

Disaster-Specific Preparedness/Response Plan

for Public Drinking Water Systems
Per Chapter 62-555.350 (15) F.A.C.

XYZ Water System Template

Insert
your system name here

Address: 123 Main Street
PO Box 123
Sample, FL 33333
Phone: 850-123-4567
Fax: 850-123-4568
Contact: Mayor Jane Doe
E-mail: JaneDoe@web.com
Connections: 400
PWS: 5555555
County: Any County

Insert your system
information here

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Preface

Chapter 62-555.350 (15) FAC

Disaster-Specific Preparedness/Response Plans

(15) Suppliers of water who own or operate a community water system serving, or designed to serve, 350 or more persons or 150 or more service connections shall develop a written emergency preparedness/response plan in accordance with Emergency Planning for Water Utilities, AWWA Manual M19, as adopted in Rule 62-555.335, F.A.C., by no later than December 31, 2004, and shall update and implement the plan as necessary thereafter. Said suppliers of water shall coordinate with their Local Emergency Planning Committee and their Florida Department of Law Enforcement Regional Security Task Force when developing their emergency plan and shall include in their plan all of the information in paragraphs (a) through (e) below.

- (a) A Communication Charts as described in Chapter 5 of AWWA Manual M19.
- (b) Written agreements with other agencies, utilities, or response organizations.
- (c) A disaster-specific preparedness/response plan as described in Chapter 5 of AWWA Manual M19 for each of the following disasters: vandalism or sabotage; a drought; a hurricane; a structure fire; and if applicable, a flood, a forest or brush fire, and a hazardous material release. Each disaster-specific preparedness/response plan shall incorporate the results of a vulnerability assessment; shall include actions and procedures, and identify equipment, that can obviate or lessen the impact of such a disaster; and shall include plans and procedures that can be implemented, and identify equipment that can be utilized, in the event of such a disaster.
- (d) Details about how the water system meets the standby power requirements under subsection 62-555.320(14), F.A.C., and, if applicable, recommendations regarding the amount of fuel to maintain on site, and the amount of fuel to hold in reserve under contracts with fuel suppliers, for operation of auxiliary power sources.
- (e) If applicable, recommendations regarding the amount of drinking water treatment chemicals, including chemicals used for regeneration of ion-exchange resins or for onsite generation of disinfectants, to maintain in inventory at treatment plants.

Specific Authority 403.861(9) FS. Law Implemented 403.852(12), 403.853(6), 403.861(17) FS. History-New 11-19-87, Formerly 17-22.650, Amended 1-18-89, 1-1-93, Formerly 17-555.350, Amended 8-28-03.

Time Extension for Submitting/Completing ERP – December 31, 2005

From: Hoofnagle, Van
Sent: Thursday, October 21, 2004 11:25 AM
Subject: Time Extension for Submitting/Completing ERP
Importance: High

I am sending this e-mail because of possible confusion in some FDEP District Offices or ACHDs regarding the deadline for compliance with the emergency preparedness/response plan requirements in FAC subsection 62-555.350(15).

As John Sowerby and other staff mentioned during Focus On Change presentations early this year on FAC Rule 62-555.350 and during training this summer on the recent amendments to FAC Chapter 62-555, the FDEP intends to amend FAC subsection 62-555.350(15) to give all affected community water systems (i.e., all community water systems serving 350 or more persons or 150 or more service connections) **until the end of 2005** instead of the end of this year to complete a comprehensive emergency preparedness / response plan as required by FAC subsection 62-555.350(15). At this point, it will likely be after the end of this year before we officially make this change to FAC subsection 62-555.350(15). In the meantime, please do not take any enforcement action against community water systems who fail to meet the 12/31/04 deadline in FAC subsection 62-555.350(15). Thanks.

Van Hoofnagle
DEP Drinking Water Administrator



Section 1 Communication Charts

The first response step in any emergency is to inform the person at the top of this list, who is responsible for managing the emergency and making key decisions. List the water system chain of command in order of contact.

