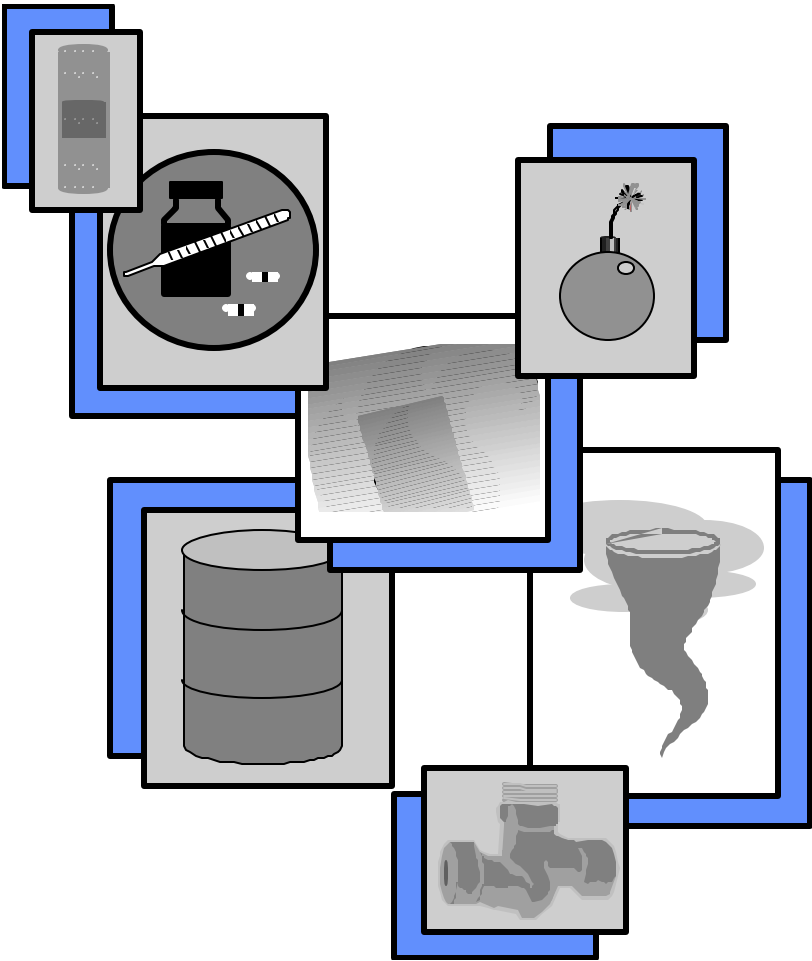


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Emergency Preparedness: Preparing for the Unanticipated

An emergency preparedness plan for water utilities



IOWA DEPARTMENT OF NATURAL RESOURCES

Prepared by Des Moines Water Works

copyright statement

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Chapter 1 Introduction to Emergency Preparedness

Chapter 1: Introduction to Emergency Preparedness

What is Emergency Preparedness?

An *emergency* can be defined as an unanticipated event that calls for immediate action. Emergencies take on many forms: fire, flood, chemical spill, water main break, winter storm, or even a terrorist attack. Emergencies are almost never pre-planned and almost always require some action by someone. In the case of drinking water emergencies, the party most often required to act, or respond, is your water utility. *Preparedness* can be defined as having in mind actions for a particular event; knowing what to do in case a specific event occurs. So, *emergency preparedness* can be defined as: *to have in mind actions for unanticipated events that call for an immediate response*. Emergency preparedness for water utilities involves:

- recognizing the emergencies most likely to occur in your community,
- training employees on responses to be taken during and after these emergencies,
- identifying other resources to be called upon when needed, and
- communicating with your community about the impact the emergency will have on them and their role in the emergency process.

Why is Emergency Planning Important?

Every water utility is in business to provide safe, quality drinking water to their community. Customers expect to receive high quality water -- even during emergencies. To meet these expectations, water utilities must prepare for situations that might prevent them from delivering the water their customers rely upon. Planning for emergencies and knowing how to respond in an emergency situation is just as important as hiring workers, preparing budgets, and all the other tasks performed every day to meet the needs of consumers.

Purpose of the Emergency Preparedness Model Plan

The primary purpose of this emergency preparedness model plan is to promote advanced planning. It also is a guide, once completed, for utility personnel and community officials to follow *during* emergency situations. The model plan can also serve as a good starting point for developing documents that may be needed to meet other regulatory standards, such as Occupational Safety and Health Administration (OSHA) requirements for fire prevention planning, or a contingency plan for Superfund Amendment and Reauthorization Act (SARA Title III). This model plan is *not* intended to serve as a regulatory compliance document. Instead, it has been designed to help utilities think, plan, and prepare strategies for dealing with emergencies.

The second section of this model plan, ***Using This Model Plan to Develop an Emergency Plan***, presents detailed instructions for completing a series of emergency forms. At first glance, the task to develop an emergency plan may seem pretty overwhelming, BUT DON'T STOP NOW! The instructions in the next section indicate which forms should be completed first, second, and so on. Take the process one step at a time. The sooner you complete your model plan, the more valuable it will be to your utility.

Who Should Initiate an Emergency Response?

Beyond the expectations of customers, there are several other good reasons why water utilities must respond to emergency situations affecting their utility or community. Even though counties and states have far more resources available to respond, in a major emergency affecting a large area, these resources may already be committed to another community. Water utility personnel are knowledgeable about their community and the resources that are available to help. For these reasons, it is important for your utility to think about the people, materials, and equipment needed when an emergency does occur.

Forming an Emergency Response Team

An Emergency Response Team should be formed using the current utility staff and others in the community such as the mayor, council members, board members, or citizen volunteers. One person may serve in more than one role, depending on the situation and the community, and there may be need to hire specialized personnel, depending on the emergency. Using the ***Emergency Response Sheets*** in this model plan, your community can identify in advance who these special resources may be and know how to contact them if their services are needed. Overall, in selecting the emergency response team, it is important to choose people who:

- are available to respond quickly,
- have knowledge in the area for which they are responsible, and
- are willing to work in a cooperative team environment.

Basic Emergency Responsibilities

Several key responsibilities must be addressed in any emergency response. These responsibilities are described in the following table.

To hold the confidence of the community during an emergency, it is very important that a person be identified to fulfill each of the key responsibilities. The designated person should be aware of the tasks involved. Also, customers, community officials, and others involved in the emergency response should recognize that the specific person has been charged with these key duties.

Key Responsibilities	Basic Tasks to be Carried Out
<p>Emergency Coordination</p> <p>(Possible people: utility superintendent, mayor, city manager, or other community official)</p>	<ul style="list-style-type: none"> • Serves as the utility's emergency authority; has approval to spend money on behalf of your utility • Calls together the Emergency Response Team • Works with the team to set priorities in the recovery process • Coordinates efforts among utility, city, county, state, and federal agencies • Provides leadership to the response team
<p>Public Communication</p> <p>(Possible people: utility superintendent, mayor, city manager, council member, board member)</p>	<ul style="list-style-type: none"> • Communicates with customers, employees, regulatory officials, and other community officials to keep them aware of the emergency efforts • Coordinates involvement with media when needed • Provides for communications equipment, such as cellular phones or portable radios
<p>Operations Management</p> <p>(Possible people: utility superintendent, operator, consultant)</p>	<ul style="list-style-type: none"> • Coordinates all work activities to restore water service - includes both field activities and administrative activities, such as plant operations, plant maintenance, purchasing, human resources, and computer operations
<p>Damage Assessment</p> <p>(Possible people: utility superintendent, operator, consultant)</p>	<ul style="list-style-type: none"> • Reviews damage caused by an emergency and summarizes damage information to utility and community officials • Arranges for work with outside contractors or engineers to recover from an emergency • Directs repairs done by outside agencies • Coordinates with insurance carriers regarding damages/losses

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Chapter 2 Using This Model Plan to Develop an Emergency Plan

Chapter 2: Using This Model Plan to Develop an Emergency Plan

How Can This Model Plan Be Used In Every Utility or Community?

This model plan provides suggestions for emergency organizing, prioritizing, planning, and training. Simple template-style forms included in this section of the model plan require information from your utility or community and need to be completed as part of your utility's emergency preparedness effort. When all forms pertaining to your utility have been completed, this model plan can serve as an effective "first action" emergency plan. It will detail the critical information about your water utility necessary to recover from an emergency, prioritize the potential hazards for your utility, identify appropriate resources in your community to be called upon for specific emergencies, and list measures to keep the plan up-to-date and useful for your community.

Follow these steps to complete the model plan's forms:

1. Complete the ***Water Supplier General Information Sheet*** first. This form will provide basic information about your water utility and community which may be needed when communicating with others in an emergency situation. Include data necessary to contact the following individuals or groups 24 hours a day:
 - the Emergency Response Team members (the people who will perform each of the key responsibilities outlined);
 - the support agencies and personnel (such as police, County Emergency Coordinator, DOT) called upon to directly assist in recovering from the emergency;
 - other companies, vendors, suppliers, etc., frequently used by your utility;
 - the gas, power and general communication providers for your water utility;
 - the communities that have contracted with your water utility to provide mutual aid, emergency water, equipment or materials;
 - your utility's critical business and individual water users (such as hospitals or nursing homes). At a glance, the form will reveal facilities or individuals involved, the specific water needs, and information to contact them, again 24 hours a day.
2. Complete the ***Failure Analysis*** form. The completed form will help prioritize the severity of the emergencies likely to impact your utility or community. Include information about an emergency's frequency or duration (the more often a specific emergency occurs, or the longer it lasts, the higher priority it becomes), impact on health, property, and business, as well as your water utility's reliance upon internal and external resources to respond to each emergency. The priorities on the form will determine which hazards should be addressed in the final emergency preparedness plan, and in what order.
3. Complete the ***Emergency Response Sheets*** for each emergency applicable to your water utility (e.g. flood, thunderstorm, tornado, main break, etc.), according to the priority

established by the completed **Failure Analysis** form. Each particular emergency has a three-page set of forms to help prepare your utility. They are:

- **Things to Consider Before an Emergency/Mitigation To Do List** and the **Emergency Response Sheet Instructions**. This is a two-sided form. **The Things to Consider Before an Emergency** list should be used to stimulate discussion about each specific emergency. The questions have been developed to assist your utility in preparing the **Mitigation To Do List**, which is simply a list of things to do relating to your utility *before* an emergency occurs. For example, make sure fire extinguishers are checked on an annual basis, would be a notation on the **Fire & Explosion Mitigation To Do List**. The **Emergency Response Sheet Instructions** are a step-by-step guide for filling in the **Emergency Response Sheet** on the facing page.
 - **Emergency Response Sheet/Trouble Shooting Guide**. This is also a two-sided form. Each **Emergency Response Sheet** contains information vital to your utility and community to respond quickly in case of that specific emergency. The information requested, such as names, telephone numbers, etc. may already be recorded in your files, and can just be transferred to the appropriate sheet. The **Trouble Shooting Guide** on the back side of each **Emergency Response Sheet** contains a series of Yes/No statements to help your utility determine the scope of each emergency and to think about the people, materials, and equipment that will be needed for response or recovery.
 - **Response/Recovery To Do List** will help you prepare a list appropriate for your utility in response to, or to recover from, a specific emergency. For example, a water main break at your utility may require you to discontinue water service to several critical customers. On the corresponding Response/Recovery To Do List, you should note to restore water service to those customers, and check for further damage to the main.
4. Complete the **Training Plan** form. This form will outline the strategies for training employees and other members of the Emergency Response Team in their roles and responsibilities during an emergency. Include information about the individuals assigned to respond to each specific task in each particular emergency and the training they'll need to become proficient at each assigned task. Also include information about the trainer, the type of training that will be received, when it will occur, and how effective and informative the training session was (does the individual know what to do and how to do it).

When completing all forms, it is important to remember that enough information must be provided to allow someone in a back-up capacity to function in an emergency. The regular staff person or designated team member may be on vacation, ill, or otherwise unavailable when an emergency occurs.

Water Supplier General Information Sheet

Instructions

The *Water Supplier General Information Sheet* is to be used to list important information about the water utility, who to contact for direct response and support during an emergency, and to list your utility's critical water users.

In the *Utility name* section, fill in the appropriate response with regard to your water utility's:

- *Public water supply ID number (PWSID)* - the Iowa Department of Natural Resources issues this number.
- *Water source* - check the box that describes your utility's raw water source.
- *Population served* - fill in the population number your utility serves.
- *Water storage tank capacity* - enter storage capacity in gallons.
- *Average daily pumpage* - enter the average daily pumpage in gallons per day.

In the *Treatment process* section check the applicable process types for your water utility.

In the *Emergency telephone notification listing* section, fill in the appropriate responses in as much detail as possible, including daytime and after-hours phone numbers for:

- *Basic Emergency Response Team* - list the personnel who are employed by your utility or in the community who would be directly involved in responding to an emergency.
- *Officials outside the utility* - list the support agencies and personnel who can be called for direct assistance in responding to recover from an emergency.
- *Contracted services/supplies* - list the companies, vendors, lab services, contractors, suppliers frequently used by your utility.
- *Utilities* - list the utilities that provide power, gas or general communication services for your water utility.
- *Mutual aid coordination* - list the communities that have entered into an agreement with your water utility to provide equipment, water or materials in an emergency.
- *Critical water users* - list the users in the service area that require a continuous water supply in an emergency. Also include what the water is used for and the volume that is needed.

Water Supplier General Information Sheet

Utility name:				Date:		
Public water supply ID number (PWSID)	Water source	Population served	Water storage tank capacity (gallons)	Average daily pumpage (gallons per day)		
	<input type="checkbox"/> Surface <input type="checkbox"/> Groundwater					
Treatment process						
Iron removal	<input type="checkbox"/> Yes <input type="checkbox"/> No	Chlorination	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Coagulation, sedimentation, filtration	<input type="checkbox"/> Yes <input type="checkbox"/> No	Fluoridation	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Softening	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Emergency telephone notification listing						
Positions	Name	Work	Pager	Cellular	Fax	Home
Basic Emergency Response Team						
Emergency Coordination						
Public Communication						
Operations Management						
Damage Assessment						
Officials outside the utility						
Fire department						
Police/Sheriff						
County Emergency Coordinator						
State Office of Emergency Management		515-281-3231				
IDNR - Field Office						
Department of Transportation						
Contracted services/supplies						
Plumber						
Electrician						
Well driller						
University Hygienic Lab (UHL)		319-335-4500				

Contracted laboratory						
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Contracted services/suppliers						
Positions	Name	Work	Pager	Cellular	Fax	Home
Engineering firm(s)						
Water storage tank manufacturer						
Property & casualty insurance						
Materials & equipment						
Chemicals						
Fuel						
Utilities						
Iowa One-Call						
Power company						
Gas company						
Telephone						
Radio/Cellular						
Mutual aid coordination						
Equipment						
Water						
Materials						
Critical water users						
Health care						
Critical use:					Volume:	
Nursing home						
Critical use:					Volume:	
Public shelter						
Critical use:					Volume:	
Other						
Critical use:					Volume:	

Failure Analysis Instructions

The *Failure Analysis* is used to assess your utility's risk and ability to respond quickly in any emergency. Think about your operation, your community and surrounding communities to determine what types of emergencies your utility needs to plan for, what impacts those emergencies will have on your utility, and who to call for help.

In the *Emergency type* section, consider these four elements in your answers:

- **Historical**
List the types of emergencies that have happened in the past -- fires, severe weather, power outages, hazardous material spills, water quality problems, etc. Think about the number of occurrences and identify hazards that have happened in nearby towns that could occur in your town, too.
- **Location**
Consider the location of your facilities. Determine if they are located in areas that often flood or near companies that produce, store, use or transport hazardous materials.
- **Physical facilities**
Decide which buildings or structures could be affected. Think about what effects the emergency will have on telephone or radio communications, and computer systems.
- **Human error**
Human error is the single largest cause of workplace emergencies and can result from poor training or by using equipment in the wrong way. Fatigue and stress can also contribute to human error.

In the *Frequency* section, rate the likelihood of each emergency happening, or the length of time each emergency will go on, using a scale of 1 to 5. Use a rating of 1 for emergencies that might occur infrequently, for example, once every 10-15 years. And, when they do occur, will only last for a short period of time. Use a 5 rating for emergencies that are very likely to occur, for example, one or more times every five years. Again, think about the duration of the emergencies. The extended loss of a critical piece of equipment, chemical feed system, or water storage may influence the frequency rating for a particular emergency.

In the *Health, Property and Business* sections, determine the impact the emergency has on your water utility's individual and commercial users, again using a scale of 1 to 5, with 1 having the lowest (or least destructive) and 5 having the highest (or most destructive) impact.

- **Health**
If people might get sick, or even die, rate it a 5. If the emergency would put people out of water for 1-2 hours, rate it a 1.
- **Property**
If property could be lost or destroyed, rate it a 5. If property has minor damage that can be repaired, rate it a 1. Think about the cost of replacing or repairing equipment, and the likelihood that your facility will need to be rebuilt following a particular emergency.
- **Business**
If the emergency causes the business to close due to lack of water, rate it a 5. If the business is inconvenienced for 1-2 hours, rate it a 1.

In the *Internal resources* and *External resources* sections assess and list the individuals, groups and businesses where you can get assistance and support. Resources include both people and materials. Use the same rating scale of 1 to 5, with 1 being your strong resources, and 5 being your weak resources. In each case, determine if your utility can respond with your own employees, or if outside individuals are needed, also.

- **Internal resources**
If your utility is able to respond to the emergency using its own staff and materials, even on a holiday weekend, rate it a 1. If your utility requires outside help to respond to the emergency, rate it a 5.
- **External resources**
If it would require only 1-2 hours for the external resources to respond with materials or staff to the emergency, rate it a 1. If it would require more than 24 hours to obtain the outside resources to respond to the emergency, rate it a 5.

In a major emergency, it's important to remember that some of your external resources may be needed elsewhere, and may not be available to you right away.

