Drinking Water and Groundwater Division

**CONTINGENCY/EMERGENCY RESPONSE PLAN FOR COMMUNITY WATER SYSTEMS**

PO Box 98922, Lincoln NE 68509‑8922

Phone: (402) 471-0521 / FAX: (402) 471-2909

ndee.ecmupload@nebraska.gov

24-Hour Emergency Contact #: (402) 499-6922

|  |  |
| --- | --- |
| **Public Water System Name:**  | **County:**  |
| **PWS ID #: NE31-** | **Phone Number:**  | **Population Served:**  |
| **Mailing Address:** | **Street/PO/Route:**  |
| **City:**  | **State:**  | **ZIP:**  |
| **Prepared by:**  | **Title:**  |
| **Date Completed:**  | **Date Update:**  |
| **Signature:** |
| **Plan #:**  |

**FOR DEPARTMENT USE ONLY**

|  |  |
| --- | --- |
| **Approved by:** | **Date:** |
| **Signature:** |

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# Section I – Introduction

## 1. Purpose

This emergency plan was developed as a guideline for the operators and administration of                                                         in order 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                                         .

During any type of emergency, the following persons will be in charge of the water system (contact in order indicated):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Order** | **Name** | **Position** | **Phone Numbers** (include area code) | **Radio Frequency****(MHz)** | **E-Mail** |
|  |  |  | **Office** | **Cellular** | **Pager** | **Home** |  |  |
| **1** |  |  |  |  |  |  |       |  |
| **2** |  |  |  |  |  |  |       |  |
| **3** |  |  |  |  |  |  |       |  |
| **4** |  |  |  |  |  |  |       |  |
| **5** |  |  |  |  |  |  |       |  |
| **6** |  |  |  |  |  |  |       |  |

##

## 3. Plan Distribution

Copies of the emergency plan have been distributed to the following water supply personnel and other local and NDEE Drinking Water and Groundwater Division officials as indicated below. In addition, a copy of this plan is kept at                                     so that it can be easily accessed in the event of an emergency. All employees will be trained on implementation of the plan.

|  |  |  |  |
| --- | --- | --- | --- |
| **Plan Number** | **Distributed By** | **Received By** | **Date** |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
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## 4. Plan Updates

The emergency plan is updated as changes occur such as dictated by personnel, phone numbers, technology, system additions or modifications. A record of plan updates follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Change Number** | **Subject** | **Date** | **Entered By** |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
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# Section II - Summary 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 and to assess and correct system vulnerabilities.

## 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 |       |
|       |       |
|       |       |
|       |       |

##

## Existing Source Information

### **A. Well Information**

[ ]  Not Applicable

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Well ID** | **Location** | **Well Depth** | **Well Yield** | **Critical Well Level1** |
| 1.       |       |       |       |       |
| 2.       |       |       |       |       |
| 3.       |       |       |       |       |
| 4.       |       |       |       |       |
| 5.       |       |       |       |       |
| 6.       |       |       |       |       |

1 Based upon well and aquifer characteristics.

### **B. Surface Water Sources**

[ ]  Not Applicable

|  |
| --- |
| Location of primary intake and critical water level(s): |
|       |
| Location of alternate intake and critical water level(s): |
|       |

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### **C.** **Water Quality of the Source(s)**

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### **D. Description of Surrounding Area and Susceptibility to Contamination**

**Description of significant potential sources of contamination in the area (approximate 1 mile radius) and susceptibility to potential contamination (see Source Water Assessment if available):**

|  |
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### **E. Source Pump Information**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Source ID** | **Pump Type** | **Manufacturer** | **H.P.** | **Capacity (gpm)** | **Phase, Voltage** |
|       |       |       |       |       |       |
|       |       |       |       |       |       |
|       |       |       |       |       |       |
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**Note: Source ID includes well identification numbers as well as any other source (i.e., surface water intake pumps etc.)**

### **Interconnections**

**Information on the location of interconnection(s) to other Community or Non-Transient Non-Community public water supplies, type and size of interconnecting pipe, pumps and accessory equipment, meters at interconnection(s), normal pressures at the interconnection, volume of water available through the interconnection(s), type of agreement and approvals needed for use, procedures necessary to use interconnection, etc.**

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### **G. Other Emergency Sources (Include equipment needed to use the source)**

