CONFIDENTIAL

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Emergency Response Plan

for

Public Water System Name:

_____

Public Water System I.D. Number:

NY _____

Prepared by: _____

Title: _____

Signature: _____

Date Completed: _____

Change Log

Date	Changes Made By	Changes Made

Distribution List

Copy Number	Recipient	Distributed By	Date

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SECTION I – INTRODUCTION

1. PURPOSE

This emergency plan was developed as a guideline for the operators and administration to minimize disruption of normal services to its consumers and to provide public health protection and safety during an emergency. Emergency response planning should be a coordinated and planned process. Proper planning can lessen the impact of an emergency. This plan was designed to address various emergency hazards that may occur in rural and small water systems.

2. ORGANIZATION

Water Department policies are set by: _____

Large expenditures (over $ _____) must be approved by: _____

Smaller purchases can be made by: _____

Emergency declarations and notification of the public, state, and local officials in accordance with 10 NYCRR 5-1.23 and 10 NYCRR 5-1.77-78 are the responsibility of: _____

A. Command Structure

During any type of emergency, the following persons have decision-making authority and are in charge of the water system emergency response (contact in order indicated):

NAME	POSITION	PHONE (DAY) PHONE (NIGHT)	RADIO FREQUENCY (MHZ)	E-MAIL

B. Water System Staff and Roles

Provide contact information, primary duties during periods of normal operation, any certifications or qualifications held, and any roles in which each employee has been cross-trained and is able to fill during an emergency. Use additional sheets if needed.

NAME	PHONE (DAY) PHONE (NIGHT)	PRIMARY DUTIES	CERTIFICATIONS/ QUALIFICATIONS	CROSS-TRAINED

SECTION II - DESCRIPTION OF THE SYSTEM

The following is a summary description of the system that should provide enough information about the system for use during an emergency. Use this worksheet to characterize and identify system assets. Describe your system here in details. Include and reference any diagrams or distribution system mapping in this report.

1. LOCATION OF PERTINENT INFORMATION

ITEM	LOCATION
Distribution System Map	
Other Pertinent Maps	
Daily Reports	
Permits	
Technical Manuals	
O&M Plan	
Start-Up/Shut-Down Procedures (SOPs)	
Computer/Paper Files	
Other (specify)	

Public Health Law Section 1125(3) requires a version of the ERP be available to the public for review. Such version shall exempt from public review any information determined by the water supplier to pose a security risk to operation of what water supply system.

Location of version available for public review:

2. SOURCE INFORMATION

A. Well Information

☐ Not Applicable because system has no wells.

WELL ID	LOCATION	WELL DEPTH	WELL YIELD	CRITICAL WATER LEVEL*

* Based upon well and aquifer characteristics.

B. Surface Water Sources

☐ Not Applicable because system has no surface water sources.

SOURCE	LOCATION	INTAKE LOCATION	CAPACITY	CRITICAL WATER LEVEL

C. Water Quality of the Source(s)

ANALYTE/ PHYSICAL PROPERTY	SOURCE NAME AND SAMPLING DATE				
Alkalinity	mg/L	mg/L	mg/L	mg/L	mg/L
pH	SU	SU	SU	SU	SU
Hardness	mg/L	mg/L	mg/L	mg/L	mg/L
Iron	ml/L	ml/L	ml/L	ml/L	ml/L
Turbidity	NTU	NTU	NTU	NTU	NTU
Odor	TON	TON	TON	TON	TON
Color	SU	SU	SU	SU	SU
Std Plate Ct/100ml					
Coliform /100ml					
E. Coli Presence					

D. Source Pump Information

☐ Not Applicable because system has not source water pumps.

SOURCE	PUMP TYPE	MANUFACTURER	H.P.	CAPACITY (GPM)	PHASE, VOLTAGE

E. Emergency Sources

SOURCE	LOCATION	CAPACITY	EQUIPMENT NEEDED*	PROCEDURES NEEDED*

* Equipment and procedures needed to use the source

☐ Potential emergency sources have been considered. No feasible sources have been identified. Details for providing potable water during a water supply emergency, as required by 10 NYCRR 5-1.33(c), are on the following pages of this ERP:

_____

F. Relocation of Water Intakes

In accordance with Section 2013 of the America's Water Infrastructure Act of 2018 (AWIA) identify any locations where water intakes could be relocated to obviate or significantly lessen the impact of a malevolent act or natural hazard. Also consider the relocation of intakes to different locations or different depths within existing sources.

