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This Contingency Planning Document represents the results of a coordinated effort between the citizens and local officials of _____. The purpose of this plan is to establish, provide, and continually update 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, physical disruptions, terrorists, or civil disorders. Once adopted, this Contingency

Planning Document will become the official standardized procedural guide for responding to such emergencies. The plan provides for long-term as well as short-term interruptions in the local public water supply service, whether total or partial in nature. This plan is coordinated with and is supplemental to existing local plans such as Hazardous Materials Response and Civil Emergency Management Plans. As time goes on and the needs of the community grow and change, certain elements of this plan may be improved, modified, or eliminated altogether. Suggestions and comments for improvement of this Contingency Plan are valuable, and will help to keep this plan viable and dynamic.

SOURCES OF SYSTEM VULNERABILITY

(Include a narrative of the system's vulnerability to identified sources of potential contamination or attach Vulnerability Assessment.)

WATER SUPPLY REPLACEMENT ALTERNATIVES

(List emergency and short-term replacement options. High priority areas identified in the Vulnerability Assessment must be addressed)

(List long-term replacement options. High priority areas identified in the Vulnerability Assessment must be addressed)

REVIEWING AND UPDATING THE PLAN

The plan will be reviewed:

- a. Annually
- b. After every significant water supply disruption incident
- c. After making significant modifications to the water supply system
- d. According to the adequacy of the plan to cope with proposed developments (i.e. shopping centers, industrial parks, or subdivisions)
- e. After significant developments are completed

EXHIBIT 1

_____ 'S SOURCE(S) OF WATER

_____ presently obtains surface water from _____ in _____ County located

(See Figure _____, Page _____).

_____ presently operates _____ water wells in _____ County located

(See Figure _____, Page _____).

_____ presently purchases water from _____

Current treatment facilities consist of _____, with a capacity of _____.

Future plans for treatment facilities include _____, with a capacity of _____.

The locations for the treatment facilities are shown on the attached system map.

This map also illustrates the distribution system for _____, along with water mains, storage facilities and capacities, and shut-off valves for isolating sections of the system.

EXHIBIT 2

RESPONSE PERSONNEL AND PROCEDURES

Public water supply emergencies will generally fall into one of four categories: interruptions in water service due to natural disasters such as tornadoes, floods, droughts, fire, or major equipment failure; spills which threaten raw water sources or actually get into the public water supply; and water-borne outbreaks due to chemical or bacteriological causes; and intentional acts involving some or all of the previously listed areas. In dealing with emergencies that affect public water supplies, the first priority will be to prevent interruption of water service or restore service if it has been interrupted. The emphasis will be upon maintaining chemically and bacteriologically safe water.

The following roster will be notified in an emergency response to any incident that has or may result in contamination of the public water supply.

Maintenance Supervisor, etc.
Telephone Number

City Manager or Mayor or Board Chairman
Telephone Number

Local DEQ Official
Telephone Number

Complaints/Spill Hotline
Oklahoma Dept. of Environmental Quality (DEQ)
707 North Robinson, P.O. Box 1677
Oklahoma City, OK 73101-1677
1-800-522-0206

OPERATION COMMANDER/INCIDENT COMMANDER/EMERGENCY RESPONSE
COMMANDER

LAW ENFORCEMENT
LOCAL POLICE CHIEF
TELEPHONE
COUNTY SHERIFF
TELEPHONE
FBI TELEPHONE 405-290-7770

LOCAL CIVIL EMERGENCY MANAGEMENT DIRECTOR

COORDINATOR, HEALTH/MEDICAL SERVICE

COMMUNICATION OFFICER

THE PUBLIC INFORMATION OFFICER

RESOURCES COORDINATOR

THE RADIOLOGICAL PROTECTION OFFICER

TRANSPORTATION COORDINATOR

THE DAMAGE ASSESSMENT OFFICER

STATE DEPARTMENT OF CIVIL EMERGENCY MANAGEMENT

Larry Culp, Operations Officer

Oklahoma City, OK

1-405-521-2481

NATIONAL RESPONSE CENTER

1-800-424-8802

Coast Guard personnel who notify all appropriate federal authorities and maintain contact with all federal agencies that can furnish information, direction or assistance as on scene responders staff the center.

CHEMTREC

1-800-424-9300

Provides immediate advice on procedures necessary during an emergency.

OTHERS:

Overview of Direction and Control

The overall responsibility for incident command, for requesting assistance outside the community and for making decisions on water use restrictions belongs to _____, and the alternate is _____. (The public water supply needs to designate here the persons who will take the lead at the local level in the event of a water supply emergency.)

This section specifies the roles of the various entities and agencies during an emergency situation:

The police department is responsible for maintaining law and order, traffic control, access control of restricted areas, security of vital facilities, communication system support, and liaison with other law enforcement agencies.

The fire department is responsible for fire suppression, fire prevention and education, radiological and biochemical decontamination, hazardous material operations, assisting in damage assessment, and communication system support.

The public works department is responsible for providing potable water and maintaining water pressure, providing engineering service and advice, assisting with damage assessment of public property, assisting in radiological and biochemical decontamination operations, and assisting in

restoration of electrical power.

