# SANFORD LAW OFFICE, PLLC

Jo Anne Sanford, Attorney at Law

April 21, 2022

## Via Electronic Filing

Ms. A. Shonta Dunston, Chief Clerk North Carolina Utilities Commission 4325 Mail Service Center Raleigh, North Carolina 27699-4325

> Re: Carolina Water Service, Inc. of North Carolina Docket No. M-100, Sub 163 Verified Response to Investigation Regarding the Ability of North Carolina's Electricity, Natural Gas, and Water/Wastewater Systems to Operate Reliably During Extreme Cold Weather

Dear Ms. Dunston:

On March 15, 2022, Carolina Water Service, Inc. of North Carolina ("CWSNC") appeared before the North Carolina Utilities Commission ("Commission" or "NCUC") in this docket in a Technical Conference ("Conference") wherein the Commission, the Public Staff, CWSNC, and Aqua North Carolina, Inc. ("Aqua") discussed matters related to the reliability of water and wastewater operations provided by the two utilities during extremely cold weather.

During and after the Conference, CWSNC and Aqua were requested to answer additional questions and to file responses to same in the docket. Attached hereto are CWSNC's responses to questions and requests posed by the Commission and the Public Staff. These responses are labeled as follows:

Attachment A: Commission Staff Questions

Attachment B: Public Staff Questions

Attachment C: Storm Event Checklist

Attachment D: Example of an Emergency Response Plan ("ERP" for Fairfield Harbour)

This Response has been verified by Dana Hill, CWSNC's Director of Operations, and I hereby certify that this filing has been provided to each of the parties of record to Docket No. M-100, Sub 163 by means of electronic service.

As always, thank you and your staff for your assistance; please feel free to contact me if there are any questions or suggestions.

Sincerely,

**Electronically Submitted** /s/Jo Anne Sanford Sanford Law Office, PLLC State Bar No. 6831

Attorney for Carolina Water Service, Inc. of North Carolina, Inc.

#### VERIFICATION

Dana Hill, being duly sworn, deposes and says: that he is the Director of Operations for Carolina Water Service, Inc. of North Carolina; that he is familiar with the facts set out in the Verified Supplemental Response to Investigation Regarding the Ability of North Carolina's Electricity, Natural Gas, and Water/Wastewater Systems to Operate Reliably During Extreme Cold Weather filed by CWSNC in Docket No. M-100, Sub 163; that he has read the foregoing Verified Response and knows the contents thereof; and that the same is true of his knowledge except as to those matters stated therein on information and belief, and as to those he believes them to be true.

Dana Hill

Sworn to and subscribed before me this the 20 day of April, 2022.

My Commission Expires: 4/28/2026



# ATTACHMENT

Α

#### In the Matter of Investigation Regarding the Ability of North Carolina Electricity, Natural Gas, Water and Wastewater Systems to Operate Reliably During Extreme Cold Weather

## Docket Nos. M-100, Sub 163 and E-100, Sub 173

Water Technical Conference March 15, 2022

# Commission Questions for Carolina Water Service, Inc. of North Carolina (CWSNC)

*Participants for CWSNC:* Don Denton, President Dana Hill, Director of Operations

Responses to Questions 1 & 2:

No questions.

Responses to Question 3:

1. Is the heat tape powered by electric from grid or batteries? How long does the heat tape last?

ANSWER: The heat tape is powered from the grid and used in conjunction with jacketed insulation for added protection. Many manufacturers recommend replacement every three years.

2. What are the heat sources for the wells, pump stations, and other critical facilities---is it electric power from a provider (Duke) or a generator?

ANSWER: Heaters are powered by electric providers during normal operation but are wired to operate under generator power.

3. (a) In terms of cold weather events, what is the difference between pipes having constant flow and other pipes?

ANSWER: Larger diameter pipes with constant flow are much less susceptible to freezing. Those that may be unprotected are generally associated with wastewater treatment facilities that are not safely accessible, and the constant flow paired with biological activity makes the likelihood of freezing much less. (b) Are constant flow pipes still subject to a freezing point? If so, do you know at what temperature freezing would occur?

ANSWER: Yes, but they would have to be subject to long durations of temperatures below 14 degrees F.

Responses to Question 4 (part two of Question 4 is partly addressed in Question 5):

1. Do you use backup generators for these pumping stations? What alternative means are available to supply power when outages occur?

ANSWER: Portable generators are available to operate facilities that are not equipped with stationary stand-by generators. Bypass pumps are also available if needed.

#### Question 5 response:

1. Are the Emergency Response Plans on file with NCDEQ for all water systems regarding public information that the Public Staff and the Commission Staff can access from NCDEQ's website? If not, could this information be provided to the Public Staff/Commission Staff?

ANSWER: We responded erroneously in our original verified response on February 23, 2022 in saying that Emergency Response Plans were on file with NCDEQ. These plans are required to be on file with the Utility for NCDEQ inspection and updated regularly. CWSNC can provide redacted versions of these plans to Public Staff / Commission Staff.

2. Are CWSNC's Emergency Response Plans for its wastewater systems filed with NCDEQ? Is this information public information that the Public Staff and the Commission Staff can access from NCDEQ's website? If not, could this information be provided to the Public Staff/Commission Staff?

ANSWER: NCDEQ does not require filing of Emergency Response Plans, as they are fluid and need to be updated as resources and personnel change. They are not considered public information due to confidential content, but CWSNC will provide redacted versions to Public Staff / Commission Staff, if requested.

#### Response to Question 6:

1. Does CWSNC have other plans of action to help customers in addition to notifying them that the water is unsafe to drink?

ANSWER: CWSNC will evaluate the potential duration of unsafe conditions; these events are evaluated and handled on a case-by-case basis.

2. Has CWSNC heard of the water and wastewater agency network called NCWaterWARN? If so, does CWSNC participate in this network during response and recovery operations?

ANSWER: CWSNC is familiar with NCWaterWarn, and while the Company is not currently a member, it will inquire about the possible benefit of membership. CWSNC has a network of contractors that supplement existing staff and equipment needs. As the Company's facilities and resources are located throughout North Carolina, under emergency conditions it is generally possible to pull from internal sources in one area to supplement service in another.

3. Do your individual water systems have physical emergency interconnections with other water providers? If so, what situations might trigger activation of an emergency interconnection? Could these interconnections be utilized in a service outage resulting from a cold weather event?

ANSWER: CWSNC does not have emergency interconnections with other providers.

*Question 7 response:* 

No questions.

# ATTACHMENT B

#### NCUC Docket No. M-100, Sub 163 Supplemental Response to Public Staff's Questions Carolina Water Service, Inc. of North Carolina

## 1. Communications Access to Customers

- a) Number of customers, represented as a number and percentage of all CWSNC customers, who have registered each of the following with the Company:
  - email address 21450 (55%)
  - telephone number 37050 (95%)
  - mobile phone number for text notifications 25350 (65%)
- b) Number of customers, represented as a number and percentage of all CWSNC customers, registered for a My Utility Connect account
  - 23400 (60%)
- 2. Analysis of hourly and/or daily meter read data from winter weather events:
  - Meter read data associated with treatment is monitored daily to identify anomalies. However, CWSNC has not specifically analyzed data from winter weather events as a separate category of review.

# 3. Heating Systems in well houses---number and percentage of all CWSNC well houses that are equipped with a heating system.

• Answer:

The NC Department of Environmental Quality regulations address this issue as follows:

**15A NCAC 18C .0402 WATER SUPPLY WELLS-** (3) Fencing and temperature protection. Fencing and temperature protection shall be constructed as follows: (E) The well, piping, treatment equipment, and electrical controls shall be protected against freezing. Wrapping with insulation shall be acceptable for appurtenances such as the air vent, meter, valves, and sample taps, provided they are visible and accessible. Insulation shall be jacketed.

• Statewide, 312 wells (100%) are equipped with thermostat-controlled heating systems; none are remotely monitored.

## 4. Backup plans.

The second part of the Commission's question number four asks, "Does your utility have a backup plan in place when there is a power outage,

#### CWSNC Supplemental Response to Public Staff's Questions Docket No. M-100 Sub 163

especially an extended power outage?" CWSNC appears to have addressed this question as part of its response to Commission's question number five. The Public Staff's follow-up questions related to the Commission's question number four are addressed below:

a) Does CWSNC record information regarding when and which systems experience power outages and how long those outages are?

