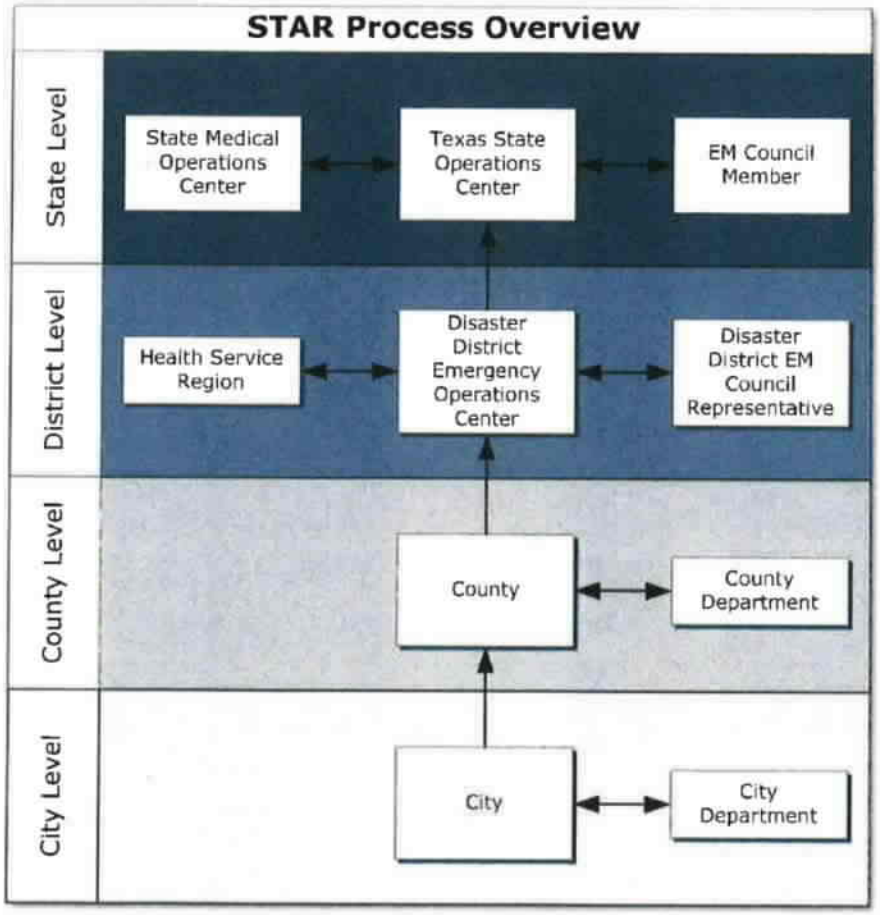
☐ Check for pump or motor failure

☐ Check power source

ATTACHMENT D – State Assistance Request (Supplemental Information Only):

If an affected utility is interested only in mutual aid assistance, register with TXWARN at https://www.txwarn.org/; this is a free service.

When requesting state assistance, the request(s) must start at the local level with the County Judge or the County Emergency Manager. The request must go to the Texas Division of Emergency Management using the steps outlined in the STAR Process.



Emergency Preparedness Plan Template

For All Affected Utilities Except Fort Bend and Harris Counties

Assistance

If you need assistance with the EPP template, please fill out the **EPP Help Form at** www.tceq.texas.gov/goto/epp-help and TCEQ will contact you via email or phone to work with you.

General Instructions

- On page 1 complete "General Information" table, circle the option(s) chosen, answer the questions, and sign the certification.
- Complete sections I, II, read section III, in section IV complete the option(s) chosen that apply to your affected utility, and complete Section V as applicable to your affected utility (county judge and sheriff's office information are required).
- Attachments A explains the EPP submittal and distribution requirements, and attachments B - D do not have to be filled out but are supplemental information to assist you in the event of an emergency.

General Information

Water System Name:	**Woodland Hills**
PWS ID No. (if applicable):	**1460120**
District No. (if applicable):	**NA**
County:	**Liberty**
CCN No. (if applicable):	**12388**
Owner:	**Weldon Alders**
Prepared by:	**Mike Ellington**
Preparer's Phone No.:	**936.494.2600**
Preparer's Email:	**Mike@aquatechutilities.com**
Preparer's Mailing Address:	**1775 North Loop 336 E. Conroe, TX 77301**
Preparer Title:	**General Manager**
Preparer's Organization:	**Aqua Tech Utilities, LLC**
Expected Completion Date for EPP Plan Implementation:	**Complete**

Option(s) Chosen:

1. **Refer to Section III-ALTERNATE POWER OPTIONS OVERVIEW.**
   Circle **all** Option(s) that will provide emergency operations during extended power outages lasting more than 24 hours for this affected utility.

   1 2A 2B 3A 3B (4) 5 6 7 8A 8B 9 10A 10B 11 12 13 14

2. Short Explanation of Proposed Emergency Preparedness Plan (i.e. *Using portable generator to power 2 out of 3 wells*): 80 KW generator already installed to run well #3 and one booster pump at well #3.

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? Yes

4. Is a timeline to implement the plan (TWC 13.1394(b)(2)(B)) provided as an attachment? no

I certify, under penalty of law, that all the information provided herein is true and accurate to the best of my knowledge.

Signature: Mike Ellington Title General Manager Date 3-27-24

UPDATES TO EMERGENCY PREPAREDNESS PLAN (EPP)

The EPP is updated as changes occur such as dictated by personnel, phone numbers, water plant additions, modifications, and serving additional water systems.

Record updates below:

Last Updated By	Title	Purpose (page #s)	On (Date)
Mike Ellington	General manager	New	02-01-2022
Mike Ellington	General Manager	Changes	3-25-2024

SECTION I – INTRODUCTION

1. APPLICABILITY

This emergency preparedness plan template was developed for the operators and administrators of affected utilities to comply with the requirements for "affected utilities" in Texas Water Code, Section 13.1394 as required by Senate Bill 3 (SB 3) and to demonstrate the affected utility's ability to provide emergency operations during extended power outages lasting **more than 24 hours**.

An ***affected utility*** is a retail public utility, exempt utility, or provider or conveyer of potable or raw water service that furnishes water service to more than one customer, provides overnight accommodations, and **is not** an affected utility under Texas Water Code, Section 13.1395. An ***extended power outage*** means a power outage lasting more than 24 hours.

If you believe that you are NOT an affected utility please email PDWEPP@tceq.texas.gov to ensure that the requirements do not apply to the water system.

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

X **Residential** ☐ **Commercial** ☐ **Industrial** ☐ **Wholesale** ☐ **Institution**

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

2. CONTACT INFORMATION

During any type of emergency, the following person(s) will be responsible for the water system (contact will be attempted in the order indicated):

Name	Title in the Organization	E-mail	Office Phone Number	Cell Phone Number	Home Phone Number	Other Phone Number
Mike Ellington	General Manager	Mike@aquatechutilities.com	936.494.2600	281.389.0155		
Ken Rash	Operator	Kenneth@aquatechutilities.com	936.494.2600	936.391.1927		
Janell Tucker	Operator	Janell@aquatechutilities.com	936.494.2600	936.499.7790		

3. Location of Maps

The maps are not required to be submitted to TCEQ for review of the EPP but should be available in case of an emergency to enable staff to locate valves, lines, and meters.

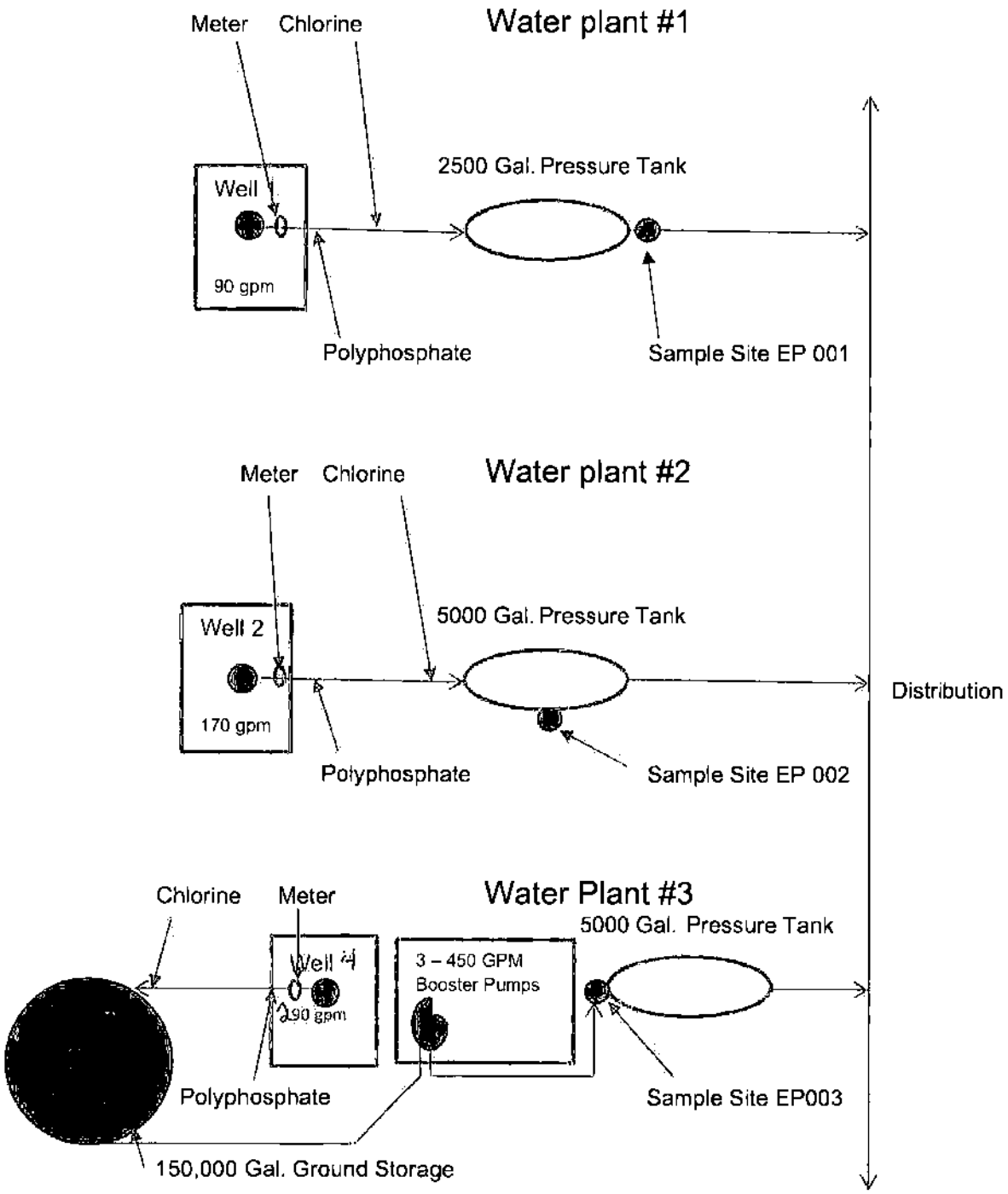
Where are your distribution system(s) map(s) located? At water plant #3

4. Diagram of Water System

Submit a diagram of your drinking water system that shows all equipment (source(s), tank(s), pumps), treatment chemicals, and any open or closed interconnects with other water systems.

See Attached Schematic.

FLOW DIAGRAM



Section II – DESCRIPTION OF THE WATER SYSTEM

IMPORTANT: Include only the equipment located at your water system, not the equipment located at another water system unless two or more systems rely on each other for emergency purposes and it is documented in a contract or written agreement.

1. SOURCE INFORMATION

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

YES X NO ☐ (If NO, go to 1.B)

TCEQ Source ID	Owner's Designation	Well Location	Used During an Emergency?	What plant name is this source associated with?	Pump Capacity
G1460120A	Well 1	30.112661, -94.869544	YES NO ☒	Water Plant #1	90 gpm
G1460120B	Well 2	30.112823, -94.890319	YES ☐ NO ☒	Water Plant #2	170 gpm
G1460120D	Well 4	30.103835, -94.904438	YES ☒ NO ☐	Water Plant #3	296 gpm

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)?

YES ☐ NO X (If NO, go to 1.C)

TCEQ Source ID	Owner's Designation	Intake Location	Used During an Emergency?	Number of Pumps	What plant name is this source associated with?	Total Pump Capacity at Intake
			YES ☐ NO ☐			gpm
			YES ☐ NO ☐			gpm
			YES ☐ NO ☐			gpm

C. Does Your Water System Purchase (or Receive) Water? YES ☐ NO X (If NO, go to 2.A)

i. Is this affected utility a direct pressure system? (Does the provider's water flow directly into your distribution system, not into a tank? Direct pressure systems generally have no tanks or pumps.)