The civil emergency management director is responsible for coordination of all phases of emergency management, public information and education, comprehensive emergency management planning, and damage assessment planning.

Oklahoma Department of Environmental Quality (DEQ)

The Environmental Complaints and Local Services (ECLS) maintains a 24-hour complaints and spill reporting hotline. Call-takers coordinate with the Emergency Response Coordinator when necessary by collecting and transmitting as much specific information as possible.

The Local ECLS Staff are responsible for inspecting water supplies, contacting the designated on-site first responder to determine if an emergency actually exists, after consultation with the Emergency Response Coordinator, initiating steps to assist with handling the emergency, including serving as the on-site coordinator of all agency activities, and assisting with follow-up on the final resolution of the emergency.

The Water Quality Division provides technical assistance during water supply emergencies by providing assistance in resolving engineering problems in order to maintain or restore water service. Personnel can be dispatched to provide "hands on" assistance if need be. Such assistance will be coordinated with the Emergency Response Coordinator. Coordination is carried out with Oklahoma Civil Emergency Management to verify the need to haul water when service is interrupted due to drought, flood, or other problems. Oklahoma Civil Emergency Management is then responsible to make arrangements to haul water. Public notice is made to consumers if contamination of the water supply is suspected (in some cases) or present.

EXHIBIT 3

AVAILABLE EQUIPMENT, MATERIALS AND TECHNICAL RESOURCES

1. Equipment owned by name of system

[List equipment]

2. Potential Needs:

Drilling Equipment:

3. Technical Resources:

Local Environmental Specialist:

Oklahoma Rural Water Association: [name]

Water Circuit Rider
1410 SE 15th Street
P.O. Box 95349
Oklahoma City, OK 73143-5349
TELEPHONE: 1-405-672-8925
FAX: 1-405-672-9898

EXHIBIT 4

CLASSIFICATION OF WATER USES AND OPTIONS FOR DEALING WITH SHORTAGES AND WATER QUALITY PROBLEMS

Public water suppliers should develop a classification system of water uses to reflect water use priorities. A classification system clarifies issues of fairness, hardship, and ultimately, management effectiveness. Four classes of water use are recommended: First, Second, and Third Class Essential Uses and Non-Essential Uses. Essential uses might include water for domestic use, health care facilities, other public institutions, emergency shelters, and fire fighting. Non-essential uses might include water used for ornamental purposes, outdoor non-commercial watering, etc. Even though a system might choose to use a standby pricing structure or other measures to curb water use demand, classifying and analyzing uses according to their contribution to the system's overall demand may reveal a plan weakness or need for a back-up strategy. In managing water during a drought, plans that primarily rely on non-restrictive options (i.e., pricing, pressure reduction, etc.) could also superimpose a scheme of restrictions where necessary to establish a balance between water use and supply. "Recommended Water Use Classes and Class Restrictions," illustrated below, shows an approach for managing water under deteriorating supply conditions. Under more quickly developing water shortage situations, such as those caused by a chemical spill, power outage, etc., the options listed under "emergency" conditions, as appropriate, should be incorporated into the development of the system's emergency operations procedures.

Program Phase

<i>General Water Use Class</i>	<i>Conservation</i>	<i>Restrictions</i>	<i>Emergency</i>
<i>Essential, First Class</i>	Voluntary Cutbacks	Voluntary Cutbacks	Mandatory or Voluntary Cutbacks
<i>Essential, Second Class</i>	Voluntary Cutbacks	Mandatory or Voluntary Cutbacks	Mandatory Bans
<i>Essential, Third Class</i>	Voluntary Cutbacks	Mandatory Bans	Mandatory Bans
<i>Non Essential</i>	Mandatory Cutbacks or Bans	Mandatory Bans	Mandatory Bans

Options for Dealing with Shortages

Water management options a supplier should consider are listed below under the management phase thought to be most appropriate:

- I. "Normal" Conditions
 - A. Water Conservation
 - Water Conservation Education
 - Water Saving Devices
 - Repair of Household Leaks
 - Pricing
 - Universal Metering
 - B. Pressure Adjustment
 - C. Leak Detection
 - D. Reservoir Evaporation Suppression
 - E. Water Saving Plumbing Codes
 - F. Reuse

- II. Under "Conservation" Conditions
 - A. Water Conservation (most of the measures applicable under "normal" conditions are effective in reducing water use under "Conservation" conditions) and Mandatory Cutbacks or Bans on Non-Essential Uses
 - B. Media Attention

- III. Under "Restriction" Conditions
 - A. Water Conservation (Voluntary Cutbacks of First and Second Class Essential Water Uses) and Mandatory Cutbacks or Bans of Non-Essential and Third Class Essential Water Uses
 - B. Rationing
 - C. Service Interruptions
 - D. Mutual Aid Agreements (Interconnections with Nearby Systems)
 - E. Temporary Pipelines and Sources
 - F. Additional Wells and Reactivation of Abandoned Wells
 - G. Temporary Impoundments
 - H. Water Recycling
 - I. Modification of Reservoir Management
 - J. Dredging to Improve Intake Capability

- IV. Under "Emergency" Conditions
 - A. Restrictive Responses (Many of the responses appropriate under the "Restrictions" phase also apply under "Emergency" conditions.)
 - B. Hauling Water
 - C. Bottled Water
 - D. Sanitation Measures