#### Answer:

Power outages are recorded in a remote monitoring database

 b) Please provide the applicable state rules and regulations for water and wastewater system infrastructure, such as 15A NCAC 02T .0305(h) and .0505(l), that require either standby power supply onsite or a portable power source.

#### Answer:

#### Wastewater:

**15A NCAC 02T .0305 DESIGN CRITERIA-** (h) The following criteria shall be met for all **pumping stations and force mains**: (1) Pump Station Reliability: (B) A standby power source or pump shall be required at all pump stations except for simplex pump stations. Controls shall be provided to automatically activate the standby source and signal an alarm condition. (C) As an alternative to Part (B) of this Subparagraph for pump stations with an average daily design flow less than 15,000 gallons per day as calculated using Rule .0114 of this Subchapter, a portable power source or pumping capability may be used. The portable source shall be owned or contracted by the permittee and shall be compatible with the station. If the portable power source or pump is dedicated to multiple pump stations, an evaluation of all the pump stations' storage capacities and the rotation schedule of the portable power source or pump in a multiple station power outage, including travel timeframes, shall be provided.

**15A NCAC 02T .0505 DESIGN CRITERIA-** (I) **Power reliability** shall be provided, consisting of: (1) automatically activated standby power supply, located onsite, and capable of powering all essential treatment units under design conditions; or (2) approval by the Director that the facility: (A) serves a private water distribution system that has automatic shut-off at power failure and no elevated water storage tanks; (B) has sufficient storage capacity that no potential for overflow exists; and (C) can tolerate septic wastewater during prolonged detention.

#### Water:

**15A NCAC 18C .0405 STORAGE OF FINISHED WATER-** (d) High Yield Aquifers: (1) Equipment. In lieu of providing elevated storage for public water systems over 300 connections in areas where aquifers are known to produce high yields, such as 400-500 gpm from an eight-inch well, a system of extra well pumping capacity, auxiliary power generating equipment, pressure tanks, controls, alarms, and monitoring systems may be provided. The design and installation of such system shall assure that reliable, continuous service is provided. (2) Auxiliary Power. A system relying on high-yield aquifers under Paragraph (d) of this Rule shall have an adequate number of wells equipped with sufficient pumping capacity so that the required flow rate will be maintained if the single largest capacity well and pump are out of operation. Auxiliary power generating equipment shall be provided for each well sufficient to operate the pump, lights, controls, chemical feeders, alarms, and other electrical equipment.

c) Does CWSNC have an operations and maintenance plan and/or contract services for its stationary and portable generators?

#### Answer:

CWSNC maintains annual maintenance contracts on all generators and performs internal load testing monthly.

d) How many as a number and percentage of all CWSNC water wells are equipped with permanent generators?

## Answer:

| ٠ | Eastern Region | 7 of 72 (9.7%)   |
|---|----------------|------------------|
| ٠ | Western Region | 7 of 240 (2.9%)  |
| • | Statewide      | 14 of 312 (4.5%) |

e) How many as a number and percentage of all CWSNC wastewater pump stations are equipped with permanent generators?

## Answer:

| • | Eastern Region | 22 of 110 (20%)   |
|---|----------------|-------------------|
| • | Western Region | 26 of 122 (21.3%) |
| ٠ | Statewide      | 48 of 232 (20.7%) |

5. How does operations staff track and manage fuel needs and does that require more frequent operator visits?

# Answer:

Generators and portable fuel tanks are maintained at a full level in preparation for outage events. Increased frequency visits are required for long term outages to monitor both fuel usage and operational efficiency. CWSNC has arrangements with bulk fuel suppliers to replenish as needed, as well as portable fuel trailers that can be deployed to refuel.

# 6. No additional questions at this time.

## 7. Recent Experience and Geographic Vulnerability

a) Has CWSNC experienced notable operational problems in previous years, such as 2014? Were any lessons learned and changes implemented?

# Answer:

CWSNC has no record of specific and significant operational problems in previous years, due to cold weather.

b) Are certain CWSNC service areas or systems more susceptible to operational problems due to cold weather?

# Answer:

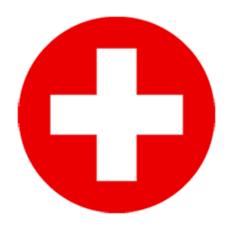
Due to the reality of low temperatures and accessibility issues in some areas, it is reasonable to assume that the Western Region would be more susceptible. That said, CWSNC has no records of significant impairments to service due to extreme cold weather.

# ATTACHMENT C



Emergency Response Pre-Event Checklist

> September 2021 Version # 1



**BUSINESS UNIT OPERATIONS** 

FRM-110 Revised: September 2021

The purpose of this checklist is to identify items that may be evaluated prior to a known emergency event.

Use this checklist to prepare facilities, staff, and contractors before an anticipated event.

Some steps are included in the facility's Emergency Response Plan (ERP) and Procedures. Review the ERP and Procedures and ensure the following items have been evaluated and identified:

| Emergency Event Watch                                                                                                     |     |    |     |
|---------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
| Emergency Response Plan (ERP) & Plans                                                                                     | Yes | No | N/A |
| Review the ERP and procedures, and complete any steps within in preparation of the emergency                              |     |    |     |
| Review emergency drinking water supply plan                                                                               |     |    |     |
|                                                                                                                           |     |    |     |
| Generators                                                                                                                | Yes | No | N/A |
| Generator Prep Steps – Ensure all have been serviced, fueled, tires/trailer inspected                                     |     |    |     |
| Generator List – Review for availability & ensure up to date                                                              |     |    |     |
| Evaluate condition of electrical panels to accept generators; inspect connections and switches                            |     |    |     |
| Confirm generator connection type, capacity log and fuel consumption.                                                     |     |    |     |
|                                                                                                                           |     |    |     |
|                                                                                                                           |     |    |     |
| Facility Preparedness                                                                                                     | Yes | No | N/A |
| Secure site Secure chemical containers                                                                                    |     |    |     |
| Secure site Secure loose debris and equipment                                                                             |     |    |     |
| Prepare/enact physical security systems – ensure all facilities are secured                                               |     |    |     |
| Manage chemical levels depending on type of emergency                                                                     |     |    |     |
| Fuel & Chemical Tank Inspection – Ensure tanks are event-ready and filled and stored in a secure location                 |     |    |     |
| Plan to Protect Assets – move critical assets and vehicles to safe location                                               |     |    |     |
| Maintain a full storage tank to assist with demand should there be a source loss, power failure or fire suppression needs |     |    |     |
| Top off all vehicles, generators, gas cans, pumps, and buggies with fuel                                                  |     |    |     |
| Check compatibility of standby equipment to system and operation of standby equipment, chainsaws, trash pumps, etc.       |     |    |     |
| Move portable standby equipment to appropriate site                                                                       |     |    |     |
| Install rented standby equipment                                                                                          |     |    |     |



# PRE-EVENT EMERGENCY RESPONSE CHECKLIST

| Facility Preparedness                                                                                                                                                                                     | Yes | No | N/A  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|------|
| Secure & test standby equipment in a safe area                                                                                                                                                            |     |    |      |
| Have fuel buggies filled and ready to go                                                                                                                                                                  |     |    |      |
| Increased (temporarily) monthly maximum fuel card purchases through fleet management system to allow refueling generators, buggies, etc.                                                                  |     |    |      |
| Inventory equipment and supplies to ensure already on hand, as needed.<br>Obtain lumber to board up windows if applicable. (See below for supply checklist.)                                              |     |    |      |
|                                                                                                                                                                                                           |     |    | N1/A |
| Electronic/Document Preparedness                                                                                                                                                                          | Yes | No | N/A  |
| Manual alternative to SCADA identified                                                                                                                                                                    |     |    |      |
| Secure critical documents - ensure there is a manual or physical backup, or ability to move to a safe location                                                                                            |     |    |      |
| Ensure paper copies available/distributed of pertinent information (i.e., facility address list, Facility ERP, system maps, schematics, O&M manuals, SOPs, etc.)                                          |     |    |      |
|                                                                                                                                                                                                           |     |    |      |
| Weather Monitoring                                                                                                                                                                                        | Yes | No | N/A  |
| Monitor weather conditions - stay up to date with all alerts and upcoming weather conditions.                                                                                                             |     |    |      |
| Weather prepare assets                                                                                                                                                                                    |     |    |      |
| Sign up for mobile and/or email alerts from your local EMA, if available                                                                                                                                  |     |    |      |
|                                                                                                                                                                                                           |     |    |      |
| Staff Safety                                                                                                                                                                                              | Yes | No | N/A  |
| Perform pre-event staff meeting to review responsibilities, expectations, and<br>safety protocols                                                                                                         |     |    |      |
| Personnel encouraged to prepare their own homes and ensure safety and proper protection of their families                                                                                                 |     |    |      |
| Personnel Training – review relevant procedures and muster point with staff as appropriate for the emergency, review equipment use/training (i.e., chainsaw and generator safety)                         |     |    |      |
| In the case of a power loss, ensure personnel are trained to shut down and start<br>up the system manually                                                                                                |     |    |      |
| PPE Inventory/Order (See below for PPE Checklist.)                                                                                                                                                        |     |    |      |
|                                                                                                                                                                                                           |     |    |      |
| Contacts/Notifications                                                                                                                                                                                    | Yes | No | N/A  |
| Set up two-way radio network and distribute equipment as applicable. Charge Satellite Phone and test all equipment thoroughly and ensure charge. Notify all local employees of the communication network. |     |    |      |
| Verify status of GETS/WPS card with IT Director for priority phone service                                                                                                                                |     |    |      |
| Notify Regulatory Regional Office and EVP/COO the emergency plan of action is being implemented                                                                                                           |     |    |      |