In the *Index rating* section add each row (across) to determine the final rating for each emergency.

Finally, in the *Ranking* section, prioritize the emergency types in numerical order, beginning with the highest index rating as first priority, followed by the next highest index rating as second, etc.

Place Index Divider Here
Chapter 3: Cross Connection

Things to Consider Before an Emergency

Chapter 3: Cross Connection

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the ***Mitigation To Do List***. To further decrease your utility's vulnerability, complete an ***Emergency Response Sheet***, ***Trouble Shooting Guide*** and ***Response/Recovery To Do List*** for each specific emergency.

- Do you have a plumbing and cross connection control ordinance?
- What type of cross connection control program is in place (i.e. containment, isolation)?
- Is there a list of customers (such as clinics, hospitals, water-using industries) with potential backflow problems?
- Are there customers on private wells?
- Is there a systematic inspection of customers with backflow prevention devices on new and existing installations?
- Is training provided for cross connection control?
- Is there a public awareness and information program?
- Are you aware of any facilities using chemical treatment systems that may be a cross connection hazard?

Mitigation To Do List

Required Action:

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	

Emergency Response Sheet Instructions

Cross Connection

As treated water is pumped from the treatment facility to the customer, it must be protected from contamination. One common means for such contamination is backflow of non-treated fluids through cross connection.

In the *Cross connection control program* section, indicate the control type that your municipality has in place.

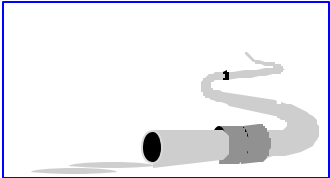
In the *Testing laboratory* section, enter the name, telephone number and address of the independent lab that your utility uses for testing and sampling.

In the *Customers with potential source of backflow* section, list those customers who have a cross connection control device. Also list the type of contamination possible.

In the *Backflow devices in utility* section, list the types, locations, and dates of installation for all devices.


In the *Active private wells* section, list those customers who have direct access and use private wells in conjunction with the public water supply.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.



Cross Connection

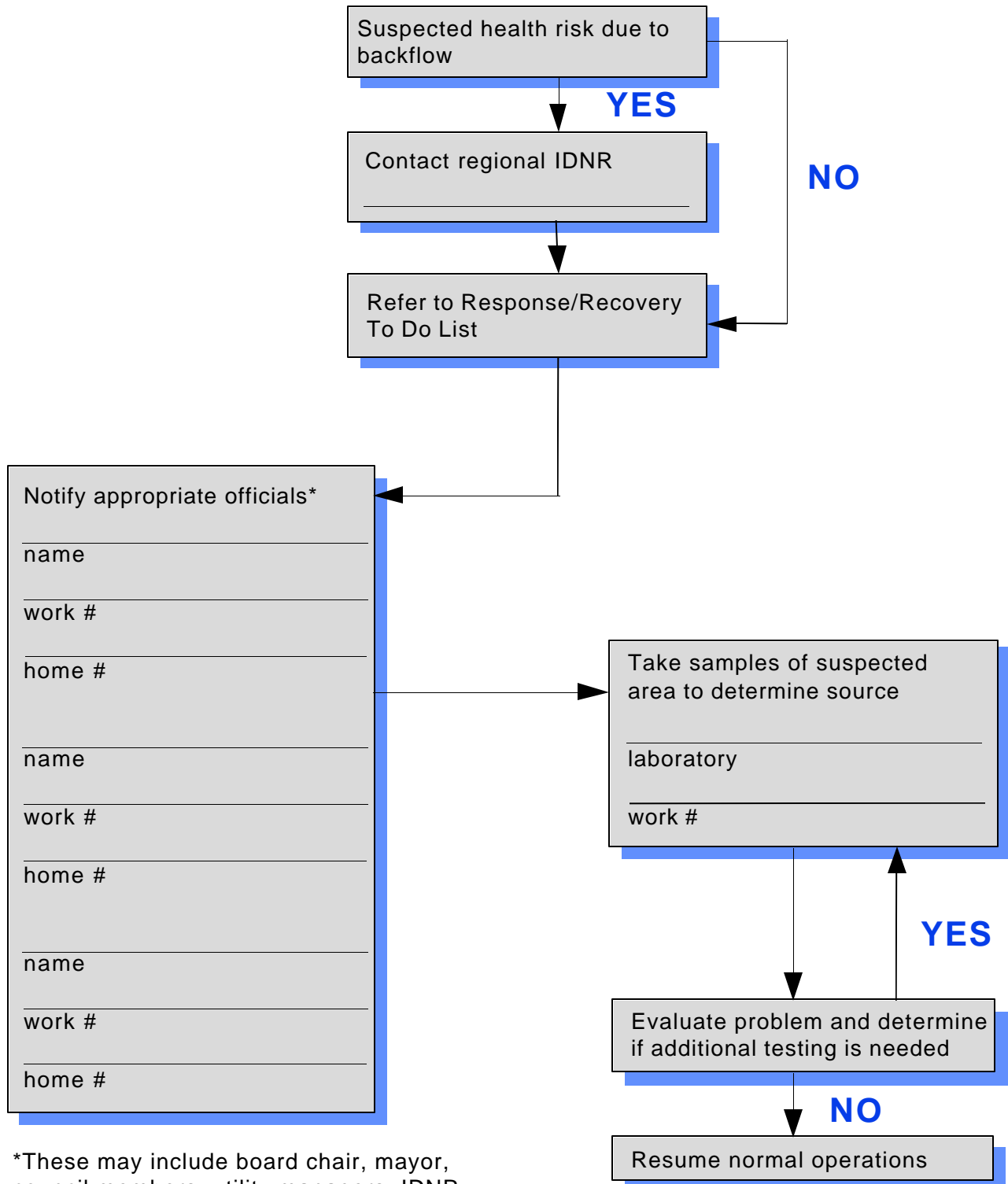
Cross connection control program	Testing laboratory			
<input type="checkbox"/> Containment <input type="checkbox"/> Isolation	Name	Telephone	Address	
Customers with potential source of backflow				
Name	Address	Telephone	Type of device installed	Type of contamination
Backflow devices in utility				
Type	Location		Date installed	
Active private wells				
Name	Location		Telephone	

 <p>CAUTION</p>	<p>WATER UTILITIES HAVE THE RESPONSIBILITY TO ENSURE THAT THE WATER SUPPLY IS PROTECTED FROM CONTAMINATION THROUGH THE TREATMENT PLANT AND WATER DISTRIBUTION SYSTEM. BECAUSE UTILITIES USUALLY CANNOT CONTROL WATER SYSTEMS AND USAGES ON PRIVATE PROPERTIES, A CROSS CONNECTION CONTROL PROGRAM IS IMPORTANT.</p>
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contamination
hazard

REMEMBER SAFETY FIRST

Trouble Shooting Guide



*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Cross Connection

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 4 Electric Power Failure

Things to Consider Before an Emergency

Chapter 4: Electric Power Failure

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- Where is the on-site main power disconnect?
- What are the power sources and their location?
- Is standby or duplicate power source available?
- What measures can be taken to protect on-site power source?
- Do motors have automatic shutdown to avoid voltage or phase fluctuation that may cause damage?
- If a generator is the standby power source, where is it stored?
Who knows how to operate the generator?
- Is there a lock-out/tag-out program?

Mitigation To Do List

Required Action:

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	

Emergency Response Sheet Instructions

Electric Power Failure

Pumps, motors, and other water system equipment depend on electrical power to operate. Electrical power components such as above ground lines, switchgear, transformers, and circuit breakers are vulnerable to numerous disasters. Voltage and phase fluctuations may damage motors. Downed power lines can create access problems. You may want to contact your electric power company to help fill in the top section of this form.

In the *Power supply* section, indicate if the power supply is three (3) phase or single phase.

In the *Primary volts* section, fill in the voltage for the primary side of the transformer.

In the *Secondary volts* section, fill in the voltage for the secondary side of the transformer.

In the *Primary fuse/breaker (amps)* section, list the primary or high service amperage listed on the transformer.

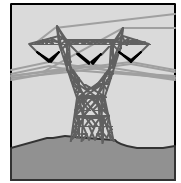
In the *Secondary service (amps)* section, list the secondary or low service amperage listed on the transformer.

In the *Circuit number* section, enter the circuit number or service number for your facility.

In the *Customers on same service*, list those customers who are connected to each of the phases serving your facility.

In the *Diagram of electric service* section, make a sketch that reflects your utility's electrical service.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.



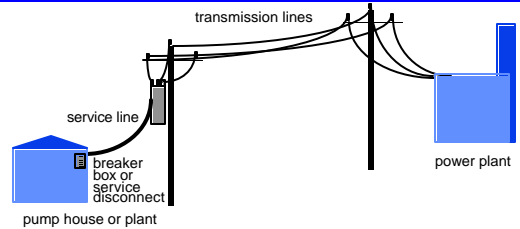
Electric Power Failure

Power supply	Primary volts	Secondary volts	Primary fuse/breaker (amps)	Secondary service (amps)	Circuit number
<input type="checkbox"/> 3 phase <input type="checkbox"/> single phase					

Customers on same service

Phase A	Phase B	Phase C
Name	Name	Name
Address	Address	Address
Telephone number	Telephone number	Telephone number

Diagram of electric service



CAUTION

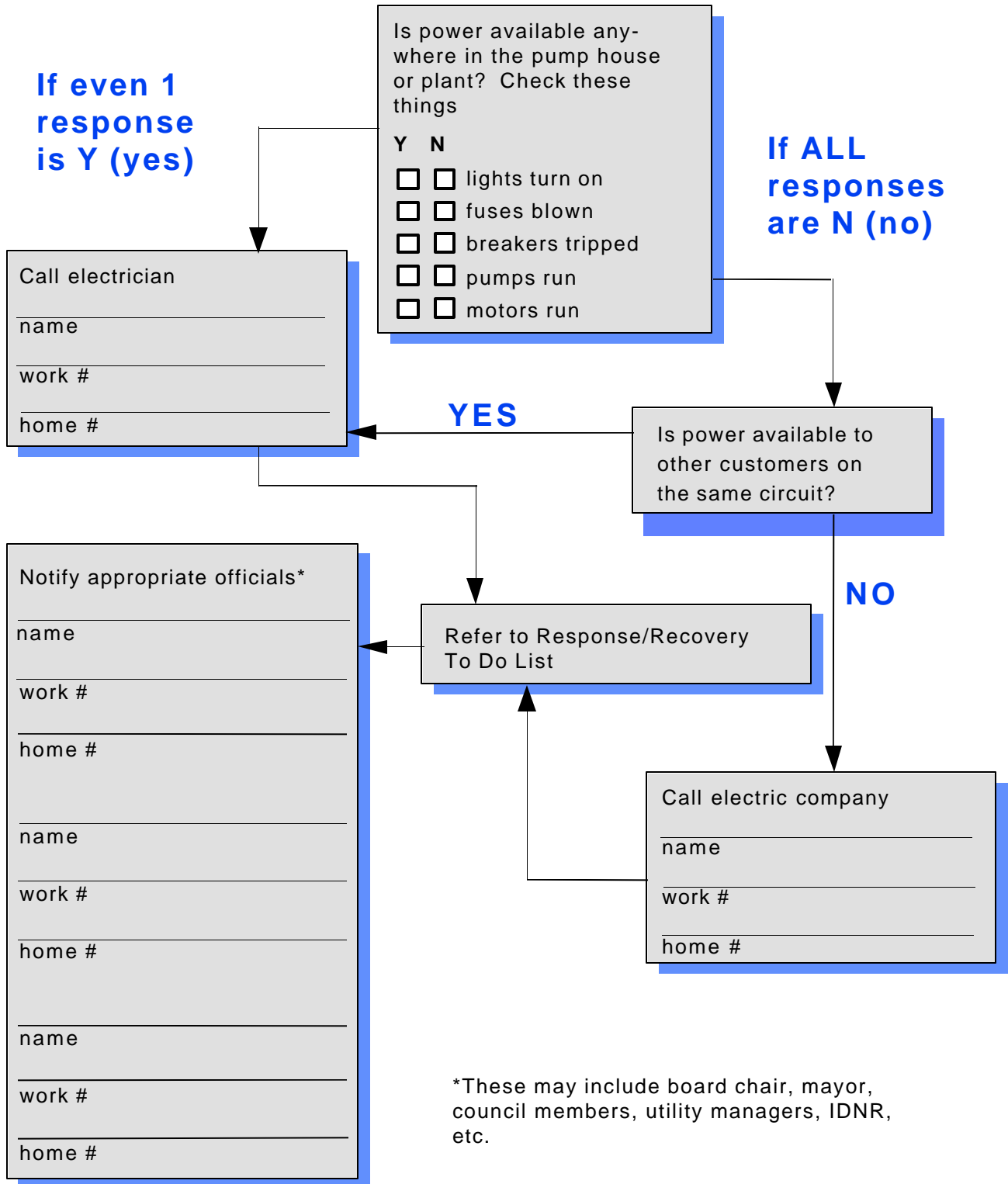


TO REDUCE THE RISK OF ELECTRIC SHOCK AND FIRE, USE EXTREME CAUTION . . . ELECTRICITY CAN BE DANGEROUS. DO NOT ATTEMPT TO SERVICE EQUIPMENT BY YOURSELF. OPENING OR REMOVING COVERS MAY EXPOSE YOU TO DANGEROUS VOLTAGE OR OTHER HAZARDS. IF YOU ARE UNFAMILIAR WITH THE ELECTRICAL SYSTEM, PLEASE CONTACT QUALIFIED SERVICE PERSONNEL.

shock hazard

REMEMBER SAFETY FIRST

Trouble Shooting Guide



Response/Recovery To Do List

Electric Power Failure

Required Action:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____

Comments:

Blank area for comments.

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Chapter 5 Equipment Failure

Things to Consider Before an Emergency

Chapter 5: Equipment Failure

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- Is critical equipment inspected at least once a month?
- Is a log card or record system used to detail inspections, maintenance required, and the general operating condition of each piece of critical equipment?
- Are the following items checked during a motor and pump inspection?
 - Cleanliness
 - Alignment and balance
 - Temperature, lubrication
 - Bearings, vibration, noise, current
 - Connections, switches, circuitry(Are electrical circuits de-energized and "locked out" before any inspection and maintenance is performed?)
- Are the critical parts of the water treatment processes, which can fail, known (i.e. iron removal, filtration, chlorination)?
- What replacement parts are needed for major components in critical equipment?
- Do you have replacement equipment and parts on hand? If not, are they readily available? (Overnight availability may be sufficient.)

Mitigation To Do List

Required Action:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____

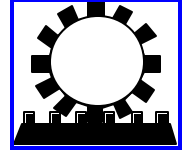
Emergency Response Sheet Instructions

Equipment Failure

Equipment such as pumps, motors and chemical feeders are vital in the operation of providing quality drinking water. In order to ensure equipment reliability, a preventive maintenance program should be set up for each piece of equipment. In addition to the preventive maintenance program, detailed records on major parts, who supplies these parts in inventory, and their availability should be maintained.

In the *Critical equipment* section, list the location of the equipment, the location of the equipment manual, the equipment's manufacturer, make, model, type and capacity of each piece of equipment.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.




Equipment Failure

Critical equipment			
	Equipment piece #1	Equipment piece #2	Equipment piece #3
Name of equipment			
Location of equipment			
Location of equipment manual			
Manufacturer			
Make			
Model			
Type			
Capacity			

Critical equipment			
	Equipment piece #4	Equipment piece #5	Equipment piece #6
Name of equipment			
Location of equipment			
Location of equipment manual			
Manufacturer			
Make			
Model			
Type			
Capacity			

CAUTION



shock hazard

FOLLOW PROPER LOCK-OUT AND TAG-OUT PROCEDURES. IF EQUIPMENT IS IN A WELL OR PIT, FOLLOW PROPER CONFINED SPACE SAFETY PROCEDURES.

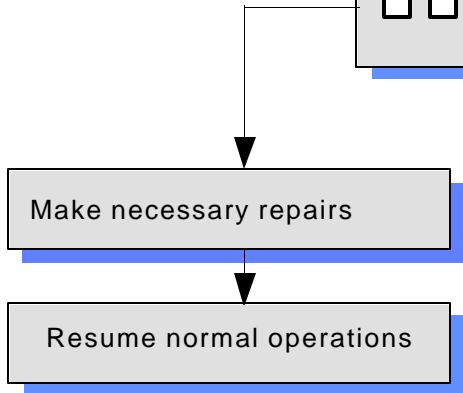
REMEMBER SAFETY FIRST

Trouble Shooting Guide

If ALL responses are Y (yes)

If ANY response is N (no)

An equipment failure has occurred
Y N
 repair/spare parts or backup equipment readily available
 staff can make repairs
 water storage adequate until repairs made



Is there potential threat to water quality?

YES

NO

Contact regional IDNR

Refer to Response/Recovery To Do List

Call alternate water supplier

 Call mutual aid agency(ies)

Notify appropriate officials*

name

 work #

 home #

name

 work #

 home #

name

 work #

 home #

Call contractor
 name

 work #

 home #

*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Equipment Failure

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 6 Fire & Explosion

Things to Consider Before an Emergency

Chapter 6: Fire & Explosion

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- Has your facility been inspected by local fire department officials to identify potential fire hazards? Is there a list of all chemicals that are stored or used in your facilities? Where is this list stored?
- Are Material Safety Data Sheets (MSDS) available for each chemical used on site? Are employees aware of these chemicals and know where they are stored?
- Is Right-to-Know labeling posted for chemical storage?
- Have personnel been trained on the proper use of fire extinguishers and do they know the location of all fire extinguishers? Are routine checks performed to make sure the fire extinguishers are operable?
- Has an evacuation plan been prepared for each facility in an event of a fire? Is the plan posted in a place for all employees to see?
- Do you know the water pressure or flow rate at each fire hydrant at the plant or pump house?
- Do you know where your gas shut-off valve and electric disconnect are for each facility?