Priorities of Water Use

FIRST CLASS ESSENTIAL WATER USES

Domestic Use:

Water necessary to sustain human life and the lives of domestic animals and to maintain minimum standards of hygiene and sanitation (sink use only, excludes laundry, commode, bath and shower uses); emergency shelters

Health Care Facilities:

Patient care and rehabilitation including related pool make-up water (requiring less than 25 percent filling)

Public Use:

Fire fighting, health and public protection purposes, if specifically approved by health officials and the municipal governing body, including line flushing on an emergency basis

SECOND CLASS ESSENTIAL WATER USES

All Domestic Uses Not Included in First Class:

Personal home water use includes water used in the kitchen for food preparation, commode, bath, shower, laundry, and landscape watering (handheld hose watering) and watering of shrubs before 8:00 a.m. and after 6:00 p.m.

Agricultural Watering (which is publicly supplied):

Agricultural irrigation at a minimum level for the production of truck crops, the maintenance of livestock, and all drip irrigation; watering by commercial nurseries at the minimum level necessary to maintain stock, to the extent that sources of water other than fresh water are not available or feasible to use; water use by arboretums and public gardens of national, state, or regional significance where necessary to preserve specimens, to the extent that recycled water is not available or feasible to use; landscape (shrubs) and vegetable garden irrigation (handheld only); minimum watering of golf courses, green only

Industrial Water Use (publicly supplied):

Industrial processes and (refer below for industrial air-conditioning use)

Commercial and Public Water Use (publicly supplied):

Office, retail, entertainment, schools and churches, laundromats (unrestricted hours of operation), restaurants, clubs and eating establishments (unrestricted hours of operation)

Office and Industrial Air-Conditioning (water cooled):

Refilling for start-up at the beginning of the cooling season, make-up of water during the cooling season to maintain temperature no cooler than 78 degrees Fahrenheit, refilling specifically approved by health officials and the municipal governing body where the system has been drained for health protection or repair purposes

THIRD CLASS ESSENTIAL WATER USES

Schools and Other Institutions:

Showering facilities

Filling and Operation of Swimming Pools:

Residential pools that serve more than 25 dwelling units, municipal pools, pools used by health care facilities for patient care and rehabilitation requiring 75 percent or more filling

Washing of Motor Vehicles:

Commercial car and truck washes

FOURTH CLASS WATER USES

Ornamental Purposes:

Fountains, reflecting pools, and artificial waterfalls

Outdoor Non-Commercial Water (publicly supplied):

Irrigating gardens (except handheld), lawns, parks, golf courses (except greens), playing fields and other recreational areas, street, driveway, and sidewalk washing

Exceptions: agricultural irrigation at a minimum level for the production of truck crops or the maintenance of livestock and all drip irrigation; watering by commercial nurseries at a minimum level necessary to maintain stock to the extent that sources of water other than fresh water are not available or feasible to use; water use by arboretums and public gardens of national, state, or regional significance where necessary to preserve specimens to the extent that recycled water is not available or feasible to use; landscape (shrubs) and vegetable garden irrigation (handheld)

Filling and Operation of Swimming Pools:

Exceptions: residential pools that serve more than 25 dwelling units, municipal pools, pools used by health care facilities for patient care and rehabilitation

Washing of Motor Vehicles:

Automobiles, trucks, boats, and trailers

Exceptions: commercial car and truck washes

Serving Water in Restaurants, Clubs, or Eating Places:

Exceptions: specific request by a customer

Fire Hydrants:

Any purpose, including use of sprinkler caps and testing fire apparatus and for fire department drills

Exceptions: fire fighting, health protection purposes (if specifically approved by the Health Department), certain testing and drills by the fire department (if it is in the interest of public safety and is specifically approved by the water boards)

Flushing of Sewers and Hydrants:

Exceptions: as needed to ensure public health and safety, and approved by the Department of Health and the water boards

Air Conditioning:

Refilling cooling towers after draining

Exceptions: refilling for start-up at the beginning of the cooling season, refilling specifically approved by the Department of Health and the water boards where the system has been drained for health protection or repair purposes

EXHIBIT 5

HAZARDOUS MATERIALS RESPONSE PROCEDURES

A. General

Early identification of the hazardous material is necessary to formulate a plan of action to handle the emergency. Once identification is made, the next action should be directed toward containing the material and/or evacuating those threatened by potential exposure to the material. After the threat has been stabilized by containment and evacuation, the third step in hazardous material operation is to safely clean up the material.

Dispatchers need to obtain as much information as possible upon being notified of a spill/leak.

Frequently, additional information on the nature or characteristics of the hazard is needed. Contact should be made with the manufacturers, users, or national response agencies and organizations.

For safety reasons, responding units should treat all spills as hazardous until they can be identified.

At transportation accident sites, hazardous materials may be identified by shipping papers, ID numbers, placards, labels, or verbally by the truck driver or railroad conductor/engineer.

At fixed site incidents, the National Fire Protection Association (NFPA) 704-Diamond may be used to identify hazardous material contained within the site.

To the extent possible, operations should be: upwind, uphill, and upstream.

Emergency vehicles should be backed in, and operators should be prepared to move if conditions worsen.