YES ☐ NO ☐

ii. Does this affected utility re-pressurize the water received from the provider? (Does the water from the provider flow into a tank which is then pumped out into the distribution system by your own pumps?) **YES ☐ NO ☐**

Provider Name N/A	**PWS ID**	**Pressure Plane** *(if more than 1 plane)*	**Will You Rely on This Provider for Water During an Emergency?**	**Will You Rely on This Provider for Pressure at Your Customer's Connections During an Emergency?**	**Capacity**	**Normally Open or Closed Interconnect?**
			YES ☐ NO ☐	YES ☐ NO ☐	gpm	
			YES ☐ NO ☐	YES ☐ NO ☐	gpm	
			YES ☐ NO ☐	YES ☐ NO ☐	gpm	

2. TREATMENT INFORMATION

A. Does Your Water System Disinfect the Water? **YES X NO ☐ (If NO, go to 2.B)**

Disinfectant *(Disinfectant Name)*	**Location** *(Plant Name)*	**Disinfectant Used During an Emergency?**	**Type of Disinfectant** *(Liquid/Gas)*	**Volume Stored** *(gals or lbs.)*	**Days of Storage** *(Emergency Demand)*	**Electricity Required to Feed Disinfectant?**
NAOCL	Water Plant #3	YES X NO ☐	Liquid Chlorine	50 Gal.	14	YES X NO ☐
NAOCL	Water Plant #2	YES ☐ NO ☒	Liquid Chlorine	50 Gal	14	YES ☒ NO ☐
NAOCL	Water Plant #1	YES ☐ NO ☐	Liquid Chlorine	50 Gal	14	YES ☒ NO ☐

B. Does Your Water System Provide Treatment Other Than Disinfection (example: polyphosphate, caustic etc.)? **YES X NO ☐ (If NO, go to 2.C)**

Chemical Feed Pump *(Chemical Feed Name)*	**Location** *(Plant Name)*	**Chemical Used During an Emergency?**	**Type of Chemical** *(Liquid/Gas)*	**Volume Stored** *(gals or lbs.)*	**Days of Storage** *(Emergency Demand)*	**Electricity Required to Feed Chemical**
Purify 600A	Water Plant #3	YES X NO ☐	Liquid	30 Gal.	14	YES X NO ☐
Purify 600A	Water Plant #2	YES ☐ NO ☒	Liquid	30 Gal	14	YES ☒ NO ☐
Purify 600A	Water Plant #1	YES ☐ NO ☒	Liquid	30 Gal	14	YES ☒ NO ☐

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).

(Do not include well or intake pumps)

YES ☐ NO X (If NO, go to 3.A)

In-Plant Transfer Pump Name	**Location** *(Plant Name)*	**Pump Used During an Emergency?**	**Pump Capacity**
N/A		YES ☐ NO ☐	gpm
		YES ☐ NO ☐	gpm
		YES ☐ NO ☐	gpm

3. DISTRIBUTION SYSTEM INFORMATION

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

YES ☒ NO ☐ (If NO, go to 3.B)

Booster/Service Pump Name	**Location** *(include pressure plane)*	**Pump Used During an Emergency?**	**Pump Capacity**
BP #1	Water Plant #3	YES X NO ☐	450 gpm
BP #2	Water Plant #3	YES NO ☒	450 gpm
BP #3	Water Plant #3	YES NO ☒	450 gpm

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

YES ☒ NO ☐ (If NO, go to 4.A)

Tank Type (*Elevated, Hydropneumatic, Ground or Standpipe*)	**Location** *(include pressure plane)*	**Tank Used During an Emergency?**	**Tank Capacity**
Hydro-pneumatic	Water Plant #3	YES X NO ☐	5000 gal
Ground Storage	Water Plant #3	YES X NO ☐	42,000 gal
Hydro-pneumatic	Water Plant #2	YES ☐ NO ☒	5,000 gal
Hydro-pneumatic	Water Plant #1	NO	2,500 gal

4. PRESSURE PLANES

Does Your Water System Have More Than One Pressure Plane? YES ☐ NO X (If NO, go to 5)

Pressure Plane	TCEQ Source ID(s) or Provider PWS ID(s)	Plant Names(s) *(If Applicable)*	Pump Names(s) *(If Applicable)*

5. SYSTEM DEMAND

Emergency Operation means the demand in MGD from the highest emergency usage day (not normal daily usage) occurring during a natural disaster within the last 3 years, excluding fire events and large water main breaks.

Demand Information	Normal Operation	Emergency Operation
Average Daily Demand:	0.084370 MGD	0.084370 MGD
Maximum Daily Demand:	0.142000 MGD	0.142000 MGD
System Capacity:	0.648000 MGD	0.273600 MGD

6. SYSTEM SIZE

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

YES ☐ NO ☒ (If NO, go to 6.B)

Receiver/Buyer Name	PWS ID *(if applicable)*	Normally Open or Normally Closed Interconnect?	Will You Provide 20 psi Throughout the Receiver's Distribution System During an Emergency?	Number of Connections in the Receiver's Water System	Population of the Receiver's Water System
			YES ☐ NO ☐		
			YES ☐ NO ☐		
			YES ☐ NO ☐		

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

(If applicable, include any connections from other water systems you may serve in the table in 6.A)

Pressure Plane *(if applicable)*	Number of Connections	Population
	539	1617

7. POWER PROVIDER(s)

Electric Utility or Retail Electrical Provider(s)	Sam Houston Electric Coop, Entergy Electric

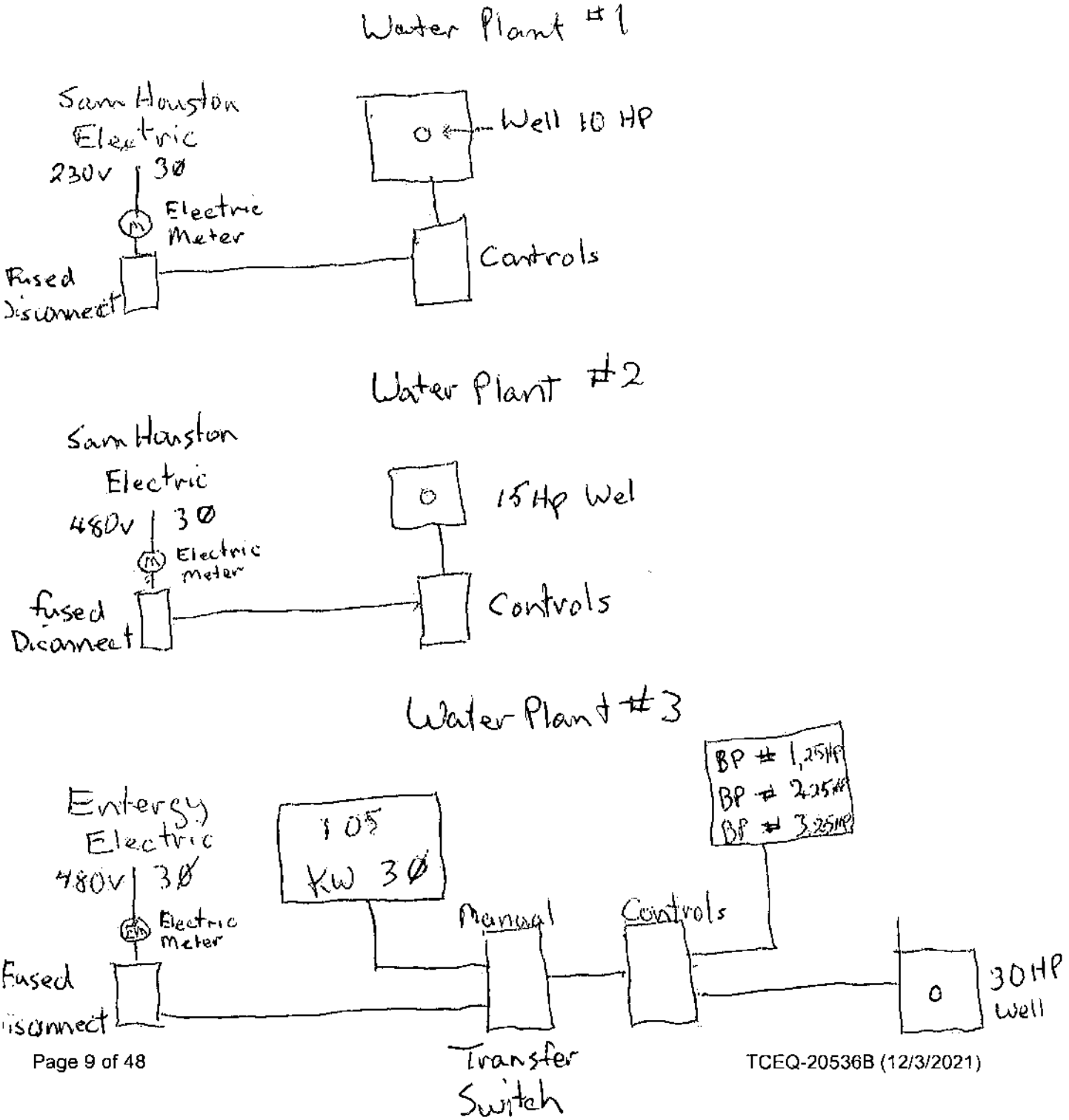
8. ELECTRICAL SCHEMATIC

Provide an electrical schematic or diagram of your water system's emergency power facilities and the equipment (treatment(s), supply, pressure maintenance, etc.) that is powered.

9. OTHER PERTINENT SYSTEM INFORMATION

Other information about the system that could be useful during an emergency (This can include plant equipment not used or any other circumstances that would clarify how the affected utility will meet the EPP requirements):

Woodland Hills subdivision water plant 1 and 2 are supplied by Sam Houston Electric Coop., water plant #3 is supplied by Entergy Electric.



OPTION 4: USE OF PORTABLE GENERATOR(S) CAPABLE OF SERVING MULTIPLE FACILITIES EQUIPPED WITH QUICK-CONNECT SYSTEM(S)

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.

Generator Brand & Model	Generator Storage Location	Distance from Your Water System	Other Water Systems Sharing This Generator *(PWS Name and ID if applicable)*	Distance Between Your Water System and Those Sharing the Generator
Caterpillar 3304B	On site	0	Lakeview pws 1460098	10.5 Miles

B. Generator specifications

Please list **all** the portable generators, **all** equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model	Max Power (KW)	Phase	Fuel Type	Quick Connect Installed?	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
Caterpillar 3304B	105 KW	1 ☐ 2 ☐ 3 ☒	Diesel	YES ☒ NO ☐ Date to be installed	Well pump 1 ☐	7.46 kW
					Well pump 2 ☐	11.20 kW
					Well pump 4 ☒	22.06 kW
					Booster pump 1 ☒	18.66 kW
					Booster pump 2 ☐	18.66 kW
					Booster pump 3 ☐	18.66 kW
					Disinfection Equipment ☒	.14 kW
					Treatment Equipment ☒	.14 kW
					Compressor(s) ☒	1.5 kW
					☐	kW
		1 ☐ 2 ☐ 3 ☐		YES ☐ NO ☐ Date to be installed		kW kW kW kW

C. Fuel Location (if applicable)

i. Physical Location of Fuel Supply (GPS or "911" address): Lat 30.103957, Lon -94.904397

D. Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

i. How much fuel is stored on site? 100 Gal.

ii. How much fuel does the generator use per hour? (Attachment B may assist in determining that amount.) 3.5 gallons based on less than 50% loading.

Section V – Emergency Communications

Emergency Communications are an essential part of an emergency response event. Knowing who to notify before an emergency event occurs is the best way to ensure that you, your system, and your customers receive needed emergency assistance. Many numbers have been provided to assist you with completing this portion of the plan. Please feel free to make copies of the pages in Section IV to post at your facility and/or to train your employees.

If the Organization is not applicable to your utility, please enter **N/A**. You are required to provide phone numbers for your County Judge and County Sheriff's Office.

If you are a member of another mutual aid organization other than TXWARN please include them on this list.