☐ Not Applicable because water system has no intakes.

SOURCE	LOCATION	CAPACITY	EQUIPMENT NEEDED*	PROCEDURES NEEDED*

* Equipment and procedure needed to use the source

☐ Relocation of intakes has been considered. No feasible locations have been identified.

3. SYSTEM INFORMATION

A. System Demand

Public Health Law Section 1125(2)(c) requires the plan to include the system capacity and ability to meet peak demand and fire flows concurrently.

System capacity is the daily amount of water that the system is approved to treat and distribute (refer to the system's water supply permit/approved design capacity of treatment plant). Average daily demand is the system's average daily usage based upon operational records maintained during the past several years. Maximum daily demand is typically the highest daily demand experienced in recent years based upon operational records. Peak water demand is the maximum hourly demand that the system can sustain provided by storage or by production capability plus storage; and still meet average daily demand. Attach any available fire flow data for fire hydrants based upon guidelines published by the ISO (Insurance Services Office) http://www.iso.com.

System Capacity	**MGD**
Total Storage	**MG**

Average Daily Demand	**MGD**
Maximum Daily Demand	**MGD**
Peak Demand	**GPH**

Is the system able to meet peak demand and fire flows concurrently using existing production capacity and available storage?

☐ Yes ☐ No

If no, is sufficient additional water available through interconnections with other systems or other sources to meet peak demand and fire flows concurrently?

☐ Yes ☐ No ☐ Not Applicable

B. Infrastructure and Equipment

Describe your water treatment plant, pump stations, process controls, finished water storage, etc.

FACILITY	LOCATION	CAPACITY	ONSITE BACKUP POWER (SPECIFY)	BACKUP POWER CAPACITY(%)*

* Does backup power provide partial or full support (define in %)?

Public Health Law (PHL) Section 1125(3) requires water systems to submit their water supply emergency plans to the commissioner for review within thirty days after major water facility infrastructure changes have been made.

Have any major infrastructure changes occurred since the water supply emergency plan was last approved?

☐ Yes ☐ No

Has the water supply emergency plan been updated to reflect these changes as required by PHL?

☐ Yes ☐ No ☐ Not Applicable

C. Distribution System and Transmission Main(s) Information

(Attach map, if necessary, include exposed crossings and important appurtenances such as air relief valves)

SIZE	LENGTH	MATERIAL TYPE	OTHER IMPORTANT INFO

D. Interconnections

☐ Not Applicable because system has no interconnections.

INTER-CONNECTION	LOCATION	SIZE AND CAPACITY	FLOW DIRECTION	EQUIPMENT/ PROCEDURES NEEDED*	% OF SYSTEM SUPPORTED

*Equipment/procedure needed to use the interconnection to receive water and to restrict/discontinue delivery of water to another system

E. Other Pertinent System Information

Other information about the system that could be useful during an emergency (control system, SCADA):

4. TREATMENT INFORMATION

A. Disinfection and Treatment

☐ Not Applicable because system does not provide any disinfection or treatment.

CHEMICAL(S) USED	TYPE OF CHEMICAL FEED	LOCATION OF DISINFECTION/ TREATMENT SYSTEM	LOCATION OF CHEMICAL STORAGE

B. Other Pertinent Disinfection and Treatment Information

Other information about disinfection and treatment that can be useful during emergency (normal dosage, normal residual and location measured, lab/sampling equipment and reagents, booster chlorinators, control systems, spare pumps, spare parts, etc.):

Section III – Emergency Response Actions

1. DESCRIPTION OF EMERGENCY RESPONSE ACTIONS

For each emergency condition in the following tables (A-R) list the immediate actions that should be taken upon discovery of the emergency. Actions should help stabilize the situation to reduce the impact to system operation. Provide contact information for people who may need to be notified, tools and equipment which may be required, and any follow-up actions needed once conditions have stabilized.