B. Task assignment and responsibility

Operations Commander

The operations commander will normally be a fire service officer from the local department, or if the accident/incident is outside corporate city limits, from the nearest department. He will be responsible for: rescue/extrication operation, fire suppression or hazardous material containment, establishing/identifying the zones around the spill/leak, location of operations command post, notification of civil defense director if necessary, evacuation order, location of decontamination site, and decontamination operations.

Incident Commander

Incident Commander will normally be the senior fire service officer, on-site, from the local department, or if the incident/accident is outside corporate city limits, from the nearest department. (THE EXCEPTION TO THIS WILL BE WHEN THE ACCIDENT SITE IS ON A

ROADWAY OR RAILROAD OUTSIDE CORPORATE CITY LIMITS, IN WHICH CASE THE INCIDENT COMMANDER WILL NORMALLY BE THE SENIOR OKLAHOMA HIGHWAY PATROL (OHP) OFFICER PRESENT). Incident commander responsibilities are: location of incident command post, location of staging area, coordination of the actions of all responding agencies, coordination of the movement of support personnel from staging area, maintaining communications with operations command post and the CD Office, if activated, briefing the civil defense director on the situation and actions taken or assistance needed, and coordination of requests for any additional resources/support needed to include: (1) fire service, (2) law enforcement, (3) health and medical.

Law Enforcement

Law enforcement personnel will be responsible for: traffic and crowd control, zone security, evacuation notification and assistance, and crime scene investigation in case of terrorist or other criminal activity.

PD Dispatchers

Responsibilities include communications between the CD Office and other emergency services at the scene.

The Civil Emergency Management Director

The Director's responsibilities are: activation of the CD organization if necessary, coordination of actions for hazardous materials accidents/incidents, establishing communication from the CD office with other emergency services at the scene, notification of emergency service organizations (i.e., Welfare, Red Cross, Salvation Army, etc.) to provide needed assistance if necessary, notification of the State Emergency Operations Center (EOC) and submittal of a report on the incident, type of hazardous materials, and actions taken, coordination of support (local, state, federal or private) as needed, and coordination of clean up and reimbursement procedures as necessary.

DEQ - Local Environmental Specialist

Responsibilities include: providing technical support for hazardous materials operations, furnishing hospitals and ambulance services with information concerning the name of the chemical involved and safety precautions to be taken by their personnel, and providing technical advice during clean up procedures.

Coordinator, Shelter Mass Care Service (i.e. Red Cross)

Responsibilities include provision of emergency lodging and feeding and clothing of evacuees, if area has to be evacuated.

The Public Information Officer

This officer is responsible for releasing to the news media information and instructions for safety concerning the hazardous materials accident/incident, including evacuation.

The Radiological Protection Officer

This officer provides information regarding radiological accidents to the civil emergency management director, who in turn will provide it to the State EOC.

Transportation Coordinator

The transportation coordinator provides such vehicles as are needed for the evacuation of persons without transportation and arranges for the movement of sick or injured from the evacuation area.

The Damage Assessment Officer

The Damage Assessment Officer coordinates monitoring/surveying with the operations officer to declare the area safe, determines the amount of damage done to the area, estimates costs of cleanup and emergency services, obtains photographs, obtains statements from witnesses, and makes the proper reports on forms as stated in attached appendices.

State Department of Civil Emergency Management

The responsibilities of this Department include activating the State emergency response team. When necessary, the Department provides direction, information, or assistance to on-scene responders, coordinating support as requested by on-scene responders or the local civil defense director, and notification of all appropriate state and federal agencies as required.

National Response Center. Toll-Free 1-800-424-8802

Coast guard personnel who notify all appropriate federal authorities and maintain contact with all federal agencies that can furnish information, direction, or assistance to on-scene responders staff this center.

CHEMTREC Toll-Free 1-800- 424-9300

CHEMTREC stands for Chemical Transportation Emergency Center, a public service of the Chemical Manufacturers Association provided by its offices in Washington, D.C. CHEMTREC provides immediate advice for those at the scene of emergencies, then promptly contacts the shipper/generator of the hazardous materials involved for more detailed assistance and appropriate follow-up. This center operates around the clock, 24 hours a day, seven days a week. It is important that every effort be made to keep a phone line open so that the shipper/generator can make contact with the on-scene leaders to provide guidance and assistance. CHEMTREC provides advice for fixed site emergencies, as well as transportation emergencies.

C. Direction and Control

An initial step to control contamination is to set up three zones: hot zone, warm zone, and cold zone.

The hot zone is where the spill/leak is located or suspected to be located. Even if the hot zone is made too large at first it can always be reduced as the situation changes.

The warm zone is a work area or buffer zone, which may become contaminated as operations continue. The size of the warm zone is immaterial as long as there is operating room. The Operations Command Post and the Decontamination Site are located in this zone.

The cold zone is outside the operational area and is definitely non-contaminated. The incident command post and staging area are located in this zone.