A. Emergency Contacts

Organization	Phone Numbers (include area code)		E-Mail or Website
	Day	Evening	
Fire Department	911	911	
Police Department	911	911	
Emergency Medical Service	911	911	
TCEQ Water Homeland Security	888/777-3186	888/777-3186	
Texas PUC	512/936-7405		http://www.puc.texas.gov/industry/water/utilities/fmt.aspx Email: water@puc.texas.gov
National Response Center	800/424-8802	800/424-8802	http://nrc.uscg.mil/Default.aspx
State Spill Hotline	800/832-8224	800/832-8224	https://www.tceq.texas.gov/response/spills
Poison Control	800/222-1222	800/222-1222	http://poisoncontrol.org/home/
CHLOREP (Chlorine Emergency Plan)	800/424-9300	800/424-9300	https://www.chlorineinstitute.org/emergency-preparedness/chlorep/
TCEQ Regional Office	24-hour cell phone 512/965-2717		Website: https://www.tceq.texas.gov/agency/directory/region/reglist.html
County Judge	936.336.4665		Website: www.co.liberty.tx.us/page/liberty.county.judge
County Office of Emergency Management	936.334.3219		Website: www.co.liberty.tx.us/page/liberty.emergency
County Sheriff's Office	911/ 936.760. 5800	911	Website: www.libertytxsheriff.com
County Public Health & Environmental Services			Email: Website:
City Mayor's Office			Email: Website:

Organization	Phone Numbers (include area code)		E-Mail or Website
	Day	Evening	
Local Public Health & Environmental Services			Email: Website:
Local Office of Emergency Management			Email: Website:
TX Division of Emergency Management (TDEM)	Provides list of State and District Coordinators which assist local officials with state assistance requests. Requests must start at local level first.		https://tdem.texas.gov/field-response/
TXWARN	866/9-TXWARN (866/989-9276)		Email: info@txwarn.org https://www.txwarn.org
Other Mutual Aid Provider			Email: Website:

B. Local Contact Notification List

Identify those entities that should be notified in the event of an extended power outage requiring emergency operations. These are people who you provide water to that you may need to contact during an emergency.

Organization	Contact Name	Title	Phone Numbers (include area code)			E-Mail
			Day	Evening	Cellular/Pager	
Other Local Government Officials						
Hospitals served by the Affected Utility						
Nursing Homes served by the Affected Utility						
Pharmacies						
Priority Water Users (Those that are critically dependent upon water including schools, dialysis centers, institutions,						

Organization	Contact Name	Title	Phone Numbers (include area code)			E-Mail
			Day	Evening	Cellular/Pager	
individuals with special needs, businesses, and other interconnected water systems, etc.)						
Others						

C. Chemical Supplier Information

Identify your Chemical Suppliers. You may need to contact them for more chemicals during an emergency

Chemical	Supplier	Contact Name	Phone Number Day	Phone Number Evening	Cell Phone	E-Mail
Chlorine	Purify	Slade Swammer	713.463.1929		281.705.2442	slade@purifywt.com
Purify 600A	Purify	Slade Swammer	713.463.1929		281.705.2442	slade@purifywt.com

D. Certified Laboratory Information

Identify your laboratory and a backup laboratory. You may need a backup laboratory if your lab is nonfunctional.

			Phone Numbers (include area code)			
Organization	**Contact Name**	**Title**	**Day**	**Evening**	**Cellular/Pager**	**E-Mail**
Nova Biologicals			936.756.5333			
North water District laboratory services			936.321.6060			

E. Fuel Supplier Contact Information (if applicable)

Identify your Fuel Suppliers. You may need to contact them for fuel during an emergency

Fuel Type	**Supplier**	**Contact Name**	**Phone Number Day**	**Phone Number Evening**	**Cell Phone**	**E-Mail**
diesel	Alders Construction	Jerry Thompson	936.334.2533			
propane	T.Neale Propane	Dispatch	936.258.4500			

F. Utilities Contact Information

Identify your Utilities Contacts. You may need to contact them during an emergency and use **N/A** if a listed organization does not apply to your water system.

				Phone Numbers (include area code)			
Organization	**N/A**	**Contact Name**	**Title**	**Day**	**Evening**	**Cellular/Pager**	**E-Mail**
Electric Utility Company		Clint Ard	Field Supervisor	800.368.3749	800.430.4911	281.702.4238	
Gas Utility Company	N/A						
Sewer Utility Company	N/A						
Telephone Utility Company	N/A						
Wholesale Water Provider	N/A						
Wholesale Water Provider	N/A						
Other							

G. Bulk Water Suppliers

Identify any bulk or bottled water suppliers that you might utilize in an emergency.

			Phone Numbers (include area code)			
Organization	**Contact Name**	**Title**	**Day**	**Evening**	**Cellular/Pager**	**E-Mail**
Bulk Water Haulers						
Bottle Water Sources						

H. Media Notification List

Identify the media organizations that you might need to contact to provide information to your customers. Also identify who is your media spokesperson. If you have a different method to communicate to your customers, please list under **Other**.

Organization	**Contact Name**	**Title**	**Day**	**Evening**	**Cellular/Pager**	**E-Mail**
Designated Water System Spokesperson	Mike Ellington	General Manager			281.389.0155	Mike@aquatechutilities.com
Newspaper - Local	Kim Marlow	Classifieds	936.336.3611	936.521.3300		Classifieds@thevindicator.com
Newspaper – Regional State	houston chronicle	Breaking News	713.362.7491			news@chron.com
Radio	KSHN		936.336.5793	936.558.5878		office@KSHN.com
	K101.5		936.334.9988			kelly@k1015.com
Television	Fox 26		713.479.2600			
Other						

ATTACHMENT A – SUBMITTING COMPLETED EPP

Upon completing your EPP please email or mail (not both) the completed form and additional documentation needed to the Texas Commission on Environmental Quality for review and approval to:

Emergency Preparedness Plan Template

For All Affected Utilities Except Fort Bend and Harris Counties

Assistance

If you need assistance with the EPP template, please fill out the **EPP Help Form at www.tceq.texas.gov/goto/epp-help** and TCEQ will contact you via email or phone to work with you.

General Instructions

- On page 1 complete "General Information" table, circle the option(s) chosen, answer the questions, and sign the certification.
- Complete sections I, II, read section III, in section IV complete the option(s) chosen that apply to your affected utility, and complete Section V as applicable to your affected utility (county judge and sheriff's office information are required).
- Attachments A explains the EPP submittal and distribution requirements, and attachments B - D do not have to be filled out but are supplemental information to assist you in the event of an emergency.

General Information

Water System Name:	**Woodway Subdivision Water System**
PWS ID No. (if applicable):	**1460091**
District No. (if applicable):	**NA**
County:	**Liberty**
CCN No. (if applicable):	**12388**
Owner:	**Weldon Alders**
Prepared by:	**Mike Ellington**
Preparer's Phone No.:	**936.494.2600**
Preparer's Email:	**Mike@aquatechutilities.com**
Preparer's Mailing Address:	**1775 North Loop 336 E. Conroe, TX 77301**
Preparer Title:	**General Manager**
Preparer's Organization:	**Aqua Tech Utilities, LLC**
Expected Completion Date for EPP Plan Implementation:	**Complete**

Option(s) Chosen:

1. **Refer to Section III-ALTERNATE POWER OPTIONS OVERVIEW.**
   Circle **all** Option(s) that will provide emergency operations during extended power outages lasting more than 24 hours for this affected utility.

   1 2A 2B 3A 3B 4 **(6)** 7 8A 8B 9 10A 10B 11 12 13 14

2. Short Explanation of Proposed Emergency Preparedness Plan (i.e. *Using portable generator to power 2 out of 3 wells*): 135 KW generator already installed to run water plant

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? Yes

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

I certify, under penalty of law, that all the information provided herein is true and accurate to the best of my knowledge.

Signature: Mike Ellington Title General Manager Date 07/18/23

UPDATES TO EMERGENCY PREPAREDNESS PLAN (EPP)

The EPP is updated as changes occur such as dictated by personnel, phone numbers, water plant additions, modifications, and serving additional water systems.

Record updates below:

Last Updated By	Title	Purpose (page #s)	On (Date)
Mike Ellington	General manager	New	09-06-2022
Mike Ellington	General Manager	Corrections	07-18-2023

SECTION I – INTRODUCTION

1. APPLICABILITY

This emergency preparedness plan template was developed for the operators and administrators of affected utilities to comply with the requirements for "affected utilities" in Texas Water Code, Section 13.1394 as required by Senate Bill 3 (SB 3) and to demonstrate the affected utility's ability to provide emergency operations during extended power outages lasting **more than 24 hours**.

An ***affected utility*** is a retail public utility, exempt utility, or provider or conveyer of potable or raw water service that furnishes water service to more than one customer, provides overnight accommodations, and **is not** an affected utility under Texas Water Code, Section 13.1395. An ***extended power outage*** means a power outage lasting more than 24 hours.

If you believe that you are NOT an affected utility please email PDWEPP@tceq.texas.gov to ensure that the requirements do not apply to the water system.

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

X **Residential** ☐ **Commercial** ☐ **Industrial** ☐ **Wholesale** ☐ **Institution**

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

2. CONTACT INFORMATION

During any type of emergency, the following person(s) will be responsible for the water system (contact will be attempted in the order indicated):

Name	Title in the Organization	E-mail	Office Phone Number	Cell Phone Number	Home Phone Number	Other Phone Number
Mike Ellington	General Manager	Mike@aquatechutilities.com	936.494.2600	281.389.0155		
Ken Rash	Operator	Kenneth@aquatechutilities.com	936.494.2600	936.391.1927		
Janell Tucker	Operator	Janell@aquatechutilities.com	936.494.2600	936.499.7790		

3. Location of Maps

The maps are not required to be submitted to TCEQ for review of the EPP but should be available in case of an emergency to enable staff to locate valves, lines, and meters.

Where are your distribution system(s) map(s) located? At water plant

4. Diagram of Water System

Submit a diagram of your drinking water system that shows all equipment (source(s), tank(s), pumps), treatment chemicals, and any open or closed interconnects with other water systems.

See Attached Schematic.

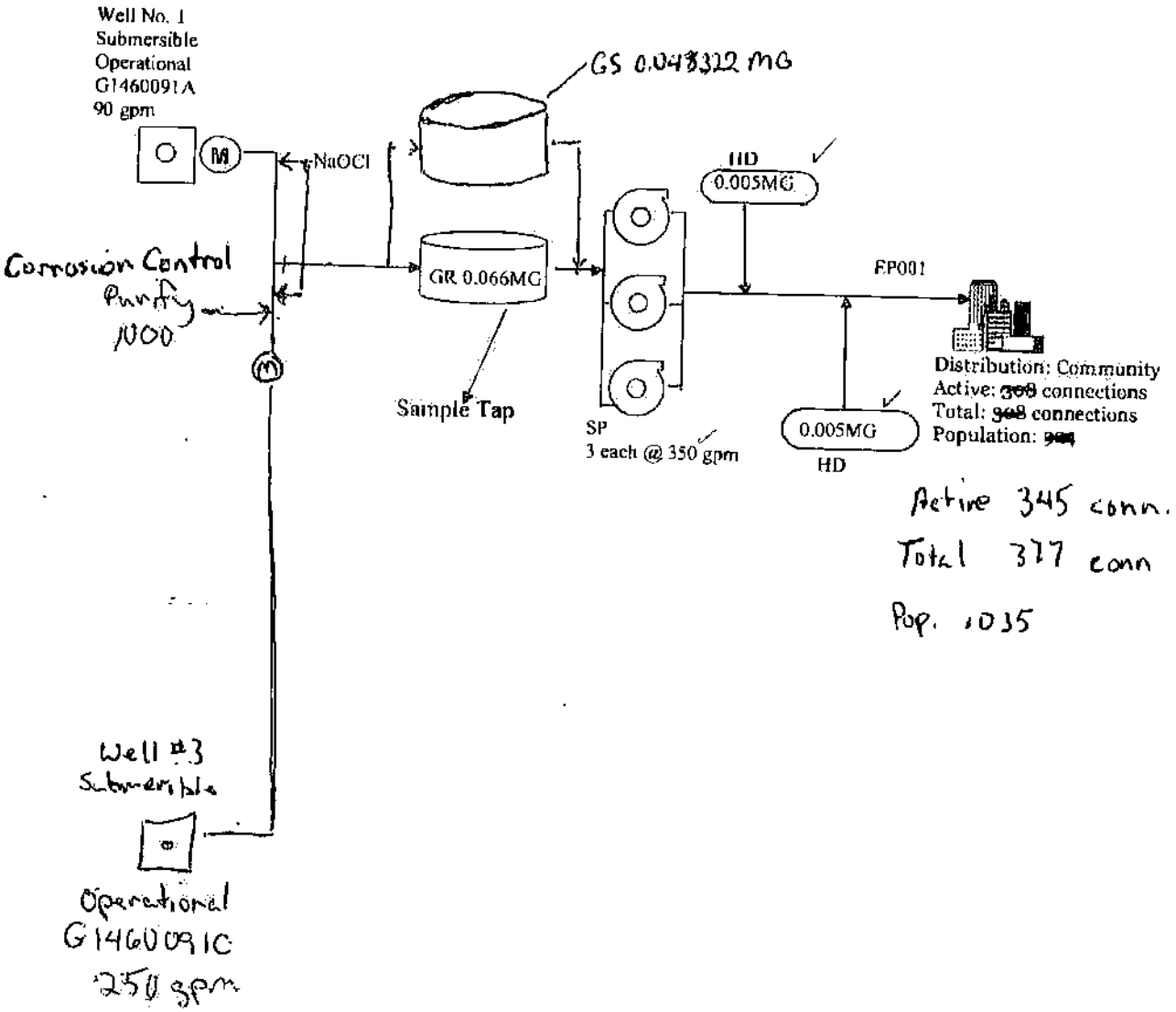
PWS - SYSTEM FLOW DIAGRAM

Name of System:	Woodway Subdivision Water System		Additional ID:	1460091
Investigation No.:	1389188	Investigation Date:	01/05/2017	

Description of Sources, Treatment, Entry Points and Distribution

Labeling: Owner's source names and TCEQ water source code designation, types of treatment and chemicals, entry points to distribution, entry point sample taps, booster disinfection, distribution connections and layout (if possible).

