<Water System Name>
_____ Parish, Louisiana

Contingency Plan

Source Water/Wellhead Protection Contingency Plan
Providing Alternative Drinking Water Supplies

Date:

Prepared By:
Louisiana Rural Water Association
P.O. Box 180 – Kinder, LA 70648
1-800-256-2591

1.0 Purpose

The purpose of this Contingency plan is to establish, provide and keep updated certain emergency response procedures, which may become necessary in the event of a partial or total loss of public water supply service as a result of natural disasters, chemical contamination, or civil disorders. This Contingency Plan is the procedural guide for responding to such emergencies.

Review and update annually

DATE OF REVIEW	REVIEWER	COMMENTS OR CHANGES

2.0 Water Supply Information

2.1 Basic Water System Information

System Identification	PWS ID #	
System Name & Address		
Contact Information	_____-_____-_____	Email:
Basic description and location of system facilities	The _____ has ____ groundwater wells of ____' – ____' in the _____ Aquifer(s) which are located _____	
Population served and number of service connections	_____ people	_____ connections
Average & Maximum Daily Demands	_____ gpd	_____ gpd
System Owner		
Primary Contact	_____ Operator	_____ Cell
Decision Maker	_____ Mayor or Board President	_____ Cell

System History:

2.2 Current Sources of Supply

Owner Well Name				
DNR Well #				
DHH ID#				
Depth (ft.)				
Aquifer				
Diameter (in.)				
Drill Date				
Capacity (gpm)				
Location				
GPS				
Water Level & Date taken				

2.3 Treatment

The only currently applied treatment is chlorination for disinfection. Treatment can be expanded or modified if necessary.

<Describe type treatment for your system. (filters, added chemicals, etc.)>

2.4 Storage

Type of Storage Facility	**Location**	**Capacity**

2.5 Power Sources

Type	**Contact**
Normal	

Emergency (Location & Size)	
Generator Fuel (type & Contact)	

_____ Parish Homeland Security and Emergency Preparedness has generators available based on demand.

2.6 Description of System Operation

<Describe the process of treatment or system treatment process. Include all phases, from raw water to finished water.>

Example: The _____ water system is supplied by _____ (____) wells that are operated automatically and are able to meet the needs of the people. The wells can be isolated from the system by valves if necessary. The wells pump to the plant where chlorine is added for disinfection. Service pumps push the treated water to the elevated tower. If the tank is down for any reason the system can be transferred to a pressure system, bypassing the tank.

2.7 Distribution System

Example: The distribution system consists of PVC mains ranging from _____ to _____ and about _____ miles of distribution pipe. There are valves throughout the system to isolate areas of concern. There are approximately _____ fire hydrants located throughout the system and approximately _____ flush valves located on the dead end mains for flushing. The system maintains a flushing program for the distribution system.

3.0 Priority of Water Users

Top Priority		
Other Systems Served		_____ gpd

4.0 Short Term Replacement Alternatives

Alternative Sources	A possible tie-in can be made to the _____ system by a _____ valve or meter on _____ Rd and _____ Rd, the systems are within _____ feet of each other.
Surface Water Source and Necessary Treatment	
Bottled Water	See Parish OEP
Other Alternatives	Tanker Trucks - See Parish OEP
Special Requirements	See Appendix "E – DHH Emergency Bulk Water Hauling Instructions"

5.0 Inventory of Available Equipment and Materials

5.1 Equipment and Materials

The system keeps pipe, repair couplings and all necessary repair parts to repair any water line emergencies.

5.2 Contractor/Contracted Service Providers

Service	Provider	Contact
LaWARN		1-800-256-2591
Chemicals		
Electrical		
Wells & Pumps		
Controls		

6.0 Notification Procedures

6.1 Incident Assessment Team

Contact Person	Title	Contact

6.2 Emergency Contact List

If Emergency Dial 911

Organization	Contact Person	Contact Phone
_____Parish Fire Dept.		
Energy Supplier		
School Board		
Sheriff/Police		
Police Jury		
_____ Parish Homeland Security and Emergency Preparedness		
Louisiana Rural Water Association	Susan Robbins	800-256-2591 Email: LaRWA@centurytel.net Website: www.lrwa.org

6.3 LDH Contacts

Engineering Service Main Line	225-342-7499 225-342-8355 Fax: 225-342-7303
District Engineer	
Regional Office	
_____ Parish	

6.4 Public Announcement Plan

After incident has been identified by the "Incident Assessment Team" and determined to be a hazard to public health, then Local media outlets will be notified.