Mitigation To Do List

Required Action:
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.

Emergency Response Sheet Instructions

Fire & Explosion

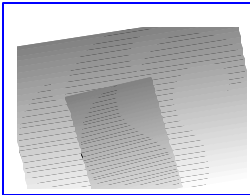
Any employee observing smoke or fire should notify other building occupants and evacuate the building immediately. Measures should be taken to insure everyone has vacated the building. Once outside, notify the fire department. Due to toxic fumes, employees should move to a designated area away from smoke.

In the *Telephone numbers* section of the **Emergency Response Sheet**, determine whether your utility is located within the 911 emergency access area. If it is not, fill in the appropriate telephone number for the fire, ambulance, sheriff and police departments for your area.

For each *Facility* section, list the location, associated water pressure, and flow of each hydrant. Next, list the location of the gas shut-off valve and electric disconnect for each facility. Then list the names of all chemicals stored on-site, as well as the location and quantity of each.

In the *Diagram of evacuation routes, shut-off valve and electrical disconnect locations* section, draw a sketch of your facilities that indicates evacuation routes, locations of gas shut-off valves and electric disconnects, and the chemical storage locations.

The **Trouble Shooting Guide** is located on the back of the **Emergency Response Sheet** and is designed to assist you in preparing your first plan of action.



Fire & Explosion

Telephone numbers			
Sheriff	Police	Fire	Ambulance
911 OR	911 OR	911 OR	911 OR

Facility:

Hydrants			Utilities		Chemicals stored		
Location	Pressure	Flow	Shut-off valve location	Electric disconnect location	Chemical name	Quantity	Location

Facility:

Hydrants			Utilities		Chemicals stored		
Location	Pressure	Flow	Shut-off valve location	Electric disconnect location	Chemical name	Quantity	Location

Facility:

Hydrants			Utilities		Chemicals stored		
Location	Pressure	Flow	Shut-off valve location	Electric disconnect location	Chemical name	Quantity	Location

Diagram of evacuation routes, shut-off valve and electrical disconnect locations

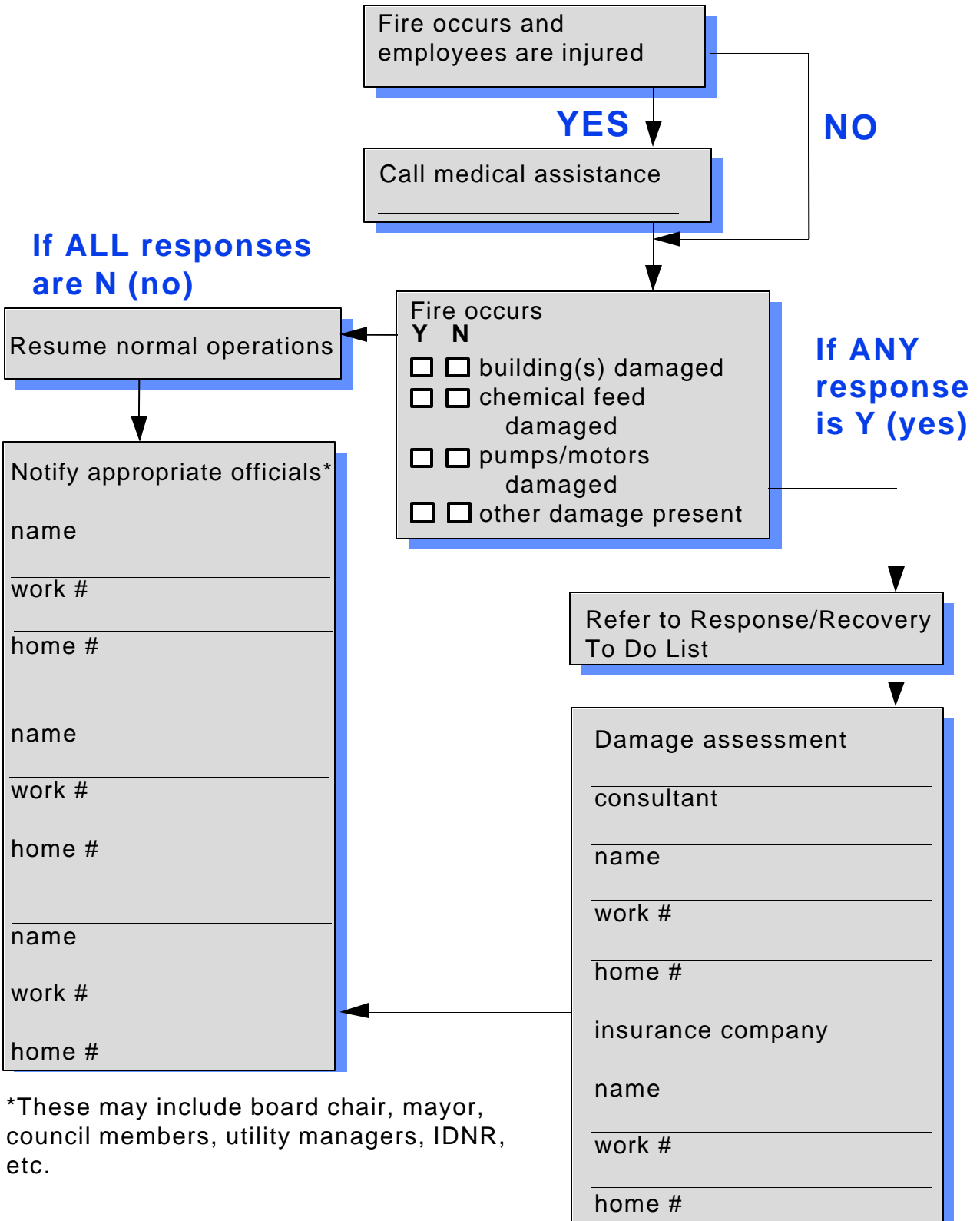
CAUTION

burn hazard

WHEN A FIRE ALARM SOUNDS OR A FIRE IS OBSERVED, NOTIFY OTHER BUILDING OCCUPANTS AND EVACUATE THE BUILDING IMMEDIATELY. REMAIN AT A SAFE DISTANCE AND DOWNWIND FROM THE FIRE. DO NOT ATTEMPT TO PUT THE FIRE OUT OR GO BACK INTO THE BUILDING UNLESS IT IS DEEMED SAFE TO DO SO.

REMEMBER SAFETY FIRST

Trouble Shooting Guide



Response/Recovery To Do List

Fire & Explosion

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 7 Flood

Things to Consider Before an Emergency

Chapter 7: Flood

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet, Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- What is the history of flooding in your area?
- What is the elevation of your facility in relation to stream and river levels?
- What is the elevation of the top of the well casing and how do you protect the well if it is in the flood plain?
- Is power source located in the flood plain and what measures are in place to protect it?
- Does staff know where to shut off power to each facility in the event the facilities are flooded?
- What equipment and materials (i.e. sand, sandbags, sump pumps) are needed to protect your facilities? At what water level are these operations required?
- Do you know the location, type and number of turns for critical isolation valves in the flood plain? How will they be operated during high water?
- How will chemicals and other supplies be delivered to your utility in a flood?
- Are there underground tanks in the flood plain that will need to be filled to prevent tank damage from flotation?
- Do you know what people are available to assist you with flood recovery?

Mitigation To Do List

Required Action:
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.

Emergency Response Sheet Instructions

Flood

If flooding is predicted following heavy thunderstorms or winter snow thaws, flood elevations should be monitored with the assistance of the sheriff/police and the National Weather Service. Constant monitoring of river or stream elevations will determine the procedures necessary to take for protection of property and personnel. In preparation for a flood, protection of facilities and equipment should begin early. All records and equipment, which can be moved, should be relocated to a higher location if they risk being flooded. Equipment and materials needed to combat flooding should be brought to the site.

In the *Rivers/Streams* section, record the rivers/streams that can flood on-site facilities and known flood stages for each.

In the *Monitoring* section, list the location of the monitoring device and method of monitoring (telephone and number, manual read, etc.).

In the *Structures* section, list the facilities that are in the flood plain and the known elevations, and list if they have sump pumps that need monitoring for high groundwater.

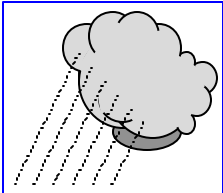
In the *Telephone numbers* section, fill in the telephone numbers of the agencies listed.

In the *Mobilization* section, list the people who would be notified to assist in protective measures, such as sandbagging operations or moving equipment and supplies to a safe area, and so on. The *Task assignment* section is to be filled in with the protective measure tasks assigned to that individual or group.

The *Critical valves* section is to be used to list the valves that would need to be operated during flooding conditions. These may be located near rivers or streams.

In the *Location of facilities and valve locations* section, draw in the river or streams that are prone to flooding, and draw in the facilities that would be affected by the flooding. Also include the major isolation valves.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.



Flood

Rivers/streams		Monitoring	
Name	Flood stage	Site	Method

Structures		Telephone numbers	
Location	Elevation	Sump pump	National Weather Service
		<input type="checkbox"/> Yes <input type="checkbox"/> No	USGS
		<input type="checkbox"/> Yes <input type="checkbox"/> No	Corps of Engineers

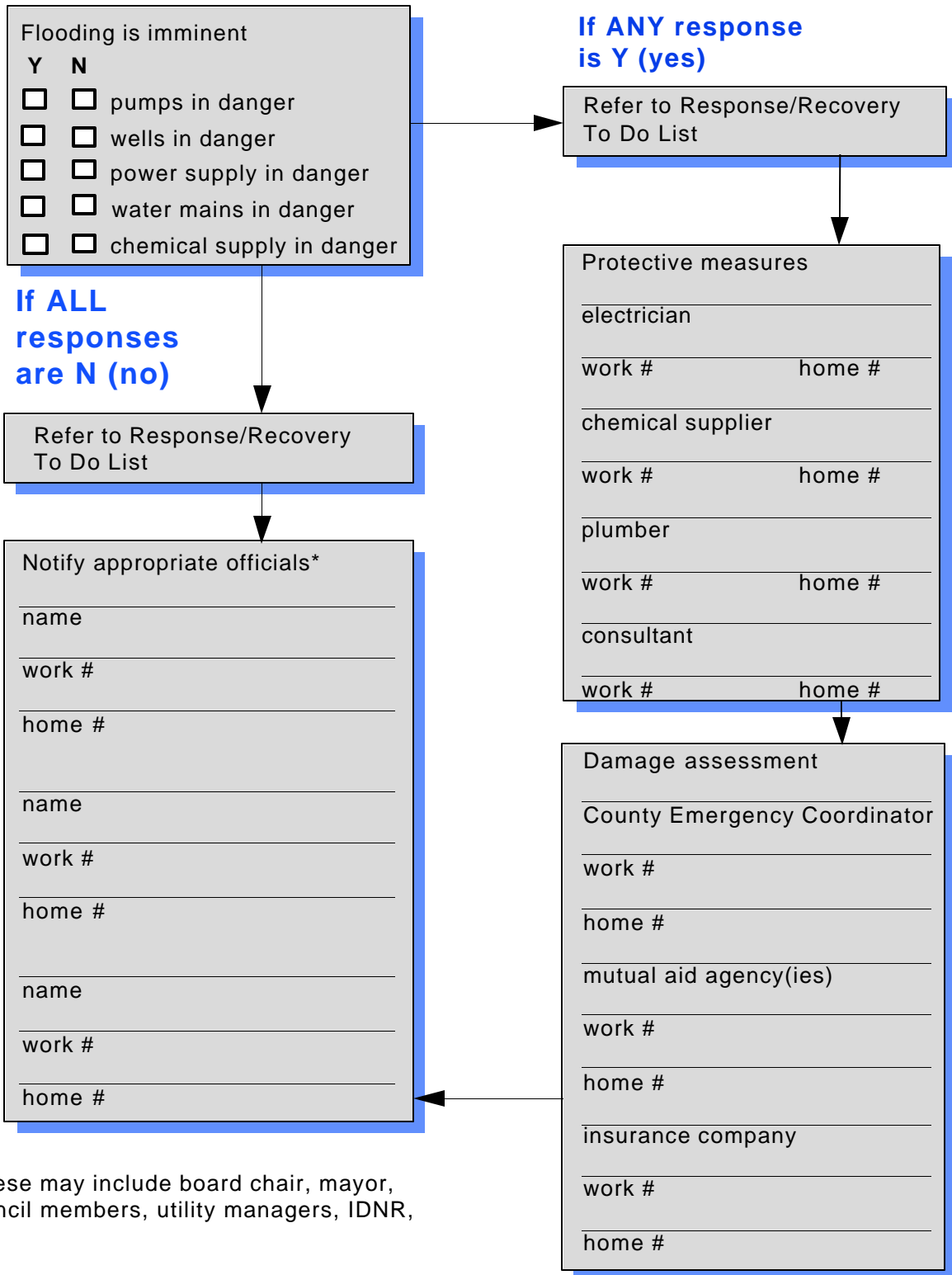
Mobilization			
Name	Home	Office	Task assignment

Critical valves			
Location	Type	Number of turns	Direction of turns



<p>CAUTION</p> <p>flood hazard</p>	<p>FLOOD WATERS ARE EXTREMELY DANGEROUS BECAUSE OF STRONG CURRENTS AND DEBRIS. USE EXTREME CAUTION WHEN ENTERING FLOOD WATER.</p> <p>REMEMBER SAFETY FIRST</p>
---	--

Trouble Shooting Guide



*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Flood

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 8 Hazardous Chemical Spill

Things to Consider Before an Emergency

Chapter 8: Hazardous Chemical Spill

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the ***Mitigation To Do List***. To further decrease your utility's vulnerability, complete an ***Emergency Response Sheet***, ***Trouble Shooting Guide*** and ***Response/Recovery To Do List*** for each specific emergency.

- Has the staff been trained in the proper use and hazard of each chemical?
- Is each facility identified as to the types of chemicals stored?
- Is there a facility layout sketch that shows where the chemicals are stored, including quantities?
- Does your utility or community have spill response equipment?
- Has the fire department been briefed on the types and quantities stored, and do they have a sketch of facilities?
- Is there a spill response program in place? Has staff been trained on how to respond to a spill?
- How is your utility notified if a chemical spill occurs?
- Do you know the hazardous chemicals used in your community which could pose a threat to your utility?

Mitigation To Do List

Required Action:

1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____
8.	_____
9.	_____
10.	_____
11.	_____

Emergency Response Sheet Instructions

Hazardous Chemical Spill

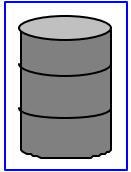
A chemical spill does not have to occur on-site to pose a threat to your utility. You need to be aware of the transportation routes and businesses that are adjacent to or near your facilities. When an on-site spill occurs, identify the substance and quantity without endangering employee health and safety.

In the *Telephone number* section, enter the telephone numbers for the fire department, the sheriff/police, and the County Emergency Coordinator. Also, the Iowa Department of Natural Resources needs to be notified in the event of a spill. The National Response Center is a federal agency that can provide assistance. Chemtrec is a private agency that can provide technical information regarding chemical handling.

In the *Chemicals in use* section, list the chemicals on hand, their location, quantity, hazard potential, the type of personal protection equipment required and any special instructions regarding those specific chemicals.

In the *Chemical locations* section, diagram where your chemicals are stored, what they are, and how much of each is stored there.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.



Hazardous Chemical Spill

Telephone numbers					
Fire department		Sheriff/Police		County Emergency Coordinator	
IDNR		National Response Center		Chemtrec	
515-281-8694		1-800-424-8802		1-800-424-9300	
Chemicals in use					
Chemical	Location	Type of storage	Potential type of release	Personal protective equipment recommended	Special instructions

Chemical locations

The diagram illustrates the layout of various chemical storage and usage areas. Key locations include a parts wash tank, a flammable 200 lbs. container, a safety placard, an oxygen 200 lbs. container in the welding shop, three oxidizer cylinders, metal storage, a fabrication shop with five non-flammable cylinders, a carpenter shop, 150 lbs. of chlorine cylinders, east storage, and an underground fuel tank.