Location: Both wells at CR 427 @ FM 1409



Section II – DESCRIPTION OF THE WATER SYSTEM

1. SOURCE INFORMATION

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

YES X NO ☐ (If NO, go to 1.B)

TCEQ Source ID	Owner's Designation	Well Location	Used During an Emergency?	What plant name is this source associated with?	Pump Capacity
G1460091A	Well 1	10,000 FM 1409	YES X NO ☐	Water Plant #1	90 gpm
G1460091C	Well 3	10,000 FM 1409	YES ☒ NO ☐	Water Plant #1	250 gpm
			YES ☐ NO ☐		

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)? No

YES ☐ NO X (If NO, go to 1.C)

TCEQ Source ID	Owner's Designation	Intake Location	Used During an Emergency?	Number of Pumps	What plant name is this source associated with?	Total Pump Capacity at Intake
			YES ☐ NO ☐			gpm
			YES ☐ NO ☐			gpm
			YES ☐ NO ☐			gpm

C. Does Your Water System Purchase (or Receive) Water? **YES ☐ NO X (If NO, go to 2.A)**

i. Is this affected utility a direct pressure system? (Does the provider's water flow directly into your distribution system, not into a tank? Direct pressure systems generally have no tanks or pumps.)

YES ☐ NO ☐

ii. Does this affected utility re-pressurize the water received from the provider? (Does the water from the provider flow into a tank which is then pumped out into the distribution system by your own pumps?)

YES ☐ NO ☐

Provider Name	PWS ID	Pressure Plane *(if more than 1 plane)*	Will You Rely on This Provider for Water During an Emergency?	Will You Rely on This Provider for Pressure at Your Customer's Connections During an Emergency?	Capacity	Normally Open or Closed Interconnect?
N/A						
			YES ☐ NO ☐	YES ☐ NO ☐	gpm	
			YES ☐ NO ☐	YES ☐ NO ☐	gpm	
			YES ☐ NO ☐	YES ☐ NO ☐	gpm	

2. TREATMENT INFORMATION

A. Does Your Water System Disinfect the Water? **YES X NO ☐ (If NO, go to 2.B)**

Disinfectant *(Disinfectant Name)*	**Location** *(Plant Name)*	**Disinfectant Used During an Emergency?**	**Type of Disinfectant** *(Liquid/Gas)*	**Volume Stored** *(gals or lbs.)*	**Days of Storage** *(Emergency Demand)*	**Electricity Required to Feed Disinfectant?**
NAOCL	Water Plant #1	YES X NO ☐	Liquid Chlorine	80 Gal.	14	YES X NO ☐
		YES ☐ NO ☐	Liquid Chlorine	0 Gal		YES ☐ NO ☐
		YES ☐ NO ☐				YES ☐ NO ☐

B. Does Your Water System Provide Treatment Other Than Disinfection (example: polyphosphate, caustic etc.)? **YES X NO ☐ (If NO, go to 2.C)**

Chemical Feed Pump *(Chemical Feed Name)*	**Location** *(Plant Name)*	**Chemical Used During an Emergency?**	**Type of Chemical** *(Liquid/Gas)*	**Volume Stored** *(gals or lbs.)*	**Days of Storage** *(Emergency Demand)*	**Electricity Required to Feed Chemical**
Purify 1000	Water Plant #1	YES X NO ☐	Liquid	40 Gal	14	YES X NO ☐
		YES ☐ NO ☐				YES ☐ NO ☐
		YES ☐ NO ☐				YES ☐ NO ☐

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). NO

(Do not include well or intake pumps)

YES ☐ NO X (If NO, go to 3.A)

In-Plant Transfer Pump Name	**Location** *(Plant Name)*	**Pump Used During an Emergency?**	**Pump Capacity**
N/A		YES ☐ NO ☐	gpm
		YES ☐ NO ☐	gpm
		YES ☐ NO ☐	gpm

3. DISTRIBUTION SYSTEM INFORMATION

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

YES ☒ NO ☐ (If NO, go to 3.B)

Booster/Service Pump Name	**Location** *(include pressure plane)*	**Pump Used During an Emergency?**	**Pump Capacity**
BP #1	Water Plant #1	YES X NO ☐	350 gpm
BP #2	Water Plant #1	YES X NO ☐	350 gpm
BP #3	Water Plant #1	YES X NO ☐	350 gpm

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

YES ☒ NO ☐ (If NO, go to 4.A)

Tank Type (*Elevated, Hydropneumatic, Ground or Standpipe*)	**Location** *(include pressure plane)*	**Tank Used During an Emergency?**	**Tank Capacity**
Hydro-pneumatic	Water Plant #1, 2- 5000 gal	YES X NO ☐	10,000 gal
Ground storage	Water Plant #1	YES X NO ☐	.066000
Ground Storage	Water Plant #1	YES ☒ NO ☐	.048322

4. PRESSURE PLANES. Consist of a single pressure plane

Does Your Water System Have More Than One Pressure Plane? YES ☐ NO X (If NO, go to 5)

Pressure Plane	TCEQ Source ID(s) or Provider PWS ID(s)	Plant Names(s) *(If Applicable)*	Pump Names(s) *(If Applicable)*

5. SYSTEM DEMAND

Emergency Operation means the demand in MGD from the highest emergency usage day (not normal daily usage) occurring during a natural disaster within the last 3 years, excluding fire events and large water main breaks.

Demand Information	Normal Operation	Emergency Operation
Average Daily Demand:	0.051520 MGD	0.051520 MGD
Maximum Daily Demand:	0.082000 MGD	0.082000 MGD
System Capacity:	0.432000 MGD	0..432000 MGD

6. SYSTEM SIZE. No

A. Does Your Water System Sell/Provide Water to Other Water Systems? No

YES ☐ NO ☒ (If NO, go to 6.B)

Receiver/Buyer Name	PWS ID *(if applicable)*	Normally Open or Normally Closed Interconnect?	Will You Provide 20 psi Throughout the Receiver's Distribution System During an Emergency?	Number of Connections in the Receiver's Water System	Population of the Receiver's Water System
			YES ☐ NO ☐		
			YES ☐ NO ☐		
			YES ☐ NO ☐		

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

(If applicable, include any connections from other water systems you may serve in the table in 6.A)

Pressure Plane *(if applicable)*	Number of Connections	Population
	377	1,131

7. POWER PROVIDER(s)

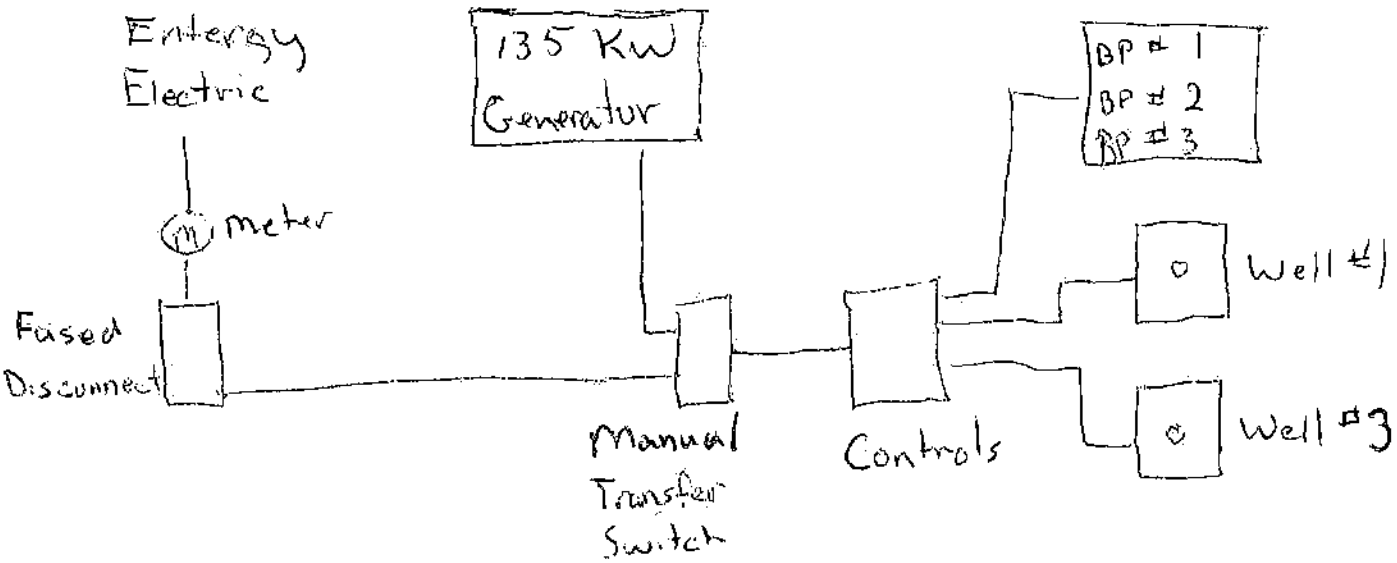
Electric Utility or Retail Electrical Provider(s)	Entergy Electric

8. ELECTRICAL SCHEMATIC

Provide an electrical schematic or diagram of your water system's emergency power facilities and the equipment (treatment(s), supply, pressure maintenance, etc.) that is powered.