EXHIBIT 5a

CITY/COUNTY

HAZARDOUS MATERIALS SPILL/ACCIDENT REPORT FORM

Emergency reporting information:

Caller's name:

Caller's telephone number:

Caller's identification (Company position, title, etc.):

Location of spill:

Source of spill:

Material spilled:

Time of spill:

Spill quantity:

Area and/or waterbody endangered:

Personnel at scene:

Actions initiated:

Shipper identification:

Manufacturer identification: _____

Container type:

Railcar/truck identification number:

Placard/label information:

Other agencies to notify immediately:

EXHIBIT 5b

HAZARDOUS MATERIALS

(Information Received)

After the E.P.A. or the producer of the material is contacted, this is some of the information that should be collected (if appropriate.)

1. How should material be handled if involved in fire?
2. How should material be handled if involved in spill or leak?
3. What should be done for personal protection?
4. If someone is exposed to material, what should be done?
5. Should the area be evacuated? If so, how far?
6. How should the material be disposed of?
7. What is the reactivity factor?
8. Is there any residual effect?
9. Vapor density:
10. Specific gravity:
11. Any other information:

EXHIBIT 6

WELLHEAD/SOURCEWATER PROTECTION PROGRAM ENVIRONMENTAL AGENCIES JURISDICTIONAL GUIDE

The following is only a partial listing of each environmental agency's jurisdiction, but it can be used as a guideline when developing Best Management Plans for a Wellhead/Sourcewater Protection Program.

OKLAHOMA CONSERVATION COMMISSION

The Oklahoma Conservation Commission coordinates the activities of Oklahoma's 89 conservation districts in the development of Best Management Practices (BMPs) designed to protect groundwater quality, especially in regards to agricultural land uses. Through the Conservation Districts, technical assistance is available for land owners in the development of site specific management plans incorporating these agricultural BMPs.

The Commission is responsible for all identification of non-point source categories of pollution, except silviculture, urban storm water runoff, and industrial runoff. However, the Commission is not "authorized to implement mandatory compliance with management practices to abate agricultural non-point source pollution."

The Commission is responsible for reclaiming land and water that has been adversely affected by past mining prior to the date of adoption of the Surface Mining Control and Reclamation Act.

Contact: Executive Director
Oklahoma Conservation Commission
2800 N. Lincoln Blvd., Suite 160
Oklahoma City, Oklahoma 73105
Telephone: (405) 521-2384

OKLAHOMA CORPORATION COMMISSION

The Corporation Commission's activities in the area of wellhead/sourcewater protection are due to its regulatory authority over the oil and gas industry. The Corporation Commission has "exclusive" jurisdiction over "salt water, mineral brines, waste oil, and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing and processing of oil and gas." In turn, it is the responsibility of the Commission "to make and enforce such rules, regulations and orders" governing oil and gas operations which are "reasonable and necessary for the purpose of preventing the pollution of the surface and sub-surface waters of the state."

The Commission also administers a portion of EPA's UIC program under which the Commission is responsible for underground injection wells associated with oil and gas production (Class 11 injection wells), including both disposal wells and enhanced recovery wells.

Contact: Pollution Abatement Program
Corporation Commission
2101 N. Lincoln Blvd.
Oklahoma City, Oklahoma 73105
Telephone: (405) 521-2500

OKLAHOMA DEPARTMENT OF AGRICULTURE

The Department of Agriculture will assist in source identification and assessment once a wellhead/sourcewater protection area has been delineated. OSDA will develop protection strategies, working closely with the local water system manager, to prevent agriculturally related practices under OSDA's jurisdiction from contaminating wells or well fields.

With respect to the application of pesticides, it is unlawful for any person to act, operate, do business, or advertise as a commercial, non-commercial, or private applicator unless a valid license has been issued by OSDA for the category of pesticide application in which the person is engaged. The license would be issued only after satisfactory completion of the required certification standards.

All licensed commercial fertilizers in the state are inspected on a regular basis to insure fertilizer is not discharged illegally into the waters of the State. Facilities that pose a high potential threat to groundwater because of various hydrogeologic factors are required to ensure that preventive measures are taken to minimize potential pollution [2 O.S. Supp 1989, 8-68 (a)].

Contact: Director, Plant Industry & Consumer Services
Oklahoma State Department of Agriculture
2800 N. Lincoln Blvd. 73105-4298
Telephone: (405) 521-3864

The Feed Yard Act requires owners/operators who are granted a license to have proper operation and maintenance plans utilizing Best Management Practices and a Pollution Prevention Plan to comply with the effluent limitations in the Oklahoma Feedyard Act 2 O.S. 1994.

Contact: Water Quality Division
Oklahoma State Department of Agriculture
2800 N. Lincoln Blvd. 73105-4298
Telephone: (405) 521-3864
Complaint Number: (1-800-235-9877)

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

The Department of Environmental Quality (DEQ) has standards and regulations governing the construction and operation of surface water sources and public water supply wells and well fields assuring the protection of the water quality. Wells must not only have safe bacteriological samples, but must have acceptable chemical and radiochemical water samples before use. The well site must be protected from surface drainage and separated from any source of pollution.

The DEQ maintains and administers a program of water pollution control under Title 27 A O.S. 1993. The DEQ is given jurisdiction for issuing permits for industrial and municipal wastewater discharges, treatment and disposal facilities. In addition, the local DEQ Environmental Specialist is responsible for individual sewage disposal systems.