# PRE-EVENT EMERGENCY RESPONSE CHECKLIST

| Contacts/Notifications                                                                                                                                                                                                                           | Yes | No | N/A |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----|
| Notify Corix Regional Office for possible need for additional generators                                                                                                                                                                         |     |    |     |
| Contact internal/external WARN/Mutual Aid representatives to discuss response activities, roles and responsibilities and mutual aid procedures, and obtaining resources and assistance, such as equipment, personnel, technical support or water |     |    |     |
| Coordinate with other key response partners to discuss priority actions or potential points of distribution for delivery of emergency water                                                                                                      |     |    |     |
| Contact power company to verify facilities are listed as a critical customer and will have power restored as a priority                                                                                                                          |     |    |     |
| Contact Emergency Contacts: Chemical Supplier, Alternate Chemical Supplier,<br>Contract Operators                                                                                                                                                |     |    |     |
| Chemical vendor with supply – Contact to ensure supply is on hand and able to be delivered; contact back-up chemical vendors                                                                                                                     |     |    |     |
| Call rental vendors to verify equipment availability. Arrange to obtain rental equipment, coordinated to be picked up/delivered immediately after storm passes, or before storm if convenient and a safe storage place exists.                   |     |    |     |
| Call contractors to arrange for standby assistance and installation help                                                                                                                                                                         |     |    |     |
| Call fuel supplier to check on fuel delivery schedule and standy status                                                                                                                                                                          |     |    |     |
|                                                                                                                                                                                                                                                  |     |    |     |
| Emergency Event Warning                                                                                                                                                                                                                          |     |    |     |
| Facility Preparedness                                                                                                                                                                                                                            | Yes | No | N/A |
| Board up windows if applicable.                                                                                                                                                                                                                  |     |    |     |
| Bring all loose items inside.                                                                                                                                                                                                                    |     |    |     |
| WWTP EQ basins emptied as much as possible and aeration turned off if applicable.                                                                                                                                                                |     |    |     |
| Coordinate to ensure appropriate operators are equipped with needed supplies (see below for suppy checklist).                                                                                                                                    |     |    |     |
|                                                                                                                                                                                                                                                  |     |    |     |
| Evacuation Notice                                                                                                                                                                                                                                |     |    |     |
| Facility Preparedness                                                                                                                                                                                                                            | Yes | No | N/A |
| Water tanks full, valve off before evacuation.                                                                                                                                                                                                   |     |    |     |
| Turn off power to all facilities.                                                                                                                                                                                                                |     |    |     |
| Inventory equipment and supplies to ensure already on hand, as needed.                                                                                                                                                                           |     |    |     |
|                                                                                                                                                                                                                                                  |     |    |     |
| Staff Safety                                                                                                                                                                                                                                     | Yes | No | N/A |
| Leave area well before expected emergency event arrives in area. Staff instructed to remain at home or in a safe location, and on standby until event has passed.                                                                                |     |    |     |
|                                                                                                                                                                                                                                                  |     |    |     |



# PRE-EVENT EMERGENCY RESPONSE CHECKLIST

|                                                                   | Inventory     | Replacement<br>Frequency | Replacement<br>Date |
|-------------------------------------------------------------------|---------------|--------------------------|---------------------|
| PPE Inventory / Replacement Schedule                              |               |                          |                     |
| Head Protection                                                   |               |                          |                     |
| High Visibility Apparel                                           |               |                          |                     |
| Safety Footwear                                                   |               |                          |                     |
| Hearing Protection                                                |               |                          |                     |
| Fall Protection                                                   |               |                          |                     |
| Respiratory Protection                                            |               |                          |                     |
| Safety Eyewear and Face Protection                                |               |                          |                     |
| Skin, Leg and Body Protection                                     |               |                          |                     |
| Hand PPE/Work Gloves                                              |               |                          |                     |
|                                                                   |               |                          |                     |
| Supplies & Equipment Inventory / Replace                          | ment Schedule |                          | ·                   |
| Emergency Equipment:                                              |               |                          |                     |
| Motors                                                            |               |                          |                     |
| Fuses                                                             |               |                          |                     |
| Chemicals - at least 2 week supply                                |               |                          |                     |
| Cellular/satellite phones or other wireless communications device |               |                          |                     |
| Chainsaws                                                         |               |                          |                     |
| Trash pumps                                                       |               |                          |                     |
| Generators                                                        |               |                          |                     |
| Gas cans                                                          |               |                          |                     |
| Pumps & sump pumps                                                |               |                          |                     |
| Fuel buggies                                                      |               |                          |                     |
| Piping                                                            |               |                          |                     |
|                                                                   |               |                          |                     |
| Emergency Supplies:                                               |               |                          |                     |
| Tarps/tape/rope                                                   |               |                          |                     |
| Plywood                                                           |               |                          |                     |



|                                                                                        | Inventory | Replacement<br>Frequency | Replacement<br>Date |
|----------------------------------------------------------------------------------------|-----------|--------------------------|---------------------|
| Sand & sandbags                                                                        |           |                          |                     |
|                                                                                        |           |                          |                     |
| Equip appropriate operators with the following                                         | ing:      | l                        |                     |
| Drinking water containers / bottled water -<br>enough to last 72 hours for each person |           |                          |                     |
| Gas cans (full)                                                                        |           |                          |                     |
| Chain saws                                                                             |           |                          |                     |
| Crowbars                                                                               |           |                          |                     |
| Trash pumps                                                                            |           |                          |                     |
| Appropriate gear (rain gear, etc.)                                                     |           |                          |                     |
| Flashlights/flares                                                                     |           |                          |                     |
| Batteries (several sets)                                                               |           |                          |                     |
| First-aid kits                                                                         |           |                          |                     |
| Hard hat                                                                               |           |                          |                     |
| Duct tape                                                                              |           |                          |                     |
| 1/2" polyrope - large roll                                                             |           |                          |                     |
| Portable gas powered ventilators                                                       |           |                          |                     |
| Two-way compatible radios                                                              |           |                          |                     |
| Non-perishable food – enough to last 72 hours for each person                          |           |                          |                     |
| Extra clothing                                                                         |           |                          |                     |
| Bedding - cots/blankets                                                                |           |                          |                     |
| Work gloves (seasonal, nitrile)                                                        |           |                          |                     |
| Cash on hand for response teams                                                        |           |                          |                     |
| Emergency crank radio                                                                  |           |                          |                     |
| Multi purpose tool                                                                     |           |                          |                     |
| Sanitation and hygiene items                                                           |           |                          |                     |
| Insect repellent                                                                       |           |                          |                     |
|                                                                                        |           |                          |                     |
|                                                                                        |           |                          |                     |

# ATTACHMENT D

# Emergency Response Plan

# Fairfield Harbour

November 15, 2021

| Facility Identification Number | NC0425132          |
|--------------------------------|--------------------|
| Street Address/GPS Coordinates |                    |
| City, State Zip Code           | Bridgton, NC 28560 |
| Phone number                   | (800) 525-7990     |
| Population Served              | 4610               |
| County                         | Craven             |

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Think Safe. Act Safe. Stay Safe.