Media Type	Contact
Television	
Newspaper	
Radio	
Social Media	
Website	
Automated Caller/Dialer	

Appendices

A. **Media/Consumer Notifications**
B. **Event and Action Log**
C. **Sample Boil Advisory**
D. **Complete DHH Contact List**
E. **DHH Emergency Bulk Hauling Instructions**

A. Media/Consumer Notifications:

1. Primary spokesperson for the media and public comment in the event of a contamination incident.

Name _____

Title _____

Address _____

Home Phone _____ Work Phone _____

Cell Phone _____

2. Information checklist to be conveyed to the public and media

1. Name of water system _____
2. Contaminant of concern and date_____
3. Source of contamination _____
4. Public health hazard _____
5. Steps the public can take_____
6. Steps the water system is taking_____
7. Other information_____

Communication Tips

Designate a spokesperson and alternates

Do:

- Be prepared.
- Designate a spokesperson.
- Provide complete, accurate, and timely information.
- Tell the truth.
- Express empathy.
- Acknowledge uncertainty and offer to get back with more information later.
- Document your communications.

Do not:

- Speculate on the cause or outcome of an incident.
- Blame or debate.
- Minimize or brush off concerns of customers.
- Treat inquiries from interested parties as an annoying distraction from the real business of emergency response.

Example: Key messages

Develop possible messages in advance, and update them as the emergency develops:

- We are taking this incident seriously and doing everything we can to resolve it.
- Our primary concern is protecting our customers' health.
- Another important concern is keeping the system operational and preventing damage.
- What we know right now is _____.
- The information we have is incomplete. We will keep you informed as soon as we know more.
- We have contacted state and local officials to help us respond effectively.
- If you think you may be ill or need medical advice, contact a physician.
- We are sampling the water and doing tests to determine whether there is contamination.
- Etc.

B. Event and Action Log:

Type of Event:		
Location:		
Date:	**Time:**	
Action Taken:		
Contract Services Used:		
Costs: (system's own forces)		
Labor		**$**
Equipment		**$**
Materials		**$**
Contracted Services		**$**
	Total Cost of Event	**$**
Evaluation/Lessons Learned:		

C. Sample Boil Advisory

DEPARTMENT OF HEALTH AND HOSPITALS
Public Health

ASOP 12.24
Issuing Boil Water Advisories
Page 1 of 2

PURPOSE: The intent of this document is to provide the requirements and procedures for issuing boil water advisories.

I. General.

A Boil Water Advisory is a public statement issued by the water system advising customers to boil tap water before consuming it. Advisories are issued when an event has occurred allowing the possibility for the water distribution system to become contaminated. An advisory does not mean that the water is contaminated, but rather that it could be contaminated; because the water quality is unknown. Customers should assume the water is unsafe to drink and take the appropriate precautions. An advisory is different from a Boil Water Notice. A Boil Water Notice is issued by the state health officer and the secretary of the Department of Health and Hospitals (DHH) or their authorized representatives. During a Boil Water Notice, all customers must boil their water before consuming it or use bottled water.

II. At a minimum, an advisory must be issued in the following instances:

A. a critical treatment process failure for systems with known source water contamination such as surface water systems;

B. loss of pressure in a part of or throughout the distribution system;

C. total coliform rule monitoring or other monitoring reveals a harmful microbial presence such as E.Coli

D. a water main break where dirt and debris have entered the distribution piping;

E. an event occurs which may affect the ability of the treatment plant to produce a safe, potable water including, but not limited to, spills of hazardous materials in the watershed and unit treatment process failures;

F. a waterborne disease outbreak potentially attributable to the water system has occurred and is discovered by the supplier;

G. as a precautionary measure, prior to a hurricane making landfall (in this situation, the advisory would most likely be issued by DHH-OPH to the area(s) which would be affected by the hurricane).

Note: These situations are not the only times when an advisory should be issued. Specific situations, upon consultation with DHH-OPH, may also call for a boil advisory.

III. Upon learning of a situation which would necessitate consumers having to boil their water, DHH-OPH personnel would consult with water system personnel about issuing a Boil Advisory to those customers affected by the situation stressing the positive side of the water system taking the initiative to issue the boil advisory on their own rather than being ordered to issue a boil notice by the state health officer.

ATTACHMENTS:

ATT 12.24: Example Boil Advisory

BOIL ADVISORY

Water System

DATE

For Immediate Release

The _____ Water System has experienced problems with our water supply system.