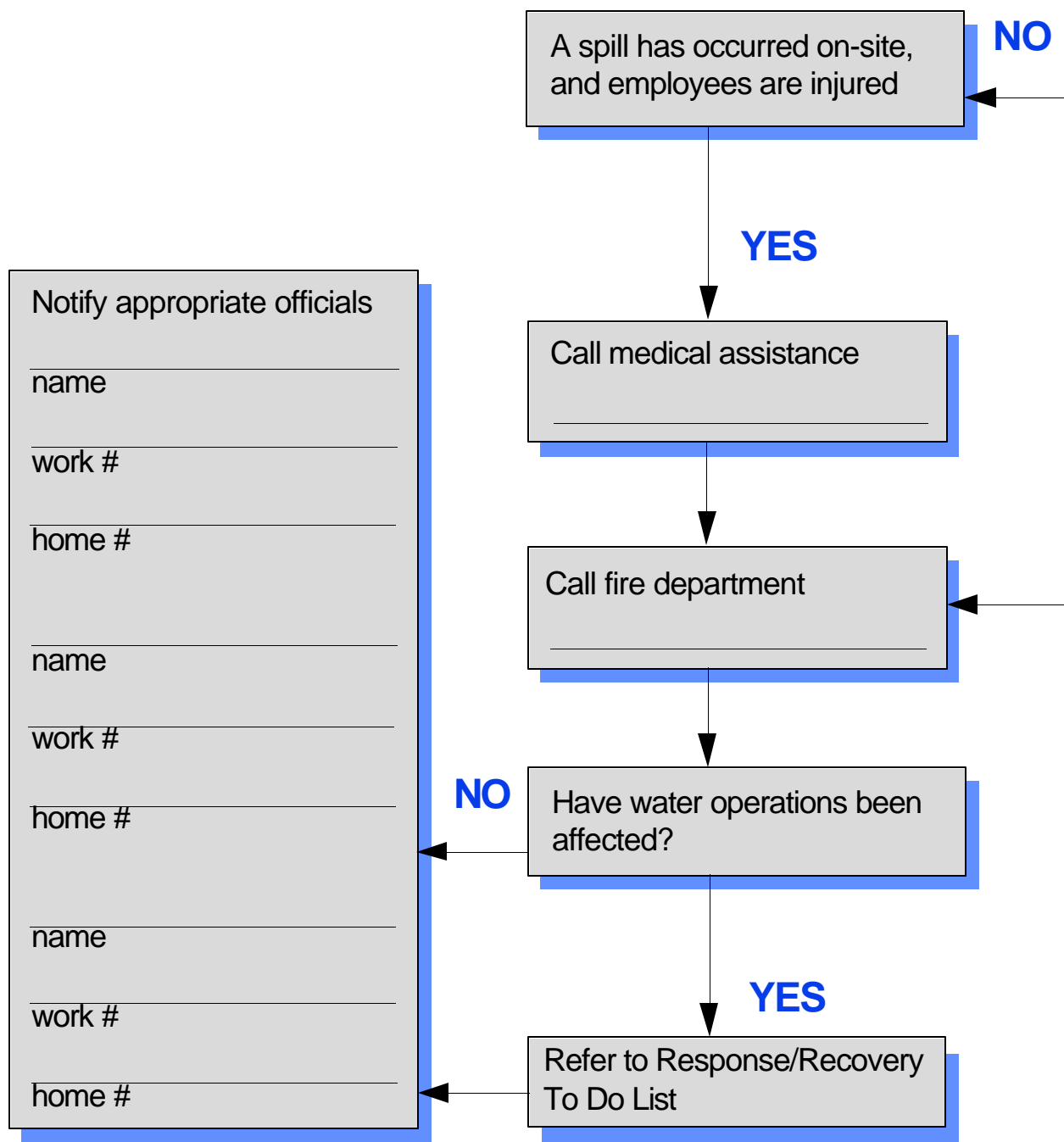
CAUTION

AS A RESULT OF A SPILL, TOXIC VAPORS OR GASES COULD BE GENERATED. STAFF SHOULD MOVE UPWIND TO AWAIT FURTHER INSTRUCTIONS AFTER NOTIFICATION OF APPROPRIATE PERSONNEL. DO NOT ATTEMPT TO CONTAIN THE SPILL IF YOU ARE NOT QUALIFIED TO DO SO.

REMEMBER SAFETY FIRST

chemical hazard

Trouble Shooting Guide



*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Hazardous Chemical Spill

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 9 Information Systems Failure

Things to Consider Before an Emergency

Chapter 9: Information Systems Failure

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- Is your control system physically isolated from external access? It is strongly suggested your control system be normally disconnected from external access.
- Is staff trained to identify suspicious control system behavior?
- Is there ability to and can your staff operate the water system manually?
- Are procedures in place for backing up the control system software regularly? Is the back-up medium stored off-site in a secured location?
- Are alarms in place to alert operators of system malfunctions, personal computer or other equipment failures?

Mitigation To Do List

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Emergency Response Sheet Instructions

Information Systems Failure

Information systems encompass personal computers, networks, automated control systems, programmable logic controllers and signal transmitting devices. Frequently these devices are connected to remote devices allowing the exchange of critical data which control pumps, chemical feeds, valves and other equipment.

When an information system device fails it may or may not send an alert to your operator. Employees should be trained to recognize and evaluate abnormal system behavior. If at all possible immediately switch the process to manual operation. Begin troubleshooting the system to find the failure.

It is critical to have back-ups made of the programming and software of control systems. The back-ups should be conducted regularly and immediately after major changes to the system. The back-ups should be stored off-site in a secured location.

The failure of an information system can occur due to the aging of equipment, computer related viruses or from hackers entering your system. It is extremely important to have all systems disconnected from external access such as the internet, until remote access is required by authorized persons.


In the *Telephone numbers* section, complete the information for Automated Systems Control vendors and the location of back-up medium.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.



Information Systems Failure

Telephone numbers			
Automated Control Systems Vendor			
Name of company	Contact's name	Work phone number	Home phone number
Software Back-up			
Name of Person	Location of Back-up	Name	Location



HACKERS

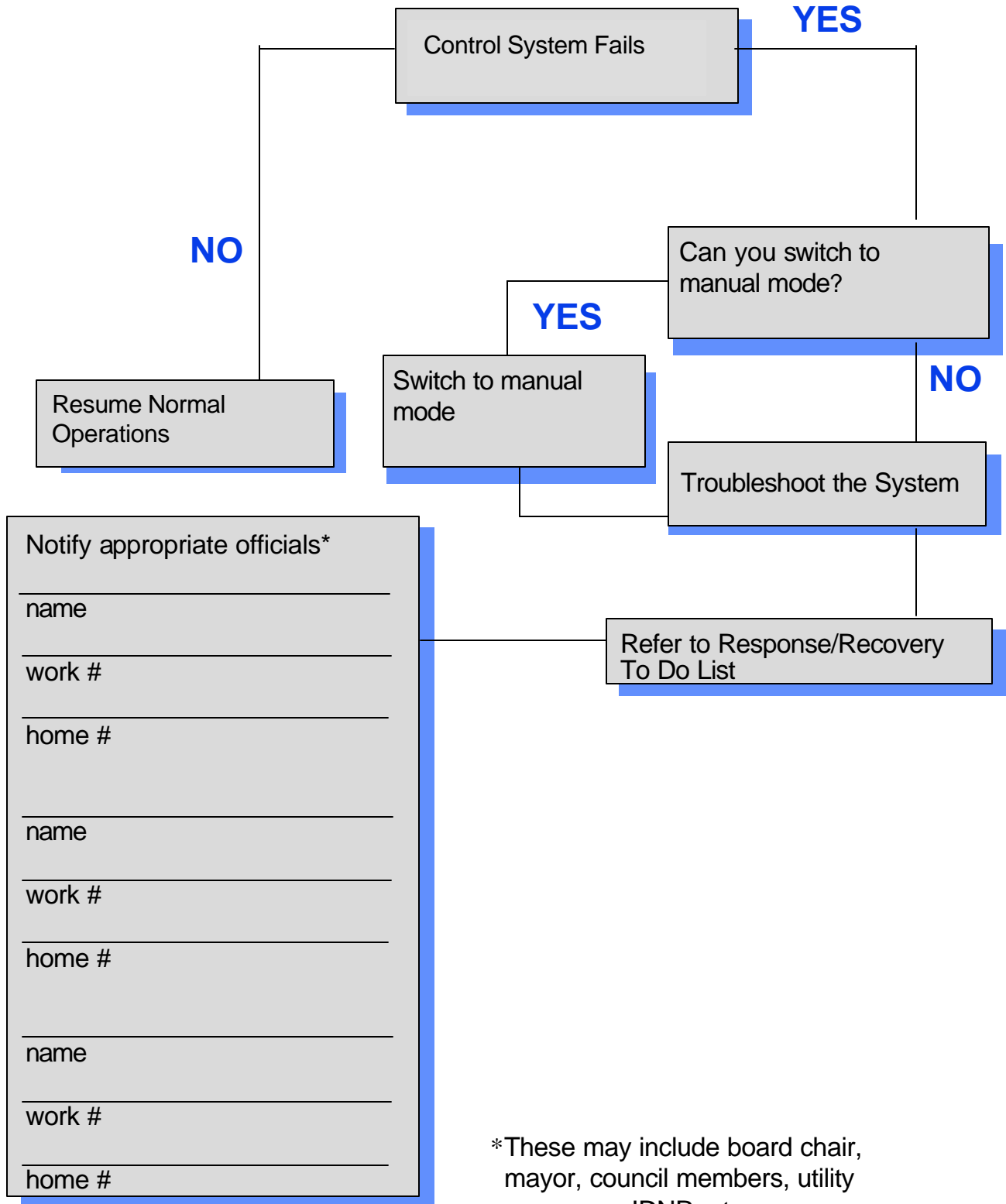
CAUTION

REGULARLY BACK-UP YOUR COMPUTER OPERATING SYSTEM AND ALL SOFTWARE. STORE THE BACK-UP IN AN OFF-SITE SECURED LOCATION.

BE PREPARED TO OPERATE A SYSTEM MANUALLY SHOULD A FAILURE IN THE CONTROL SYSTEM OCCUR.

NEVER HAVE A DIRECT CONNECTION ALLOWING EXTERNAL ACCESS TO YOUR CONTROL SYSTEM. PHYSICALLY CONNECT TO THE REMOTE ACCESS SOFTWARE PRIOR TO EACH TIME ACCESS IS REQUIRED.

Trouble Shooting Guide



*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Information Systems Failure

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 10 Medical

Things to Consider Before an Emergency

Chapter 10: Medical

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- Are first aid kits installed in facilities and equipment?
- Are staff trained in first aid/CPR?
- Does your staff know to provide the following information when calling for medical assistance:
 1. Location of facility (name and address).
 2. Phone number from which the call is being made.
 3. Type of emergency (fire, medical, chemical, vehicular).
 4. Extent of emergency.
 5. Do not hang up first; let the person you called hang up first.
- Have you identified a list of your utility's confined spaces and potential hazards, and depth at entry?
- Do you know if confined space has a "Confined Space Entry" permit?
- Have personnel been trained in confined space entry?
- Are you aware of the OSHA reporting guidelines in the event of a fatality or multiple hospitalization incident?

Mitigation To Do List

Required Action:
12.
13.
14.
15.
16.
17.
18.
19.
20.
21.
22.

Emergency Response Sheet Instructions

Medical

When a medical emergency arises it is very important that your response does not further endanger the victim or yourself. Do not administer first aid or CPR unless you have been properly trained. Only move the victim if a life-threatening situation exists. Unnecessary movement could result in increased severity of the injuries.

In the *Telephone numbers* section, determine whether your utility is located within the 911 emergency access area. If it is not, fill in the appropriate telephone number for fire (medical response), ambulance and IOSHA.

In the *Worker's compensation* section, record your utility's worker's compensation carrier and agent, and the agent's work and home phone numbers.

In the *Confined space* section, list confined spaces at your utility, their potential hazards, depth, and the size of the access opening. Also indicate if the confined space is permitted or non-permitted. Permitted confined space means that unremoveable hazards are present (hazards can be atmosphere, moving machinery, and converging walls, etc.). At least two people with proper equipment must be available before entry. Non-permitted confined space means that hazards do not exist or are controlled before entry.

In the *Chemicals* section, list the type and location of each chemical stored in your facilities.

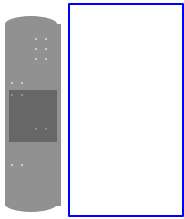
Use the *Family notification* section to list who should be contacted in case of a medical emergency.

In the *First aid kit and confined space locations* section, detail where first aid kits and confined spaces are located.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.

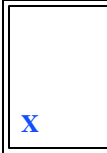
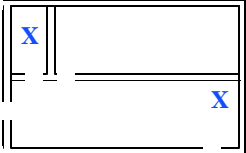
Emergency Response Sheet

Medical




Telephone numbers				
Fire	Ambulance	IOSHA		
911 OR	911 OR	1-800-562-4692 OR 1-515-281-5668		
Worker's compensation				
Name of company	Agent's name	Work phone number	Home phone number	
Confined space				
Location	Potential hazard	Depth	Access size	Permitted/Non-permitted
				<input type="checkbox"/> Permitted <input type="checkbox"/> Non-permitted
				<input type="checkbox"/> Permitted <input type="checkbox"/> Non-permitted
				<input type="checkbox"/> Permitted <input type="checkbox"/> Non-permitted
				<input type="checkbox"/> Permitted <input type="checkbox"/> Non-permitted
Chemicals				
Name	Location	Name	Location	
Family notification				
Employee name	Contact	Telephone	Address	

First aid kit and confined space locations

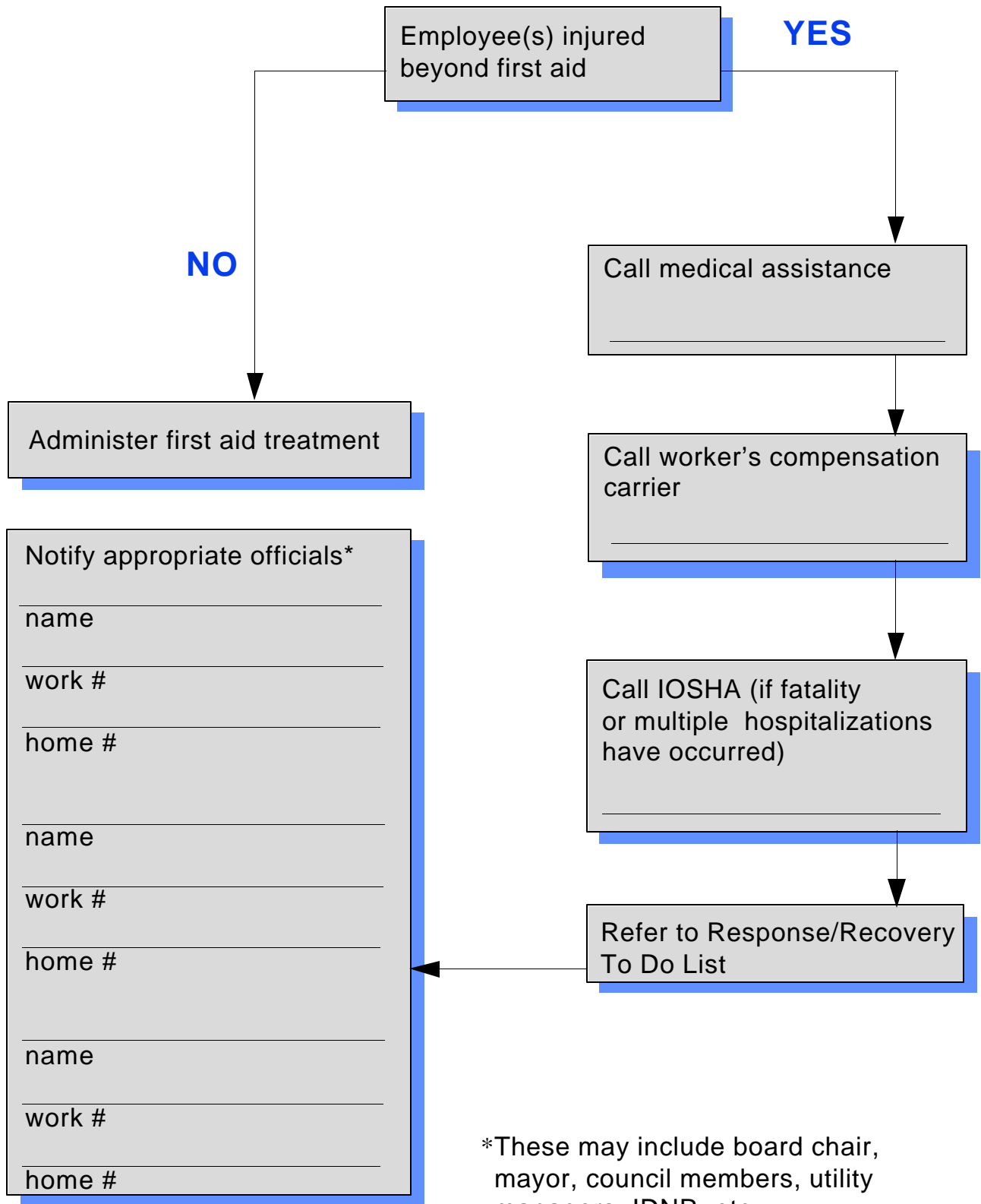
CAUTION



GET OR HAVE OTHERS GET MEDICAL ASSISTANCE TO THE SCENE. PROTECT YOURSELF FROM BLOODBORNE PATHOGENS.

IF THE PERSON IS IN A CONFINED SPACE, DO NOT ENTER THE SPACE TO PERFORM UNASSISTED INTERNAL RESCUE.

Trouble Shooting Guide



Response/Recovery To Do List

Medical

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 11 Personnel Succession

Things to Consider Before an Emergency

Chapter 11: Personnel Succession

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- Does your utility have a mutual aid agreement for personnel support?
- Is someone in the community cross-trained and evaluated as an operator?
- What is the telephone and address of the newspaper for personnel recruitment?
- Does the IDNR have a list of eligible candidates who can be recruited?
- Is there a local plumber or contractor available who can provide temporary manpower assistance?
- Will the contracted laboratory provide temporary testing and sampling assistance?

Mitigation To Do List

Required Action:

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	

Emergency Response Sheet Instructions

Personnel Succession

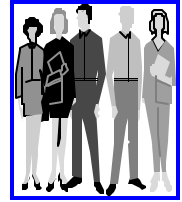
By law, a water utility must be operated by a certified operator. In the event of staff termination, a replacement needs to be found immediately. Cross-training among staff members can help to alleviate some of the problems caused when an operator leaves your utility.

In the *Mutual aid* section list organizations that can assist you by providing qualified personnel.

In the *Services* section, list newspapers where advertisements can be placed, laboratories where you can contract for sampling and testing services and plumbers, contractors, etc. who can provide you with temporary assistance.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.