ERP – Fairfield Harbour Revised: November 2021

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Apr 21 2022



ERP – Fairfield Harbour

#### 1 INTRODUCTION

The purpose of this Emergency Response Plan (ERP) is to guide operations crews in a safe, timely, and effective response to incidents that threaten the company's environment and public health, safety, or welfare. It is also intended to promote coordination among employees, supervisors and management, the public, and private responders.

This ERP is intended for personnel of utilities operation and for other agencies that support the company in multi-divisional incident response.

Incidents vary greatly in location and severity. This ERP recognizes that general rules may not apply in all circumstances and seasoned judgement may be applicable in some cases. This ERP is not intended to supersede any regulation or corporate initiative, and will be audited and updated on an as needed basis to reflect the corporate mandate.

#### 1.1 EMERGENCY RESPONSE MISSION AND GOALS

| Mission Statement for<br>Emergency Response | In an emergency, the mission of the company is to protect the health<br>and safety of our customers and our environment by being prepared<br>to respond immediately and safely to a variety of events that may<br>result in reduced service of the utility. |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Goal 1                                      | Be able to quickly identify an emergency and initiate timely and effective response actions.                                                                                                                                                                |
| Goal 2                                      | Be able to quickly notify local, regional, and federal agencies to assist<br>in the response and provide updates of system status.                                                                                                                          |
| Goal 3                                      | Protect public health and environment by being able to quickly determine if there is a risk to the utility and being able to rapidly notify customers effectively of the situation and advise them of appropriate protective action.                        |
| Goal 4                                      | To be able to quickly respond to and repair damage to minimize or prevent utility system down time.                                                                                                                                                         |



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#### **1.2 CHAIN OF COMMAND**

Following the Chain of Command to inform your manager is a critical step in an emergency to ensure all required individuals are properly notified for a timely and effective response.

| Title                                                                                    | Responsibilities During an Emergency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| SVP/President                                                                            | Ultimately responsible for region as well as for providing direction on key items. Communicates status and updates with the Corix Executives.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| President of Operations                                                                  | The President of Operations is the lead for managing the emergency, coordinating with support agencies, and providing information to the Director of Public Relations for communicating with the news media. All communications to external parties are to be approved by the President. This person will provide a standard pre-scripted message to those who call with general questions. Contacts other regions to provide additional resources so further action can be taken as required. Solicits assistance from HSE as needed. Communicates status and updates to HSE/SVP. Determines when the emergency is over and communicates next steps. |  |
| Regional/State Director<br>(when title not in place<br>delegates to the Area<br>Manager) | Responsible for the management and decision making including<br>determining there is an emergency and activating the emergency plan. In<br>charge of the utility operations and providing recommendations to the<br>President of Operations. In charge of contacting emergency contacts and<br>regulatory contacts. Provides direction to Area Manager to move<br>employees, contractors, customers and visitors, equipment/vehicles and<br>emergency supplies to a safe location.                                                                                                                                                                    |  |
|                                                                                          | In charge of the utility operations in consultation with the Regional/State<br>Director. Responsible for assigning operator to be in charge of<br>emergency, and performing inspections, maintenance, sampling, and<br>relaying critical information, and assessing facilities. Interacts with<br>emergency responders. Additional duties:                                                                                                                                                                                                                                                                                                            |  |
| Area Manager                                                                             | <ul> <li>Report emergencies immediately</li> <li>Follow emergency procedures as directed by emergency personnel</li> <li>If applicable, determine when to abandon or shut down the operations or task</li> <li>Use a system to account for all employees after the emergency</li> <li>Report missing persons to emergency personnel</li> </ul>                                                                                                                                                                                                                                                                                                        |  |
| Lead Operator/ System<br>Operators                                                       | Assists the Area Manager as needed to assess the emergency to include initial inspections, assessing facilities, and sampling.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |

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EMERGENCY RESPONSE PLAN ERP – Fairfield Harbour

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| Title     | Responsibilities During an Emergency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All Staff | Be familiar with the Corix weather and natural disaster emergency plan.<br>Learn about the alarm system and any distinctive alarms used in the case<br>of a weather or natural disaster emergency. Know the location of<br>emergency supplies, such as non-perishable food, bottled water, battery<br>operated radios, first aid supplies, flashlights, batteries, duct tape, plastic<br>sheeting, and plastic garbage bags. Be aware of the reliable external<br>sources for up-to-date weather and natural disaster information. Know the<br>difference between a weather watch and weather warning. Know steps to<br>take to ensure public and employee safety following a security event.<br>During emergency response, be aware of the potentially dangerous and<br>unsecured work environment you are entering due to the absence of<br>normal safety guards and protocols. Be aware of the increased safety<br>efforts and procedures that will limit or eliminate exposure to real and<br>potential hazards. Be ready to mobilize at any time an event requires.<br>Receive specialized safety training for emergency response and likely<br>scenarios. Be equipped with the appropriate vehicles, tools, and safety<br>devices that will eliminate or reduce exposure to hazards. Shall have an<br>emergency response card or picture ID or other means to indicate that they<br>are an "Emergency Responder". Deliver equipment or supplies and relieve<br>staff after the workplace has been secured and normal work procedures<br>re-established. |

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# 2 CONTACT LIST

All contact information of the designated individuals should be captured below. Add additional area-specific contacts.

|                          | Name            | Phone Number   | Cell Number | Email                                         |
|--------------------------|-----------------|----------------|-------------|-----------------------------------------------|
| Employee Notification L  | ist             |                |             |                                               |
| Regional /State Director | Dana Hill       | 800-525-7990   |             | Dana.Hill@carolinawa<br>terservicenc.com      |
| Area Manager             | Anthony Futrell | 800-525-7990   |             | Anthony.Futrell@carol inwaterservicenc.com    |
| Operator                 | Matthew Golden  | 800-525-7990   |             | Matthew.Golden@caroli<br>nawaterservicenc.com |
|                          |                 |                |             |                                               |
|                          |                 |                |             |                                               |
|                          |                 |                |             |                                               |
| First Responders of an I | Emergency       |                |             |                                               |
| Fire Department          |                 | 911            |             |                                               |
| Medical Service          |                 | 911            |             |                                               |
| Police                   |                 | 911            |             |                                               |
| Poison Control           |                 | 800-222-1222   |             |                                               |
|                          |                 |                |             |                                               |
| Government Agencies      |                 |                |             |                                               |
| Regional EPA             | Region 4        | 404-562-9900   |             |                                               |
| CDC                      | Atlanta         | 800-232-4636   |             |                                               |
| NCDEQ District           | Washington      | 252-946-6481   |             |                                               |
| NC Public Water Supply   | Washington      | 252-948-3890   |             |                                               |
| NCDEQ 24 hour number     | Raleigh         | 1-800-858-0368 |             |                                               |
| FBI Field Office         | Charlotte       | 704-672-6100   |             |                                               |
| NC Health Department     | Raleigh         | 919-707-5000   |             |                                               |
| Homeland Security        | Washington D.C. | 202-282-8000   |             |                                               |
|                          |                 |                |             |                                               |