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### **H.** **Possible Future Sources of Water (How will future water sources be protected?)**

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## 3. Treatment Information

### **A. Disinfection**

|  |  |
| --- | --- |
| Chemical(s) Used: |       |
| Type of Chemical Feed: |       |
| Location of Disinfection System: |       |
| Location of Chemical Storage: |       |

### **B. Other Treatment**

|  |  |
| --- | --- |
| Other Treatment Methods(s): |       |
| Chemical(s) Used: |       |
| Type of Chemical Feed: |       |
| Treatment Chemicals and Storage: |       |
| Laboratory Chemicals and Storage: |       |

Also attach MSDS sheets on all chemicals used.

###

### **C. Other Applicable Information (booster chlorinators, control systems, etc.)**

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## 4. Finished Water Storage

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of Storage Unit** | **Location** | **Type** | **Capacity** | **Overflow Elevation** |
|  |  |  |  |  |
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## 5. Distribution System and Transmission Main(s) Information

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**(Attach map if necessary)**

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## 6. System Demand

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. System capacity is the maximum daily amount of water that the system is capable of treating or producing and distributing. Peak water demand is the maximum hourly demand that the system can sustain provided by storage or by production capability plus storage.

|  |  |  |  |
| --- | --- | --- | --- |
| Average Daily Demand: |       MGD | Maximum Daily Demand: |       MGD |
| System Capacity: |       MGD | Peak Demand: |       GPH |

## 7. Power

|  |  |
| --- | --- |
| Primary Power: |       |
| Backup Power: |       |

## 8. Other Pertinent System Information

Other information about the system that could be useful during an emergency:

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# Section III – Emergency Response Actions

**The following are the action steps that will be followed for all emergency situations:**

1. Take or direct any **immediate** response measures that are obviously needed to reduce risk to the public (see specific emergency response action below).
2. Notify NDEE Drinking Water and Groundwater Division and (if applicable) the system administration.
3. Determine and implement other appropriate corrective actions to reduce and eliminate the effects of the emergency.
4. Inform consumers of the emergency situation as soon as possible, and again as the status changes.

## 1. Description of Emergency Response Actions

Refer below to the response action(s) for the specified emergency:

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### **A. Power Outage**

**Immediate Actions:**

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### **Other Actions:**

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### **B. Prolonged Water Outage**

**Immediate Actions:**

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### **Other Actions:**

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### **C. Transmission and/or Distribution System Failure (tanks, controls, piping, etc.)**

**Immediate Actions:**

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### **Other Actions:**

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### **D. Treatment Equipment Failure**

**Immediate Actions:**

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### **Other Actions:**

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### **E. Source Pump Failure**

**Immediate Actions:**

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### **Other Actions:**

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### **F. Loss of SCADA or Other Automated Control**s

**Immediate Actions:**

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### **Other Actions:**

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### **G. Contamination of Supply (including MCL violations)**

**Immediate Actions:**

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### **Other Actions:**

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### **H. Chemical Incident at Facility**

**Immediate Actions:**

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### **Other Actions:**

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### **I. Drought**

**Immediate Actions:**

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### **Other Actions:**

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### **J. Flood**

**Immediate Actions:**

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### **Other Actions:**

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### **K. Severe Weather**

**Immediate Actions:**

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### **Other Actions:**

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### **L. Fire at Water Supply System Facility**

**Immediate Actions:**

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### **Other Actions:**

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### **M. Hazardous Material Release (In Watershed or Recharge Area)**

**Immediate Actions:**

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### **Other Actions:**

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### **N. Terrorism or Vandalism (actual or suspected)**

**Immediate Actions:**

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### **Other Actions:**

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### **O. Earthquake**

**Immediate Actions:**

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### **Other Actions:**

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## 2. Work Order Log

As response activities are undertaken,                                               personnel will keep a record of work activities using the work order log form below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Work Order Number** | **Crew** | **Assignment** | **Estimated Time of Repair** | **Assignment Made By** | **Completed By** | **Date Completed** |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
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|       |       |       |       |       |       |       |

## 3. Emergency Reference Table

Refer to the table below for whom to contact during certain emergencies. The next table gives the phone numbers for each contact. Note that the supplier of water must notify NDEE Drinking Water and Groundwater Division when water delivery is disrupted to 10% or more of the consumers. The supplier of water must not use water from any emergency source or stop disinfection or other treatment without receiving the approval of NDEE Drinking Water and Groundwater Division.