Emergency Response Sheet




Personnel Succession

Mutual aid			
Name	Utility	Telephone	After-hours telephone

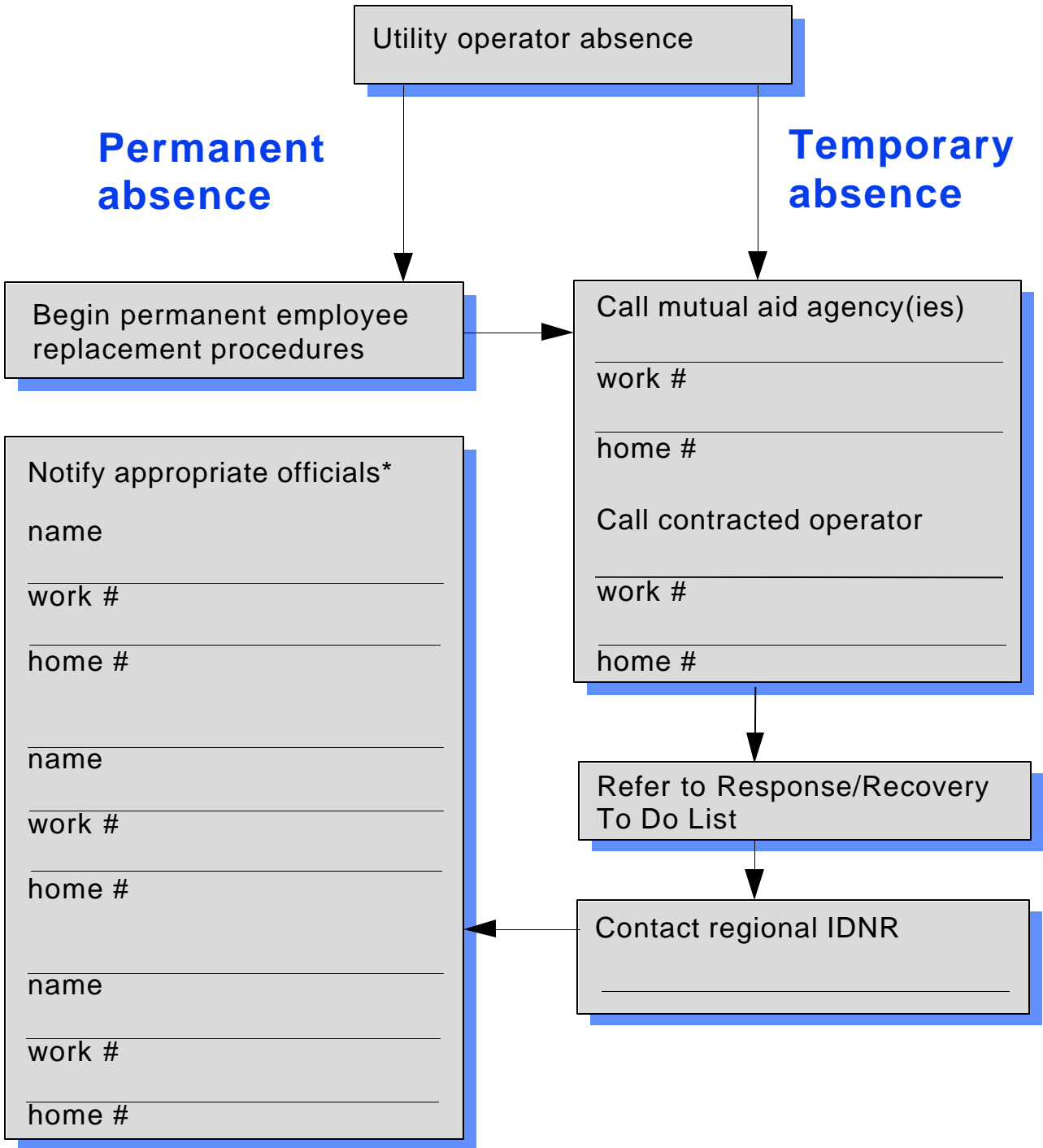
Services				
Services provided	Name	Company	Telephone	After-hours

Organizational chart 	Operator in charge grade required
	Shift operator grade required

CAUTION 	<p>WHEN EMPLOYEES NEED TO BE REPLACED, BE SURE YOUR TEMPORARY OR PERMANENT REPLACEMENT EMPLOYEES HAVE THE NECESSARY QUALIFICATIONS AND LICENSES, IN ORDER TO KEEP THE PUBLIC WATER SUPPLY SAFE.</p> <p>REMEMBER SAFETY FIRST</p>
---	--

necessary licensing

Trouble Shooting Guide



*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Personnel Succession

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 12 Terrorist / Vandalism

Things to Consider Before an Emergency

Chapter 12: Terrorism/Vandalism

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet, Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- Has your facility completed a Vulnerability Assessment (VA)?
- Has the risk analysis been analyzed for methods to reduce risk?
- Does your facility utilize a tiered security program that reflects the threat level of the Department of Homeland Security advisories?
- Have you addressed emergency procedures for contamination of your system? Do you have procedures in place to rapidly respond to complaints of taste and odor? See the chapter 15 of this plan titled Water Contamination.
- Has your facility analyzed electric power requirements and planned for alternative sources if the grid fails? See chapter 4 in this plan called Electric Power Failure.
- Has your facility addressed procedures for employees when threats are received? Threats can be directed at bombs, violence, contaminants, etc. See chapter 13 in this plan called Threats.
- Do you have a neighborhood watch program to keep citizens alert to people tampering with water system?
- Have all of your employees been trained in identifying suspicious individuals, addressing strangers, and emergency notification procedures?
- Have all of your employees been trained to identify and report acts of vandalism and terrorism?
- Do your hiring practices include pre-employment background checks?

Mitigation To Do List

Required Action:
1.
2.
3.
4.
5.
6.
7.
8.

Emergency Response Sheet Instructions

Terrorism/Vandalism

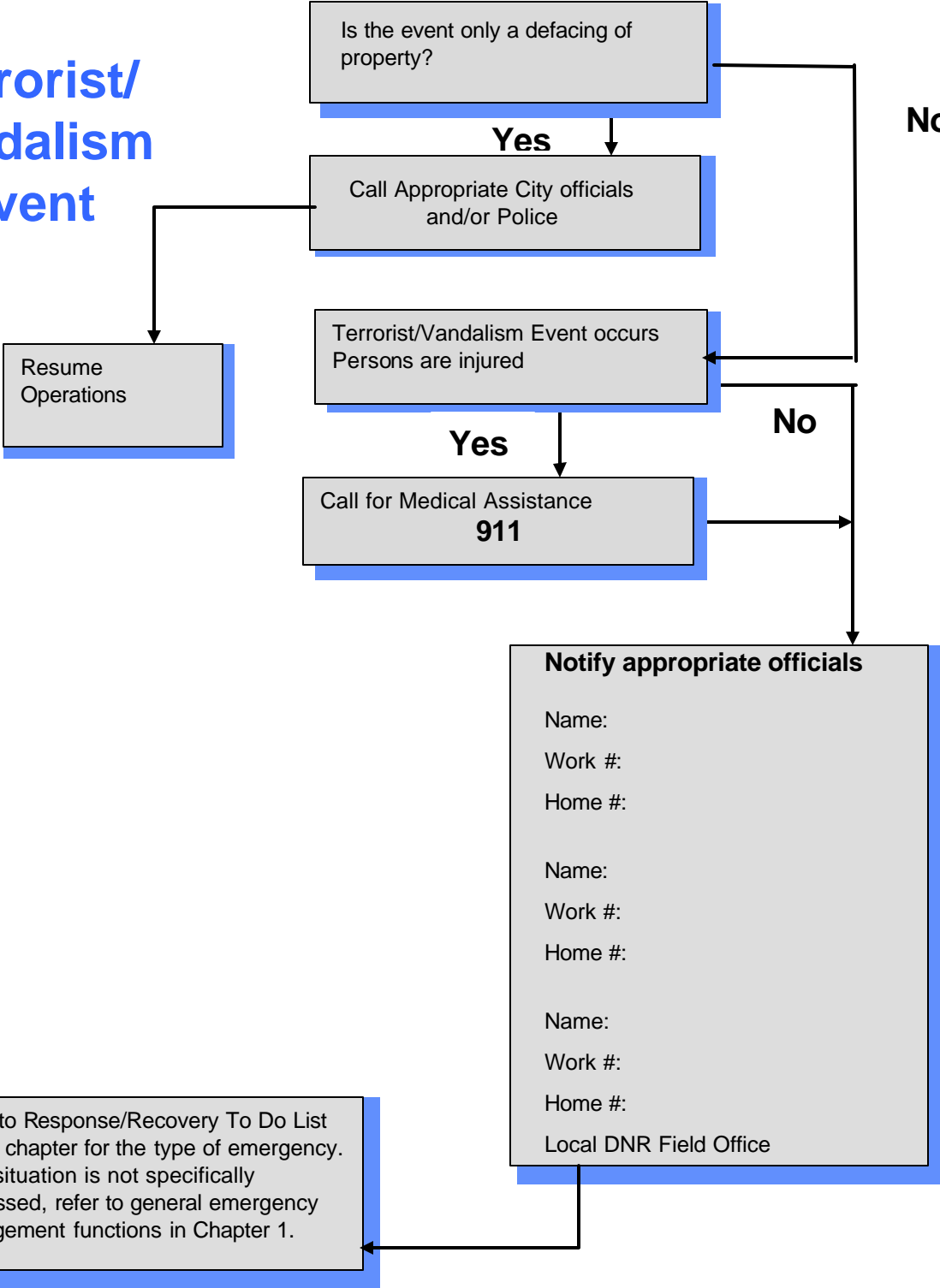
Terrorism Defined: An individual or a group with the motivation and capability for theft or sabotage of assets, or other malicious acts that would result in the loss of assets, destruction of consumer confidence, or illness/death of your customers. The act of terrorism can be a carefully executed plan that destroys your facilities or may be as simple as a phone call to the press indicating the presence of a contaminant in your water system. Your facility must have a plan to effectively deal with the situation.

Terrorists are classified into three groups of individuals; insider, outsider and vandals. Each group may have motives that are different but each can easily destroy equipment, disrupt your service or cause mayhem with your customer base. The attack itself, if physical, will create a situation similar to emergencies your facility has already planned for in other chapters. A terrorist may strike your power supply, damage equipment, or contaminate your water.

Your facility's Vulnerability Assessment will point out weaknesses in your system. These weaknesses should be the starting point of analyzing your risk and developing solutions to lessen the consequences of terrorism or vandalism. A well executed plan to mitigate these consequences can mean the difference of hours versus weeks when restoring water services within your system.

Telephone numbers				
Sheriff	Police	Fire	Ambulance	FBI
911	911	911	911	Omaha Region Office (402)493-8688

Terrorist/ Vandalism Event



Response/Recovery To Do List

Terrorism

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 13 Threats

Things to Consider Before an Emergency

Chapter 13: Threats

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- Has your facility addressed procedures for employees when threats are received? A threat can be related to a bomb, violence or contaminants in your water system.
- Who should be called when a threat is received?
- What are the procedures that deny access to unauthorized personnel?
- Do you have procedures for handling suspicious letters and packages?
- Are all packages and materials inspected before taken into critical areas?
- Are you aware of objects, items, or parcels which look out of place or suspicious?
- Can local law enforcement agencies help develop a response plan?
- Are good housekeeping practices maintained?
- Is there a threat checklist by the phone(s)?
- Is staff trained on how to respond to a threat?
- How will staff be alerted in the event of a threat?
- What evacuation procedures are in place for threats?
- Have you identified gathering points for employees based on various threats?

Mitigation To Do List

Required Action:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____

Emergency Response Sheet Instructions

Threats

A threat can be delivered in a variety of ways. Threats may be received by telephone, in person, mail or with suspicious packages left in an area. Threats may or may not include the location of the target, the time for detonation or release, or an ultimatum related to the release or detonation of the device. Bombs can be constructed to look like almost anything. Threats of contamination may or may not include the location of the possible contaminants. The raw water or finished water system could be attacked..

In the *Threatening Phone Call Checklist* section, record the date, time and content of a threat. Include descriptive information about the caller. Complete the information on who to notify, located near the bottom of the page. Keep the checklist available near frequently used telephones.

In the *Evaluation team* area list the names and telephone numbers of the team members who would be called to assess the threat.

In the *Public accessible areas to be searched* section list the facility(ies) and area(s) within the facility that need to be searched.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.

Emergency Response Sheet

Threats

Threatening Phone Call Checklist

Please follow the below procedures in the event you are the recipient of a threatening phone call. Try to keep the caller on the line to obtain as much information as possible. Remain calm and courteous. Listen; do not interrupt the caller. Record as much information as possible, including:

1. What kind of threat is posed? _____
- A. Contamination: *What kind of contaminant?* _____
How much? _____
- B. Physical Damage: *What kind of damage?* _____
What kind of device? _____
- C. Who is the threat directed at? _____
2. Where? _____
3. When? _____
4. Why? _____
5. By whom? _____
6. What is the (*caller's*) name? _____
7. What is the (*caller's*) affiliation, if any? _____
8. What is the (*caller's*) address/phone#? _____
9. What is the exact wording of the threat? _____

10. Is the caller ___ male ___ female ___ well spoken ___ illiterate ___ foul ___ irrational ___ incoherent ___ coherent
11. Is the caller's voice ___ calm ___ angry ___ slow ___ rapid ___ soft ___ loud ___ laughing ___ crying ___ deliberate ___ normal ___ slurred ___ nasal ___ clear ___ lisping ___ stuttering ___ deep ___ high ___ cracking ___ rational ___ emotional ___ excited ___ young ___ old ___ approx. age ___ familiar - *who did it sound like?* _____
___ accented – *what nationality, region?* _____
12. Is the connection clear? ___ (*Could it have been a wireless or cell phone?*) _____
13. Is there background noise? ___ Street noises? ___ *what kind?* _____
___ Machinery – *what type?* _____
___ Voices - *describe* _____
___ Children – *describe* _____
___ Animals-*what kind?* _____
___ Computer keyboard/office _____
___ Music – *what kind?* _____
___ Trains ___ Airplanes ___ Party atmosphere ___ Quiet
___ Other _____

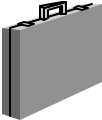
Name of person receiving call: _____ Date: _____ Time: _____ (a.m.) (p.m.)

Notification Personnel

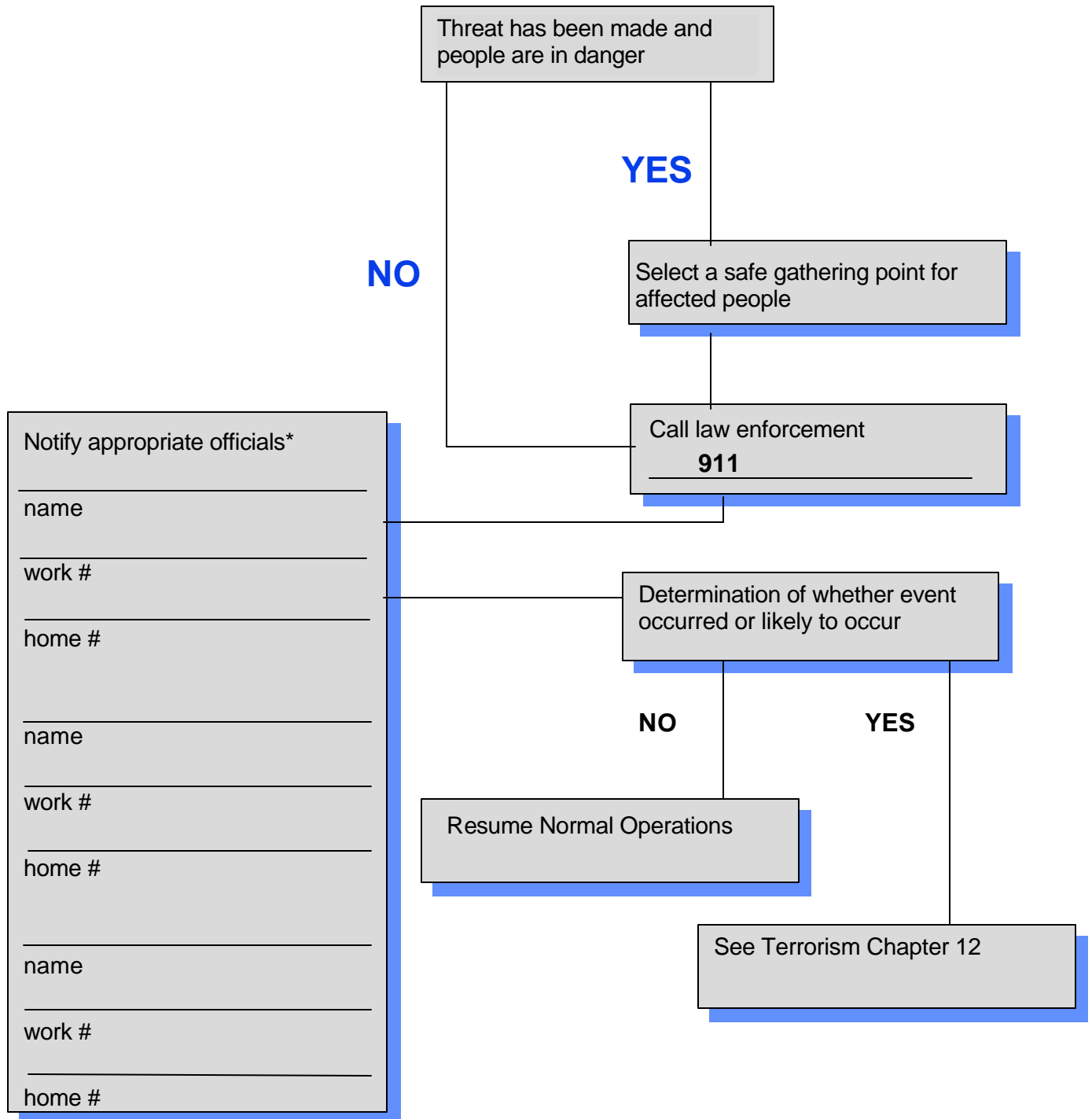
Water Dept. Manager: work phone number, cell phone number

Police 911

Telephone numbers			
Sheriff	Police	Fire	Ambulance
911	911	911	911
Evaluation team		Public accessible areas to be searched	
Name	Telephone		

<p>CAUTION</p>  <p>explosion hazard</p>	<p>WHEN SEARCHING FOR A BOMB, SUSPECT ANYTHING THAT LOOKS UNUSUAL. LET A TRAINED BOMB TECHNICIAN DETERMINE WHAT IS OR IS NOT A BOMB. DO NOT REMOVE, MOVE, OR HANDLE THE BOMB, OR SUSPECTED OBJECT ONCE IT HAS BEEN DISCOVERED.</p> <p>DO NOT USE RADIOS, REMOTE TELEPHONES OR ANY CELLULAR OR PORTABLE EQUIPMENT THAT USES RADIO FREQUENCIES IN THE VICINITY OF THE BOMB THREAT.</p> <p>REMEMBER SAFETY FIRST</p>
---	---

Trouble Shooting Guide



*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Threats

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 14 Thunderstorm & Tornado

Things to Consider Before an Emergency

Chapter 14: Thunderstorm & Tornado

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- What notification procedures are in place for alerting the community of severe weather? Who initiates the alarm? How is your utility notified?
- Where is the activation alarm located?
- What procedures are used to notify employees of severe weather conditions?
- Where are the designated "safe" shelter areas in your facility? Interior rooms and hallways away located on the lowest level, away from windows, equipment or hazardous materials, are best.
- Are there employees trained who can administer first aid? Who will call for medical assistance if required?
- How will existing weather conditions be monitored? Is scanner or weather radio equipment available?
- Do all personnel know the difference between a "watch" and a "warning" condition?