(MAY WANT TO LIST WHAT PROBLEMS)

Because of these problems, the water produced by our water supply system is of questionable microbiological quality.

Therefore, as a precaution, the _____ Water System is issuing a BOIL ADVISORY effective immediately. This BOIL ADVISORY is to remain in effect until rescinded by the Water System.

It is recommended that all consumers disinfect their water before consuming it (including fountain drinks), making ice, brushing teeth, or using it for food preparation or rinsing of foods by the following means:

> Boil water for one (1) *full* minute in a clean container. The one minute starts after the water has been brought to a rolling boil. (The flat taste can be eliminated by shaking the water in a clean bottle, pouring it from one clean container to another, or by adding a small pinch of salt to each quart of water that is boiled.)

Again, please be sure to disinfect your own water prior to consumption until you have been advised otherwise.

The _____ Water System will rescind this Boil Advisory upon notification from the Louisiana Department of Health and Hospitals - Office of Public Health that additional water samples collected from our water supply system have shown our water to be safe.

D. Complete List of DHH Contacts

LOUISIANA DEPARTMENT OF HEALTH
Engineering Services

★Central Office	LDHH–OPH–Engineering Services PO Box 4489 Baton Rouge, LA 70821–4489 PHYS: 628 N 4th St, 1st Floor
	(225) 342–7499 (Main line) (225) 342–7303 (Fax) Safe.Water@la.gov (reporting emergencies after business hours)
Amanda Laughlin, Chief Engineer – Amanda.laughlin@LA.GOV	
Caryn Benjamin, Deputy Chief Engineer - Compliance/Enforcement Caryn.benjamin@la.gov	

Drinking Water Revolving Loan Fund	Jenny Wilson, Program Manager - Jennifer.wilson@la.gov Dan MacDonald, Program Engineer - Dan.macdonald@la.gov
Operator Certification	Tom Walton - Tom.walton@la.gov

Deputy Chief Engineer of Field Operations District 1 and 2		John Williams, P.E. John.williams@la.gov	
District	Region	District Engineer	District Sanitarian
1	1, 3	Alicia Martinez, P.E. Alicia.martinez@la.gov	Melissa Favorth Melissa.favorth@la.gov
2	2, 9	Byron Nagel, P.E. Byron.nagel@la.gov	Teresa Benton Teresa.benton2@la.gov

Deputy Chief Engineer of Field Operations District 3 and 4		Jennifer Kihlken, P.E. Jennifer.kihlken@la.gov	
3	4, 5	Steven Joubert, P.E. Steven.joubert@la.gov	Kim Theriot Kimberly.theriot@la.gov
4	6, 7, 8	William Smith, P.E. William.smith2@la.gov	Gregg Stout Gregg.stout@la.gov

Region	Mailing Address	Telephone Numbers
1	Metro Region 1 (Benson Tower) 1450 Poydras St, Suite 1273 New Orleans, LA 70112	(504) 599–0112 (504) 599–0200 (Fax)
2	Capitol Region 2 PO Box 4489 Baton Rouge, LA 70821–4489 PHYS: 628 N 4th St, 1st Floor	(225) 342-7395 (225) 342–7607 (Fax)
3	Teche Region 3 1434 Tiger Dr Thibodaux, LA 70301	(985) 449-5007x345 (985) 447–0920 (Fax)
4	Acadian Region 4 825 Kaliste Saloom Rd Brandywine # 3 Suite100 Lafayette, LA 70508	(337) 262–5316 (337) 262–5638 (Fax)
5	Southwest Region 5 707–A East Prien Lake Rd. Lake Charles, LA 70601	(337) 475–3214 (337) 475–3222 (Fax)
6	Central Region 6 5604–B Coliseum Blvd. Alexandria, LA 71303	(318) 487–5282 x242 (318) 487–5338 (Fax)
7	Northwest Region 7 1525 Fairfield Ave, Room 569 Shreveport, LA 71101	(318) 676–7477 (318) 676–7485 (Fax)
8	Northeast Region 8 PO Box 6118 Monroe, LA 71211-6118 PHYS: 1650 Desiard St, 2nd Floor	(318) 361–7210 (318) 362–3163 (Fax)
9	Southeast Region 9 71128 LA Hwy 59, Suite 102-B Abita Springs, LA 70420	(985) 871–1283 (985) 871–1335 (Fax)