9. OTHER PERTINENT SYSTEM INFORMATION

Other information about the system that could be useful during an emergency (This can include plant equipment not used or any other circumstances that would clarify how the affected utility will meet the EPP requirements):



Section III– Alternate Power Options Overview

The following is a list that will assist in determining which option (or options) should be selected to demonstrate the ability to provide emergency operations during extended power outages lasting more than 24 hours. Provide the required information on the following applicable pages. You must select at least one option and **options (7-13) may require more than one option.**

OPTION 1: PERMANENTLY INSTALLED AUTOMATIC STARTING AUXILIARY GENERATOR(S)

COMPLETE OPTION 1 – Sections A through C

OPTION 2A: YOUR SYSTEM WILL RELY ON YOUR PROVIDER DURING AN EXTENDED POWER OUTAGE

The type of systems that will utilize this option are a distribution only system which receives water under direct pressure relying on their provider for water at 20 psi throughout their distribution system. A water system receives water to a tank and re-pressurizes the water to maintain 20 psi in their distribution system may also choose this option. Choose if you will rely on a water provider *during an extended power outage*.
COMPLETE OPTION 2A – Sections A and B

OPTION 2B: MEMBER OF TXWARN

A **"distribution only" system** may only use this option if it needs certified staff for operational purposes or needs equipment to repair their distribution system. **A distribution only system** will need to choose Option 2A for the purpose of maintaining 20 psi in its distribution system during an extended power outage.
COMPLETE OPTION 2B – Sections A through B

OPTION 3A: NEGOTIATION OF LEASING AND CONTRACTING AGREEMENTS

Your facility has obtained a leasing or contract agreement for emergency power equipment and fuel. The agreement(s) must provide for coordination with the Texas Division of Emergency Management.
COMPLETE OPTION 3A – Sections A through D

OPTION 3B: MUTUAL AID AGREEMENT(S) WITH OTHER WATER PROVIDERS

Your facility is a member of another mutual aid provider, you have identified, and will make available one or more resources with another mutual aid provider. Your facility has obtained mutual aid agreement(s) for emergency power equipment and fuel with other water providers including retail, exempt, potable, or raw water providers. The agreement(s) must provide for coordination with the Texas Division of Emergency Management.
COMPLETE OPTION 3B – Sections A through B

OPTION 4: USE OF PORTABLE GENERATOR(S) CAPABLE OF SERVING MULTIPLE FACILITIES EQUIPPED WITH QUICK-CONNECT SYSTEMS

A portable generator capable of being moved to serve multiple facilities where both the portable generator and facilities are equipped with compatible quick-connect systems.
COMPLETE OPTION 4 – Sections A through D

OPTION 5: USE OF ON-SITE ELECTRICAL GENERATION OR DISTRIBUTED GENERATION FACILITIES

On-site electrical generation or distributed generation facilities. On-site electrical generation means that each facility generates, or can generate, its own power rather than being powered by a commercial electric power grid. Distributed Generation Facilities are small-scale power producing facilities located near the electrical load, which may feed into a common grid. An example is electricity generated by solar power.
COMPLETE OPTION 5 – Sections A through D

OPTION 6: HARDENING THE ELECTRIC TRANSMISSION AND DISTRIBUTION SYSTEM SERVING THE WATER SYSTEM

One alternative is to relocate electric transmission lines for the system from overhead to underground and protect them from strong winds. Another alternative is to replace overhead transmission lines, poles and rated appurtenances with ones that can withstand historical hurricane-force wind velocities, and trim or remove any trees or branches next to and above the overhead transmission lines.

COMPLETE OPTION 6 – Sections A and B

OPTION 7: USE AND MAINTENANCE OF DIRECT ENGINE OR RIGHT-ANGLE DRIVES

Direct engine or right-angle drive. This option is only available to existing facilities, **may** require more than one option, and must still provide 20 psi throughout the distribution system.

COMPLETE OPTION 7 – Sections A through C

OPTION 8A: DESIGNATION OF THE WATER SYSTEM AS A CRITICAL LOAD FACILITY

Your water system is registered with your electric provider as a critical load facility, this **will** require more than one option, and must provide 20 psi throughout the distribution system (see page 19 for additional information on the requirement for a second option). Will require documentation from your electric provider indicating your facility is protected from power loss lasting more than 24 hours.

COMPLETE OPTION 8 – Sections A and B

OPTION 8B: RECOGNITION OF THE WATER SYSTEM AS HAVING REDUNDANT, ISOLATED, OR DEDICATED ELECTRICAL FEEDS

Your water system has redundant, isolated, or dedicated electrical feeds to water plant(s) and equipment, this **will** require more than one option, and must provide 20 psi throughout the distribution system (see page 21 for additional information on the requirement for a second option). Will require documentation from your electric provider indicating your facility is protected from power loss lasting more than 24 hours.

COMPLETE OPTION 8B – Sections A and C

OPTION 9: PROVIDE WATER STORAGE CAPABILITIES

Your water system has sufficient ground, elevated, or standpipe storage to provide your entire distribution system with water at 20 psi during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option.

COMPLETE OPTION 9 – Sections A and E

OPTION 10A: WATER IS DELIVERED TO YOUR DISTRIBUTION SYSTEM FROM OUTSIDE YOUR SERVICE AREA USING AN EMERGENCY INTERCONNECT

Water is delivered from outside your service area in such a manner that you can provide water at 20 psi to your distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option.

COMPLETE OPTION 10 – Sections A and F

OPTION 10B: WATER IS DELIVERED TO YOUR DISTRIBUTION SYSTEM FROM OUTSIDE YOUR SERVICE AREA USING A WATER HAULER

Water is delivered from outside your service area in such a manner that you can provide water at 20 psi to your distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option.

COMPLETE OPTION 10 – Sections A and H

OPTION 11: WATER SYSTEM HAS THE ABILITY TO PROVIDE WATER THROUGH ARTESIAN FLOWS

An affected utility can provide water using an approved artesian source to their distribution system at 20 psi during an extended power outage lasting more than 24 hours. This option **will** need to be combined with another option (see page 28 for additional information on the requirement for a second option).
COMPLETE OPTION 11 – Sections A and E

OPTION 12: REDUNDANT INTERCONNECTIVITY BETWEEN PRESSURE ZONES

An affected utility opens valves in one or more pressure zones within their water system to provide water at 20 psi in all pressure zones throughout its entire distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option.
COMPLETE OPTION 12 – Sections A and D

OPTION 13: USE EMERGENCY WATER DEMAND RULES TO MAINTAIN EMERGENCY OPERATIONS

An affected utility will provide a minimum of 0.35 gallons per minute (gpm) per connection to the distribution system while maintaining distribution pressures of at least 20 psi in the event of the loss of normal power supply. This option **will** need to be combined with other option(s) to ensure 20 psi during a water outage lasting more than 24 hours (see page 30 for additional information on the requirement for a second option).
COMPLETE OPTION 13 – Sections A and D

OPTION 14: ANY OTHER ALTERNATIVE DETERMINED BY THE COMMISSION TO BE ACCEPTABLE

An affected utility can propose other alternatives of meeting the requirements of TWC 13.1394 if the alternative(s) ensure water will be provided at 20 psi throughout the distribution system during a water outage lasting more than 24 hours.
COMPLETE OPTION 14 – Sections A and B

Section IV– Alternate Power Options Details

OPTION 1: PERMANENTLY INSTALLED AUXILIARY GENERATOR(S)

A. Generator Specifications.

Please list **all** the generators, **all** equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model Caterpillar	Max Power (KW)**	Phase	Fuel Type	Automatic Switch Gear?	Facility Staffed 24 hours a day, 7 days a week?	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered**
		1 ☐ 2 ☐ 3		YES ☐ NO	YES ☐ NO	Well pump 1 ☒ Well pump 2 ☒ Well pump 3 ☒ Booster pump 1 ☒ Booster pump 2 ☒ Booster pump 3 ☐ Disinfection Equipment ☒ Treatment Equipment ☒ Compressor(s) ☒ Total KW	
		1 ☐ 2 ☐ 3 ☐		YES ☐ NO ☐	YES ☐ NO ☐		kW kW kW
		1 ☐ 2 ☐ 3 ☐		YES ☐ NO ☐	YES ☐ NO ☐		kW kW kW

**The generator's total KWs cannot be less than the KWs listed under the power requirements for each facility and treatment unit that will be provided power. The generator must be able to power the equipment listed by the water system. **

B. Fuel Location

i. Physical Location of Fuel Supply (GPS or "911" address): Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

i. How much fuel is stored on site?

ii. How much fuel does the generator use per hour? (Attachment **B** may assist in determining that amount)

iii. Does the water system have access to additives/other methods to prevent fuel from freezing as per manufactures recommendations (example diesel additives)? Caterpillar SR-4 spec sheetg

OPTION 2A: YOUR SYSTEM WILL RELY ON YOUR PROVIDER DURING AN EXTENDED POWER OUTAGE

Choose only if you will rely on purchased water *during an extended power outage*. Your current contract and or provider ***agree*** to provide you with water during an extended water outage at a pressure of 20 psi in distribution.

Provider Name	PWS ID	PRESSURE PLANE	Will you rely on this provider for water to a tank during an emergency?	Will you rely on this provider for pressure at YOUR customer's connections during an emergency?
			YES ☐ NO ☐	YES ☐ NO ☐
			YES ☐ NO ☐	YES ☐ NO ☐
			YES ☐ NO ☐	YES ☐ NO ☐

A. Is your water system solely relying on a provider(s) for emergency operations? (This means, the provider's water flows directly into your distribution system, and not into a tank, and you have no tanks or pumps)

☐ **YES (If yes, you must submit documentation under 2A.i. listed below.)**

☐ **NO** (Please fill out the pages for the alternative power option that will power the equipment)

i. Please provide **one or more** of the following:

☐ A copy of the contract(s) with your provider(s) that includes language guaranteeing 20 psi throughout your distribution system or specific pressure plane. Please tab the page and highlight the section in the contract guaranteeing pressure.

☐ A letter from the provider(s) including language guaranteeing 20 psi throughout your distribution system or specific pressure plane.

☐ Page(s) from the provider's EPP which includes the connection count for your system (or pressure plane) in the provider's connection count.

☐ An engineering study (hydraulic analysis) sealed by a Texas Licensed Professional Engineer demonstrating that the provider is capable, of providing your entire distribution system with water services at a minimum of 20 psi.

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

☐ **YES** (Please fill out the pages for the alternative power option that will power the equipment)

☐ **NO**

B. Does your water system re-pressurize the water received from the provider? (Does the water from the provider flow into a tank which is then pumped out into the distribution system by your own pumps?)

☐ **YES** (Please fill out the pages for the alternative power option that will power the equipment)

☐ **NO**

OPTION 2B: CONTRIBUTING MEMBER OF TXWARN

Member has identified needed resource(s) to the TXWARN system. Installation of a quick connect system is required with this option. **A "distribution only" system may not use this option to maintain 20psi in distribution.**

A. Please provide ALL of the following items

☐ A copy of the TXWARN membership profile page.

☐ A copy of the mutual aid agreement with TXWARN (Applicable to Investor/Privately Owned Water systems)

☐ A local government entity is covered by the Texas Statewide Mutual Aid System as stated in the Texas Government Code Section 418.111 Subchapter E (Applicable to Cities, Counties, and Districts)

B. Generator specifications

Please list the items hoped to be obtained from TXWARN. List **all** equipment to be powered, and the power needs for each piece of equipment.

Generator	Power (KW)	Quick Connect Installed?	Phase	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements of Each Facility and Treatment Unit Powered
		YES ☐ NO ☐ Date to be installed	1 ☐ 2 ☐ 3 ☐	Well pump 1 ☐	kW
				Well pump 2 ☐	kW
				Well pump 3 ☐	kW
				Booster pump 1 ☐	kW
				Booster pump 2 ☐	kW
				Booster pump 3 ☐	kW
				Disinfection Equipment ☐	kW
				Treatment Equipment ☐	kW
				Compressor(s) ☐	kW
				☐	kW
		YES ☐ NO ☐ Date to be installed	1 ☐ 2 ☐ 3 ☐		kW
					kW
					kW
					kW
					kW
					kW
					kW
					kW
					kW
					kW

The generator's total KWs **cannot be less than the KWs listed under the power requirements for each facility and treatment unit that will be provided power. The generator must be able to power the equipment listed by the water system. **

OPTION 3A: NEGOTIATION OF LEASING AND CONTRACTING AGREEMENTS

Your water system will obtain an agreement with a generator providing company. Installation of a quick connect system is required with this option. Please note that the agreement must provide for coordination with the Texas Division of Emergency Management.

A. Provide a signed copy of the agreement

B. Generator Specifications

Please list the generator to be leased, **all** equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model	Max Power (KW)	Phase	Quick Connect Installed?	Fuel Type	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
		1 ☐ 2 ☐ 3 ☐	YES ☐ NO ☐ Date to be installed		Well pump 1 ☐	kW
					Well pump 2 ☐	kW
					Well pump 3 ☐	kW
					Booster pump 1 ☐	kW
					Booster pump 2 ☐	kW
					Booster pump 3 ☐	kW
					Disinfection Equipment ☐	kW
					Treatment Equipment ☐	kW
					Compressor(s) ☐	kW
					☐	kW
		1 ☐ 2 ☐ 3 ☐	YES ☐ NO ☐ Date to be installed			kW
						kW
						kW
						kW
		1 ☐ 2 ☐ 3 ☐	YES ☐ NO ☐ Date to be installed i.			kW
						kW
						kW
						kW

The generator's total KWs **cannot be less than the KWs listed under the power requirements for each facility and treatment unit that will be provided power. The generator must be able to power the equipment listed by the water system. **

C. Fuel Location

i. Physical Location of Fuel Supply (GPS or "911" address):

D. Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

i. How much fuel is stored on site?
ii. How much fuel does the generator use per hour? (Attachment B may assist in determining that amount.)

OPTION 3B: MUTUAL AID AGREEMENT WITH ANOTHER WATER PROVIDER(S)

Member has identified needed resource(s) to another water provider as part of a mutual aid agreement. Installation of a quick connect system is required with this option. **A "distribution only" system may not use this option to maintain 20psi.** Please note that the agreement must provide for coordination with the Texas Division of Emergency Management.