Contact: Water Quality Division
Oklahoma Department Environmental Quality
707 North Robinson, P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677
Telephone: (405) 702-8100

The Hazardous Waste Management Act delineates that the DEQ's duty is to require and approve disposal plans from all persons generating and transporting hazardous waste or recyclable materials off-site for storage, recycling, treatment, or disposal; require and approve disposal plans from all persons generating hazardous waste; prohibit certain specific disposal practices; make periodic inspections of hazardous waste generating facilities; and to issue permits for construction and operation of hazardous waste treatment, storage, disposal and recycling facilities.

Contact: Hazardous Waste Management
Oklahoma Department Environmental Quality
707 North Robinson, P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677
Telephone: (405) 702-5100

Most solid waste is safely disposed of in properly operated DEQ approved sanitary landfills. The DEQ is empowered to promulgate rules and regulations for solid waste disposal and processing sites, including, but not limited to, the site location, construction, operation and maintenance.

Contact: Solid Waste Management
Oklahoma Department Environmental Quality
707 North Robinson, P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677
Telephone: (405) 702-5100

The DEQ maintains a state-wide groundwater monitoring program at 1800 community and non-community public water supplies. Detailed analyses are performed for all community systems to determine if organic chemicals, toxic metals, or any man-made contaminants are present. Concentrations of naturally occurring minerals are also analyzed. Data is compared with expected values for each significant aquifer to determine quality changes or aberrant values and to identify any public water supply out of compliance with established water quality regulations or standards.

Contact: State Environmental Lab Services
Oklahoma Department Environmental Quality
1000 N. E. 10th
Oklahoma City, Oklahoma 73117-1212
Telephone: (405) 271-5240

OKLAHOMA WATER RESOURCES BOARD

The OWRB provides assistance to water systems in matters of water rights allocation, matters relating to the licensing of well drillers, and providing assistance in preparation of loan/grant applications to the agency. The OWRB conducts hydrologic surveys, maximum annual yield determinations, and assists in finding new sources of supply.

A permit should be obtained before using groundwater for non-domestic purposes and it is a violation of rules and regulations to use water without a permit. OWRB is authorized to issue regular, temporary, special or provisional temporary permits. OWRB also regulates the orderly withdrawal of water in relation to the allocation of water to the land overlying the basin or subbasin.

All persons drilling groundwater wells, reconditioning wells, plugging wells, installing monitoring wells, observation wells, or heat exchange wells, test drilling for fresh groundwater, or installing pumps in the state must make application for and become licensed by OWRB. The OWRB has adopted minimum standards for construction of water wells, land monitoring wells, plugging of abandoned water wells, monitoring wells, water well test holes, and capping of water wells not in use. The purpose of these minimum standards is to provide uniform rules/regulations to protect the fresh groundwaters of the state from contamination.

Contact: Water Management Division
Oklahoma Water Resources Board
3800 N. Classen
Oklahoma City, Oklahoma 73118
Telephone: (405) 530-8800

The OWRB is authorized to promulgate water quality standards for waters of the state, and to classify water according to its best uses in the interest of the public under conditions prescribed for the prevention, control, and abatement of pollution. The State of Oklahoma has prepared and adopted water quality standards for interstate waters.

The standards apply to all fresh groundwater (defined as groundwater with a maximum total dissolved solids concentration of less than 5000 ppm) in the state. Groundwaters are protected by both narrative and numeric criteria.

Contact: Water Quality Programs Division
Oklahoma Water Resources Board
3800 N. Classen
Oklahoma City, Oklahoma 73118
Telephone: (405) 530-8800

OFFICE OF THE SECRETARY OF THE ENVIRONMENT

The Office of the Secretary of the Environment oversees management of the EPA grants that provide funding for federal programs, provides coordination between agencies when jurisdictional questions arise, and has other duties assigned by the Governor.

Contact: Secretary of the Environment
3800 N. Classen
Oklahoma City, Oklahoma 73118
Telephone: (405) 530-8800

EXHIBIT 7

PUBLIC COMMUNICATIONS/COMMUNITY RELATIONS PROCEDURES

Public Communications/Community Relations Procedures and Educating the Public

Effective communication with the public both before and after a water supply disruption incident is important for a number of reasons. Health considerations may require prompt public notification, as in incidents where boil-water notices are necessary. Public notification may also be a legal requirement for many situations under both the Safe Drinking Water Act and State statutes. In addition, effective communication can minimize public confusion and frustration and can help to secure the public's cooperation in implementing such response measures as water conservation.

To be effective, public communication must be prompt, frequent, accurate, and credible. Moreover, the credibility of water supply system personnel must be established at the outset of any problem. A final and principal component of a public communication program should be the education of consumers before a problem arises so that they can be on the look-out for potential problems and will understand the basis for any water use restrictions.

Form is often as important as content when communicating potentially volatile material to the public. The following are suggestions concerning the manner of presenting information about a water disruption event:

Notify the public as quickly as possible following the discovery of a problem. It is crucial to credibility that initial notification is through water supply personnel, not state or federal personnel or press leaks.

The designated spokesperson will be _____, and the alternate will be _____. The spokesperson will need to communicate clearly with the public and to inspire confidence. (An employee of the water system or a municipal official can be chosen.)