In addition, the supplier of water must make public notification when a condition exists which according to NDEE Drinking Water and Groundwater Division constitutes a public health hazard. The water supplier must also notify the chief administrative/elected official where the public water system is located and the local law enforcement department having jurisdiction.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Emergency** | **Emergency Responders** | **State/Local Agencies** | **Local Contacts** | **Chemical Suppliers** | **Equipment Repair/Supplies** | **Utilities** | **Bulk Water Suppliers** | **Media** |
| Power Outage | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Prolonged Water Outage | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Transmission/Distribution System Failure | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Treatment Equipment Failure | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Source Pump Failure | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Loss of SCADA or Other Automated Controls | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Contamination of Supply | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Chemical Incident at Facility | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Terrorism/Vandalism | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Drought | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Flood | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Severe Weather | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Earthquake | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Fire | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |
| Hazardous Material Release in Watershed or Recharge Area | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  | [ ]  |

**Place an x in the appropriate columns below:**

##

## 4. Emergency Reference Table Contacts and Phone Numbers

### **Emergency Responders**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organization** | **Contact Name** | **Title** | **Phone Numbers (include area code)** | **E-Mail** |
|  |  |  | **Day** | **Evening** | **Cellular/Pager** |  |
| Fire Department |       |       |       |       |       |       |
| Police Department |       |       |       |       |       |       |
| FBI Field Office (for terrorism or sabotage) |       |       |       |       |       |       |
| Emergency Medical Service |       |       |       |       |       |       |
| National Spill Response Office | 24 Hour Hotline | **(800) 424-8802** |  |
| State (NDEE) Spill Hotline | 24 Hour Hotline |  |  |
| Poison Control |  | **(800) 955-9119** |  |
| Water System Operators/Managers  |       |       |  |  |  |       |
|  |       |       |  |  |  |       |
|  |       |       |  |  |  |       |

### **B. State and Local Agencies Notification List**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organization** | **Contact Name** | **Title** | **Phone Numbers (include area code)** | **E-Mail** |
|  |  |  | **Day** | **Evening** | **Cellular/Pager** |  |
| NDEE Field Office |       |       |       |       |       |       |
| NDEE Lincoln Office | Administrator | (402) 471-0510 | (402) 417-9028 | (402) 417-9028 | laura.r.johnson@nebraska.gov@nebraska.gov |
|  | Field Services Program Manager | (402) 471-0521  | **24 Hour** **(402) 499-6922** | (402) 432-4692 | andy.kahle@nebraska.gov |
| Local County Health Department |       |       |       |       |       |       |
| Nebraska Department of Environment & Energy | Regional Office |       |       |       |       |       |
|  | 24 Hour Spill Hotline |       |       |       |       |       |
| State Emergency Management Office |       |       |       | **24 Hour****(402) 471-7421** |       |       |
| County Emergency Management Office |       |       |       |  |       |       |
| Nebraska Rural Water Association |       |       |  |  |  |       |

### **C. Local Contact Notification List**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organization** | **Contact Name** | **Title** | **Phone Numbers (include area code)** | **E-Mail** |
|  |  |  | **Day** | **Evening** | **Cellular/Pager** |  |
| Government Officials |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
| Hospitals |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
| Pharmacy |       |       |       |       |       |       |
| Priority Water Users (Those that are critically dependent upon water including schools, nursing homes, dialysis centers, institutions, individuals, businesses, interconnected water systems, etc.) |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
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|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
| Others |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |

### **Chemical Supplier Information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chemical** | **Supplier** | **Contact Name** | **Phone Numbers (include area code)** | **E-Mail** |
| **Day** | **Evening** | **Cellular/Pager** |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |
|       |       |       |       |       |       |       |