Mitigation To Do List

Required Action:
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.

Emergency Response Sheet Instructions

Thunderstorm & Tornado

When notified of a severe thunderstorm, all employees should seek the nearest protected area. Protected areas could consist of a vehicle, a building or any sound structure that would protect the employee from the elements.

In a tornado warning situation, once the Civil Defense Alarms are sounded, the employee should seek the nearest available public shelter and exit all vehicles.

In the *Employee notification* section, list the procedures to follow when the severe weather alarm is sounded.

In the *Telephone numbers* section, list the agencies and their telephone numbers that can provide direct forecasts.

In the *Diagram of shelter areas* section, draw a sketch of your facility and showing the shelter areas are.

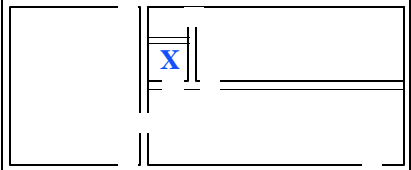
The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.




Thunderstorm & Tornado

Employee notification			
Thunderstorm warning	Tornado watch		Tornado warning
Telephone numbers			
National Weather Service		Sheriff/Police	

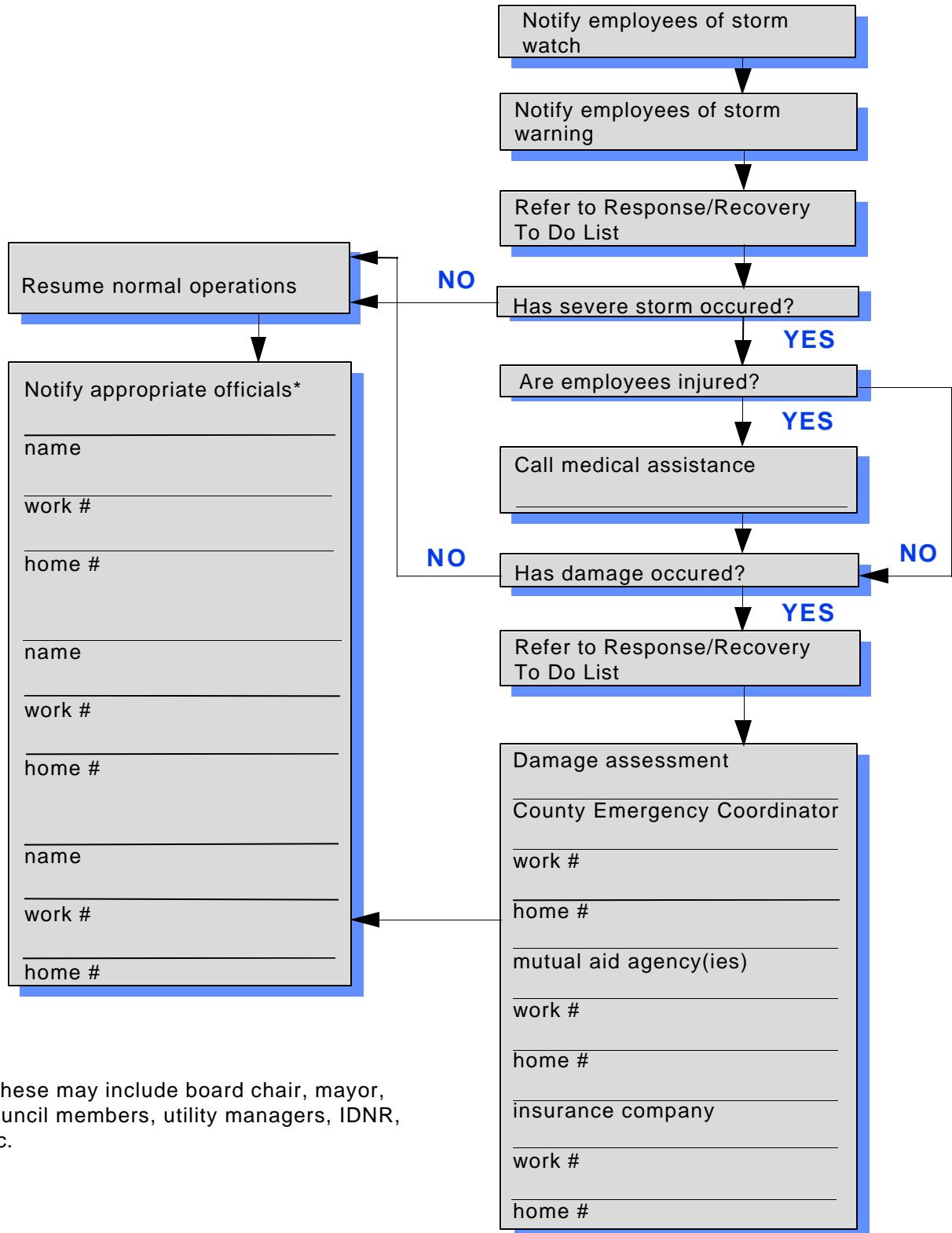
Diagram of shelter areas



CAUTION THUNDERSTORMS AND TORNADOES CAN CAUSE INJURY AND DAMAGE FACILITIES. STAY TUNED TO WEATHER CONDITIONS DURING SEVERE WEATHER INCIDENTS. WHEN A TORNADO WARNING IS SOUNDED, PROCEED TO THE NEAREST SHELTER AREA. STAY IN THE SHELTER AREA UNTIL THE **ALL CLEAR SIGNAL** IS GIVEN.



Trouble Shooting Guide



Response/Recovery To Do List

Thunderstorm & Tornado

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 15 Water Contamination

Things to Consider Before an Emergency

Chapter 15: Water Contamination

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the ***Mitigation To Do List***. To further decrease your utility's vulnerability, complete an ***Emergency Response Sheet***, ***Trouble Shooting Guide*** and ***Response/Recovery To Do List*** for each specific emergency.

- Is there a public notification plan?
- Do you have a listing of all major highways and railways in your area?
- Is there a list of your utility's treated water quality information?
- Is there a list of alternate sources of treated water?
- Is staff trained in the proper techniques of providing quality water in case of a contaminated water situation?
- Do you have a list of water haulers?
- Have you made mutual aid agreements with any neighboring communities?
- Are you aware of possible contaminants in the surrounding area that influence the quality of your raw water source(s)?
- Do you have a list of water sampling and testing laboratories?
- Is your staff trained in proper sampling and testing techniques?
- Does your staff have an understanding of what needs to be done if your water storage or distribution systems become contaminated?

Mitigation To Do List

Required Action:
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.

Emergency Response Sheet Instructions

Water Contamination

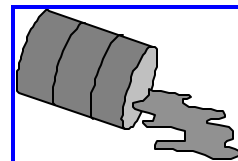
The first step in analyzing the quality of the water being delivered to your customers is the collection of samples. The selection of representative sample points within the distribution system is an important initial step in accurately reflecting water quality and identifying sources of contamination. One of the most common causes of error in water quality analysis is improper sampling.

In the *Public notification* section, list those agencies that need to be alerted of any health risks related to water contamination. This includes the regional IDNR office. It may also include an independent laboratory, contracted to conduct sampling and testing. Include their telephone, after-hours telephone, e-mail and fax numbers for these agencies.

In the *Media* section, list local media agencies, their contact person, email, telephone and fax numbers.

Check the *EPA public notification guidelines* section to ensure your water quality statistics comply.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.



Water Contamination

Public notification				
Contact person	Agency	Telephone	After-hours telephone	Fax
	Regional Iowa Department of Natural Resources			
	Laboratory			
	Iowa Department of Public Health			
	County Department of Public Health	(515) 281-4933	(515) 247-1732 (pager)	
Media				
Contact person	Company	Telephone	After-hours telephone	Fax

EPA public notification guidelines			
Violation category	Type	Notice must be Given within*	Frequency of notice
Tier 1 1. Failure to comply with a Maximum Contaminant Level (MCL) 2. Failure to comply with a treatment technique requirement established in lieu of an MCL 3. Failure to comply with a schedule prescribed under variance or exemption	Newspaper	14 days	No repeat
	Mail or hand deliver	45 days	Quarterly (as long as violation continues)
Tier 2 1. Failure to comply with monitoring requirements 2. Failure to comply with specified testing procedures 3. Operating under a variance or an exemption	Newspaper	3 months	Quarterly; but only by mail or hand delivery as long as violation continues
* Radio and television stations must be notified within 72 hours if an MCL violation poses an acute (immediate) health risk.			

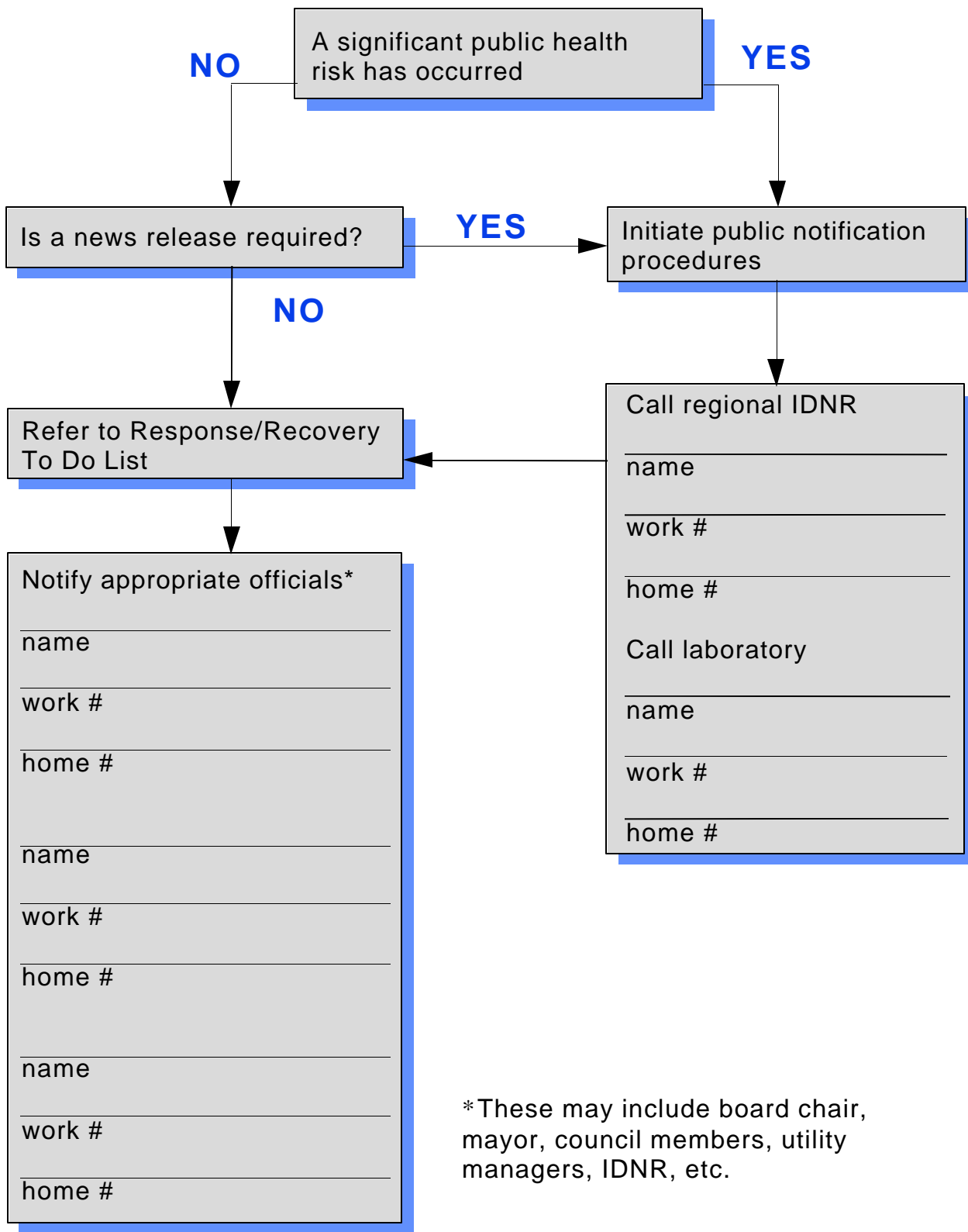
CAUTION ANY WATER CONTAMINATION SITUATION SHOULD BE TAKEN SERIOUSLY. PEOPLE CAN BECOME SICK, OR EVEN DIE.



health hazard

REMEMBER SAFETY FIRST

Trouble Shooting Guide



Response/Recovery To Do List

Water Contamination

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 16 Water Main Break

Things to Consider Before an Emergency

Chapter 16: Water Main Break

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the **Mitigation To Do List**. To further decrease your utility's vulnerability, complete an **Emergency Response Sheet**, **Trouble Shooting Guide** and **Response/Recovery To Do List** for each specific emergency.

- What is the size and location of water storage tanks for your community? (List size, location, and valve location.) What is the normal water level in each storage tank?
- How long can you serve customers from storage alone?
- Where are pump stations and wells located? (List size and valve location.)
- What are the normal discharge pressures at the pump station(s)?
- What is the size, depth, and location of critical water mains?
- Where are the critical valves located? What is the valve type, number, and direction of required turns?
- What types of repair parts are in stock or locally available?
- Where can repair parts be obtained that are not available locally?
- Is a periodic valve and hydrant operation program in place to insure proper operation?
- Is the distribution map part of the emergency plan?

Mitigation To Do List

Required Action:
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.

Emergency Response Sheet Instructions

Water Main Break

When a water main has failed, isolation of the break is important to maintain water capacity in the water storage facilities and to minimize the risk of water contamination in the distribution system. Information concerning the size of mains, pipe materials, valve locations, valve sizes, number of turns and direction to operate valves, and location of nearby hydrants is essential for recovery procedures. To begin, notify ONE-CALL and then initiate repair activities. Notify major customers affected by the main break and implement conservation measures if needed.

In the section titled *Critical water mains*, list the location, size, and water pressure that is maintained for the various water mains in the distribution system. This information can be used to compare significant drops in water pressure. (Note: pressure at the plant and/or water level in the storage tank may be the only data available to monitor changes in pressure and indicate a possible main break.)

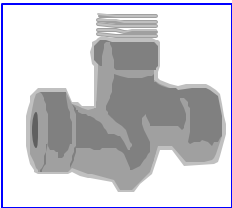
In the *Customers on critical main(s)* section, list the name, address and telephone number of the user on the critical mains listed to the left. This information will be needed if the water main break has an impact on their operations. Critical customers may include hospitals, health care facilities, or large commercial or industrial customers.

In the *Water storage facilities* section, list the location and capacity of each water storage facility. Capacity should reflect the number of gallons that can be stored in the storage facility. Also identify the type of water storage facility, whether it is above ground, elevated tank, etc.

In the *Critical valves* section, list the location, size, the number and direction of turns needed to operate the valve(s) in order to isolate a water main break.

In the *Diagram of distribution system* section, make a note to refer to the map(s) of your distribution system. List the map(s) that you have included in your emergency plan.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.