A. Power Outage

☐ Not Applicable because: _____

Immediate actions: 1. _____ 2. _____ 3. _____ 4. _____	Contact Names and Number: 1. _____ 2. _____ 3. _____ 4. _____
Tools and equipment: 1. _____ 2. _____	Follow-up actions and notification: 1. _____ 2. _____

B. Prolonged Water Outage

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	**Follow-up actions and notification:**
1. _____	1. _____
2. _____	2. _____

C. Transmission and/or Distribution System Failure

(Tanks, controls, piping, etc.)

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	**Follow-up actions and notification:**
1. _____	1. _____
2. _____	2. _____

D. Treatment Equipment Failure

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

E. Pump Failure

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

F. Loss of SCADA or Other Automated Controls

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

G. Contamination of Supply

(Including MCL violations)

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

H. Chemical Incident at Facility

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

I. Drought

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

J. Flood

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

In accordance with Section 2013 of the America's Water Infrastructure Act of 2018 (AWIA), identify any locations where flood protection barriers could be constructed to obviate or significantly lessen the impact of a malevolent act or natural hazard. Consider temporary barriers, such as sandbags and permanent barriers, dikes, or berms. Also consider infrastructure improvements, such as the installation of watertight doors.

LOCATION	BARRIER TYPE	EQUIPMENT NEEDED

☐ Installation of flood protection barriers has been considered. No locations were identified where barriers would obviate or significantly lessen the impact of malevolent acts or natural hazards.

K. Severe Weather

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

L. Earthquake

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

M. Fire at Water Supply System Facility

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	**Follow-up actions and notification:**
1. _____	1. _____
2. _____	2. _____

N. Fire in the Community

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	**Follow-up actions and notification:**
1. _____	1. _____
2. _____	2. _____

O. Hazardous Material Release

(In Watershed or Recharge Area)

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

P. Terrorism or Vandalism

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

Q. Cyber Attack

☐ Not Applicable because: _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

R. Other (specify): _____

Immediate actions:	Contact Names and Number:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
Tools and equipment:	Follow-up actions and notification:
1. _____	1. _____
2. _____	2. _____

S. Supply Chain Shortages

Identify the critical chemicals needed for water treatment. It is recommended that at least 30 days of supply be kept on-site based on average daily usage. In the event of shortages, consider increasing on-site storage if feasible.

Chemical	Primary Supplier	Alternate Supplier*	Daily Usage	On-site supply (days)

* Verify the alternate supplier receives chemicals from a different source than is used by the primary supplier.

Identify alternate chemicals which may be used during an emergency *with regulatory approval*. For example, consider other chemical grades or certifications (food grade vs. NSF 60), alternate formulations ($KMnO_4$ vs. $NaMnO_4$), different concentrations (5% vs. 12.5%), different chemicals which achieve the same purpose (ferric chloride vs. alum), and reduced doses (1.0 mg/L vs. 1.2 mg/L).

Chemical	Alternate*

* Note changes in chemicals or concentrations may impact downstream processes and water chemistry. Additional monitoring may be necessary following changes. All changes to public water systems must receive prior approval from the regulatory authority.

Task	Complete
Discuss with chemical suppliers water system designation as critical infrastructure.	☐
Update lists of spare parts and supplies. Identify critical components and supplies that may have long lead times. Consider securing spare parts in advance.	☐
Establish mutual aid agreements (neighboring municipalities, NYWARN).	☐
Create an account for the U.S. EPA Water Treatment Chemical Suppliers and Manufacturers Locator Tool: https://www.epa.gov/waterutilityresponse/chemical-suppliers-and-manufacturers-locator-tool.	☐

Identify any additional actions needed to respond to supply chain shortages:

T. Pandemic

If a continuity of operations plan (COOP) has been prepared, indicate where the plan can be found: _____

If a COOP has not been prepared, complete the following tables.