Revised April 2017

E. DHH Emergency Bulk Water Hauling Instructions

Bobby Jindal
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS

Department of HEALTH and HOSPITALS
Alan Levine
SECRETARY

INSTRUCTIONS FOR EMERGENCY TANK TRUCK BULK WATER HAULING IN LOUISIANA

These instructions provide the requirements for bulk water haulers during emergency tank truck delivery of potable water. Water is a basic necessity and must be available during emergencies. This emergency supply of water must be safe and properly handled or additional problems will result. For example, a tank truck used to haul water from a creek to put out a rural fire and then used to haul drinking water without first being cleaned and disinfected could very well be the instrument causing an outbreak of such waterborne diseases as typhoid fever, gastrointestinal illness or infectious hepatitis. Therefore, it is essential that water for emergencies be obtained from a safe source, and that the tanker trucks used to transport the water be carefully selected, cleaned and disinfected.

NOTE: All bulk water hauling will be directed by the Louisiana Department of Health and Hospitals, Office of Public Health, Safe Drinking Water Program (LDHH-OPH-SDWP) under the direction of the Chief Engineer. This office will coordinate with the Public Water System supplying the bulk water and the contractor. All water supplied will be in compliance with the Safe Drinking Water Act and the Louisiana Administrative Code, Title 51 (Sanitary Code). The LDHH-OPH-SDWP can be reached at telephone number 225-342-7499 and address at the Bienville Building at 628 N. 4th Street, Baton Rouge, LA 70802.

TANK CONSTRUCTION

All water contact surfaces should be stainless steel of the American Iron and Steel Institute (AISI) 300 series or corresponding Alloy Casting Institute (ACI) types that are non-toxic and non-absorbent and which under conditions of intended use is equally resistant as stainless steel of the AISI 300 series or corresponding ACI types. Interior coatings **MUST BE APPROVED** for drinking water use (NSF or AWWA standards).

SELECTION OF TANK TRUCK OR TRAILER

Tank trucks used for the transportation of potable water should be selected with two considerations in mind: the nature of the truck's normal use and the degree of difficulty of cleaning. Food-grade trucks ONLY are allowed for potable water use. Tanks previously used to transport petroleum products, toxic materials or other deleterious substances **shall not be used** to haul drinking water. Drinking water may not be transported or stored in tanks used for any non-food product. Bulk water transported or stored in a tank used for a food product other than water shall comply with the following cleaning and disinfection procedures.

CLEANING PROCEDURES

1. Tank trucks that haul potable water regularly from a public water system approved by the Louisiana Safe Drinking Water Program (Department of Health and Hospitals, Office of Public Health (DHH-OPH-SDWP)) source need not have the tanks cleaned between hauls, but should be flushed with disinfected water between uses.
2. For milk trucks and military-style water trucks or trailers, tanks should be scrubbed with clean water and flushed thoroughly, then inspected for cleanliness including the absence of particulate matter such as rust and sediment (see CONFINED SPACE ENTRY DIRECTIONS). A certified milk or juice wash station is recommended, since car washes do not provide the needed level of cleanliness. The certified wash station can also supply a wash sticker to be used as proof of proper washing.

OFFICE OF PUBLIC HEALTH – CEHS – ENGINEERING SERVICES
BIENVILLE BUILDING • 628 N. 4TH STREET • P.O. BOX 4489 • BATON ROUGE, LOUISIANA 70821-4489
PHONE #: (225) 342-7499 • FAX #: (225) 342-7303 *WWW.DHH.LA.GOV*
"AN EQUAL OPPORTUNITY EMPLOYER"

3. The following cleaning procedures may be employed for tank trucks normally used for hauling such liquids as apple juice, vinegar, wine, yeast, linseed oil, corn syrup, peanut oil, margarine oil, etc.
A. Open the drain and flush with hot water.
B. Steam with an emulsifying detergent until the tank is clear. Where steam is not available, circulate the detergent at a temperature of 180 to 210°F, changing the location of the nozzle to keep the interior continuously wet from top to bottom. Return the solution to the supply tank and re-circulate until clean.
C. Rinse the tank thoroughly with hot water and drain to an approved disposal facility (see CONFINED SPACE ENTRY DIRECTIONS).
D. Tanks used for the transport of dairy products must have the interior of the tank inspected with a black lamp (ultraviolet) after cleaning and flushing as outlined above. Tanks shall not be used when odors or contaminants are found or suspected. Waste chlorine solutions should be disposed of at proper waste disposal sites so that their disposal does not result in fish kills, etc.
4. All food grade tanks shall receive an initial wash at a Louisiana DHH-OPH approved milk tank truck washing facility, and have a current wash sticker. The location of the nearest approved milk wash station can be obtained by calling the Milk and Dairy Program at 225-342-7655.