Water Main Break

Critical water mains			Customers on critical main(s)		
Street	Size	Pressure	Name	Address	Telephone number

Water storage facilities			Critical valves			
Location	Capacity (gallons)	Type	Location	Size	# of turns	Direction of turn

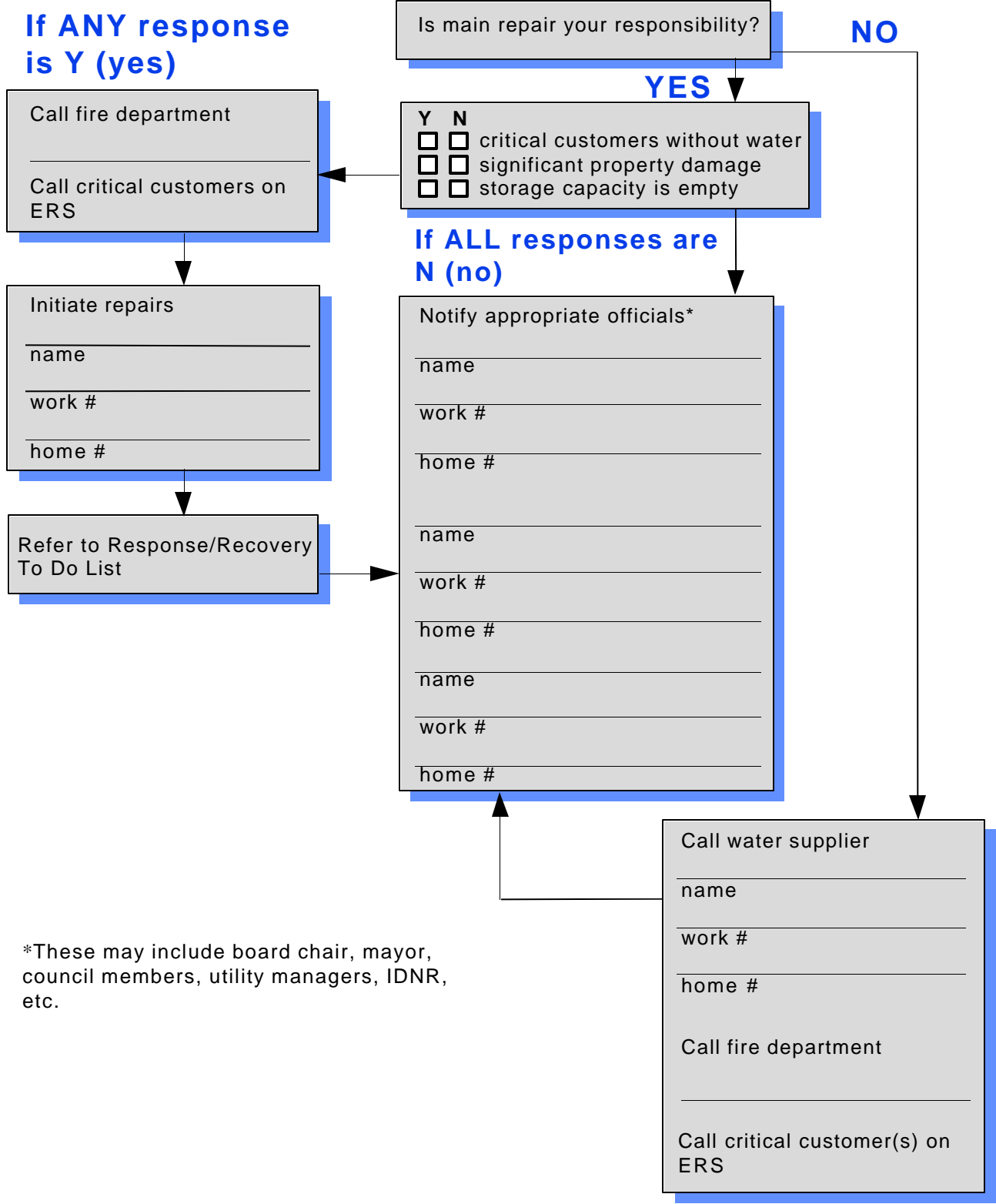
Diagram of distribution system Refer to distribution map(s) in this plan, listed below:

CAUTION  A MAJOR WATER MAIN BREAK CAN CAUSE SUBSTANTIAL DAMAGE. PROTECT PROPERTY WHEN POSSIBLE. DO NOT ENTER FLOODED BASEMENTS AND OTHER FACILITIES BECAUSE OF THE RISK OF ELECTRIC SHOCK AND LEAKING NATURAL GAS.

REMEMBER SAFETY FIRST

cave-in hazard

Trouble Shooting Guide



Response/Recovery To Do List

Water Main Break

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 17 Water Shortage

Things to Consider Before an Emergency

Chapter 17: Water Shortage

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the ***Mitigation To Do List***. To further decrease your utility's vulnerability, complete and ***Emergency Response Sheet***, ***Trouble Shooting Guide*** and ***Response/Recovery To Do List*** for each specific emergency.

- What are the alternate raw water source options?
- What is the storage capacity of these sources?
- What well/stream level indicates low water source?
- What other finished water supplies are available?
- What conditions of supply and demand indicate a water shortage?
- Is there a conservation plan that addresses water shortage conditions as required by state law?
- What are the critical water user demands?
- Is the minimum flow rate achievable through water conservation?
- What well or stream level is critical for meeting normal water demand?

Mitigation To Do List

Required Action:

1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____
8.	_____
9.	_____
10.	_____
11.	_____

Emergency Response Sheet Instructions

Water Shortage

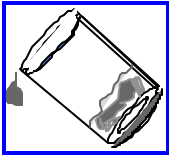
A water shortage can occur due to changes in climate and equipment failure. Not being able to provide an adequate supply of water to your customers can have an impact on their daily lives and on business operations. In these instances, public safety and the health of your customers is most important.

In the *County Emergency Coordinator* section, enter the name of the contact person, and list the name of the agency, telephone and fax numbers for the Emergency Coordinator in the county in which your utility is located.

In the *Media* section, list the name of the person to contact, the name of the company, and the telephone and fax numbers used for public information notification.

In the *Conservation plan* section, list the steps your utility will take to take care of the shortage.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.



Water Shortage

County Emergency Coordinator				
Contact person	Agency	Telephone	After-hours telephone	Fax
Media				
Contact person	Company	Telephone	After-hours telephone	Fax

Conservation plan (as outlined in Code of Iowa 455B.266)
 Suspend or restrict usage of water by category of use on a local or state-wide basis in the following order:

- 1) Water conveyed across state boundaries.
- 2) Uses of water primarily for recreational or aesthetic purposes.
- 3) Uses of water for the irrigation of hay, corn, soybeans, oats, grain sorghum or wheat.
- 4) Uses of water for the irrigation of crops other than hay, corn, soybeans, oats, grain sorghum or wheat.
- 5) Uses of water for manufacturing or other industrial processes.
- 6) Uses of water for generation of electrical power for public consumption.
- 7) Uses of water for livestock production.
- 8) Uses of water for human consumption and sanitation supplied by rural water districts, municipal water systems, or other public water supplies as defined in section 455B.171 of the Code of Iowa.
- 9) Uses of water for human consumption and sanitation supplied by a private water supply as defined in section 455B.171 of the Code of Iowa.

Attach your utility's conservation plan

CAUTION

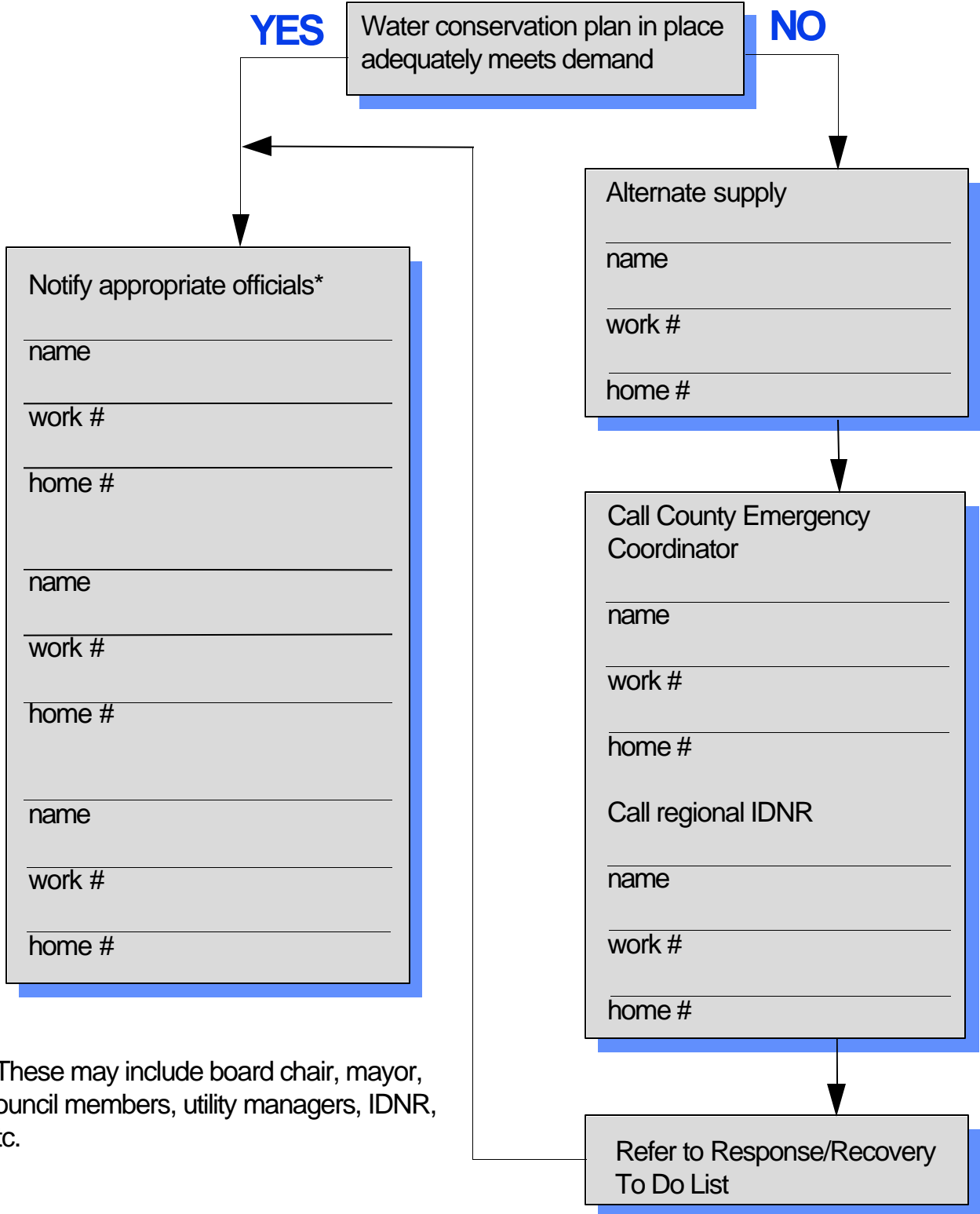


DURING TIME OF WATER SHORTAGE, CONTACT YOUR FIRE DEPARTMENT AND KEEP THEM UPDATED ON THE SITUATION.

REMEMBER SAFETY FIRST

fire hazard

Trouble Shooting Guide



*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Water Shortage

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 18 Water Tower Icing

Things to Consider Before an Emergency

Chapter 18: Water Tower Icing

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the ***Mitigation To Do List***. To further decrease your utility's vulnerability, complete an ***Emergency Response Sheet***, ***Trouble Shooting Guide*** and ***Response/Recovery To Do List*** for each specific emergency.

- What steps can be taken to ensure the water continues to move in the tank?
- Will increasing the variation in the water level keep the water from freezing?
- Are water levels adjusted for winter capacity?
- If icing occurs, what process and equipment will be needed to melt the ice?
- Are storage tanks regularly inspected for internal and external wall damage, chipped or peeling paint, changes to cathodic protection, damage to ladders, damage to riser pipe, or damage to the overflow pipe inside of the tank?

Mitigation To Do List

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Emergency Response Sheet Instructions

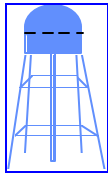
Water Tower Icing

Freezing water in water storage tanks can be a serious problem. Freezing is more likely in systems using surface water sources. However, groundwater supplies can also experience icing problems in storage tanks during very cold weather.

In the *Elevated water storage information* section, list the manufacturer, tank capacity, and winter and summer water level settings. Also, list the location of the tower sensor elevation, its location and overflow elevation.

In the *Location of elevated tank(s)* section, diagram the location of your storage tank(s) in your distribution system.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.




Water Tower Icing

Telephone Numbers			
Fire department	911 OR	Sheriff/Police	911 OR
Elevated water storage information			
Tower information	Tower #1	Tower #2	Tower #3
Manufacturer			
Capacity			
Water level settings	winter summer	Winter summer	winter summer
Sensor elevation			
Sensor location			
Overflow elevation			
Elevated water storage information			
Tower information	Tower #4	Tower #5	Tower #6
Manufacturer			
Capacity			
Water level settings	winter summer	Winter summer	winter summer
Sensor elevation			
Sensor location			
Overflow elevation			

Location of elevated tank(s)



CAUTION

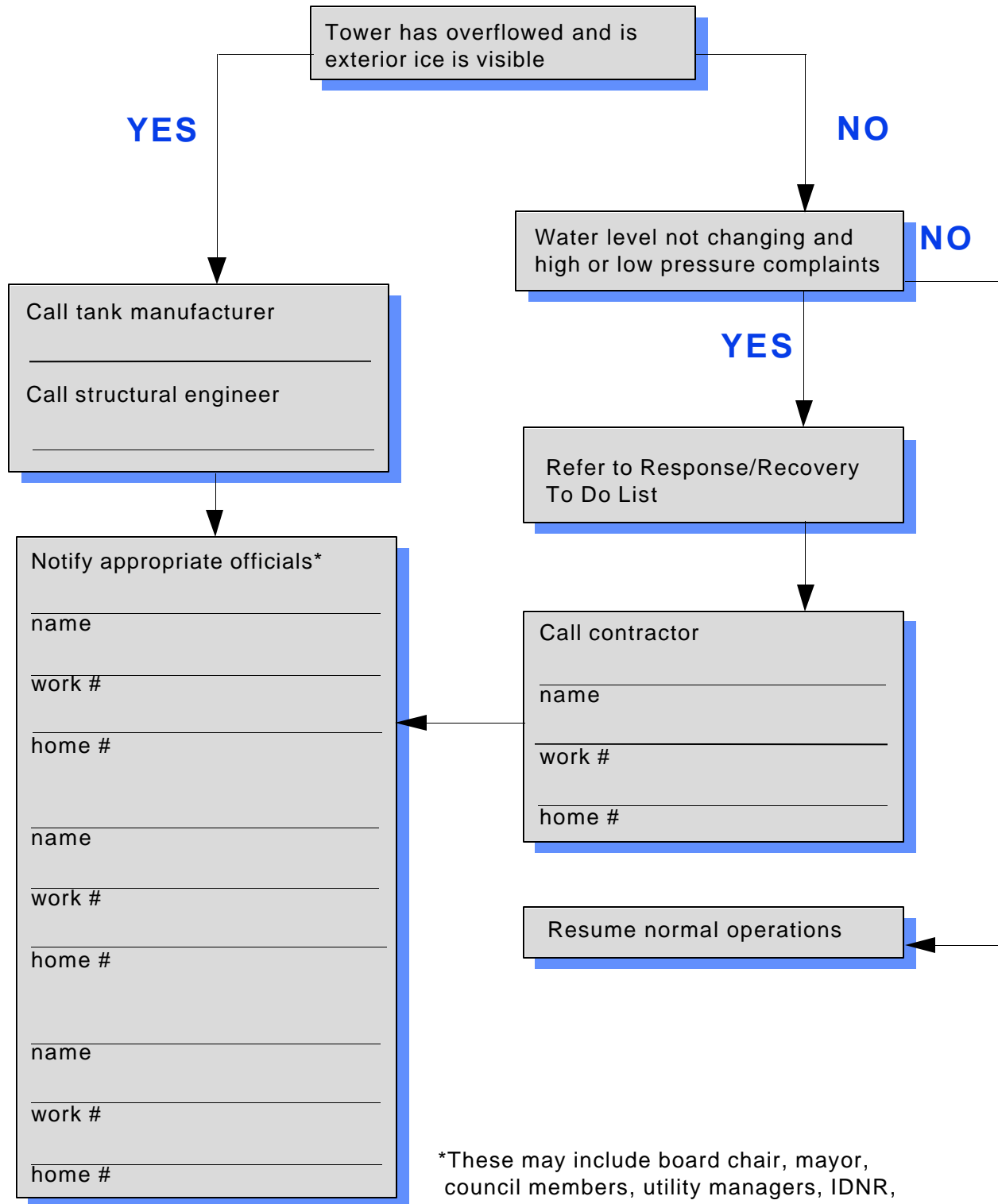


freezing hazard

TO REDUCE THE RISK OF INJURY, DO NOT ATTEMPT TO CLIMB ELEVATED TANKS WITHOUT THE APPROPRIATE SAFETY EQUIPMENT. IF HEAVILY LOADED WITH EXTERIOR ICE, STRUCTURAL FAILURE COULD BE A RISK.

REMEMBER SAFETY FIRST

Trouble Shooting Guide



Response/Recovery To Do List

Water Tower Icing

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 19 Workplace Violence

Things to Consider Before an Emergency

Chapter 19: Workplace Violence

To reduce your water utility's exposure in an emergency, use the following suggestions and complete the ***Mitigation To Do List***. To further decrease your utility's vulnerability, complete an ***Emergency Response Sheet***, ***Trouble Shooting Guide*** and ***Response/Recovery To Do List*** for each specific emergency.

- What security measures are in place to deter violent acts?
- Have you talked with local law officials about violent acts or what constitutes workplace violence?
- Can local law enforcement agencies assist in developing security measures for violent threats?
- Is there a communication process to alert others if there is a threat of violent behavior?
- Do you know the warning signs of potentially violent employees and customers?
- What utility assets need to be protected?
- What are the priorities for providing protection of these assets?
- How fast can your utility respond to a violent act?
- Is there written policy that clearly communicates how threats will be handled?
- Has telephone training been provided for irate callers?
- Are you contracting with an agency for employee counseling and mediation services?

Mitigation To Do List

Required Action:
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.

Emergency Response Sheet Instructions

Workplace Violence

Incidents of workplace violence may include kidnapping, robbery, theft, and physical assault involving a co-worker or customer. In extreme cases, assassinations or arson can occur.

In the *Telephone numbers* section, determine whether your utility is located within the 911 emergency access area. If it is not, fill in the appropriate telephone number for the sheriff, police, fire and ambulance departments for your area.

Review the *Early warning signals* section for helpful information.

The ***Trouble Shooting Guide*** is located on the back of the ***Emergency Response Sheet*** and is designed to assist you in preparing your first plan of action.



Workplace Violence

Telephone numbers			
Sheriff	Police	Fire	Ambulance
911 OR	911 OR	911 OR	911 OR

Early warning signals

- Direct or veiled verbal threats of harm.
- Intimidation of others. (This can be physical or verbal intimidation. Harassing phone calls and stalking are obvious examples.)
- Carrying a concealed weapon or flashing a weapon to test reactions.
- Paranoid behavior. Perceiving that everyone is against them.
- Moral righteousness and believing the organization is not following the rules and procedures.
- Unable to take criticism of job performance. Holds a grudge, especially against a supervisor. Often verbalizes hope for something to happen to the person against whom the employee has the grudge.
- Expression of extreme desperation over recent family, financial, or personal problems.
- History of violent behavior.
- Extreme interest in semi-automatic weapons and their destructive power to people.
- Fascination with incidents of workplace violence and approval of the use of violence under similar circumstances.
- Disregard for the safety of co-workers.
- Obsessive involvement with the job, often uneven job performance and no apparent outside interests.
- Being a loner who has a romantic obsession with a co-worker who does not share this interest.