Task	Complete
Review command structure identified in Section I.2.A and verify names, contact information, roles, and authorities.	☐
Review and update the list of personnel identified in Section I.2.B.	☐
Review supply chain shortage response plan and take necessary actions.	☐

Identify critical functions and staff needed to carry out each function:

Priority	Essential Function	Primary employee(s)	Backup employee(s)
1			
2			
3			
4			
5			

Review, update or develop policies or plans for the following as necessary:

Policy or Plan	Location	Complete
Telecommuting		☐
Alternate staff schedules (split, staggered, or alternating shifts)		☐
Alternate work locations		☐
Limiting in-person interactions		☐
Alternate sampling locations		☐
Securing and distributing PPE		☐

Identify any additional actions needed to respond to a pandemic:

_____

_____

_____

_____

_____

2. DETECTION STRATEGIES

Section 2013 of AWIA requires the inclusion of strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system. Below is a list of potential detection strategies. Indicate those strategies used by your system. Consider implementing those strategies not currently implemented.

Check the box next to the detection strategies currently used by your system:

- ☐ Intrusion detection alarms
- ☐ National Response Center notifications
- ☐ Notifications from emergency services
- ☐ Customer complaint surveillance
- ☐ Public health surveillance
- ☐ Utility staff notifications
- ☐ Automated IT and OT system intrusion detection monitoring
- ☐ Chlorine gas in air monitors
- ☐ Weather Service alerts
- ☐ Notification from U.S. Army Corps of Engineers
- ☐ Energy provider notification
- ☐ Line power sensor notifications
- ☐ Routine system sampling
- ☐ Routine patrols by utility staff or law enforcement
- ☐ Source water capacity monitoring (well water depth, reservoir level, etc.)
- ☐ Comparison of produced versus billed water volumes
- ☐ SCADA set point alarms (water level, chemical concentration, pump status, etc.)
- ☐ Fire/smoke alarms
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

3. EMERGENCY CONTACTS AND PHONE NUMBERS

Public Health Law Section 1125(5) requires every water supplier to provide updated communication and notification information every year.

Provide the date you last updated your contact information with your local health department: _____

A. Emergency Responders

ORGANIZATION	CONTACT NAME	PHONE (DAY) PHONE (NIGHT)	E-MAIL
Fire Department			
Police Department			
FBI Field Office (for terrorism or sabotage)			
Emergency Medical Service			
Local Health Department			
National Spill Response Center	24 Hour Hotline	1 (800) 424-8802	
State (DEC) Spill Hotline	24 Hour Hotline	1 (800) 457-7362	
Local Hazmat Team			
Other (specify)			
Other (specify)			
Other (specify)			

For Water System Operators/Managers see Section I

B. State and Local Agencies Notification List

ORGANIZATION	CONTACT NAME	PHONE (DAY) PHONE (NIGHT)	E-MAIL
New York State Department of Health	Off Hour / Duty Officer	(866) 881-2809	
	Bureau of Water Supply Protection	(518) 402-7650 (D) (866) 881-2809 (N)	bpwsp@health.state.ny.us
Local Health Department			
Department of Environmental Conservation	Regional Office		
	24 Hour Spill Hotline	(800) 457-7362	
NYS OEM (Office of Emergency Management)		(518) 292-2200	postmaster@dhses.ny.gov
Hazmat Hotline	DEC's 24 Hour Spill Hotline	(800) 457-7362	
County Office of Emergency Management			
New York Rural Water Association		1-888-697-8725	nyrwa@nyruralwater.org
New York Water/Wastewater Agency Response Network			info@nywarn.org
Other (specify)			
Other (specify)			
Other (specify)			

C. Local Contact Notification List

ORGANIZATION	CONTACT NAME	PHONE (DAY) PHONE (NIGHT)	E-MAIL
Government Officials			
Hospitals			
Pharmacy			
Priority Water Users (Those are critically dependent upon water including schools, nursing homes, dialysis centers, institutions, Individuals, businesses, interconnected water systems, etc.)			
Others (specify)			