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# EMERGENCY RESPONSE PLAN

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|                                   | Name              | Phone Number | Cell Number | Email                                          |
|-----------------------------------|-------------------|--------------|-------------|------------------------------------------------|
| Corix Contacts                    |                   |              |             |                                                |
| Customer Experience               |                   | 800-525-7990 |             | customerservice@caroli<br>nawaterservicenc.com |
| HSE                               | Brent Milliron    | 704-319-0504 |             | Brent.Milliron@carolinawater<br>servicenc.com  |
| HSE                               | Mary Rollins      | 704-319-0519 |             | Mary.Rollins@corix.com                         |
| Human Resources                   | Nate Meyers       | 847-897-6443 |             | Nate.Meyers@corix.com                          |
| Insurance                         | Jennifer Toledo   | 604-697-6735 |             | Jennifer.Toledo@corix.com                      |
| IT – Technical Support            | Tom Ostler        | 847-897-6435 |             | Tom.Ostler@corix.com                           |
| SVP/President                     | Donald Denton     | 704-525-5049 |             | Donald.Denton@corix.com                        |
|                                   |                   |              |             |                                                |
| Service / Repair / Contra         | ctors Contacts    |              |             |                                                |
| Bottled Water Supplier            | Food Lion         | 252-637-5601 |             |                                                |
| Bulk Water Supplier               | Culligan          | 877-386-0823 |             |                                                |
| Cable                             | Suddenlink        | 877-794-2724 |             |                                                |
| Chemical Supplier                 | WaterGuard        | 800-872-7665 |             |                                                |
| Contractor                        | B&S               | 910-212-8702 |             |                                                |
| Contractor                        | Powerhouse        | 252-222-0036 |             |                                                |
| Contractor                        | Aragona Bros.     | 910-358-2249 |             |                                                |
| 'Dig Safe' or 'One Call'          |                   | 811          |             |                                                |
| Electric Util. Co.                | Tideland Electric | 800-637-1079 |             |                                                |
| Electrician                       | PowerHouse        | 282-726-6000 |             |                                                |
| Equip Repair                      | Pearson Pump      | 919-580-5507 |             |                                                |
| Equip Supplier                    | HD Supply         | 252-527-8138 |             |                                                |
| Excavator                         | Aragona Bros.     | 910-358-2249 |             |                                                |
| Fuel - Diesel                     | Jenkins           | 252-633-3560 |             |                                                |
| Fuel - Gasoline                   | Jenkins           | 252-633-3560 |             |                                                |
| Fuel - Natural Gas                | N/A               |              |             |                                                |
| Gas/ Propane Supplier/<br>Utility | Jenkins           | 252-633-3560 |             |                                                |

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|                                  | Name                            | Phone Number      | Cell Number     | Email                                    |
|----------------------------------|---------------------------------|-------------------|-----------------|------------------------------------------|
| Laboratory-Water<br>Testing      | Environment 1                   | 252-756-6208      |                 |                                          |
| MOU Organizations                | N/A                             |                   |                 |                                          |
| Mutual Aids                      | N/A                             |                   |                 |                                          |
| Pipe/Fittings                    | Aragona Bros.                   | 910-358-2249      |                 |                                          |
| Plumber                          | Aragona Bros.                   | 910-358-2249      |                 |                                          |
| Pump Repair                      | Pearson Pump                    | 919-734-4267      |                 |                                          |
| Radio/SCADA Repair               | Gopher Utility                  | 704-963-9064      |                 |                                          |
| Rental Equip Supplier            | Country Aire<br>Rental          | 252-247-4938      |                 |                                          |
| Sewer System<br>(Interconnected) | N/A                             |                   |                 |                                          |
| Sewer Util. Co.                  | Carolina Water<br>Service       |                   |                 |                                          |
| Telephone                        | Suddenlink                      | 877-794-2724      |                 |                                          |
| Welding & Metal<br>Fabricating   | Aragona Bros.                   | 910-358-2249      |                 |                                          |
| Well Drilling Co.                | Gopher Utility                  | 704-963-9064      |                 |                                          |
|                                  |                                 |                   |                 |                                          |
| Media                            |                                 |                   |                 |                                          |
| Corix                            | Deb Clark                       | (704) 525 -1620   |                 | Deb.Clark@carolinawate<br>rservicenc.com |
| Corix                            | Tom Oakley                      | (847) 897-6483    |                 | Tom.Oakley@corix.com                     |
| Newspaper                        | Sun Journal                     | 252-638-8101      |                 |                                          |
| Radio Station                    | WRNS                            | 252-639-7900      |                 |                                          |
| Television Station               | WITN                            | 888-478-4957      |                 | desk@witn.com                            |
|                                  |                                 |                   |                 |                                          |
| Emergency Notification           | (Use list to notify             | important parties | of the emergenc | y)                                       |
| Local Law Enf                    |                                 | 911               |                 |                                          |
| Local Highway Patrol             |                                 | 911               |                 |                                          |
| Local Fire Dept                  | Tri Community<br>Vol. Fire Dept | 252-637-6911      |                 |                                          |
| County Emergency Mgt<br>Dept     | Craven County                   | 252-636-6608      |                 |                                          |

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|                                        | Name                           | Phone Number | Cell Number | Email |
|----------------------------------------|--------------------------------|--------------|-------------|-------|
| Emergency Medical<br>Serv (EMS)        |                                | 911          |             |       |
| Hazmat Hotline                         |                                | 911          |             |       |
| Local Hazmat                           |                                | 911          |             |       |
| Local Leader (city mgr,mayor, etc)     | Irv Joffee –<br>POA            | 516-429-6334 |             |       |
| National Spill Reponse<br>Ctr.         |                                | 800-424-8802 |             |       |
| RWA, Water Circuit<br>Rider            | NCRWA                          | 336-731-6963 |             |       |
| State Emergency<br>Preparedness Office |                                | 919-825-2500 |             |       |
| Critical Customers* (Inc               | lude Title)                    |              |             |       |
| Hospitals                              | CarolinaEast<br>Medical Center | 252-633-8111 |             |       |
| Emergency Shelters (schools/churches)  | N/A                            |              |             |       |
| Kidney Dialysis                        | N/A                            |              |             |       |
| Law Enforcement<br>Offices             | N/A                            |              |             |       |
| Drinking Water                         | N/A                            |              |             |       |
| Waste Disposal                         | N/A                            |              |             |       |
| Others                                 |                                |              |             |       |
|                                        |                                |              |             |       |

\*Contact critical customers as soon as possible, prioritize service to, and/or collect bacteriological samples.

# **3 EMERGENCY RISK RANKING**

Identify the possible events that may cause a system emergency, ranked as high, moderate, or low risk.

| Emergency Event: | Affected Areas:                                                                                                                                         | Ranking: |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Blizzards        | Upper Midwest, Great Plains in US; Prairies,<br>eastern Arctic, eastern Ontario in Canada<br>(source National Weather Service,<br>Government of Canada) | Low      |
| Chemical Spill   | All                                                                                                                                                     | Moderate |
| Droughts         | Arizona, California, Colorado, Nevada, New<br>Mexico, Oklahoma, Texas, Alabama, Georgia,                                                                | Low      |



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| Emergency Event:                                                      | Affected Areas:                                                                                                                                                                                                                                                                                                                                                                                   | Ranking: |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
|                                                                       | South Carolina, high plains, Rockies, and to the Pacific <i>(source drought.gov)</i>                                                                                                                                                                                                                                                                                                              |          |
| Earthquakes                                                           | California, Alaska, Hawaii, and Puerto Rico,<br>Pacific Northwest Earthquake Zone and New<br>Madrid Earthquake Zone <i>(source Marsh</i><br><i>insurance broker)</i>                                                                                                                                                                                                                              | Low      |
| Extreme Cold or Heat<br>Waves (Severe Weather &<br>Natural Disasters) | All                                                                                                                                                                                                                                                                                                                                                                                               | High     |
| Fire                                                                  | All                                                                                                                                                                                                                                                                                                                                                                                               | Low      |
| Floods                                                                | All (source NOAA)                                                                                                                                                                                                                                                                                                                                                                                 | High     |
| General Threat & Bomb<br>Threat                                       | All                                                                                                                                                                                                                                                                                                                                                                                               | Low      |
| Hurricanes                                                            | Texas to North Carolina, Hawaii, Puerto Rico<br>and U.S. Virgin Islands, Virginia to Maine,<br>Florida <i>(source Marsh insurance broker)</i>                                                                                                                                                                                                                                                     | High     |
| Landslides or Avalanches                                              | All areas are affected. Major/widespread<br>landslides: Washington, Oregon, California,<br>Colorado, Idaho, Hawaii, Virginia, Ohio,<br>Pennsylvania, Tennessee, North Carolina,<br>Puerto Rico, Nevada, Utah, Wyoming.<br>Moderate/severe: Appalachian Mountains,<br>Rocky Mountains, Pacific Coastal Ranges,<br>Alaska, Hawaii, Alberta, Ontario. <i>(Source<br/>USGS, Government of Canada)</i> | Low      |
| Power Outages (Electrical<br>Lines Down, Generator Use)               | All                                                                                                                                                                                                                                                                                                                                                                                               | Moderate |
| Security Breach                                                       | All                                                                                                                                                                                                                                                                                                                                                                                               | Low      |
| Tornadoes                                                             | Texas, Iowa, Oklahoma, Kansas, Nebraska,<br>South Dakota, Colorado, New Mexico, Alberta,<br>Ontario <i>(source NOAA, Government of Canada)</i>                                                                                                                                                                                                                                                    | Low      |
| Wildfires                                                             | All areas are affected. Following are highest<br>US number/acres burned: California, Texas,<br>Arizona, Montana, Florida, North Carolina<br>Oregon, New Jersey, Georgia, Washington<br><i>(Source III)</i>                                                                                                                                                                                        | Low      |
| Winter Storms                                                         | Central United States, Great Lakes, east coast<br>of the U.S. and Canada, and northern Canada<br>(source NOAA)                                                                                                                                                                                                                                                                                    | Low      |

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#### **4 COMMUNICATION EQUIPMENT INVENTORY**

Inventory your utility's communication equipment below (i.e., satellite phones, etc.) and ensure communication methods have been established prior to an event.

| Туре | Assigned to | Location | Number/Frequency/Channel |
|------|-------------|----------|--------------------------|
|      |             |          |                          |
|      |             |          |                          |
|      |             |          |                          |
|      |             |          |                          |
|      |             |          |                          |
|      |             |          |                          |
|      |             |          |                          |
|      |             |          |                          |

#### **5 SYSTEM INFORMATION**

Critical system components that take priority in an emergency are listed below. With multiple failures, the sequencing of repairs will take priority based on population and number of connections served unless otherwise determined.