A. Please provide ALL of the following items:

☐ Name of water system(s) or group that you have a mutual aid agreement with.

☐ A copy of the mutual aid agreement from each water provider.

☐ Highlight the area in the agreement that lists the resource(s) to be provided by the water system(s).

B. Generator specifications

Please list the items that are anticipated to be obtained through a mutual-aid agreement. List **all** equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model	Max Power (KW)	Phase	Quick Connect Installed?	Fuel Type	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
		1 ☐ 2 ☐ 3 ☐	YES ☐ NO ☐ Date to be installed		Well pump 1 ☐	kW
					Well pump 2 ☐	kW
					Well pump 3 ☐	kW
					Booster pump 1 ☐	kW
					Booster pump 2 ☐	kW
					Booster pump 3 ☐	kW
					Disinfection Equipment ☐	kW
					Treatment Equipment ☐	kW
					Compressor(s) ☐	kW
					☐	kW
		1 ☐ 2 ☐ 3 ☐	YES ☐ NO ☐ Date to be installed			kW
						kW
						kW
						kW
		1 ☐ 2 ☐	YES ☐ NO ☐			kW
						kW
						kW

Generator Brand & Model	Max Power (KW)	Phase	Quick Connect Installed?	Fuel Type	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
		3 ☐	Date to be installed			kW

The generator's total KWs **cannot be less than the KWs listed under the power requirements for each facility and treatment unit that will be provided power. The generator must be able to power the equipment listed by the water system. **

OPTION 4: USE OF PORTABLE GENERATOR(S) CAPABLE OF SERVING MULTIPLE FACILITIES EQUIPPED WITH QUICK-CONNECT SYSTEM(S)

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.

Generator Brand & Model	Generator Storage Location	Distance from Your Water System	Other Water Systems Sharing This Generator *(PWS Name and ID if applicable)*	Distance Between Your Water System and Those Sharing the Generator

B. Generator specifications

Please list **all** the portable generators, **all** equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model	Max Power (KW)	Phase	Fuel Type	Quick Connect Installed?	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
		1 ☐ 2 ☐ 3 ☐		YES ☐ NO ☐ Date to be installed	Well pump 1 ☐	kW
					Well pump 2 ☐	kW
					Well pump 3 ☐	kW
					Booster pump 1 ☐	kW
					Booster pump 2 ☐	kW
					Booster pump 3 ☐	kW
					Disinfection Equipment ☐	kW
					Treatment Equipment ☐	kW
					Compressor(s) ☐	kW
					☐	kW
		1 ☐ 2 ☐ 3 ☐		YES ☐ NO ☐ Date to be installed		kW
						kW
						kW
						kW

C. Fuel Location (if applicable)

i. Physical Location of Fuel Supply (GPS or "911" address):

D. Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or

more if needed based on past power outages and utility knowledge.

i. How much fuel is stored on site?

ii. How much fuel does the generator use per hour? (Attachment B may assist in determining that amount.)

OPTION 5: USE OF ON-SITE ELECTRICAL GENERATION OR DISTRIBUTED GENERATION FACILITIES

Onsite Electrical Generation means that each facility generates its own power rather than being powered by a commercial electric power grid. Distributed Generation Facilities are small-scale power producing facilities located near the electrical load which may feed into a common grid.

A. On-Site Electrical Generation or Distributed Generation Specifications

i. Describe On-Site Electrical Generation or Distributed Generation Facility:

B. On-site Electrical Generation or Distributed Generation Specifications

Please list **all** facilities, list **all** equipment to be powered and the power needs for each piece of equipment.

Type of On-site Electrical Generation Facilities.	**Max Power (KW)**	**Fuel Type** *(if applicable)*	**List all Facilities and Treatment Units That Will Be Powered During an Emergency**	**Power Requirements of Each Facility and Treatment Unit Powered**
Diesel/ Electric Caterpillar Model SR4	135 KW	Diesel	Well pump 1 ☐	7.45 kW
			☐	
			Well pump 3 ☐	14.91 kW
			Booster pump 1 ☐	11.19 kW
			Booster pump 2 ☐	11.19 kW
			Booster pump 3 ☐	11.19 kW
			Disinfection Equipment ☐	0.14 kW
			Treatment Equipment ☐	0.14kW
			Compressor ☐	1.12 kW
			☐	kW
				kW
				kW
				kW
				kW
				kW

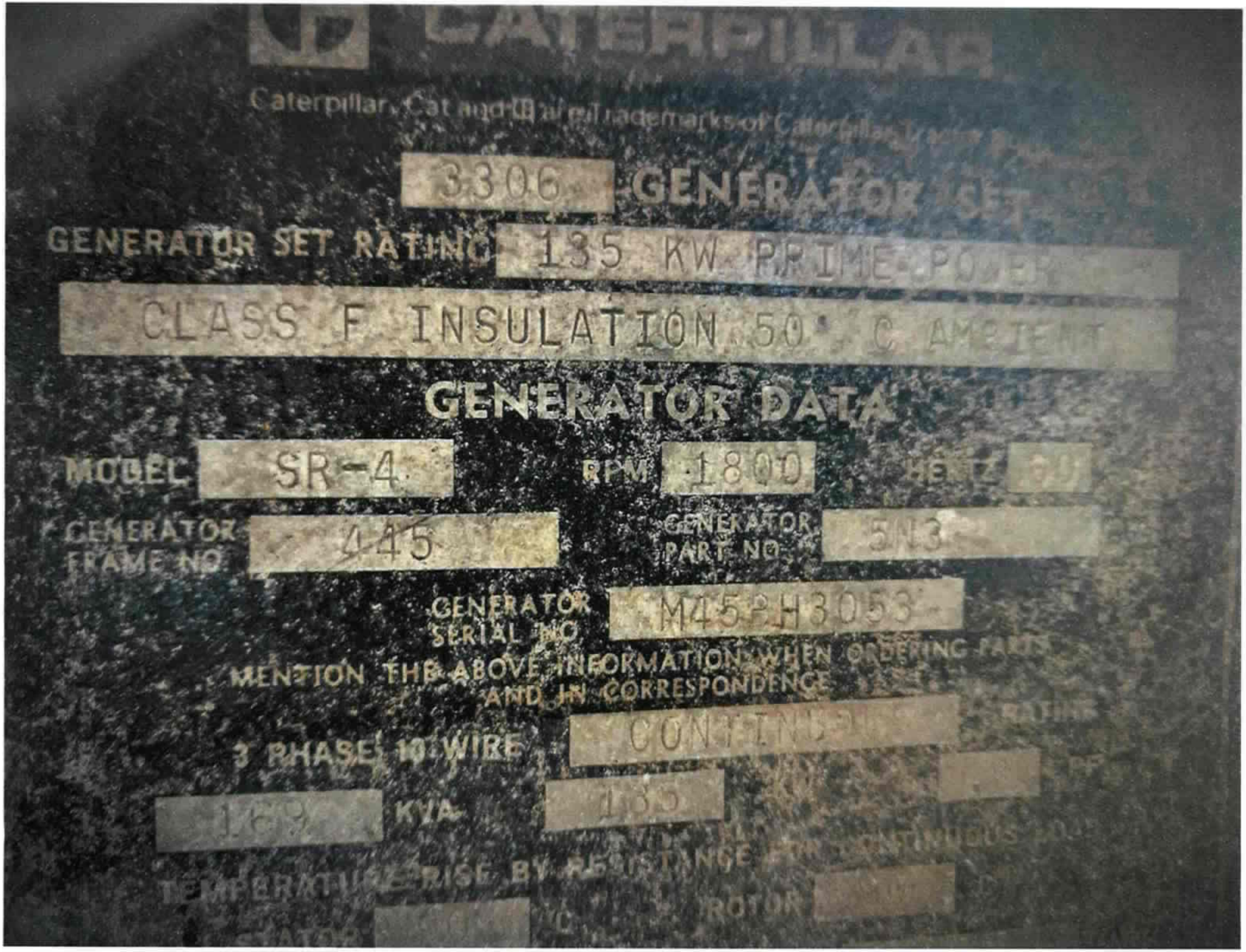
C. Fuel Location

i. Physical Location of Fuel Supply (GPS or "911" address): 9994 FM 1409

D. Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

i. How much fuel is stored on site? 200 Gallon

ii. How much fuel does the generator use per hour? (Attachment **B** may assist in determining that amount) 3.3


CATERPILLAR
Caterpillar, Cat and the Cat mark are trademarks of Caterpillar
3306 GENERATOR SET
GENERATOR SET RATING 135 KW PRIME POWER
CLASS F INSULATION 50° C AMBIENT
GENERATOR DATA
MODEL SR-4
RPM 1800
GENERATOR FRAME NO 445
GENERATOR PART NO 5N3
GENERATOR SERIAL NO M45P3053
MENTION THE ABOVE INFORMATION WHEN ORDERING PARTS AND IN CORRESPONDENCE
CONTINUOUS
3 PHASE 10 WIRE
KVA 135
RISE BY RESISTANCE
ROTOR

OPTION 6: HARDENING THE ELECTRIC TRANSMISSION AND DISTRIBUTION SYSTEM SERVING THE WATER SYSTEM

One alternative is to relocate electric transmission lines for the system from overhead to underground and protect them from flooding. Another alternative is to replace overhead transmission lines, poles and rated appurtenances with ones that can withstand historical hurricane-force wind velocities, and trim or remove any trees or branches next to and above the overhead transmission lines.

A. Hardening Description

i. Describe the hardening activities:

B. Diagram

Include a diagram showing the electrical system, including the power transmission system (from the power generation facility to the customer's power meter) and distribution system (the water system's electrical wiring after the customer's power meter) feeding each water facility and the preventive measures taken for each.

OPTION 7: USE AND MAINTENANCE OF DIRECT ENGINE OR RIGHT- ANGLE DRIVES

(EXISTING FACILITIES ONLY) This option is only available to existing facilities and, **may** require more than one option. If right angle drive is located only on a well how will treated water be sent to the distribution system or if located only on a booster pump, how is treated water entering a storage tank, and must still provide 20 psi throughout the distribution system.

A. Direct Engine or Right-Angle Drive Specification

Please list all the drives, **all** equipment to be powered, and the power needs for each piece of equipment.

Brand or Model	Max Power (HP, kW)	RPM	Fuel Type	List all Facilities and Treatment Units Powered	Power Requirements of Each Facility and Treatment Unit Powered (circle appropriate unit)
				Well pump 1 ☐	kW or HP
				Well pump 2 ☐	kW or HP
				Well pump 3 ☐	kW or HP
				Booster pump 1 ☐	kW or HP
				Booster pump 2 ☐	kW or HP
				Booster pump 3 ☐	kW or HP
				Disinfection Equipment ☐	kW or HP
				Treatment Equipment ☐	kW or HP
				Compressor(s) ☐	kW or HP
				☐	kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP

B. Fuel Location (if applicable)

i. Physical Location of Fuel Supply (GPS or "911" address):

C. Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

i. How much fuel is stored on site?

ii. How much fuel does the generator use per hour? (Attachment B may assist in determining that amount.)

OPTION 8A: DESIGNATION OF THE WATER SYSTEM AS A CRITICAL LOAD FACILITY

Your water system is registered with your electric provider as a critical load facility. This **will** require more than one option, because designation of critical load does not guarantee an uninterrupted supply of electricity. It is the responsibility of the water system to plan for alternative sources of electric power should a localized outage or load shed event occur. The water system is required to provide 20 psi throughout the distribution system.

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

☐ Name of electric provider(s).

☐ A copy of the letter or email from your electric provider(s) designating your water system as having critical load status.

☐ Submit a diagram of your water system that includes all equipment listed in Section II DESCRIPTION OF THE WATER SYSTEM

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

Please provide other option(s) _____ then complete that section of the EPP.

B. Indicate all facilities that are included in critical load status (please refer to the facilities listed for the PWS in Section II – Description of the Water System) and use the exact same naming convention.

Name of Plant	Address to Electric Meter Providing Power to Plant

OPTION 8B: DESIGNATION OF THE WATER SYSTEM AS HAVING REDUNDANT, ISOLATED, OR DEDICATED ELECTRICAL FEEDS

Your water system has redundant, isolated, or dedicated electrical feeds. This **will** require more than one option, because having redundant, isolated, or dedicated electrical feeds does not guarantee an uninterrupted supply of electricity. It is the responsibility of the water system to plan for alternative sources of electric power should a localized outage or load shed event occur. The water system is required to provide 20 psi throughout the distribution system.