Avoid defensive postures and speculative responses in the face of negative reactions. It is better to admit ignorance than to speculate.

Do not raise false hopes concerning the remedial time-frame or attempt to trivialize problems involved in responding to a serious water supply disruption.

If the incident is substantial, failure to convey adequate information to the public could be particularly polarizing. Including the involvement of a person from the "public," therefore, would provide a gesture of openness and respect. Such a person need not necessarily be involved in the decisions, but should be allowed to observe them impartially and in their entirety.

After contamination of a public water supply well has been detected, the initial public communication is crucial to maintaining public confidence in the integrity of the water supply system. The duration of the initial communication phase may vary, depending upon the severity of the contamination incident, but it encompasses the time from the discovery of the contamination to the provision of interim remedial measures. While the precise information that needs to be transmitted also will depend upon the nature and extent of the contamination, the types of information most likely to be important to an

interested public would include the following:

Federal and State Notification Requirements -- Pursuant to Section 1414(c) of the Safe Drinking Water Act (42 U.S.C. 300g-3(c)) public water system owners or operators must notify their customers of any failure to comply with a maximum contaminant level (MCL) established in a national primary drinking water regulation (NPDWR), failure to comply with a prescribed treatment technique established in lieu of an MCL, failure to meet a variance or exemption schedule, failure to comply with monitoring requirements or a testing procedure prescribed by an NPDWR, and operation pursuant to a variance or exemption. Current regulations governing the manner and form of the public notification are found at 40 CFR 141.32.

Water Supply System Information -- Basic information should be given on the location of well fields and the distribution system.

Identify the Contaminant -- The name of the contaminant should be given as well as what it is used for, any chemical or physical properties that are easily explained (such as the ability to degrade), toxicity information, and the concentration that has been detected.

Water Use Restrictions -- Impermissible and permissible water uses should be given. Whether the public can drink the water is obviously the most important information to convey at this stage. However, people will also want to know whether they can use it for bathing, washing dishes, or watering the lawn.

Boil Orders -- In cases of bacteriological contamination, the public may be directed to boil water for drinking uses.

Conservation -- In situations where the ability to supply customers is jeopardized, the public may have to employ water conservation measures to ease the demand.

Impact on Water Supply -- The impact on the availability of water can be illustrated with a description of the hydrogeologic area and the supply components affected by the contaminant.

Alternative Supplies -- A list of the source(s) of alternative water supplies should be provided, including information on how this water will be made available to the public.

Risk Assessment -- This is very difficult information to convey without creating frustration and confusion. Avoid comparisons to other types of risks, e.g., driving a car versus drinking the contaminated water. In some instances, particularly with relatively low-level contamination and short public exposure, it will be impossible to quantify the risk in a meaningful way. Give figures where available, stress the margin of safety built into drinking water standards, discuss the steps taken to eliminate any risk, and do not trivialize the significance of the contamination.

Action Taken and Planned -- Detail the steps the water supply system has taken and will take to address the incident.

Duration of the Incident -- Be realistic in addressing the long-term impact of the incident. There is a temptation to be optimistic in making predictions on the resolution of the incident, but it is important for the sake of credibility to avoid building up unrealistic public expectations.

Future Public Communication -- Set forth plans for continued dissemination of information to the public.

Contamination Source -- To avoid liability for false statements, do not make any accusations that cannot be substantiated. Where the contamination source is verified, provide a straightforward account of the facts; avoid speculation.

Methods of communicating the information to the public regarding a contamination incident include:

One Spokesperson -- To ensure consistency and accuracy, the one person designated above should be responsible for the flow of information to the public and the media.

Information Sheets -- Some of the information that needs to be disseminated during the initial communication phase can be prepared in advance, such as water system information, boil orders, and conservation measures. It may be appropriate to have a prepared "initial news release," that notifies the public that there has been a contamination incident, and gives system personnel some time to assess the incident and prepare a more detailed "explanatory news release."

Contact Media -- Later in this section is presented a list by name, organization, and phone number of the radio and television stations, and newspapers to be contacted by the spokesperson. A press conference may be an appropriate venue for disseminating information to the media.

Contact External Notification Network -- EXHIBIT 2 contains a media contacts roster. Local politicians, congressmen, civic leaders, and the governor should also be provided with the basic facts surrounding the incident, and can be requested to refer the media to the designated spokesperson.

Notify Public Directly -- If there is an acute public health threat associated with the contamination incident, it may be necessary to disseminate information directly through dramatic methods, such as civil defense sirens, sound trucks, and door-to-door notification.

It is important to keep the public informed following the initial communication phase. Interest in the problem may wane if providing alternate supplies has caused relatively little public inconvenience, and support for costly, long-term solutions may erode. If the public is experiencing long-term inconvenience as a result of the incident, it will want periodic reassurance that efforts are underway to restore the water supply system. The following are progress report items:

Federal and State Notification Requirements -- The initial communication requirements listed above include provisions for notification in the event of ongoing violations.

Status of Use Restrictions -- As more information on the nature and extent of the contamination becomes known, the water use restrictions and conservation may change.

Time Frame for Permanent Remedial Measures -- Avoid excessive optimism so that public expectations remain realistic.

Options Under Consideration -- Describe permanent supply replacement, treatment, and

cleanup options. Public comment may be solicited.