#### 5.1 WATER SYSTEM(S)

#### 5.1.1 Basic System Information

| Main Facility Address | System<br>Identification<br>Number | Population<br>Served | Number of<br>Service<br>Connections | Basic description                                                                  |
|-----------------------|------------------------------------|----------------------|-------------------------------------|------------------------------------------------------------------------------------|
| Bridgton, NC 28560    | NC0425132                          | 4610                 | 1877                                | WTP with 3 booster pumps<br>and 500,000 gals concrete<br>groundwater storage tank. |

Critical system components must be evaluated no less than annually with plans for improvements and upgrades as applicable.

## 5.1.2 Pump Information

| Well # / Booster<br>Station # /<br>Surface Water<br>Intake | Facility Address | Pump<br>Depth                  | Normal Well /<br>Booster<br>Pump / Raw<br>Water Pump<br>GPM | Wellhead /<br>Booster<br>Pump<br>Operating<br>Pressure | Motor<br>HP | Phase/<br>Voltage |
|------------------------------------------------------------|------------------|--------------------------------|-------------------------------------------------------------|--------------------------------------------------------|-------------|-------------------|
| Well 1                                                     |                  | 150                            | 600 GPM                                                     | 20                                                     | 30 HP       | 3phase/230V       |
| Well 2                                                     | ┝                | 150                            | 400 GPM                                                     | 15                                                     | 25 HP       | 3phase/230V       |
| Well 3                                                     |                  | 160                            | 634 GPM                                                     | 10                                                     | 25 HP       | 3phase/480V       |
| Booster Station                                            |                  | Jockey<br>pump                 | 250 GPM                                                     | 58-68 PSI                                              | 15 HP       | 3phase/460V       |
| Booster Station                                            |                  | Pump<br>1 &<br>2 Main<br>pumps | 550 GPM                                                     | 58-68 PSI                                              | 50 HP       | 3phase/460V       |

#### 5.1.3 Treatment Information

| Well #/<br>Surface<br>Water Intake/<br>Facility | Chemicals<br>Used      | Type of Chemical<br>Feed/Pump                 | Location of<br>Disinfection<br>System | Location of Bulk<br>Chemical Storage | Onsite<br>Lab<br>Location<br>Y/N |
|-------------------------------------------------|------------------------|-----------------------------------------------|---------------------------------------|--------------------------------------|----------------------------------|
| Well 1                                          | Liquid<br>bleach       | Diaphram<br>Pulsatron<br>120 GPD @<br>100 PSI | Well piping                           | Well Building                        | Y                                |
| Well 1                                          | FeroQuest<br>Phosphate | Diaphram<br>Pulsatron<br>24 GPD<br>@100PSI    | Well piping                           | Well Building                        | Y                                |
| Well 2                                          | Liquid<br>bleach       | Diaphram<br>Pulsatron<br>120 GPD @<br>100 PSI | Well piping                           | Well Building                        | Y                                |

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| Well 2 | FeroQuest<br>Phosphate | Pulsatron<br>24 GPD<br>@100PSI                | Well piping | Well Building | Y |
|--------|------------------------|-----------------------------------------------|-------------|---------------|---|
| Well 3 | Liquid<br>bleach       | Diaphram<br>Pulsatron<br>120 GPD @<br>100 PSI | Well piping | Well Building | Y |
| Well 3 | FeroQuest<br>Phosphate | Diaphram<br>Pulsatron<br>24 GPD<br>@100PSI    | Well piping | Well Building | Y |

# 5.1.4 Finished Water Storage

| Applicable Well /<br>Surface Water<br>Intake / Facility | Location/ Address | Name of<br>Storage Facility | Storage Type               | Capacity (gals) |
|---------------------------------------------------------|-------------------|-----------------------------|----------------------------|-----------------|
| Tank                                                    |                   | Tank Site                   | Concrete Ground<br>Storage | 500,000         |

#### 5.1.5 Power

| Facility        | Primary<br>Power | Acct# | Backup<br>Power<br>(stationary<br>, portable,<br>or both) | Auto or<br>Manual<br>transfer<br>switch<br>available | KW/<br>Phase | Voltage      | Rotation | Generator<br>Quick<br>Connect |
|-----------------|------------------|-------|-----------------------------------------------------------|------------------------------------------------------|--------------|--------------|----------|-------------------------------|
| WTP &<br>well 3 | Tideland         |       | Stationary                                                | Auto                                                 | 150K<br>W    | 3P<br>460V   | CW       | No                            |
| Well 1          | Tideland         |       | Portable                                                  | Manual                                               | 100<br>KW    | 3Ph/<br>240V | CW       | Y                             |
| Well 2          | Tideland         |       | Portable                                                  | Manual                                               | 100K<br>W    | 3Ph/<br>240V | CW       | Y                             |

#### 5.1.6 Portable Generators

| Facility                                        | Address | KW    | Fuel<br>Type |
|-------------------------------------------------|---------|-------|--------------|
| Fairfield Harbour Generator<br>storage Building |         | 45 KW | Gasoline     |

|                                                 |           |          |                   |               | Attachment D |
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|                                                 | Emergency |          | ERP – Fairfield I |               | eld Harbour  |
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|                                                 |           |          |                   |               |              |
| Fairfield Harbour Gen<br>storage Building       |           |          |                   | 55 KW         | Gasline      |
| Fairfield Harbour Generator<br>storage Building |           |          |                   | 35 KW         | Diesel       |
| Fairfield Harbour Generator<br>storage Building |           |          |                   | 100 KW        | Diesel       |
| Fairfield Harbour Generator<br>storage Building |           |          |                   | 60KW          | Gasoline     |
| Fairfield Harbour Generator<br>storage Building |           |          |                   | 48 KW         | Diesel       |

#### 5.1.7 Critical System Components List

Depending on the emergency, these system components have priority for repairs.

| Component            | Reason Critical to Operation | Location/Address |
|----------------------|------------------------------|------------------|
| Drinking Water Wells | No interconnection           |                  |

#### 5.1.8 Interconnections including Emergency

| Peak<br>Capacity | Manual/ Auto PSI<br>Control | Name of System<br>Interconnection | Interconnect Location |
|------------------|-----------------------------|-----------------------------------|-----------------------|
|                  |                             |                                   |                       |
|                  |                             |                                   |                       |

#### 5.1.9 Alternative Water Source Options

List information on alternative source water options to mitigate impacts during incidents

| Туре          | Location              | Comments                                                                                                                                                         |
|---------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Well          | Municipal golf course | This irrigation well can be used to<br>supply water under emergency<br>approval from state. Chlorination is<br>needed and the well can produce up<br>to 300 gpm. |
| Bottled Water |                       |                                                                                                                                                                  |

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| Licensed Water Hauler |  |
|-----------------------|--|
|                       |  |

#### 5.1.10 Other Applicable Information (booster chlorinators, control systems, etc)

| Booster<br>chlorinators | Pressure<br>Booster Stations | Control Systems | Sump Pumps | Spare Equipment |
|-------------------------|------------------------------|-----------------|------------|-----------------|
|                         |                              |                 |            |                 |
|                         |                              |                 |            |                 |

#### 5.1.11 Fire Flow Data

Attach any available fire flow data for fire hydrants based upon guidelines published by the ISO (Insurance Services Office) <u>http://www.iso.com</u>.

