
Public Water System Emergency Response Plan Template

(Revised 04/23/2007)

**Provided by
Mississippi Department of Health
Bureau of Public Water Supply**

**Special thanks to
Community Resources Group, Inc.
for providing this document which
has been modified to meet the needs of
Mississippi's public water systems**

Water System Emergency Response Plan

Section I. General ERP Statement

1.01 Pursuant to guidance from U.S. EPA and in compliance with Section 1433 of the Safe Drinking Water Act and the Emergency Planning and Community Right-to-Know Act, _____ has adopted the following Emergency Response Plan to serve as a guide to the management and other staff in responding to an emergency event. Should such an event occur, board members, employees, and other agents of the system shall use this ERP as a guide and their best judgment in preparing an appropriate response. The water system ERP shall be reviewed by the board each year and updated as necessary.

Section II. General Workplace Safety Policy Statements

2.01 General Policy Statement

Pursuant to Occupational Health and Safety Administration regulations and other federal and state laws, it is the policy of the water system to provide employees with safe and healthy working conditions. It is the policy of the water system that employees and other agents performing work for the system adhere to the following policy statements in an effort to minimize the chance of workplace accidents which can result in injuries or death to employees or others.

2.02 Reporting Workplace Hazards

The water system requires all employees to report existing and potential hazards as soon as practical to the Certified Operator. It is the responsibility of the water system board to take every reasonable measure to remove or warn employees about the reported hazards.

2.03 Contact List Posting

Copies of the water system ERP Contact List shall be posted at the water office as well as in every service truck or other vehicle owned or operated by the water system.

2.04 Safety Equipment Use

Individual safety equipment supplied by the system or safety components of equipment used by the employees of the water system including but not limited to seat belts, emergency flashing lights, hard hats, safety goggles, traffic cones or barricades, self contained breathing apparatuses, safety harnesses, or other equipment shall be used accordingly. Alteration or removal of any equipment or vehicle's safety device components including but not limited to seat belts, emergency flashing lights, emergency engine kill switches, weight sensitive seat kill switches, or other components is strictly forbidden.

2.05 Notification of Injuries

Employees must inform the Certified Operator of any on-the-job injury or accident requiring first aid or medical attention, whether or not worktime is lost. The Certified Operator will in turn conduct an investigation of any job-related injury or illness requiring a doctor's care. Injuries that require only first aid and result in no loss of production or worktime will be investigated by the Certified Operator who will in turn submit a written report to the board.

2.06 Confined Entry - Climbing Prohibition

Employees lacking proper training or OSHA certification are prohibited from entering a confined vessel including but not limited to ground storage water tanks, hydropneumatic water tanks, water standpipes, or elevated tanks. Employees are also prohibited from climbing water standpipes or elevated tanks without a safety line and harness and in the absence of another employee on the ground.

Section III.

General Emergency Response Procedures

3.01 General Emergency Procedures Statement

It is recommended that the water system employees adhere to the following steps in responding to all emergency event that threaten the system, its employees, its customers, and / or its ability to maintain pressure and to supply potable water in compliance of federal / state drinking water standards.

- 3.01.1 Identify the threat to the public, customers, employees, and / or other system assets.
- 3.01.2 Take appropriate actions to prevent injuries and / or the loss of life.
- 3.01.3 Take appropriate actions to prevent additional injuries and / or damage.
- 3.01.4 Complete repairs based on priority demand.
- 3.01.5 Return water system to normal operational levels.
- 3.01.6 Evaluate effectiveness of the ERP in providing guidance to this emergency event.
- 3.01.7 Revise the ERP as necessary to improve guidance for future events of this type.

Section IV.

Accident Procedures

4.01 Accidents Involving Employee

In the event of a workplace related accident causing injury to an employee of the water system, any nearby uninjured employee shall attempt to assess the severity of the injury and determine if an emergency response is necessary. If emergency aid is required, the uninjured employee shall contact the appropriate emergency response by dialing 911 and giving the dispatcher specific information related to the accident, location, and nature of the injured employee's injuries. As soon as possible, the Certified Operator should contact the water system's insurance carrier (if the system has workers compensation insurance).

4.02 Accidents Involving Others

In the event of an accident causing injury to someone other than an employee of the water system but involving an employee while on the job, the employee shall contact emergency response as soon as practical by dialing 911. The employee should give the dispatcher specific information related to the accident, location, and nature of the injuries involved. As soon as possible, the Certified Operator should contact the water system's insurance carrier and attorney. All employees shall refrain from making statements or admissions of wrong-doing without first consulting the water system's attorney.

Section V.