### **System Equipment Repair and Supplies Contact Information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organization** | **Contact Name** | **Title** | **Phone Numbers (include area code)** | **E-Mail** |
|  |  |  | **Day** | **Evening** | **Cellular/Pager** |  |
| Electrician |       |       |       |       |       |       |
| Plumber |       |       |       |       |       |       |
| Pump Specialist |       |       |       |       |       |       |
| Soil Excavator/Backhoe Operator |       |       |       |       |       |       |
| Equipment Rental (Power Generators) |       |       |       |       |       |       |
| Equipment Rental (Chlorinators) |       |       |       |       |       |       |
| Equipment Repairman |       |       |       |       |       |       |
| SCADA Repair Service |       |       |       |       |       |       |
| Pump Supplier |       |       |       |       |       |       |
| Well Driller |       |       |       |       |       |       |
| Pipe Supplier |       |       |       |       |       |       |
| Local/Regional Analytical Laboratory |       |       |       |       |       |       |
| Elevated Storage |       |       |       |       |       |       |
|       |       |       |       |       |       |       |

###

### **F. Utilities Contact Information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organization** | **Contact Name** | **Title** | **Phone Numbers (include area code)** | **E-Mail** |
| **Day** | **Evening** | **Cellular/Pager** |
| Electric Utility Company |       |       |       |       |       |       |
| Gas Utility Company |       |       |       |       |       |       |
| Sewer Utility Company |       |       |       |       |       |       |
| Telephone Utility Company |       |       |       |       |       |       |
| Diggers Hotline, UFPO or local equivalent |       |       |       |       |       |       |
|       |       |       |       |       |       |       |

### **G. Bulk Water Suppliers**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organization** | **Contact Name** | **Title** | **Phone Numbers (include area code)** | **E-Mail** |
| **Day** | **Evening** | **Cellular/Pager** |
| Bulk Water Hauler |       |       |       |       |       |       |
|       |       |       |       |       |       |
|       |       |       |       |       |       |
|       |       |       |       |       |       |
| Bottle Water Source |       |       |       |       |       |       |
|       |       |       |       |       |       |
|       |       |       |       |       |       |
|       |       |       |       |       |       |

### **H. Media Notification List**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Organization** | **Contact Name** | **Title** | **Day** | **Evening** | **Cellular/Pager** | **E-Mail** |
| Designated Water System Spokesperson |       |       |       |       |       |       |
| Newspaper - Local |       |       |       |       |       |       |
| Newspaper – Regional State |       |       |       |       |       |       |
| Radio |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
| Television |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
|  |       |       |       |       |       |       |
| Other |       |       |       |       |       |       |

#

# Section IV – Consumer Notification

The                                          must make public notification when a condition exists which according to NDEE Drinking Water and Groundwater Division constitutes a public health hazard. The                                          must also notify the chief administrative/elected official (                                        ) where the public water system is located and the local law enforcement department having jurisdiction (                                        ).

Consumers will be notified as soon as possible of any emergency that potentially affects them. The public will be notified of emergencies that pose an immediate threat to health or safety through media outlets such as television, radio, and newspapers. In addition, emergency notices will be posted in the following public places:                                         . Critical users will be notified directly, if necessary. These are customers of the system who could be severely impacted immediately by a water system disruption, including schools, institutions, senior citizens complexes, water-dependent businesses, interconnected water systems, medical and dental clinics, restaurants, and individuals with home dialysis machines or other life support devices sensitive to water quality changes.

**Examples** of some public notifications follow:

|  |
| --- |
|       |

**DRINKING WATER WARNING**

                                         water has high levels of nitrate

DO NOT GIVE THE WATER TO INFANTS UNDER 6 MONTHS OLD OR USE IT TO MAKE INFANT FORMULA

Water sample results received                           showed nitrate levels of level and units                    . This is above the nitrate standard, or maximum contaminant level (MCL), of state/federal MCL                    . Nitrate in drinking water is a serious health concern for infants less than six months old; this includes pregnant women and nursing mothers because of the transfer of nitrate to the fetus or baby through the mother’s milk or blood.

**What should I do?**

* **DO NOT GIVE THE WATER TO INFANTS. *Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.*** Blue baby syndrome is indicated by blueness of the skin.Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.
* Water, juice, and formula for children under six months of age should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.
* **DO NOT BOIL THE WATER.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.
* Adults and children older than six months can drink the tap water (nitrate is a concern for infants because they can't process nitrates in the same way adults can). However, if you are pregnant or have specific health concerns, you may wish to consult your doctor.

**What happened? What is being done?**

Nitrate in drinking water can come from natural, industrial, or agricultural sources (including septic systems and run-off). Levels of nitrate in drinking water can vary throughout the year. We’ll let you know when the amount of nitrate is again below the limit.

Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.

For more information, please contact                                          at                           or                                         .

This notice is being sent to you by                                          (State Water System ID#:           )

Date distributed:

**DRINKING WATER WARNING**

                          water is contaminated with

fecal coliform or *E. coli* bacteria

BOIL YOUR WATER BEFORE USING

*Fecal coliform or E. coli* bacteria were found in the water supply on                          . These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

**What should I do?**

* **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a rolling boil and let it boil for at least one minute then let it cool before using; or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation **until further notice**. Boiling kills bacteria and other organisms in the water.
* *Fecal coliform or E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems*.
* The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice about drinking water from their health care providers.

**What happened? What is being done?**

Bacterial contamination can occur when increased run-off enters the drinking water source (for example, following heavy rains). It can also happen due to a break in the distribution system (pipes) or a failure in the water treatment process.

Describe corrective action

We will inform you when tests show no bacteria and you no longer need to boil your water. We anticipate resolving the problem within [estimated time frame].

For more information, please contact                           at                      or                     . General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1 (800) 426-4791.

This notice is being sent to you by                          , State Water System ID#:           .

Date distributed:           .

**DRINKING WATER WARNING**

BOIL YOUR WATER BEFORE USING

Disease-causing organisms have entered                           water supply.

These organisms are causing illness in people served by                          . We learned of a waterborne disease outbreak from                           on           .

**What should I do?**

* **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a rolling boil and let it boil for at least one minute then let it cool before using; or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation until further notice. Boiling kills bacteria and other organisms in the water.
* [Describe symptoms of the waterborne disease.] If you experience one or more of these symptoms and they persist, contact your doctor. People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers.

**What happened? What is being done?**

Describe the outbreak, corrective action, and when the outbreak might end.

We will inform you when you no longer need to boil your water.

For more information, please contact                           at                           or                          . General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1 (800) 426-4791.

This notice is being sent to you by                          , State Water System ID#           .

Date distributed:           .

**DRINKING WATER WARNING**

                          has high turbidity levels

BOIL YOUR WATER BEFORE USING

The (PWS Name)                 routinely monitors your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. A water sample taken                           showed turbidity levels of [number] turbidity units. This is above the standard of                           turbidity units. Because of these high levels of turbidity, there is an increased chance that the water may contain disease-causing organisms.

**What should I do?**

* **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a rolling boil and let it boil for at least one minute then let it cool before using; or use bottled water. Boiled or bottled water should be used for drinking, making ice, washing dishes, brushing teeth, and food preparation until further notice.
* *Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.* People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers.
* The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

**What happened? What is being done?**

Describe reason for the high turbidity, corrective action, and when the system expects to return to compliance.

We will inform you when turbidity returns to appropriate levels and when you no longer need to boil your water.

For more information, please contact                           at                           or                          . General guidelines on ways to lessen the risk of infection by microbes are available from the EPA Safe Drinking Water Hotline at 1 (800) 426-4791.

This notice is being sent to you by                          , State Water System ID#:           .

Date distributed:           .

**DRINKING WATER PROBLEM CORRECTED**

Customers of                           were notified on            of a problem with our drinking water and were advised to describe recommended action. We are pleased to report that the problem has been corrected and that it is no longer necessary to describe recommended action. We apologize for any inconvenience and thank you for your patience.

Add further details here when appropriate.

As always, you may contact                           at                           or                           with any comments or questions.

This notice is being sent to you by                          , State Water System ID#:           .

Date distributed:           .

# Section V - 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                           has the capability to conserve and restrict water use based upon the local water system regulations found in                          . During times of drought or other problems that limit the availability of water, public notice of water use restrictions will be issued by:                          .