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

☐ Name of electric provider(s) that will provide redundant, isolated, or dedicated electrical feeds.

☐ A copy of the letter or email from your electric provider(s) that designates your water system as having redundant, isolated, or dedicated electrical feeds.

☐Submit a diagram of your water system that includes all equipment listed in Section II DESCRIPTION OF THE WATER SYSTEM

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

Please provide other option(s) _____ then complete that section of the EPP.

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

Name of Plant	Address to Electric Meter Providing Power to Plant

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

Name of Plant	Address to Facility without Dedicated Electrical Feeds

OPTION 9: PROVIDE WATER STORAGE CAPABILITIES

Your water system has sufficient ground, elevated, or standpipe storage to provide your entire distribution system with water at 20 psi during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option if the water system does not have sufficient, useful storage during a power outage lasting longer than 24 hours. It is the responsibility of the water system to plan for alternative sources of electric power should the water system not have sufficient storage to last for greater than 24 hours.

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

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)]

☐ **YES** **

☐ **NO**

** Water systems with an exception or alternative capacity requirement that ***is less than,*** the required minimum capacity requirements for storage, will be required to choose a different option. A different option is required because an exception or alternative capacity requirement reduces the water system's minimum required treatment capacity and consequently reduces the system's ability to provide useful[1] water storage capacity during an outage lasting more than 24 hours.

Use the diagram on the next page to assist you in answering questions C and D.

C. What is the useful storage [1] capacity of all storage tanks that maintain distribution pressures above 20 psi (46 feet of residual hydraulic head above the highest connection)?
Note: If you have dedicated fire storage, do not include it in the number above.

Useful storage capacity of all storage tanks: _____

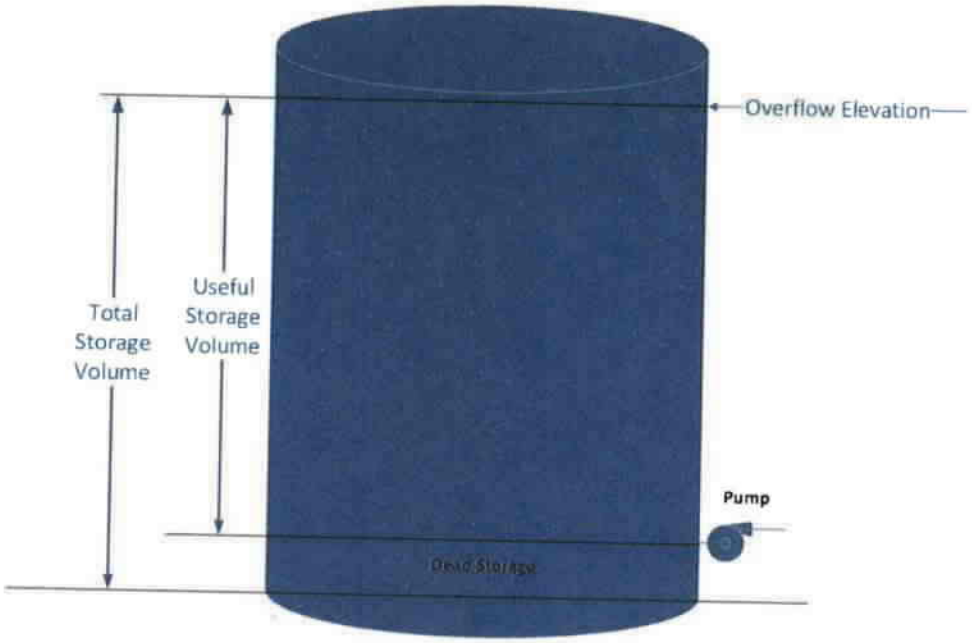
D. Using the water systems Maximum Daily Demand (MDD) listed in question 5 under *Section II – Description of the Water System*, divide the useful storage volume (million gallons) for maintaining distribution pressures above 20 psi by the MDD under emergencies. This is the amount of days water can be provided if storage was full before the start of the emergency.

Number of days water can be provided before a state of emergency arises: _____.

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.

Please provide other option(s) then complete that section of the EPP.

[1] The AWWA Drinking Water Dictionary defines useful storage as "*water storage that is readily available for discharge into a distribution system, such as water in an elevated storage tank or in a ground storage tank that can be pumped into the system. Water in a ground storage tank below the suction level of the pump would be storage, but not useful storage*".


Overflow Elevation
Total Storage Volume
Useful Storage Volume
Pump
Dead Storage

OPTION 10A: WATER IS DELIVERED TO YOUR DISTRIBUTION SYSTEM FROM OUTSIDE YOUR SERVICE AREA USING EMERGENCY INTERCONNECTS

The affected utility would be receiving water temporarily until natural disaster has passed.

Water is delivered from outside your service area in such a manner that you can provide water at 20 psi to your distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option depending if the entire water system will be receiving water from the interconnect. An affected utility opens one or more emergency interconnects with other water systems that can provide water into different pressure zones of the affected utility requesting to use this option.

If Using Emergency Interconnects (normally closed) to provide water to your service area:

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.

PWS ID Number and Name	Where does this system obtain its water?	Connections Served

B. Provide the following information:

1. A map of your distribution system and highlight the area that will be provided water by a different water system.
2. Is the interconnect under direct pressure or is it an air gap into a storage tank? _____
3. Provide a copy of an agreement or contract that clearly states the providing system agrees to provide and maintain water to your distribution system at 20psi.

List storage tank(s) that have an air gapped interconnect?

Plant Name (Needs to match with listing under Section II of EPP)	**Storage Tank(s)**

C. Will both water systems be using the same type of disinfection? ☐ **YES** ☐ **NO**

If you answered **NO** and the emergency source contains a different disinfectant than what the water system distributes under normal operations, provide the following information:

☐ **YES** ☐ **NO** Will the water system use only the emergency source during an emergency?

☐ **YES** ☐ **NO** Will the water system modify their distribution system to ensure areas with different disinfectants will be isolated from each other?

☐ **YES** ☐ **NO** Does the water system currently have a valid exception to blend chlorine and chloramines in an emergency?

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)]

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.

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.

Please provide other option(s) then complete that section of the EPP.

OPTION 10B: WATER IS DELIVERED TO YOUR DISTRIBUTION SYSTEM FROM OUTSIDE YOUR SERVICE AREA USING WATER HAULER(S)

The affected utility would be receiving water temporarily until natural disaster has passed. Water is delivered to your service area using a water hauler and, you can provide water at 20 psi to your distribution system during an extended power outage lasting more than 24 hours. This option may need to be combined with another option if the water system cannot deliver water pressurized to 20 psi to the distribution system.

If using Water Hauler(s) to provide water to your service area:

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

Approved Water Hauler ID (Can be verified in Texas Drinking Water Watch)

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.

Water Provider ID	**Type of Disinfection Used**

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

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

Plant Name (Needs to match with listing under Section II of EPP)	**Storage Tank(s)**

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

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

☐ **YES** ☐ **NO**

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.

Please provide option(s) and complete that section of the EPP.

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.

Please provide another option(s) then complete that section of the EPP.

OPTION 11: WATER SYSTEM HAS THE ABILITY TO PROVIDE WATER THROUGH ARTESIAN FLOWS

An affected utility can provide water using an approved artesian source to their distribution system at 20 psi during an extended power outage lasting more than 24 hours. This **will** need to be combined with another option if the water system is unable to ensure water is consistently treated and distributed at 20psi to your distribution system. It is the responsibility of the water system to plan for alternative sources of electric power should the water system be unable to consistently provide 20 psi of pressurized treated water to the distribution system.

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

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

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

D. **How will pumps be powered?**

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 an additional option if it can document that 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.**

Please provide another option(s) then complete that section of the EPP.

OPTION 12: REDUNDANT INTERCONNECTIVITY BETWEEN PRESSURE ZONES

An affected utility opens valves in one or more of their pressure zones to provide water at 20 psi throughout its distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option to ensure the system can provide 20 psi throughout its 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)?

B. Please provide the following:

☐ A map of your system delineating pressure planes, and show elevated tanks, elevation contours of each zone and isolation valves.

☐ Provide useful storage of each elevated storage tank, see **(Option 9 Question C-D and Diagram page 25)**.

☐ A capacity report with details that show each pressure plane can provide 0.35 gpm per connection.

☐ Are there areas that will need inline booster pumps? If so, how will they be powered? Please provide a schematic of the connection.

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.

Please provide your other option(s) then complete that section of the EPP.

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. For example, if elevation contour difference exceeds feet of useful storage or if 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

An affected utility will provide a minimum of 0.35 gallons per minute (gpm) per connection to the distribution system while maintaining distribution pressures of at least 20 psi in the event of the loss of normal power supply. This option **will** need to be combined with another option to ensure 20 psi during a water outage lasting more than 24 hours since just reducing water demand will not be adequate to provide water during an extended power outage.

A. How will you communicate with your customers that you have instituted your Drought Contingency Plan during an extended power outage? (e.g. Utility website, Social Media, Radio, TV, reverse 911, door tags, 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.

Please provide other option(s) _____ then complete that section of the EPP.

C. Explanation and Authority

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 **N/A** ☐

Fill in the levels or stages of restrictions that will be applied, the conditions that generally will trigger them and the types of restrictions that will be applied. The conditions that trigger various restriction stages could be based upon critical source water levels and other conditions such as imminent loss of water or pressure.

Restriction Stage	Stage Trigger(s)	Restrictions
I		
II		
III		

OPTION 14: ANY OTHER ALTERNATIVE DETERMINED BY THE COMMISSION TO BE ACCEPTABLE

An affected utility can propose other alternatives of meeting the requirements of TWC 13.1394 if the alternative(s) ensure water will be provided at 20 psi throughout the distribution system during a water outage lasting more than 24 hours.

A. The following methods would NOT be acceptable options

i. **Evacuation**

The EPP must show how you will provide water during an extended power outage caused by a natural disaster, not during the disaster when it is unsafe. The rule specifically states the water is to be provided after it is safe and practicable. The people who are evacuated may return when it is safe to do so after the disaster has passed, but before power is returned to your water system. In the case, of the most recent winter storm power was not restored for several days. You must be able to provide water after the disaster, but before normal power is restored.

ii. **Providing bottled water**

The EPP must show how you will provide water at **20 psi** at each of your customer's connections.

iii. Relying on your provider **without** the documentation that states the provider will provide your system with 20psi throughout your distribution system.

B. Alternative Description

Describe the alternative and how it will provide 20 psi throughout your distribution system:

Section V – Emergency Communications

Emergency Communications are an essential part of an emergency response event. Knowing who to notify before an emergency event occurs is the best way to ensure that you, your system, and your customers receive needed emergency assistance. Many numbers have been provided to assist you with completing this portion of the plan. Please feel free to make copies of the pages in Section IV to post at your facility and/or to train your employees.

If the Organization is not applicable to your utility, please enter **N/A**. You are required to provide phone numbers for your County Judge and County Sheriff's Office.

If you are a member of another mutual aid organization other than TXWARN please include them on this list.

A. Emergency Contacts

Organization	Phone Numbers (include area code)		E-Mail or Website
	Day	Evening	
Fire Department	911	911	
Police Department	911	911	
Emergency Medical Service	911	911	
TCEQ Water Homeland Security	888/777-3186	888/777-3186	
Texas PUC	512/936-7405		http://www.puc.texas.gov/industry/water/utilities/fmt.aspx Email: water@puc.texas.gov
National Response Center	800/424-8802	800/424-8802	http://nrc.uscg.mil/Default.aspx
State Spill Hotline	800/832-8224	800/832-8224	https://www.tceq.texas.gov/response/spills
Poison Control	800/222-1222	800/222-1222	http://poisoncontrol.org/home/
CHLOREP (Chlorine Emergency Plan)	800/424-9300	800/424-9300	https://www.chlorineinstitute.org/emergency-preparedness/chlorep/
TCEQ Regional Office	24-hour cell phone 512/965-2717		Website: https://www.tceq.texas.gov/agency/directory/region/reglist.html
County Judge	936.336.4665		Website: www.co.liberty.tx.us/page/liberty.county.judge
County Office of Emergency Management	936.334.3219		Website: www.co.liberty.tx.us/page/liberty.emergency
County Sheriff's Office	911/ 936.760. 5800	911	Website: www.libertytxsheriff.com
County Public Health & Environmental Services			Email: Website:
City Mayor's Office			Email: Website:

Organization	Phone Numbers (include area code)		E-Mail or Website
	Day	Evening	
Local Public Health & Environmental Services			Email: Website:
Local Office of Emergency Management			Email: Website:
TX Division of Emergency Management (TDEM)	Provides list of State and District Coordinators which assist local officials with state assistance requests. Requests must start at local level first.		https://tdem.texas.gov/field-response/
TXWARN	866/9-TXWARN (866/989-9276)		Email: info@txwarn.org https://www.txwarn.org
Other Mutual Aid Provider			Email: Website:

B. Local Contact Notification List

Identify those entities that should be notified in the event of an extended power outage requiring emergency operations. These are people who you provide water to that you may need to contact during an emergency.