D. Chemical Supplier Information

CHEMICAL	SUPPLIER	CONTACT NAME	PHONE (DAY) PHONE (NIGHT)	EMAIL

E. System Equipment Repair and Supplies Contact Information

ORGANIZATION	CONTACT NAME	PHONE (DAY) PHONE (NIGHT)	E-MAIL
Electrician			
Plumber			
Pump Specialist			
Soil Excavator/ Backhoe Operator			
Equipment Rental (Power Generators)			
Equipment Rental (Chlorinators)			
Equipment Rental (Portable Fencing)			
Equipment Repairman			
SCADA Repair Service			
Pump Supplier			
Well Drillers			
Pipe Supplier			
Local/Regional Analytical Laboratory			
Others (specify)			

F. Utilities Contact Information

ORGANIZATION	CONTACT NAME	PHONE (DAY) PHONE (NIGHT)	E-MAIL
Electric Utility Company			
Gas Utility Company			
Sewer Utility Company			
Telephone Utility Company			
"Dig Safe", UFPO or local equivalent	Dig Safely NY	800-962-7962	
Neighboring Water Systems			
Others (specify)			

G. NYS Certified Bulk Water Suppliers

List of certified bulk and bottled water providers:
https://www.health.ny.gov/environmental/water/drinking/bulk_bottle/

ORGANIZATION	CONTACT NAME	PHONE (DAY) PHONE (NIGHT)	E-MAIL
Bulk Water Hauler			
Bottled Water Source			

H. Media Notification List

ORGANIZATION	CONTACT NAME	PHONE (DAY) PHONE (NIGHT)	E-MAIL
Designated Water System Spokesperson			
Newspaper – Local			
Newspaper – Regional/State			
Radio			
Television			
Other			

Section IV Emergency Water Use Restrictions

1. EXPLANATION AND AUTHORITY

During periods of a drought, a major leak, a system failure, or excessive consumption beyond the capacity of the system, etc., the water system must have the capability to conserve and restrict water usage.

Specify which regulation allows water system to issue and enforce water conservation or restrictions:	☐ Water system or Village/Town/County code or regulation. Reference: _____
	☐ Emergency declaration under NYS Executive Law Article 2B
Specify who has local authority to issue public notice for water conservation or restrictions:	

2. RESTRICTION STAGES

The following are the levels or stages of restrictions that will be applied, the conditions that generally will trigger them, and the types of restrictions that are applied. The conditions that trigger various restriction stages could be based upon critical source water levels indicated in Section II-2 or other conditions such as imminent loss of water or pressure.

RESTRICTION STAGE	STAGE TRIGGER(S)	RESTRICTIONS
I		
II		
III		

Section V – Communications

EMERGENCY COMMUNICATIONS EQUIPMENT

	CB RADIO	CELL PHONE	OTHER (SPECIFY)
Number of units available			
Location(s)			

In the event of an emergency, the primary line of communication will be (check one):	☐ Telephone ☐ Cell phone ☐ Radio system ☐ Other: _____
If the primary line of communication is not functional, the back-up line of communication will be (check one):	☐ Telephone ☐ Cell phone ☐ Radio system ☐ Other: _____
Other lines of communication include (specify):	
Specific Communication Instructions:	

Section VI – Spare Parts and Equipment

1. WATER SUPPLY SPARE PARTS AVAILABLE ON SITE

ITEM	LOCATION	CONTACT NAME AND PHONE #

2. WATER SUPPLY EMERGENCY EQUIPMENT

ITEM	LOCATION	CONTACT NAME AND PHONE #

3. PORTABLE POWER SUPPLY(IES)

MAKE/ MODEL	PHASE/ VOLTAGE/ AMPS	LOCATION OF STORAGE	LOCATION OF USE	CONTACT NAME AND PHONE #

4. VEHICLES AND CONSTRUCTION EQUIPMENT

A. Vehicles

MAKE AND MODEL	CAPACITY	LOCATION OF VEHICLE AND KEYS	CONTACT NAME AND PHONE #

B. Construction Equipment

EQUIPMENT (MAKE/MODEL)	LOCATION OF EQUIPMENT	CONTACT NAME AND PHONE #