Water System Chain of Command – Lines of Authority

Order	Name & Title	Responsibilities During an Emergency	Contact Information
1			Phone: Cell: Email:
2			Phone: Cell: Email:
3			Phone: Cell: Email:
4			Phone: Cell: Email:
5			Phone: Cell: Email:
6			Phone: Cell: Email:
7			Phone: Cell: Email:

Emergency Notification

Notification call-up lists - Use these lists to notify important parties of an emergency.

Emergency Notification List				
Organization or Department	Name & Position	Telephone	Cell Phone	e-mail
State Warning Point	Duty Officer	800-320-0519	800-320-0519	N/A
Local Law Enforcement				
Fire Department				
Emergency Medical Services				
Water Operator (if contractor)				
County Health Department				
DEP District Office				
County Emergency Management Dept.				
Local Leader (City Mgr., Mayor, Chair. Co. Comm., etc.)				
Local Hazmat Team (if any)				
Hazmat Hotline				
National Spill Response Center.	Duty Officer	800-424-8802	800-424-8802	N/A
Interconnected Water System(s)				
Neighboring Water System (not connected)				
FRWA Water Circuit Rider		850-668-2746		

Priority Customers				
Organization Or Department	Name & Position	Telephone	Cell Phone	email
Hospital Or Clinic(s)				
Nursing Home(s)				
Public Schools				
Private Schools				
Wastewater Treatment Plant				
Food Processing Or Other Industry				

Service / Repair Notifications				
Organization Or Department	Name & Position	Telephone	Cell Phone	email
Electric Utility Co.				
Electrician				
Gas / Propane Supplier				
Water Testing Lab.				
Sewer Utility Co.				
Telephone Co.				
Plumber				
Pump Supplier				
"Dig Safe" or "One Call"				

Service / Repair Notifications				
Organization Or Department	Name & Position	Telephone	Cell Phone	email
Rental Equip. Supplier				
Chlorine Supplier				
Other Chemical Suppliers				
Radio/SCADA Repair Co.				
Bottled Water Service				
Bulk Water Supplier				
Well Drilling Co.				
Pipe Supplier				

Designated Public Spokesperson and Alternates

Designate a spokesperson (alternates) for delivering messages to the news media & public

Public Spokesperson	Name & Position	Telephone	Cell Phone
Spokesperson			
Alternate 1			
Alternate 2			

Key Messages

Develop possible messages in advance, and update them as the emergency develops
<ul style="list-style-type: none"> ▪

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▪

Health Advisories – Boil Water Notices

Use the assistance of your County Health Department and/or District FDEP office, and FDEP’s Mandatory Health Effects Language, located on FDEP’s website at:

<http://www.doh.state.fl.us/environment/water/manual/boil.htm>

<http://www.DEF.state.fl.us/water/drinkingwater/rules.htm>,

and click on “Mandatory Health Effects Language”., PLUS EPA’s templates at:

<http://epa.gov/safewater/pn.html>

Click on “Microsoft Word and Word Perfect files of PN templates” (PN means Public Notifications), then determine which “Tier” of notifications is needed and click on the desired software to receive them in.



Section 2 Written Agreements With Other Agencies, Utilities, or Response Organizations

INSERT BELOW information regarding any written agreements with other agencies, utilities, or response organizations, such as emergency interconnects, mutual aid or FlaWARN.

Emergency Interconnect(s)

Information on the location of interconnection(s) (if any), type and size of interconnecting pipe, pumps and accessory equipment, meters at interconnection(s), normal pressures at both ends of interconnection, volume of water from interconnection(s), type of agreement and approvals needed for use, procedures necessary to use interconnection, etc.

Location (Street)	
Location (GPS)	
Description	

Memoranda of Understanding

Organization	
Summary of Understanding	

Mutual Aid Agreements

Organization	
Summary of Understanding	

FlaWARN **WEBSITE FOR AGREEMENT: www.flawarn.org**

Organization	
Summary of Understanding	



Section 3 Disaster-Specific Preparedness/Response Plan

Your disaster-specific preparedness/response plan must include a Vulnerability Assessment and preparedness / response plans for: vandalism or sabotage; a drought; a hurricane; a structure fire; and if applicable, a flood, a forest or brush fire, and a hazardous material release.