## 2. Restriction Stages

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 and other conditions such as imminent loss of water or pressure.

|  |  |  |
| --- | --- | --- |
| **Restriction****Stage** | **Stage Trigger(s)** | **Restrictions** |
| I |       |       |
|       |
|       |
|       |
|       |       |
|       |
|       |
|       |
| II |       |       |
|       |
|       |
|       |
|       |       |
|       |
|       |
|       |
| III |       |       |
|       |
|       |
|       |
|       |       |
|       |
|       |
|       |

# Section VI – Communications

**1. In the event of an emergency, the primary line of communication will be (check one):**

[ ]  Telephone;

[ ]  Cellular Phone;

[ ]  Radio System;

[ ]  Other:

**2. If the primary line of communication is not functional, the back-up line of communication will be
(check one):**

[ ]  Telephone;

[ ]  Cellular Phone;

[ ]  Radio System;

[ ]  Other:

**3. Other lines of communication include:**

|  |
| --- |
|       |

**4. Phone Service Emergency Provisions:**

In the event that the phone lines are not functioning, the phone company will be informed. The operator in charge will also inquire how long the facility will be without phone service.

**5. Specific Communication Instructions:**

|  |
| --- |
| Additional Instructions:      |

##

## 1. Communication Log

|  |
| --- |
| **COMMUNICATION LOG** |
| **Date** | **Time** | **Request** | **Action Taken** |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |

# Section VII – Assessment of Available Equipment

## 1. Emergency Communications Equipment

### **CB Radios**

|  |  |
| --- | --- |
| **Number of Radios:** |       |
| **Location(s) of Radios:** |       |

### **Cellular Phones**

|  |  |
| --- | --- |
| **Number of Cellular Phones:** |       |
| **Location(s) of Cellular Phones:** |       |

### **Pagers**

|  |  |
| --- | --- |
| **Number of Pagers:** |       |
| **Location(s) of Pagers:** |       |

### **D. Other Communication Equipment Available**

|  |
| --- |
|       |

## Emergency Water Supply Equipment

### **A. Bulk Water Supply Truck**

 Contact for truck:

 Location(s) that truck(s) will be

 Set up during an emergency:

### **B. Other Emergency Water Supply Equipment**

|  |  |  |
| --- | --- | --- |
| Item | **Location** | **Contact** |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |

### **Parts Available for Emergency Interconnections**

|  |  |  |
| --- | --- | --- |
| Item | **Location** | **Contact** |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |

## 3. Power Supply Equipment

### **A. Power Sources**

|  |  |
| --- | --- |
| **Primary Power Source:** |       |
| **Alternate Power Sources:** |       |
| **Location of Fuel:** |       |

###

### **B. Generators**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Make/Model | **Phase/****Voltage/****Amps** | **Contact Individual** | **Phone No.** | **Location of Storage** | **Location of Use** |
|       |       |       |       |       |       |
|       |       |       |       |       |       |

## 4. Vehicles and Construction Equipment

### **A. Pickup Trucks, Vans, and other Vehicles**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Make and Model** | 4x4? | Owner | **Phone Number** | **Location of Vehicle and Keys** |
|  | Yes | No |  |  |  |
|       | [ ]  | [ ]  |       |       |       |
|       | [ ]  | [ ]  |       |       |       |
|       | [ ]  | [ ]  |       |       |       |
|       | [ ]  | [ ]  |       |       |       |

### **B. Dump Trucks**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Make and Model** | **Capacity****(tons)** | **Owner** | **Phone Number** | **Location of Vehicle and Keys** |
|       |       |       |       |       |
|       |       |       |       |       |
|       |       |       |       |       |
|       |       |       |       |       |

### **C. Construction Equipment**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item****(include make/model)** | **Owner** | **Phone Number** | **Location of Item** |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |
|       |       |       |       |

## 5. Spare Parts for Water Source

### **A. Spare Pump(s)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pump Type** | **Manufacturer** | **H.P.** | **Capacity (gpm)** | **Phase, Voltage** |
|       |       |       |       |       |
|       |       |       |       |       |
|       |       |       |       |       |
|       |       |       |       |       |
|       |       |       |       |       |
|       |       |       |       |       |

### **List of Spare Parts for Pump(s) and Well(s)**

|  |  |
| --- | --- |
| **Part** | **Location** |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |

## 6. Spare Parts for the Distribution System

### **A. List of Spare Piping**

|  |  |
| --- | --- |
| **Part** | **Location** |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |

###

### **B. List of Spare Valves**

|  |  |
| --- | --- |
| **Part** | **Location** |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |

### **C. Other Parts Available (Distribution System)**

|  |  |
| --- | --- |
| **Part** | **Location** |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |

## 7. Spare Parts for Treatment

### **A. Spare Chemical Feed Pump(s)**

|  |  |  |
| --- | --- | --- |
| Manufacturer | **Model** | **Location of Spare** |
|       |       |       |
|       |       |       |

|  |  |
| --- | --- |
| **List Spare Parts for Feed Pump:** | **Location:** |
|       |       |
|       |       |
|       |       |
|       |       |

###

### **B. Reserve Chemicals**

|  |
| --- |
| Location of reserve supply of chemicals: |
|       |

## 8. Miscellaneous Parts for the System

###

### **A. Additional Parts Not Listed Above**

|  |  |
| --- | --- |
| **Part:** | **Location:** |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |
|       |       |

# Section VIII – Recovery

Returning to normal operations is vital to rapid restoration of clean, safe water to the community and is essential to the assessment and recovery process. The following is a checklist of actions to be taken during the recovery period. A copy of this checklist will be kept for each water supply emergency event. Also included is a preliminary damage assessment to be used in the recovery process.

## 1. Assessment and Recovery Period Checklist

[ ]  Perform in-depth damage assessment of system to determine long-term effects of damaged areas (use assessment form below). Prepare a preliminary damage report.

[ ]  Notify your local health department and NDEE Drinking Water and Groundwater Division of system status and situation.

[ ]  Will there be a need to use mutual aid agreements and/or implement standby contracts or other emergency agreements for equipment and operations?

[ ]  Prepare written documentation of emergency work performed for possible compensation by emergency agencies. Make sure that crews make a record of work effort, written logs (see Work Order Log) and take pictures. This will all be helpful in recovery of funds.

[ ]  After completion of emergency repairs, rest the crews and return, if possible, to more normal work schedules.

[ ]  Notify appropriate insurance carriers. Provide written and photo documentation of damage.

[ ]  Assist in the survey of emergency repairs and scheduling of permanent repairs.

[ ]  Assist in the inventory of repair supplies and replacement stock.

[ ]  Servicing of emergency equipment, when able (oil changes, lubrication, etc.).

[ ]  Make sure the public is kept informed throughout the extent of the emergency.

## Preliminary Damage Assessment

Following the Damage Assessment notify NDEE Drinking Water and Groundwater Division of the findings.

|  |  |
| --- | --- |
| **General Overview:** |  |
| [ ]  Determine need to repair, replace, or abandon facilities | [ ]  Estimate cost to repair damage  |
| [ ]  Evacuate buildings in danger of collapse |  |
| **Treatment Plants:** |  |
| [ ]  Check if power is available and condition of mechanical and electrical equipment | [ ]  Check for chemical spills or releases |
| Confirm that field crew does the following: |  |
| [ ]  Check for structural damage | [ ]  Closes and tags damaged facilities; and equipment |
| **Tanks:** |  |
| [ ]  Check for evidence of failure of subbase |  |
| **Reservoirs:** Check for: |  |
| [ ]  Leaks | [ ]  Cracks |
| [ ]  Seepage | [ ]  Broken inlet/outlet pipes, underdrains |
| [ ]  Landslides | [ ]  Check for buckling |
| [ ]  Embankment slump |  |
| **Distribution System**: Check for: |  |
| [ ]  Leaks | [ ]  Breaks |
| [ ]  Pressure loss in lines | [ ]  Cross-connections |
| [ ]  Check mechanical couplings | [ ]  Lower water levels to reduce possibility of structural damage |
| **Wells:** |  |
| [ ]  Check for physical damage to facilities | [ ]  Test for contamination |
| [ ]  Name, address, phone # for private lab | [ ]  Check for pump or motor failure |
| [ ]  Check power source |  |

# Section IX – Evaluation

At the conclusion of the water supply emergency event,                           will assemble and prepare an after-event evaluation report. This report assesses the actions and responses to an emergency. A sample form for this evaluation report follows:

## Evaluation Report Form

* **Introduction**

Emergency Declaration

Purpose of Report

Emergency Mitigation Planning

History

* **Description of Emergency**
	+ 1. Geography
		2. Chronology
		3. Damages and Impact
		4. Statistics
	1. **Recommendations**
		1. Issue
		2. Background
		3. Recommendation
		4. Lead
		5. Support
		6. Funding
		7. Schedule
	2. **Appendices**
		1. Maps
		2. List of Participants