Natural Disasters

5.01 Natural Disasters

In the event of an impending weather related warning or advisory including a thunderstorm, tornado, hurricane, winter storm, flooding, or other natural disaster, the Certified Operator should ensure that the water system is adequately prepared by securing facilities, equipment, and ensuring reasonable protection for the system employees. If a sustained electrical outage is expected, the Certified Operator should coordinate efforts with the County Emergency Management Coordinator and the Mississippi Emergency Management Agency (MEMA) to obtain electrical generators necessary temporarily restore power to water wells, booster pumps, and treatment plants. As soon as possible after the immediate danger has ended, the Certified Operator should have the employees of the water system to conduct a damage assessment of the water system. If the damage has caused or will cause a water outage, steps should be taken to restore water pressure as soon as possible and to issue a boil water notice. Furthermore, the MEMA DR-1 Flash Report should be forwarded to the Mississippi Emergency Management Agency within four hours of the event to ensure that the water system is eligible for federal / state disaster assistance.

Section VI.

External Emergencies

6.01 External Emergencies

In the event of an external emergency which threatens the water system, the Certified Operator and other system employees should ensure that the probability of damage and or contamination of the water system or injury to the employees of the water system is minimized. Such events including an accidental chemical release, nuclear or other radiological release, natural gas or petroleum leak or fire, wildfire, riots or strikes, an act of terrorism or other external emergencies have the possibility of threatening the property, employees, customers, and mission of the water system. In the event of such emergency, the Certified Operator should establish communication and with the County Emergency Management Coordinator and other emergency response agencies to aid in the development of a plan to mitigate any possible damage or threat to the water system.

Section VII. Internal Emergencies

7.01 Internal Emergencies

In the event of an internal emergency which threatens the water system, the Certified Operator and other system employees should ensure that the probability of damage and or contamination of the water system, injury to employees, or injury to the public is minimized. Such events including an accidental chlorine release, fire, major water line break, or other internal emergencies have the possibility of threatening the property, employees, customers, and mission of the water system. In the event of such emergency, the Certified Operator should establish communication and with the County Emergency Management Coordinator and other emergency response agencies to aid in the development of a plan to mitigate any possible damage or threat to the water system, its employees, customers, or the public.

Section VIII. Threats and Hoaxes

8.01 Threats and Hoaxes

With the receipt of a verbal, written, or rumored threat to the water system, the Certified Operator and other system employees should consider the threat to be real until proven otherwise. Such threats including but not limited to the use of firearms, explosives, weapons of mass destruction, other weapons, and the threat of contaminating the water supply should be taken seriously. Law enforcement officials should be notified of the threat as soon as possible and steps should be taken immediately to protect the water system, its employees, and its customers. If a threat related to introducing contaminants into the potable water supply, steps should be taken to immediately contact MDH Bureau of Public Water Supply and the Mississippi Emergency Management Agency (designated Homeland Defense State Coordinating Agency) in addition to shutting off the supply of water and issuing a “Do Not Drink” notice to the customers of the water system. A thorough inspection of the water system should be implemented as soon as possible in addition to obtaining water samples at the source, storage tanks, and distribution system. Only after analytical tests have proven that no contaminants have been introduced into the water or under order from the MDH – Bureau of Public Water Supply, should the water system be re-pressurized and the “Do Not Drink” notice lifted.

Section IX. Contamination and Waterborne Disease Outbreaks

9.01 Contamination and Waterborne Disease Outbreaks

Pursuant to the water system Standard Operating and Maintenance Procedures and to the MDH Minimum Job Performance Guidelines for Certified Waterworks Operators in the State of Mississippi, the Certified Operator of the water system and other designated employees shall routinely test the disinfectant level residual of the water at the source, storage, and distribution systems. Furthermore, if the free chlorine residual level drops below 0.5 mg/l, the Certified Operator and employees shall take steps to increase the residual including the flushing of lines and raising the chlorine dosage rate and if necessary shock-chlorinating the water. However, if it is suspected that the water system has become contaminated because of increased aesthetic water quality complaints particularly related to unusual odor in the water or by reports of an increase in acute gastrointestinal illnesses or other suspicious illnesses of consumers of water supplied by the system, the Certified Operator shall contact the MDH – Bureau of Public Water Supply as soon as possible. Increased water quality monitoring should be implemented and if necessary, a thorough inspection of the system’s water tanks, backflow prevention devices, and other actions recommended by MDH should be implemented. If it is suspected that the contamination is a result of intentional sabotage or an act of terrorism, the Certified Operator shall contact the Mississippi Emergency Management Agency as soon as possible.