In any event there are a series of general steps to take:

1. Confirm and analyze the type and severity of the emergency.
2. Take immediate actions to save lives.
3. Take action to reduce injuries and system damage.
4. Make repairs based on priority demand.
5. Return the system to normal operation.

Vulnerability Assessment

It is essential that water systems identify and assess the vulnerability of each system component for both natural and human-caused emergencies, before preparing their disaster-specific preparedness/response plans. Prepare your Vulnerability Assessment by completing the table below:

Facility Vulnerability Assessment

System component	Description and condition	Vulnerability	Security improvements (indicate existing or proposed)
Raw Water Sources			
Pump-house and pumping facilities			
Treatment Facilities			
Storage Facilities			
Distribution System			
Computer and telemetry systems			

A. Vandalism or Sabotage Response Procedures

1. Utility staff first aware of incident:	
a)	
b)	
2.	
a)	
b)	
3.	
a)	
b)	

B. Drought Response Procedures

Include water use restrictions per Consumptive Use Permit

1.	
a)	
b)	
2.	
a)	
b)	
3.	
a)	
b)	

C. Hurricane Preparedness & Response Procedures

Pre- Hurricane (36 to 48 hrs prior to arrival)	1. 2. 3.
Hurricane Watch (24 to 36 hrs prior to arrival)	1. 2. 3.
Hurricane Warning (24 hrs or less prior to arrival)	1. 2. 3.
Recovery Procedures	1. 2. 3.

D. Structure Fire Response Procedures

1. Utility staff discovering fire: a) b)
2. a) b)
3. a) b)

E. Flood Preparedness & Response Procedures

Is any critical part of your system in a flood prone area? If so, this procedure is required.

1. a) b)
2. a) b)
3. a) b)

F. Forest or Brush Fire Response Procedures

Is any critical part of your system subject to forest or brush fire? If so, this procedure is required.

1. a) b)
2. a) b)
3. a) b)

G. Hazardous Material Release Response Procedures

Do you have any hazardous material (chlorine gas) at your water system? If so, this procedure is required.

1. a) b)
2. a) b)
3. a) b)

H. Other Disaster Response Procedures

NONE OF THIS EXAMPLE IS REQUIRED by DEP in Chapter 62-555.350(15). Use it only if there are other disasters that you want to prepare for, such as a Contamination Event, SCADA Attack, or Structural Damage from an Intentional Act?

Contamination
1. a) b)
2. a) b)
SCADA Attack
1. a) b)
2. a) b)
Structural Damage from an Intentional Act
1. a) b)
2. a) b)



Section 4 Standby Power Requirements

Include details about how the water system meets the standby power requirements as described in Ch. 62-555.320(14), and 62-555.350(15)(d) FAC for water source, treatment, and pumping facilities necessary to deliver drinking water at a rate at least equal to the Average Daily Water Demand.

Standby Power for Wells or Surface Water Intakes

Standby Power (or by alternate means) to OPERATE WELLS at Average Daily Demand

Average Daily Demand (ADD) in gpd or gpm	
Wells Needed to Supply Average Daily Demand	
Standby Generator (kW) Needed for ADD &	
Power Failure Transfer, Alarms & Notifications	
Generator Fuel Consumption	gallons per hour
Recommended On-Site Fuel Storage (gallons)	
Reserve Fuel by Supplier Contract	

Standby Power for Treatment Facilities

Standby Power (or by alternate means) to TREAT WATER at Average Daily Demand

Treatment Facilities Needed to Supply ADD	
Standby Generator (kW) Needed to Operate ADD Treatment Facilities	
Power Failure Transfer, Alarms & Notifications	
Generator Fuel Consumption	gallons per hour
Recommended On-Site Fuel Storage (gallons)	
Reserve Fuel by Supplier Contract	

Standby Power for Pumps

Standby Power (or by alternate means) to PUMP WATER at Average Daily Demand

Pumps Needed to Supply ADD	
Standby Generator (kW) Needed to Pump ADD	
Power Failure Transfer, Alarms & Notifications	
Generator Fuel Consumption	gallons per hour
Recommended On-Site Fuel Storage (gallons)	
Reserve Fuel by Supplier Contract	



Section 5 Drinking Water Treatment Chemicals & Disinfectants

Include recommendations regarding the amount of drinking water treatment chemicals, to maintain in inventory at treatment plants. Do not just list chemical storage capacity, but instead recommend the minimum amount of chemicals to maintain in inventory, which depends upon the location and reliability of chemical suppliers, the status of impending disasters, etc.