Organization	Contact Name	Title	Phone Numbers (include area code)			E-Mail
			Day	Evening	Cellular/Pager	
Other Local Government Officials						
Hospitals served by the Affected Utility						
Nursing Homes served by the Affected Utility						
Pharmacies						
Priority Water Users (Those that are critically dependent upon water including schools, dialysis centers, institutions,						

Organization	Contact Name	Title	Phone Numbers (include area code)			E-Mail
			Day	Evening	Cellular/Pager	
individuals with special needs, businesses, and other interconnected water systems, etc.)						
Others						

C. Chemical Supplier Information

Identify your Chemical Suppliers. You may need to contact them for more chemicals during an emergency

Chemical	Supplier	Contact Name	Phone Number Day	Phone Number Evening	Cell Phone	E-Mail
Chlorine	Purify	Slade Swammer	713.463.1929		281.705.2442	slade@purifywt.com
Purify 1000	Purify	Slade Swammer	713.463.1929		281.705.2442	slade@purifywt.com

D. Certified Laboratory Information

Identify your laboratory and a backup laboratory. You may need a backup laboratory if your lab is nonfunctional.

			Phone Numbers (include area code)			
Organization	**Contact Name**	**Title**	**Day**	**Evening**	**Cellular/Pager**	**E-Mail**
Nova Biologicals			936.756.5333			
North water District laboratory services			936.321.6060			

E. Fuel Supplier Contact Information (if applicable)

Identify your Fuel Suppliers. You may need to contact them for fuel during an emergency

Fuel Type	**Supplier**	**Contact Name**	**Phone Number Day**	**Phone Number Evening**	**Cell Phone**	**E-Mail**
diesel	Alders Construction	Jerry Thompson	936.334.2533			
propane	T.Neale Propane	Dispatch	936.258.4500			

F. Utilities Contact Information

Identify your Utilities Contacts. You may need to contact them during an emergency and use **N/A** if a listed organization does not apply to your water system.

				Phone Numbers (include area code)			
Organization	**N/A**	**Contact Name**	**Title**	**Day**	**Evening**	**Cellular/Pager**	**E-Mail**
Electric Utility Company		Clint Ard	Field Supervisor	800.368.3749	800.430.4911	281.702.4238	
Gas Utility Company	N/A						
Sewer Utility Company	N/A						
Telephone Utility Company	N/A						
Wholesale Water Provider	N/A						
Wholesale Water Provider	N/A						
Other							

G. Bulk Water Suppliers

Identify any bulk or bottled water suppliers that you might utilize in an emergency.

			Phone Numbers (include area code)			
Organization	**Contact Name**	**Title**	**Day**	**Evening**	**Cellular/Pager**	**E-Mail**
Bulk Water Haulers						
Bottle Water Sources						

H. Media Notification List

Identify the media organizations that you might need to contact to provide information to your customers. Also identify who is your media spokesperson. If you have a different method to communicate to your customers, please list under **Other**.

Organization	**Contact Name**	**Title**	**Day**	**Evening**	**Cellular/Pager**	**E-Mail**
Designated Water System Spokesperson	Mike Ellington	General Manager			281.389.0155	Mike@aquatechutilities.com
Newspaper - Local	Kim Marlow	Classifieds	936.336.3611	936.521.3300		Classifieds@thevindicator.com
Newspaper – Regional State	houston chronicle	Breaking News	713.362.7491			news@chron.com
Radio	KSHN		936.336.5793	936.558.5878		office@KSHN.com
	K101.5		936.334.9988			kelly@k1015.com
Television	Fox 26		713.479.2600			
Other						

ATTACHMENT A – SUBMITTING COMPLETED EPP

Upon completing your EPP please email or mail (**not both**) the completed form and additional documentation needed to the Texas Commission on Environmental Quality for review and approval to:

Choose One

PDWEPP@tceq.texas.gov

OR

Water Supply Division, Emergency Preparedness and Response Section, MC-155
P.O. Box 13087
Austin, TX 78711-3087

Assistance

If you need assistance with the EPP template please fill out the **EPP Help Form at** www.tceq.texas.gov/goto/epp-help and TCEQ will contact you via email or phone to work with you.

Approved Plan Distribution

Completer this section after the approval letter is received from TCEQ. Please maintain appropriate documentation of compliance with plan distribution requirements. In addition, a copy of the approved plan must be maintained by the "affected utility", so that it can be easily accessed in the event of an emergency. All employees must receive annual training on implementation of the plan.

Copies of the approved Emergency Preparedness Plan and the TCEQ Approval Letter must be distributed to the following entities:

Distributed To	Method of Distribution	Date
County Judge		
County Office of Emergency Management		
Public Utility Commission Filing	Use the **weblinks** provided: For **Confidential filing procedures** for the PUC use Docket No. **52272** 1. http://puc.texas.gov/industry/filings/Confidential.aspx For PUC Procedural Rules for Filing of Pleadings, Documents, and Other Materials 2. http://puc.texas.gov/agency/rulesnlaws/procrules/pre/22.71/22.71.pdf **Address:** Public Utility Commission of Texas Central Records 1701 N Congress PO Box 13326 Austin, Texas 78711-3326 For additional questions contact the PUC Central Records office at (512)-936-7180.	

Texas Division of Emergency Management (TDEM)	Submit to TDEM via email at: TechHaz@tdem.texas.gov **Address:** Texas Division of Emergency Management 1033 La Posada, Ste 300 Austin, Texas 78752 For additional questions contact the TDEM (512)-424-2208	

ATTACHMENT B – Generator Information

If you plan on utilizing options 1, 2, 4, 5, or 6, you will need to estimate the gallons per hour of fuel that will be used by the generator. This is essential in determining the volume of fuel required to maintain emergency operations. Below is a chart from the FEMA Resource Typing Manual which may be of assistance in determining fuel needs and generator types. **Supplemental information only.**

RESOURCE: GENERATORS						
Category:	Public Works & Engineering (SEF 3)			**Kind:**	Equipment	
Minimum Capabilities:		Type I	Type II	Type III	Type IV	Type V
Component	**Metric**					
Equipment	KW	**XQ2000** 2000 kW Generator; Sound attenuated; Trailer mounted (semi tractor); Up to 3015 Amps@ 480 Volts, 3 Phase, 60 Hz; Dry weight 89,000 lbs; Fuel tank capacity 1250 Gallons; Dimensions 40' Long x 8' Wide x 13'.5" Tall; Potential application example—Single or multiple units for: Power plants, heavy industrial facility, high-rise buildings; Setup time (cables from generator to main power feed estimated at 5+ hours)	**XQ1500** 1500 kW Generator; Sound attenuated; Trailer mounted (semi tractor); Up to 2260 Amps@ 480 Volts, 3 Phase, 60 Hz; Dry weight 59,000 lbs; Fuel tank capacity 1250 Gallons; Dimensions 40' Long x 8' Wide x 13'.5" Tall; Potential application example—Single or multiple units for: Universities, hospitals, medium to large manufacturing facility; Setup time (cables from generator to main power feed estimated at 5+ hours)	**XQ600** 600 kW Generator; Sound attenuated; Trailer mounted (semi tractor); Up to 2080 Amps@ 208 Volts, 3 Phase, 60 Hz / up to 902 Amps@ 480 Volts 3 Phase, 60 Hz; Dry weight 37,000 lbs; Fuel tank capacity 660 Gallons; Dimensions 40' Long x 8' Wide x 13'.5" Tall; Potential application examples: Retail stores, HVAC system power, multi-story/buildings, light manufacturing, apartment buildings; Setup time (cables from generator to main power feed estimated at 3+ hours)	**XQ400** 400 kW Generator; Sound attenuated; Trailer mounted (pull behind); Multi-voltage distribution panel; Up to 1390 Amps @ 208 Volts, 3 Phase, 60 Hz/up to 602 Amps@ 480 Volts 3 Phase, 60 Hz; Dry weight 16,800 lbs; Fuel tank capacity 470 Gallons; Dimensions 23' Long x 8'.5" Wide x 11' Tall; Potential application example: Large office building, public schools, libraries, and communication equipment. Setup time (cables from generator to main power feed estimated at 2+ hours)	**XQ125** 125 kW Generator; Sound attenuated; Trailer mounted (pull behind); Multi-voltage distribution panel; Up to 433 Amps@ 208 Volts, 3 Phase, 60 Hz / up to 188 Amps @ 480 Volts 3 Phase, 60 Hz; Dry weight 10,610 lbs; Fuel tank capacity 223 Gallons; Dimensions 18'.5" Long x 6'.5" Wide x 9' Tall; Potential application example: Small office building, emergency mobile trailers & operations, restaurants. Setup time (cables from generator to main power feed estimated at 1 hour)
Comments:	2500-gallon external fuel tanks available. Fuel consumption is estimated at 7% of the kW usage (example: fuel consumption on a 100 kW Generator operating at full load is approximately 7 gallons per hour). Technicians are available for hookup and monitoring of equipment. 4/0 Quick connect (Cam-Lock) cable is available for tie-in to power feed, rated at 400 Amps each cable. Fuel supply, and/or fuel vendors available. Power distribution equipment available. Transformers & Load Banks are available.					

XQ2000	XQ1500	XQ600-400	XQ125
			
			

ATTACHMENT C – RECOVERY CHECKLIST – Supplemental Information Only

Returning to normal operations is vital to rapid restoration of clean, safe water to the community and is essential to the assessment and recovery process. The following is a checklist of actions to be taken during the recovery period. Also included is a preliminary damage assessment that can be used to assist in the recovery process.

Assessment and Recovery Period Checklist

☐ Perform in-depth damage assessment of system to determine long-term effects of damaged areas (use assessment form below).

☐ Notify TCEQ of system operational status and situation.

☐ Will there be a need to use mutual aid agreements and/or implement standby contracts or other emergency agreements for equipment and operations?

☐ Prepare written documentation of emergency work performed for possible compensation by emergency agencies. Make sure that crews make a record of work effort, written logs (see Work Order Log) and take pictures. This will all be helpful in recovery of funds.

☐ Notify appropriate insurance carriers. Provide written and photo documentation of damage.

☐ Assist in the survey of emergency repairs and scheduling of permanent repairs.

☐ Servicing of emergency equipment, when able (oil changes, lubrication, etc.).

☐ Make sure the public is kept informed throughout the extent of the emergency.

Preliminary Damage Assessment

Following the Damage Assessment, you should notify TCEQ of your operational status.

A. General Overview:

☐ Determine need to repair, replace, or abandon facilities

☐ Estimate cost to repair damage

☐ Evacuate buildings in danger of collapse

B. Treatment Plants:

☐ Check if power is available and condition of mechanical and electrical equipment

☐ Check for chemical spills or releases

C. Confirm that field crew does the following:

☐ Check for structural damage

☐ Closes and tags damaged facilities and equipment

D. Tanks:

☐ Check for evidence of failure of subbase

E. Reservoirs:

Check for:

☐ Leaks and Seepage

☐ Cracks

☐ Broken inlet/outlet pipes, underdrains

☐ Landslides or Embankment slump

☐ Buckling

F. Distribution System:

Check for:

☐ Leaks

☐ Breaks

☐ Pressure loss in lines

☐ Cross-connections

☐ Check mechanical couplings

☐ Lower water levels to reduce possibility of structural damage

G. Wells:

☐ Check for physical damage to facilities

☐ Test for contamination

☐ Name, address, phone # for private lab

☐ Check for pump or motor failure

☐ Check power source

ATTACHMENT D – State Assistance Request (Supplemental Information Only):

If an affected utility is interested only in mutual aid assistance, register with TXWARN at https://www.txwarn.org/; this is a free service.

When requesting state assistance, the request(s) must start at the local level with the County Judge or the County Emergency Manager. The request must go to the Texas Division of Emergency Management using the steps outlined in the STAR Process.