| Average Daily<br>Demand | Maximum Daily<br>Demand | System Capacity | Peak Demand |
|-------------------------|-------------------------|-----------------|-------------|
|                         |                         |                 |             |
|                         |                         |                 |             |

#### 5.1.12 Location of Pertinent Information

| Item                                                                                                                                                                                                                              | Document Location           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Distribution System Map (includes line sizes, valve locations, fire hydrants, blow-offs and pumping, storage and treatment facilities)                                                                                            | Online GIS and Field Office |
| Facility Addresses                                                                                                                                                                                                                | Online GIS and Field Office |
| Pressure Boundary Map                                                                                                                                                                                                             | Online GIS                  |
| Process Flow Diagram                                                                                                                                                                                                              | Online GIS                  |
| Site Specific Schematics (As Applicable):<br>Pumping and Storage Facilities<br>Reservoir Facilities<br>Water Treatment Facilities<br>Chemical Storage Locations<br>Booster Pump Stations<br>Pressure-regulating valve (PRV) Sites | Online GIS and Field Office |
| Operation and Maintenance (O & M) Manuals                                                                                                                                                                                         | Field Office                |
| Start-up and Shutdown Procedures (SOP)                                                                                                                                                                                            | Field Office                |
| Other relevant documents:                                                                                                                                                                                                         |                             |

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# 5.2 WASTEWATER SYSTEM(S)

## 5.2.1 Basic System Information

| Main Facility Address | NPDES Number | Population<br>Served | Number of<br>Service<br>Connections | Basic description                                                                            |
|-----------------------|--------------|----------------------|-------------------------------------|----------------------------------------------------------------------------------------------|
|                       | WQ 0033111   | 4695                 | 1878                                | 600,000 gpd extended air with<br>FFP Filters and UV<br>disinfection with stream<br>discharge |

#### 5.2.2 Pump Information

| Lift<br>Station # | Facility Address | Total Dynamic<br>Head | Motor HP | Phase/ Voltage     |
|-------------------|------------------|-----------------------|----------|--------------------|
| 1                 |                  | 50 FT                 | 10 HP    | 3 / PHASE 230      |
| 2                 |                  | 50 FT                 | 10 HP    | 3 / PHASE 230      |
| 3                 |                  | 35 Ft                 | 5.5      | 3 / PHASE 230      |
| 4                 |                  | 35 Ft                 | 5.0      | 3 / PHASE 230      |
| 5                 |                  | 55 Ft                 | 10       | 3 / PHASE 230      |
| 6                 |                  | 35                    | 3        | Rotary Phase / 230 |
| 7                 |                  | 30                    | 3        | Rotary Phase / 230 |
| 8                 |                  | 35                    | 5        | 3 / PHASE 230      |
| 9                 |                  | 35                    | 3        | Rotary Phase / 230 |
| 10                |                  | 30                    | 3        | 3 / PHASE 230      |
| 11                |                  | 35                    | 3        | Rotary Phase / 230 |
| 12                |                  | 30                    | 3        | Rotary Phase / 230 |
| 13                |                  | 25                    | 3        | 3 / PHASE 230      |

|     |                  |     |            |      | Attachment D            |
|-----|------------------|-----|------------|------|-------------------------|
| СОГ | <b>X</b> °       | Er  | MERGENCY   |      | ERP – Fairfield Harbour |
|     | oup of Companies | Res | PONSE PLAN |      | Revised: November 2021  |
| 14  |                  |     | 30         | 3    | Rotary Phase / 230      |
| 15  |                  |     | 25         | 3    | Rotary Phase / 230      |
| 16  |                  |     | 42         | 7.5  | 3 / PHASE 230           |
| 17  |                  |     | 84         | 25.0 | 3 / PHASE 230           |
| 18  |                  |     | 25         | 3    | 3 / PHASE 230           |
| 19  |                  |     | 45         | 5.5  | 3 / PHASE 230           |
| 20  |                  |     | 30         | 5.0  | 3 / PHASE 230           |
| 21  |                  |     | 45         | 5.5  | 3 / PHASE 230           |
| 22  |                  |     | 85         | 20.0 | 3 / PHASE 230           |
| 23  |                  |     | 85         | 10   | 3 / PHASE 230           |
| 24  |                  |     | 40         | 7.5  | 3 / PHASE 230           |
| 25  |                  |     | 45         | 5.0  | 3 / PHASE 230           |
| 26  |                  |     | 40         | 5.0  | 3 / PHASE 230           |

#### 5.2.3 Treatment Information

| Facility / Lift<br>Station # | Chemicals<br>Used | Type of<br>Chemical<br>Feed/Pump | Location of<br>Disinfection<br>System | Location of<br>Bulk<br>Chemical<br>Storage | Onsite Lab<br>Location<br>Y/N |
|------------------------------|-------------------|----------------------------------|---------------------------------------|--------------------------------------------|-------------------------------|
| N/A                          |                   |                                  |                                       |                                            |                               |

5.2.4 Power

| Facility | Primary<br>Power | Acct# | Backup<br>Power<br>(stationary,<br>portable, or<br>both) | Auto or<br>Manual<br>transfer<br>switch<br>availabl<br>e | KW/<br>Phase | Voltage | Rotation | Generator<br>Quick<br>Connect |
|----------|------------------|-------|----------------------------------------------------------|----------------------------------------------------------|--------------|---------|----------|-------------------------------|
|----------|------------------|-------|----------------------------------------------------------|----------------------------------------------------------|--------------|---------|----------|-------------------------------|

| Group of Companies              |          |   | EMERGENCY<br>RESPONSE PLAN |        |                          |                     | ERP – Fairfield Harbour<br>Revised: November 2021 |      |  |
|---------------------------------|----------|---|----------------------------|--------|--------------------------|---------------------|---------------------------------------------------|------|--|
| Office /<br>storage<br>building | Tideland | T | Stationary                 | Auto   | 11KW                     | 1 P/<br>220<br>Volt | NA                                                | None |  |
| WWTP                            | Tideland | T | Stationary<br>at<br>WWTP   | Auto   | 300k<br>W/<br>3<br>Phase | 3P/ 460<br>Volt     | CW                                                | None |  |
| L.S.#1                          | Tideland |   | Portable                   | Manual | 55<br>KW                 | 230                 | CW                                                | Yes  |  |
| L.S.#2                          | Tideland |   | Stationary                 | Auto   | 80<br>KW                 | 230                 | CW                                                | Yes  |  |
| L.S.#3                          | Tideland |   | Portable                   | Manual | 45<br>KW                 | 230                 | CW                                                | Yes  |  |
| L.S.#4                          | Tideland |   | Portable                   | Manual | 45KW                     | 230                 | CW                                                | Yes  |  |
| L.S.#5                          | Tideland |   | Portable                   | Manual | 55KW                     | 230                 | CW                                                | Yes  |  |
| L.S.# 6                         | Tideland |   | Portable                   | Manual | 45<br>KW                 | 230                 | CW                                                | Yes  |  |
| L.S. # 7                        | Tideland |   | Portable                   | Manual | 35KW                     | 230                 | CW                                                | Yes  |  |
| L.S. # 8                        | Tideland |   | Portable                   | manual | 48<br>KW                 | 230                 | CW                                                | Yes  |  |
| L.S. # 9                        | Tideland |   | Portable                   | manual | 55<br>KW                 | 230                 | CW                                                | Yes  |  |
| L.S.# 10                        | Tideland |   | Portable                   | manual | 45<br>KW                 | 230                 | CW                                                | Yes  |  |
| L.S.# 11                        | Tideland |   | Portable                   | manual | 48KW                     | 230                 | CW                                                | Yes  |  |
| L.S. #12                        | Tideland |   | Portable                   | manual | 55KW                     | 230                 | CW                                                | Yes  |  |
| L.S.# 13                        | Tideland |   | Portable                   | manual | 45<br>KW                 | 230                 | CW                                                | Yes  |  |

|                    |          |           |            |         |                         |                 |                        | Attachment D |  |
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|                    |          | EMERGENCY |            | E       | ERP – Fairfield Harbour |                 |                        |              |  |
| Group of Companies |          | oanies    | Resp       | ONSE PL | AN                      | Re              | Revised: November 2021 |              |  |
|                    |          | I         | Γ          | I       |                         |                 |                        |              |  |
| L.S.# 14           | Tideland |           | Portable   | manual  | 55<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 15           | Tideland |           | Portable   | manual  | 35<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 16           | Tideland |           | Portable   | manual  | 48<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 17           | Tideland |           | Stationary | Auto    | 60<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 18           | Tideland |           | Portable   | manual  | 48<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 19           | Tideland |           | Portable   | manual  | 48<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 20           | Tideland |           | Portable   | manual  | 55<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 21           | Tideland |           | Stationary | Auto    | 15<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 22           | Tideland |           | Stationary | Auto    | 80<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 23           | Tideland |           | Portable   | manual  | 55<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 24           | Tideland |           | Portable   | manual  | 45<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 25           | Tideland |           | Portable   | manual  | 55<br>KW                | 230             | CW                     | Yes          |  |
| L.S.# 26           | Tideland |           | Portable   | manual  | 55<br>KW                | Single<br>phase | CW                     | Yes          |  |
| L.S.# 20           | Tideland |           | Portable   | manual  | 55<br>KW                | 230             | CW                     | Yes          |  |