Disinfection Treatment Information

Disinfection Chemical(s)	Chemical / Location No. 1	Chemical / Location No. 2
Name of Chemical		
Type of Chemical Feed		
Chemical Storage Location		
Recommended Minimum Amount to be Maintained in Storage (gal)		

Other Chemical Information

Chemical(s) Used	Chemical #1	Chemical #2	Chemical #3	Chemical #4
Name of Chemical				
Type of Chemical Feed				
System Location				
Chemical Storage Location				
Recommended Minimum Amount to be Maintained in Storage (gal)				



Appendix A

Basic System information

This information is useful and recommended for inclusion in your ERP, it is not required by DEP in Chapter 62-555.350(15).

Keep this basic information readily available for when you need it for emergency responders, repair people, the news media and potentially, an emergency operator.

Basic System Information

GPS coordinates will help emergency crews find your system following a major catastrophe.

System identification number (PWS ID)		
System name and address		
GPS Coordinates	Latitude:	Longitude:
Basic description and location of system facilities		
Population served and service connections.	Population =	Connections =
System Owner		
Management Authority		
Name, title, and phone numbers of person responsible for maintaining and implementing the ERP.		

System Demand

Demand based on Monthly Operational Records and system capacity based on Sanitary Survey.

Average Daily Demand (gpd)	
Maximum Daily Demand (gpd)	
System Capacity (gpd)	
Peak Hour Demand (gpm)	

Location of Pertinent Information

Item	Location
Distribution System Map	
O&M Manual(s)	
Start-Up / Shut-Down Procedures	

Well Information

GPS coordinates will help emergency crews find wells following a major catastrophe.

Well Information	Well No. 1	Well No. 2	Well No. 3	Well No. 4
GPS well tag #				
Location (street)				
GPS Coordinates	Lat: Long:	Lat: Long:	Lat: Long:	Lat: Long:
Well Depth (ft)				
Well Yield (gpd)				
Pump Type				
Manufacturer				
Capacity (gpm)				
Motor Manufacturer				
Horsepower				
Phase				
Volts/Amps				

Surface Water Sources

GPS coordinates will help emergency crews find surface water intakes following a major catastrophe.

Surface Water Information	Intake No. 1	Intake No. 2
Location (Street / Description)		
GPS Coordinates	Lat: Long:	Lat: Long:
Critical Water Level		

Finished Water Storage

GPS coordinates will help emergency crews find tanks following a major catastrophe.

Name of Storage Unit	Tank No. 1	Tank No. 2	Tank No. 3	Tank No. 4
Location (Street)				
Location (GPS)	Lat: Long:	Lat: Long:	Lat: Long:	Lat: Long:
Type (ground, elevated, etc.)				
Capacity (gal)				
Empty Elevation				
Overflow Elevation				

High Service Pumps

HSP	HSP No. 1	HSP No. 2	HSP No. 3	HSP No. 4
Location (street)				
Pump Type				
Manufacturer				
Capacity (gpm)				
Motor Manufacturer				
Horsepower				
Phase				
Volts/Amps				



Appendix B Training and Rehearsals

This information is useful and recommended for inclusion in your ERP, it is not required by DEP in Chapter 62-555.350(15).

Event	Description	People & Organizations Involved	Date



Appendix C Plan Approval

This information is useful and recommended for inclusion in your ERP, it is not required by DEP in Chapter 62-555.350(15).

Plan Approval

This plan is officially in effect when reviewed, approved, and signed by the following people:

Name / Title	Signature	Date