CLEANING AND SANITIZING AUXILIARY EQUIPMENT

All hoses, connections, pumps, heaters and other water contact equipment shall be cleaned and sanitized with a concentrated solution of chlorine (3 oz. of 5-1/4 percent household bleach to 2 gallons of water) by brushing solution on all exposed parts.

HOSES

All hoses used for loading and unloading should be stored off the ground at all times and all couplings or water contact surfaces should be covered with caps or plastic coverings to protect them from contamination during storage and transportation. Hoses should be made of materials which have no influence on the taste or odor of the water and which are approved for potable water use. Examples are piping made of polyvinyl chloride (PVC), polyethylene (PE), acrylonitrile-butadiene-styrene(ABS) or other equivalent materials.

WATER SOURCE AND QUALITY

Only a water supply which has been permitted or approved by the DHH-OPH Safe Drinking Water Program shall be used as a source to fill tank trucks or trailers during water hauling operations. Only Public Water Systems (PWS) operating under normal conditions may supply tanker truck drinking water. Tapping fire hydrants without the approval of the water system is a crime and violators will be arrested. Water tankers may only fill at designated locations approved by the public water system.

All transported water must carry a free chlorine residual of at least 1 ppm at the beginning of the haul and at least 0.2 ppm free chlorine residual at the end of the haul (see dosage table on last page). Chlorine and water contact time for adequate disinfection is at least 20 minutes before the water may be used. In most cases, water can be analyzed for a chlorine residual prior to use. A free chlorine residual of 0.2 ppm at the end of the haul is an indication that the water supply has been satisfactorily disinfected. Transported water should be tested for bacteriological contamination prior to use. During emergencies, this may not be practical. However, when water is hauled for sustained periods of time, the water should be regularly tested for coliform organisms. The presence of any coliform organism is an indicator or unsafe water.

Each tank shall be inspected both exterior and interior before filling by the fill station supervisor. Any interiors that appear dirty or have residual grit shall be sent to the wash station for cleaning. The interior can be checked with an OVA or HNu meter and an explosive limit meter if desired. Any truck with significant readings shall be rejected. The chlorine residual shall be measured after filling and the truck driver shall be given a completed four-part form (Lab 8 Form) as certification that the truck was properly filled. One part of the form shall stay with the filler (PWS), one part with the truck driver, one part will

be presented to the recipient of the water, and one part will be forwarded to the Safe Drinking Water Program. Any truck not able to unload within 24 hours shall dump the load and proceed to the PWS for re-filling.

CONFINED SPACE ENTRY DIRECTIONS

CAUTION - Tank trucks are considered confined spaces. Residual compounds or cleaning compounds which may be introduced can cause a hazardous atmosphere to workers who enter for cleaning purposes. Tank truck interiors may be extremely slippery. Minimum entry requirements include:

1. Continuous forced ventilation to insure dilution of residual contaminants and to provide sufficient oxygen, and;
2. A standby worker attending a lifeline attached to the entry worker(s). If at all possible, these cleaning procedures should be accomplished without entry.

DOSAGES OF CHLORINATING COMPOUNDS FOR DISINFECTION

Liquid Sodium Hypochlorite - 5.25 Percent Available Chlorine

(Household Bleach such as Clorox, Purex, Speedup, etc.)

(Manufacturer's name is for information and not to show preference)

Dosage parts per million (ppm)	50 gallons water	100 gallons water	500 gallons water	1000 gallons water	5000 gallons water
1	¾ teaspoon	1 ½ teaspoon	7 ½ teaspoon	3 ounces	13 ounces
10	7 ½ teaspoons	3 ounces	12 ounces	1 ½ pints	1 gallon
50	6 ounces	13 ounces	2 quarts	1 gallon	4 ¾ gallons
200	1 ½ pints	1 ½ quarts	2 gallons	3 ¾ gallons	19 gallons

Calcium Hypochlorite Granules or Tablets-70 percent available chlorine

(HTH, Perchloron, Sentry, etc.)

(Manufacturers name is for information and not to show preferences)

1	-	-	-	-	1 ounce
10	-	-	1 ounce	2 ounces	10 gallons
50	-	1 ounce	5 ounces	10 ounces	3 pounds
200	2 ounces	4 ounces	1 pound & 3 ounces	2 pounds & 6 ounces	12 pounds