Section X. Water Outages

10.01 Water Outages

Pursuant to the water system’s Standard Operating and Maintenance Procedures and MDH regulations, a minimum of 20 psi should be maintained throughout the distribution system at all times. Should a major line break, power outage, telemetry failure, or other unintentional or intentional event that results in a sustained pressure of less than this minimum threshold occur, the Certified Operator should coordinate with MDH – Bureau of Public Water Supply in the issuance of a voluntary Boil Water Notice. Furthermore, bacteriological samples should be taken from the effected areas of the system and if necessary, appropriate actions to increase the disinfectant level by adjusting the chlorine dosage rate or shock treatment should be completed. Only after samples have been analyzed and determined to be clear of total coliform should the Certified Operator lift the Boil Water Notice to the effected areas of the system.

Section XI. Security Measures

11.01 Process-Oriented Security Measures

It is the policy of the water system that necessary measures are employed at all times to reduce the possibility of intentional damage to the water system's physical plant, office, vehicles and other equipment. All water well sites, tank sites, treatment plant sites are considered restricted areas. Only the payment window vestibule area and board room (only during board meetings) at the water office are not restricted areas. Only authorized employees of the water system may enter restricted areas unaccompanied. All other people are required to be accompanied by an authorized employee of the water system at all times while in restricted areas. Furthermore, all visitors to restricted areas shall be required to sign-in at the water office prior to be accompanied to a restricted area. All restricted areas shall be visibly marked "Restricted Area / Authorized Personnel Only" and shall be kept locked and secure at all times when an employee is not onsite. Other security measures shall also be followed to prevent the unauthorized use, theft, or damage to water system property. Employees shall remove keys from vehicles when not in use and lock doors to vehicles (and tool / supply storage boxes) at night and when attending meetings or training events. Keys to other equipment shall be removed when not in use and additional measures employed to prevent the unauthorized use, theft, or damage. Computers shall be password protected and should be turned off at the close of each business day.

11.02 Security Barriers

Physical and passive security barriers shall be maintained to provide reasonable protection of the water system's assets. All wells, tanks, treatment plants, and pipe / maintenance yards shall be fenced at a minimum height of 72" and include either rolled concertina or barbed wire headers. Gates shall be kept operational and shall be locked with single locks only with only authorized system employees having keys. All doors to buildings, control panels, treatment plant rooms, chemical storage rooms / buildings, and electrical control boxes shall be locked at all times. Anti-climb barriers shall be installed on elevated tanks and stand pipes. Passive barriers including motion-activated exterior security lights shall be installed and maintained at the water office and the treatment plant. All facilities including wells, tanks, treatment plants, and the water office and other buildings shall have security night lights. Other passive barriers including keeping brush and vegetation off of or hanging over fences shall be implemented.

Section XII. Recovery Plan

12.01 Recovery Plan

In the event of an emergency that causes catastrophic damage to the water system, the Certified Operator shall coordinate with the system's insurance carrier and if applicable with the County Emergency Management Coordinator in the development of a recovery plan to return the system to normal operations as soon as possible. The Certified Operator shall also be responsible for giving periodical updates to the board, to the news media, and to customers during the recovery phase of an emergency. Assistance from outside contractors as well as mutual aid providers shall be requested as necessary to expedite recovery operations.

Section XIII. Emergency Response Training and Drilling

13.01 Contamination and Waterborne Disease Outbreaks

It is the policy of the water system that the management and other system employees have the knowledge and the skills necessary to effectively function during an emergency crisis. The Certified Operator shall ensure that other employees of the system have adequate training opportunities made available. Periodically, the Certified Operator should conduct practice exercises and mock emergency drills to ensure the proper response and readiness of system personnel in handling emergency situations. It is recommended that the Certified Operator involve other local / state agencies as well as neighboring water systems and mutual aid providers in the planning, coordination, and participation in these exercises.

Section XIV. ERP Confidentiality

14.01 ERP Confidentiality

The water system Emergency Response Plan is a controlled document not intended for release to the general public. Every effort shall be made to keep the contents of this ERP confidential and prevent its intentional or unintentional release to others who may use it to identify weaknesses or procedural errors that can be exploited to cause harm to the water system. Release of this document is permitted to only authorized government agencies as required by law and to the County Emergency Management Coordinator.

Section XV.
Appendix Forms

15.01 Appendix Forms

The following Appendix Forms are an integral component of the water system Emergency Response Plan and shall be used in the execution of the aforementioned procedures. Furthermore, copies of all completed forms shall be kept on permanent file at the water office.