# 5.2.5 Portable Generators

| Facility                             | Address | KW    | Fuel Type |
|--------------------------------------|---------|-------|-----------|
| Fairfield generator storage building |         | 45 KW | Gasoline  |

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|                                      | E   | MERGENCY   | ERP – Fairfield Harbour |              |  |
| Group of Companies                   | Res | PONSE PLAN | Revised: November 2     |              |  |
|                                      |     |            |                         |              |  |
| Fairfield generator storage buildir  | ng  |            | 55 KW                   | Gasoline     |  |
| Fairfield generator storage building |     |            | 35 KW                   | Diesel       |  |
| Fairfield generator storage building |     |            | 60 KW                   | Gasoline     |  |
| Fairfield generator storage building |     |            | 100 KW                  | Diesel       |  |
| Fairfield generator storage building |     |            | 60KW                    | Gasoline     |  |
| Fairfield generator storage building |     |            | 48 KW                   | Diesel       |  |

#### 5.2.6 Critical System Components List

Depending on the emergency, these system components have priority for repairs.

| Component          | Reason Critical to Operation                | Location/Address    |  |
|--------------------|---------------------------------------------|---------------------|--|
| Lift Station Pumps | Prevent sewer spills                        | See locations above |  |
| WWTP               | Prevent Sewer spill and effluent violations |                     |  |

#### 5.2.7 Interconnections including Emergency

| Name of System Interconnection | System Interconnect Location |
|--------------------------------|------------------------------|
|                                |                              |
|                                |                              |
|                                |                              |

#### 5.2.8 Other Applicable Information (booster chlorinators, control systems, etc)

| Air Release Valve | Control Systems | Sump Pumps | Spare Equipment |
|-------------------|-----------------|------------|-----------------|
|                   |                 |            |                 |
|                   |                 |            |                 |
|                   |                 |            |                 |

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#### 5.2.9 Location of Pertinent Information (As Applicable)

| Item                                                                                                                                                      | Document Location   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Collection System Map                                                                                                                                     | Online GIS and WWTP |
| Facility Addresses                                                                                                                                        | Online GIS and WWTP |
| Process Flow Diagram                                                                                                                                      | Online GIS and WWTP |
| <u>Site Specific Schematics</u> (As Applicable):<br>Pumping and Storage Facilities<br>Treatment Facilities<br>Chemical Storage Locations<br>Pump Stations | WWTP                |
| Operation and Maintenance (O & M) Manuals                                                                                                                 | WWTP                |
| Start-up and Shutdown Procedures (SOP)                                                                                                                    | WWTP                |
| Other relevant documents:                                                                                                                                 |                     |

#### 5.3 WRITTEN AGREEMENTS WITH OTHER AGENCIES, UTILITIES, OR RESPONSE ORGANIZATIONS

#### 5.3.1 Mutual Aid Agreements

A mutual aid and assistance network provides water and wastewater utilities with the means to quickly obtain help in the form of personnel, equipment, materials and associated services from other utilities to restore critical operations impacted during any type of emergency, big or small. May include emergency connections, personnel, equipment and chemical supplies, etc:

| Organization             | N/A |
|--------------------------|-----|
| Summary of Understanding |     |

#### 5.3.2 WARN

Water and Wastewater Agency Response Networks (WARNs) are comprised of "utilities helping utilities" within a state/region that respond to and recover from emergencies by sharing resources with one another. WARNs are governed by a common mutual aid agreement. The WARN agreement allows utilities to share resources in a more expedited way, compared to other mechanisms that require a formal disaster declaration. The agreement spells out how liability, workers' compensation, insurance and reimbursement will work. Other benefits include increased emergency preparedness and coordination, and enhanced access to specialized resources. Utility responders, once notified, are typically on the ground within 24 hours.

| Organization             | N/A |
|--------------------------|-----|
| Summary of Understanding |     |

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# 5.3.3 Memoranda of Understanding

| Organization             | N/A |
|--------------------------|-----|
| Summary of Understanding |     |

#### 5.3.4 Contracts

List any additional contracts in place:

| Contracts          | Company Name | Pertinent Information |
|--------------------|--------------|-----------------------|
| Contract Operators |              | Operator Level        |
| Chemical Suppliers |              |                       |
| Bottled Water      |              |                       |
| Water Hauler       |              |                       |
| Other              |              |                       |

#### **6 SURROUNDING EXTERNAL FACILITIES**

List non-Corix owned surrounding chemical production, handling or storage industries that could impact your utility and employees during incidents such as accidental releases, hurricanes or earthquakes.

#### Industry Chemical Handling Facilities

| Facility Name | Location | Distance | Chemical and Exposure Pathway |
|---------------|----------|----------|-------------------------------|
| None          |          |          |                               |
|               |          |          |                               |
|               |          |          |                               |
|               |          |          |                               |
|               |          |          |                               |

Refer to ERP-008-Chemical Spill for safety information on environmental factors.

#### **7 COMMUNICATIONS**

#### 7.1 MEDIA RELATIONS

All inquiries from the media should be directed to the Director of Public Relations at (847) 897-6483. If this is not possible or practicable, inquiries should be referred to the President of Operations or SVP/President.

#### 7.2 PUBLIC NOTIFICATION

Provide location of public notice templates.

#### 8 EMERGENCY RESPONSE

#### 8.1 EMERGENCY RESPONSE PROCEDURES

Specific Emergency Response Procedures that apply to this facility are provided separately.

#### 8.2 ANNUAL REVIEW/ TRAINING

The purpose is to establish that all field operations employees are adequately trained in emergency response to different situations. On an annual basis, employees in operations will conduct an internal review and all relevant documents will be updated as needed. Certify completion of the exercise to regulatory agencies as applicable. The following will be required as part of the training:

- 1. A review of the facilities' ERPs and ERP Procedures.
- 2. Ensure each facility has emergency contact phone numbers updated and posted.
- 3. Review of the Corix Physical Security Program

Perform Tabletop Exercises from the scenarios provided within the Security Breach and other Natural Disaster ERPs. See the Tabletop Exercise Template.

Schedule for drills, tabletop exercises, and other ways to practice emergency response.

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| Event                   | Description                                                                               | People / Organizations<br>Involved | Date     |
|-------------------------|-------------------------------------------------------------------------------------------|------------------------------------|----------|
| Rehearsals              | Conduct actual<br>emergency drill.                                                        | Utility system staff.              | Annually |
| On-site Training Drills | Conduct specific drills<br>(ex. communications,<br>water line breaks,<br>sampling, etc.). | Utility system staff               | Annually |

## 9 OPERATIONS EMERGENCY RESPONSE PLAN APPROVAL AND REVIEW

#### 9.1 PLAN EVALUATION & MITIGATION

The ERP will be evaluated and updated on an annual basis after the emergency rehearsal. Identified improvements shall be made at that time and communicated to all staff.

#### 9.2 PLAN REVIEW & UPDATE

Any modifications will be incorporated into the ERP template document.

#### 9.3 REVIEW & APPROVAL

This plan must be reviewed and approved by the supervisor and employees to whom it applies. Document all individuals that have reviewed the plan (on this page or separately as needed).

| Created By: Brent Milliron | Created: 11/17/2021  |
|----------------------------|----------------------|
| Approved By:               | Approved: MM/DD/YYYY |
| Reviewed By:               | Reviewed: MM/DD/YYYY |