Cost and Funding -- Detail response costs to-date and give estimates of both future costs and possible sources of funding.

Investigation Results -- Name the source of contamination if it has been confirmed by investigation. Avoid finger-pointing without clear substantiation.

The urgency of the situation is likely to have lessened by the time the progress report phase has been reached, and time can be spent in building upon the good relations established during the initial communication phase. The following are recommendations for maintaining positive public relations: prepare a regular progress report on the situation; continue to direct all communication through the designated local spokesperson; refer difficult inquiries to technical personnel (state or local); and hold regular press conferences if the severity of the situation warrants.

Once permanent remedial measures have been selected, it is important to notify the public in a manner that fosters support for the decision. The following should be included in this notification:

Memory Refresher -- In some situations, the public may need to be reminded as to why there is a problem that needs correcting.

Details of Long-Term Option Selected -- Include as much information on the option selected as the public can easily digest. Explain why it will provide a safe, permanent solution, and why it was selected over other alternatives.

Costs -- Give an accurate assessment of the costs involved.

Funding Strategies -- Detail how the water supply system intends to pay for the option it has selected.

Because the selection of a long-term solution may have financial implications for the water supply system's customers, the method of communication should be straightforward and allow for no hint of impropriety on the part of system personnel. Advance information "leaks" should be guarded against. The following should be considered as means of notifying the public about the costs of long-term options:

Notice Directly to Customers -- By special mailing, or included with rate notices.

Statutory Requirements -- In some cases, there may be notification requirements if rate increases or other funding mechanisms are contemplated.

Press Notification -- By progress report or press conference.

Finally, the public should be educated about its water supply system so that basic information is lodged in the public consciousness before any contamination incident occurs. In general, the public is unaware of basic water supply concepts, and this lack of knowledge often frustrates communication efforts when a contamination incident occurs. The following fundamentals should be covered in any public education program: what the water source is, how water is distributed, how water can become contaminated, measures taken to ensure that the water supply is safe, and the basis for the water rate structure.

There are a number of ways to educate the public concerning its water supply. Some are more costly than others, and some depend upon the extent of the community's communication resources. Listed below are a number of potential methods for reaching the public:

Pamphlet to customers -- This could be a separate mailing to customers, or could be included with their rate notice.

Newsletters to customers--Brief newsletters can be sent to the utility's customers along with their rate notices with different aspects of the water supply system featured. The frequency of distribution can vary, from monthly to even yearly.

Newspaper articles -- Newspaper articles would be an inexpensive and efficient way to communicate the basic elements of the water supply system.

Television and radio -- Television and radio can also be used to educate the public in an inexpensive and efficient way. Contacts made with television and radio personnel may also be useful during a contamination incident. If funding permits, public service announcements could be prepared.

Presentations to civic groups -- Civic groups in residential neighborhoods generally welcome presentations by utility personnel, and the groups are an excellent means of establishing contact with local civic leaders, whose support may be valuable following a contamination incident.

School programs -- Early education can provide a lifetime awareness of the value of a safe drinking water supply. An effort can be made to include ground water and the water supply system as topics on local school civics or science curricula.

Ongoing Incident Assessment

After response procedures have been initiated, steps must be taken periodically to evaluate the situation, to determine the short-term and long-term impacts on water supply, and to develop alternative response strategies. EXHIBIT 5a is a report form for Ongoing Incident Assessment.

Contamination Assessment and Response

If the supply disruption is the result of a contamination event, it may be necessary to undertake a contamination assessment. EXHIBIT 5b provides a reporting form for chemical incidents, and provides an emergency notification report form. Contamination can occur due to agricultural or waste disposal practices which introduce contaminants into the aquifer, or from the accidental release of contaminants due to such things as a truck spill, leaking underground storage tanks, poor materials handling practices, or intentional terrorist activities.

The following steps must be taken in response to evidence of contamination: identify the name of the chemical agent (trade and/or generic and/or formula), and whenever possible the name of the manufacturer, determine the toxicity of different concentrations of the chemical, identify and isolate the source of contamination, if known, ascertain the amount introduced or which might be introduced into the source of supply or system, locate the point of introduction and the volume of water the point of introduction, map the extent of contamination, identify and isolate any water supplies which might

have been contaminated, notify the public, and set up an ongoing program of monitoring and sampling.

The appropriate responses for each contamination event will be dependent on the nature of the specific occurrence. The first priority for most spill scenarios, for instance, will be containment of the material followed by removal of the contaminant and any contaminated soils, and/or pumping and treatment of contaminated water. If the supply is threatened by plumes of contamination already in the aquifer, the appropriate response may include: connection to alternative supplies, development of new wells, remediation of the aquifer, treatment at the well or point of use, and blending of water supplies to achieve acceptable levels.

EXHIBIT 2 contains a suggested system of action levels useful in developing response procedures, and EXHIBIT 5 contains a summary of hazardous materials response procedures provided by the Oklahoma State Department of Civil Emergency Management.

EXHIBIT 8

[Instructions - Attach a copy of
your system's

Sourcewater/Wellhead Protection Area Delineation]

EXHIBIT 9

[Attach copies of your completed survey forms of potential sources of contamination]