1. Emergency Response Plan Contact List
2. Water System Restricted Area Visitor Log
3. MEMA-DR1 Flash Report Form
4. Policy Certification Form

Emergency Response Plan Contact List

1.0 Water System Contacts		Name		Title		Phone		Alternate
1.01	Water Office							
1.02	Board Members							
1.03	Employees							
1.04	Attorney							
1.05	Engineer							
1.06	Insurance Carrier							
2.0 Emergency Response Contacts		Name		Title		Phone		Alternate
2.01	Law Enforcement							
2.02	Fire Department							
2.03	Emergency Medical Service							
2.04	County Emergency Management							
2.05	County Health Department							
2.06	MDH – Bureau of PWS							
2.07	MEMA							
2.08	MSDEQ							
2.09	HAZ-MAT Response Team							
2.10	MS Highway Safety Patrol							
2.11	FBI Field Office							

Emergency Response Plan Contact List

3.0	Critical Needs Customers	Company / Org.	Contact Name	Phone	Alternate
3.01	Hospitals				
3.02	Nursing Homes				
3.03	Schools				
3.04	Day Care Facilities				
3.05	Consecutive Water Systems				
3.06	Industrial Critical Customers				
3.07	Commercial Critical Customers				
3.08	Residential (Special Needs)				
4.0	Utility Providers	Company	Contact Name	Phone	Alternate
4.01	Water (Consecutive System)				
4.02	Electrical Utility				
4.03	Telephone Company				
4.04	Natural Gas Utility				
5.0	Emergency Aid Providers	Company	Contact Name	Phone	Alternate
5.01	Excavator Service				
5.02	Well Repair Service				
5.03	Electric Motor Repair Service				
5.04	Electrician				
5.05	Contract Repair Service				
5.06	Mutual Aid Provider #1				
5.07	Mutual Aid Provider #2				
5.08	Equipment Rental (Excavator)				
5.09	Equipment Rental (Generator)				
6.0	Other Emergency Contacts	Company / Org.	Contact Name	Phone	Alternate
6.01	MS One Call				
6.02	CRG-RCAP Technical Assist.				
6.03	Newspaper				
6.04	Radio				
6.05	Television				

**Water System Restricted Area
Visitor Log**

Date of Visit	Name of Visitor	Purpose of Visit	Time In	Time Out	Name of Accompanying Authorized Employee

Mississippi Emergency Management Agency

INITIAL DISASTER REPORT

(Submit within 4 hours – see NOTE below)

1. Name of County impacted by this event:

County Name

2. Cause of emergency /disaster/damage (check as many as applies) [] tornado

[] straight line winds [] down burst winds [] flash flooding [] riverline flooding

[] hurricane [] tropical storm [] earthquake [] Other _____(explain)

3. When did it happen? Day Date: (/ /)

Time: [] am [] pm

4. Identify the area(s) within the County impacted by this event:

The Water System Service Area

5. EXTENT OF DAMAGE	HOMES	MOBILE HOMES	APARTMENTS	BUILDINGS BUS. - FARM	PUBLIC ROADS/ BRIDGES
Minor Damage					
Major Damage					
Destroyed					
Totals					

13. Casualties? Injured: Hospitalized: Dead: Missing: Homeless:

7. Are shelters open? [] YES [] NO

Not required

8. If sheltering required, request MEMA notify American Red Cross / Dept. of Human Services? [] YES

[] NO

9. If shelters are open, are they operated by American Red Cross [] YES [] NO

[] UNSURE

10. If shelters open, list names of shelter, location, address (if known) and approximate number of people sheltered below:

11. Describe type of state assistance/resources needed:

12. List immediate priorities:

INFORMATION PROVIDED BY:	(SUBMIT INFORMATION TO:
Name Title	Mississippi Emergency Management Agency (MEMA)
Agency The water system	Attn: Communications Section / Operations Officer
Address	PO Box 4501 Jackson, MS 39296-4501
City/Zip	Telephone Number (24-hours) 601.352.9100
Telephone (area code first) Fax	Fax Number 601.352.8314
NOTE: This INITIAL DISASTER REPORT (DR-1) is your first report of an incident. Use it only one time to record the initial impact, then use the SITUATION REPORT (DR-2) forms for updating as more information becomes available. This and other DR forms can be used for local internal reporting and documentation in addition to forwarding to MEMA.	Internal actions If the above report was obtained from information received over the telephone, person making report sign below: Signature: Date:

MEMA DR-1 revised (12/97)

CERTIFICATION OF ADOPTION

I hereby certify that the above _____ Emergency Response Plan was adopted by a motion properly made, seconded, and approved by the water system board on the _____ day _____ A.D. with the effective date being _____ day of _____ A.D. I further certify that the policy remains in force, has not been amended, or rescinded.

Certified Record of Vote: _____ voting “Yes”, _____ voting “No”, _____ Abstaining or Absent.

Directors voting “Yes”

Directors voting “No”

Directors Absent or Abstaining

Name of Responsible Official (Please Print or Type)

Responsible Official Name / Signature

Date