CAUTION

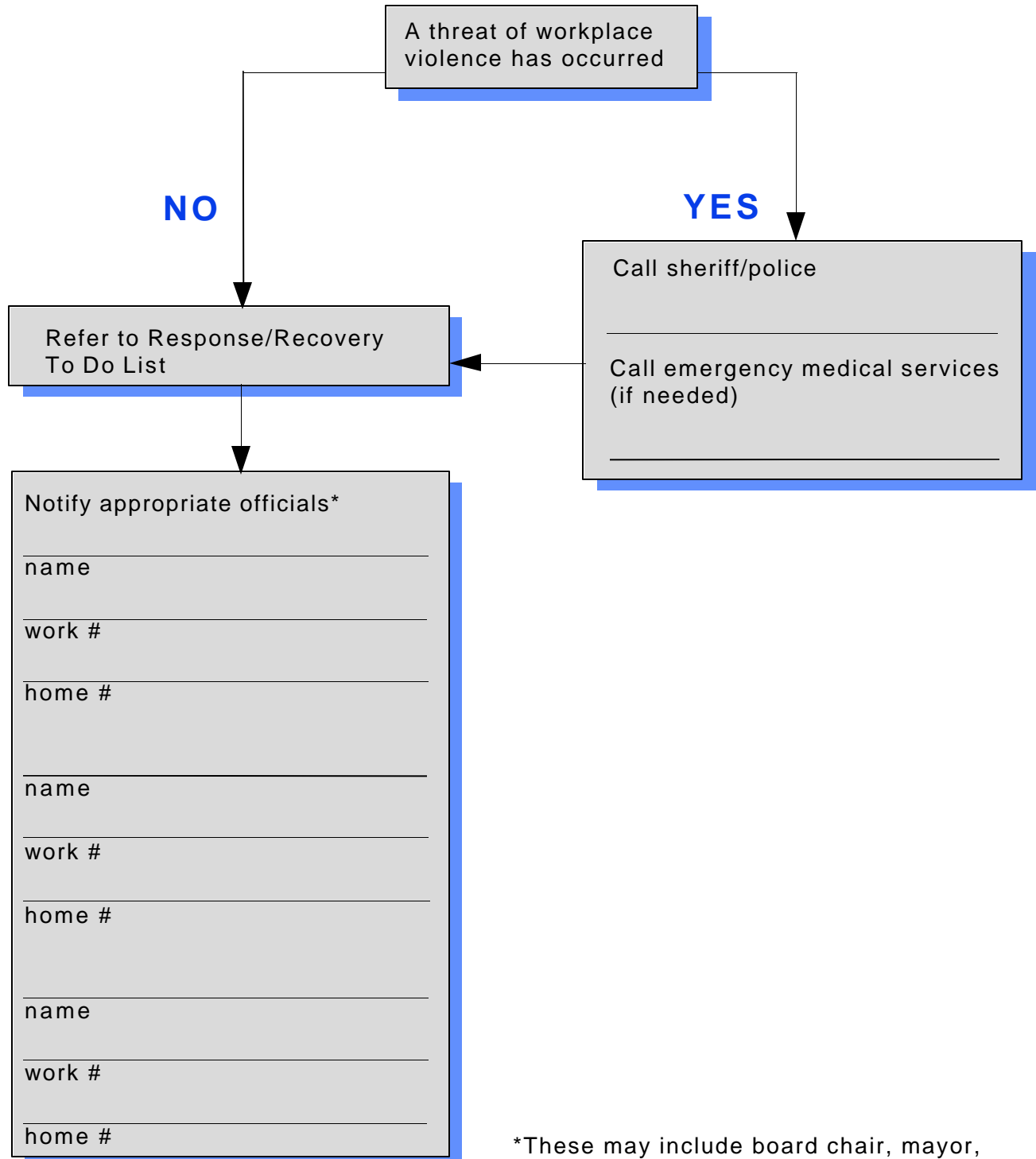
WHEN A THREAT IS MADE, TAKE IT SERIOUSLY AND CONTACT PROPER AUTHORITIES.



personal safety hazard

REMEMBER SAFETY FIRST

Trouble Shooting Guide



*These may include board chair, mayor, council members, utility managers, IDNR, etc.

Response/Recovery To Do List

Workplace Violence

Required Action:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.

Comments:

Place Index Divider Here
Chapter 20 Implementing Emergency Planning

Chapter 20: Implementing Emergency Planning

Planning Emergency Response Training

Training in emergency preparedness cannot be taken for granted. In emergency situations, people don't always react or think clearly; having experienced "dry-runs" or some other type of advanced exposure to likely emergencies will help to minimize confusion in a real emergency. Through training, people will have the opportunity to go through thought processes and form habits that can be followed when immediate responses are required.

By completing the fill-in-the blank forms contained in the previous section of this model plan, your community or utility can create its own unique emergency preparedness plan. These same forms, particularly the ***Failure Analysis*** and ***To Do Lists*** prepared for each ***Emergency Response Sheet***, can serve as the basis of your utility's emergency training plan. The training plan should identify who is to be trained, who will provide training, what types of training techniques are to be used, a schedule for training activities, and how the training will be evaluated to see if objectives were met.

It is important to prioritize training needs to address those areas where your utility or community may be most vulnerable. The ***Failure Analysis*** rating will identify those emergencies most likely to occur or affect your utility. Training needs associated with the highest priority emergency will also be of highest priority. In addition to prioritizing training, it is important to consider all emergency response roles that may require some education. For example, if a water main break is determined to be the highest ranking emergency, then training needs for each person/role involved in a water main break emergency response should be evaluated. The operator (or team member responsible for the Operations Management key responsibility) may require additional technical skills, or the mayor (or team member responsible for Public Communications) may need exposure to field repair conditions in order to communicate appropriately with the public or media.

In addition to training that may be needed related to a specific emergency, more extensive emergency training will likely be needed for Emergency Response Team members, especially as these roles shift from one person to another. This broader training should cover the individual emergency roles and duties established for each person, basic emergency notification procedures, basic communication plans, evacuation routes and shelter provisions, location of commonly used equipment, and procedures to be followed if a utility shutdown is required.

The ***Training Plan*** form included in this model plan will assist in recording training needs, priorities, and schedules. With a documented training plan, your utility can incorporate emergency response training into regular business processes and budgets as they are developed.

Training Plan

Name <small>(staff/community member)</small>	Training needed <small>(topic)</small>	Trainer <small>(internal/external)</small>	Training technique <small>(workshop/classes)</small>	Schedule <small>(month/year)</small>	Evaluation technique <small>(post-test/observation)</small>	

Conducting Emergency Response Training

Your utility does not have to spend large amounts of money to prepare Emergency Response Team members to fulfill their duties. Remember, utility personnel are often very knowledgeable about their community and the resources available in your utility or community to address an emergency. Use the resources available to begin training efforts, and bring in assistance from outside experts when it is needed.

Emergency response training can be provided in many forms. Organizations have used: orientation sessions, discussion groups, reading materials, tabletop exercises, scenarios, walk-through exercises or drills, demonstrations, external seminars, mock emergencies, etc. Depending on the specific need, one form of training may be more effective than another. To help team members become more familiar with broader emergency matters, such as notification routines or shelter sites, group question and answer sessions may work well. For specific emergency responses, more of a “hands-on” method may be needed, such as tabletop scenarios or walk-through exercises. These are also extremely valuable tools to discover details not considered when preparing **Emergency Response Sheets** or **To Do Lists**. Choose the tool that best fits the particular training need and the people to be involved in the training.

Once a training session has been conducted, it is important to determine whether it achieved what was intended. Every training activity should be concluded with an evaluation of the training materials and methods to allow for fine-tuning. Additionally, a means of follow-up should be in place to ensure training needs have been satisfied. For example, if an operator needed technical training in water main repair, check to see if that team member can demonstrate the new ability learned from the training.

Training records, in some form, should be maintained for all members of the Emergency Response Team. By keeping track of this information, your utility can easily identify someone to serve in a back-up capacity for another team member, or identify how duties can be shifted to others.

Updating and Administering the Plan

As with any business that experiences change, water utilities can expect their emergency preparedness plans to become outdated. And, without up-to-date information, the plan will become useless as an aid in an emergency response. Therefore, it is recommended the plan be reviewed, and potentially modified, at least on an annual basis. The annual process should include:

- Review of the **Failure Analysis** - Be sure the emergency rankings from the previous analysis are accurate, and rerank, if necessary. Is the **Failure Analysis** list still complete, or should other emergencies be added to it? If actions taken in response to the **To Do Lists** or to fulfill the **Training Plan** cause these rankings to change, make the appropriate adjustments and reprioritize emergencies.
- Review Progress Toward **To Do Lists** - Determine if items listed on the **To Do Lists** have been accomplished. Delete items accomplished or no longer necessary due to

changes in operation or structure. For incomplete items remaining on the list, evaluate why those items were not achieved, make appropriate changes to allow them to be completed, and determine new priorities and schedules for completion.

- Review **Emergency Response Sheets** and **To Do Lists** - Consider how changes in team members, facilities, operational procedures, resources, and community officials may have affected the information contained in these forms. Update forms with appropriate information.
- Review **Training Plan** and Individual Training Evaluations - Determine if activities listed on the **Training Plan** have been accomplished. Delete items accomplished or no longer necessary due to changes in operation, personnel, or community resources. Consider the results of the training evaluations and determine changes needed in future programs to better meet the needs of participants. For training activities which were not completed, evaluate why those activities were not conducted, make appropriate changes to allow them to be completed, and determine new priorities and schedules for completion based upon the revised **Failure Analysis** and **To Do Lists**.

The **Water Supplier General Information Sheet** should be reviewed monthly for up-to-date names and telephone numbers. Additionally, Emergency Response Team members should be aware of their responsibility to notify the person responsible for maintaining the plan whenever this basic contact information changes. If team members move, obtain new telephone numbers, or are no longer available for after-hours contact, the **Water Supplier General Information Sheet** should be updated immediately.

Specific events may occur which should cause the plan to be updated (and appropriate training to occur) without waiting for the annual review process. Examples may include: changes in water utility personnel, election of new utility or community officials, new facilities placed in operation, or significant operational changes.

Communicating the Plan to Others

The emergency preparedness plan for your utility needs to be communicated in a variety of ways. First, it must be written and distributed to the appropriate people in the community. Copies of the plan should be provided to members of the Emergency Response Team, utility officials, community officials, and representatives of other emergency organizations in the community, such as fire and police departments. As your utility goes through the annual review and updating process, revised copies of the plan or individual pages should be distributed. Also, it is important that Emergency Response Team members have copies available not only at their business or daytime locations, but also in their homes. Emergencies don't always occur during regular business hours so the plan information should be accessible to team members day and night.

Beyond circulation of the written plan, it is important to present the plan to your utility staff, community officials, and other community groups. Part of the presentation should include identifying the people who will serve in each of the key emergency responsibilities. By introducing team members to the community, a first step is made in assuring the public that

your utility will be prepared to do what is necessary to provide them with safe drinking water when an emergency does occur. Another benefit of sharing the plan within the community is the possible identification of additional resources, people and equipment, that may be available to help. In sharing the plan, special attention should be paid to educating consumers about their roles in the emergency response. Examples of specific actions can be shared, such as emergencies that may need property owners to assist in isolating their water services, or checking for potential contamination sources.

The ***Training Plan*** should be presented to Emergency Response Team members and utility officials at least annually. This will ensure members and officials understand the priorities placed on training and encourage more support for achieving the training goals.

Chapter 21 Outcome

To meet the expectations of your customers, your utility and staff need to identify potential emergencies and plan for them. Emergency preparedness begins with identifying the emergencies most likely to occur at your utility, and then listing the people and other resources you need to have involved. By identifying contact people, telephone numbers and other information before an emergency, your utility can be prepared to respond when an emergency does occur.

Follow these steps to begin your emergency response planning:

- **Record facts about your utility.** By completing the *Water Supplier General Information Sheet*, you have identified your Emergency Response Team, and provided vital information about your utility's operation and emergency resources available.
- **Anticipate emergencies.** By completing the *Failure Analysis*, you and your team members can identify and prioritize emergencies most likely to occur at your facility.
- **Plan for response.** By completing the *Emergency Response Sheets* and *Trouble Shooting Guides* you and your team members will identify key individuals to assist in your emergency response. Using the *Mitigation* and *Response/Recovery To Do Lists*, will help you outline and prioritize step-by-step actions that need to be taken.
- **Train team members.** As you are completing the specific emergency forms, identify training opportunities for your team members. Use the *Training Plan* form to record these needs and how you plan to accomplish them.
- **Keep your community informed.** As always, the members of your community are part of the team, although they may not have an active role. Keep them involved by holding press conferences, making public announcements, and using other communication methods. Remember, your community is counting on you to provide a quality product and quality service, even during an emergency.

Appendix 1

Iowa Department of Natural Resources Water Supply Section Directory

Name/Region	Phone	Areas of Responsibility	Title
Water Quality Bureau - Construction Section: Engineering, Water Use, Private Systems, Contract Administration			
Dennis Alt	515/725-0275	Program Administration	Section Supervisor
Michael Anderson, PE	515/725-0336	Water Allocation, Security, Source Water Protection	Senior Engineer
Jennifer Bunton, PE	515/725-0298	DWSRF, Viability Assessment, Construction Permits	Senior Engineer
Bob Campbell	515/725-0222	Construction Permits, Water Use Permits	Engineer
Daryl Enfield, PE	515/725-0285	Construction Permits, Water Use Permits	Engineer
Charlotte Henderson	515/725-0341	Contract Management, Reporting, and Data Quality	Senior Env. Specialist
Stephen Hopkins	515/725-0346	On-Site Wastewater State Revolving Loan Fund	Environmental Specialist
Jacob Mathew	515/725-0299	Water Supply Construction Permits	Engineer
Diane Moles	515/725-0281	Rules Development, Staffing, Policy Development	Executive Officer II
Jim Neleigh	515/725-0276	Water Use Permits	Engineer
Roy Ney, PE	515/725-0360	Construction Permits, Corrosion Control, IESWTR	Senior Engineer (Lead)
Brent Parker, PE	515/725-0337	Grants to Counties Program, Private Well Permits	Senior Engineer
Taroon Veerab, PE	515/725-0278	Construction Permits, Water Use Permits	Engineer
Monica Wnuk	515/725-0277	Water Use Permits, Construction Permits	Engineer
WQB - Operation Permits Section: Compliance & Enforcement, Database Management, Operator Certification, & Laboratory Certification			
Dennis Alt	515/725-0275	Program Administration	Acting Section Supervisor
Michelle Carson	515/725-0282	PWS Name/Address Changes, Permit Fees, Office	Clerk
Tracy Edwards	515/725-0359	Contracts, Office Support	Administrative Assistant I
Jane Enfield	515/725-0463	Grants/Contract Administration	Clerk Specialist
Hal Frank	515/725-0342	Compliance/Enforcement, PN, IGW, SDWIS	Environmental Specialist
Shawn Halligan	515/725-0358	Region # 4, Permits, Compliance, and Enforcement	Environmental Specialist
Anne Lynam	515/725-0280	Compliance and Enforcement 1 & 5, CCR, Op Cert.	Environmental Specialist
Cecilia Naughton	515/725-0289	Region # 2, Permits, Compliance, and Enforcement	Environmental Specialist
Laurie Sharp	515/725-0284	Operator Certification	Administrative Assistant II
John Vedder	515/725-0350	Operation Permits, Compliance/Enforcement	Sr. Environmental Specialist
James Warren	515/725-0297	Region # 3, Permits, Compliance, and Enforcement	Environmental Specialist
Mike Wiemann	515/725-0283	Computer Administration	Sr. Environmental Specialist
Bill Wyrer	515/725-0339	Region # 6, Permits, Compliance, and Enforcement	Environmental Specialist
Swallow Yan	515/725-0344	Database Management & Administration	Database Administrator
Joe Zervas	515/725-0343	Certification Programs	Sr. Environmental Specialist
Field Services & Compliance Bureau: Field Offices			
IDNR Region 1	563/927-2640	Sanitary Surveys, Site Surveys, Technical Assistance	Manchester
Michele Smith	563/927-2640	Region # 1 Operation Permits	Manchester
IDNR Region 2	641/424-4073	Sanitary Surveys, Site Surveys, Technical Assistance	Mason City
IDNR Region 3	712/262-4177	Sanitary Surveys, Site Surveys, Technical Assistance	Spencer
IDNR Region 4	712/243-1934	Sanitary Surveys, Site Surveys, Technical Assistance	Atlantic
IDNR Region 5	515/725-0268	Sanitary Surveys, Site Surveys, Technical Assistance	Des Moines
Julie Leonard	515/725-0279	Region # 5 Operation Permits	Des Moines
IDNR Region 6	319/653-2135	Sanitary Surveys, Site Surveys, Technical Assistance	Washington

Chuck Corell, IDNR Water Quality Bureau Chief: 515/281-4582

FAX: 515/725-0348 (for general correspondence) 515/725-0287 (laboratories only)

Emergency Response Number (24-hours): 515/281-8694 (use this number for reporting incidents after normal business hours)

Security Technical Assistance Contractor: Lynn Pitts 515/725-0340

Mailing Addresses: (for Central Office Staff):
Iowa Department of Natural Resources
Water Supply Section
401 SW 7th St., Suite M
Des Moines, IA 50309-4611

(for EPA Region VII):
EPA Region VII
901 N. 5th Street
Kansas City, KS 66101

Fee Mailing Address: PO Box 14573, Des Moines, IA 50306-3573

EPA SDWA Hotline: 800/426-4791

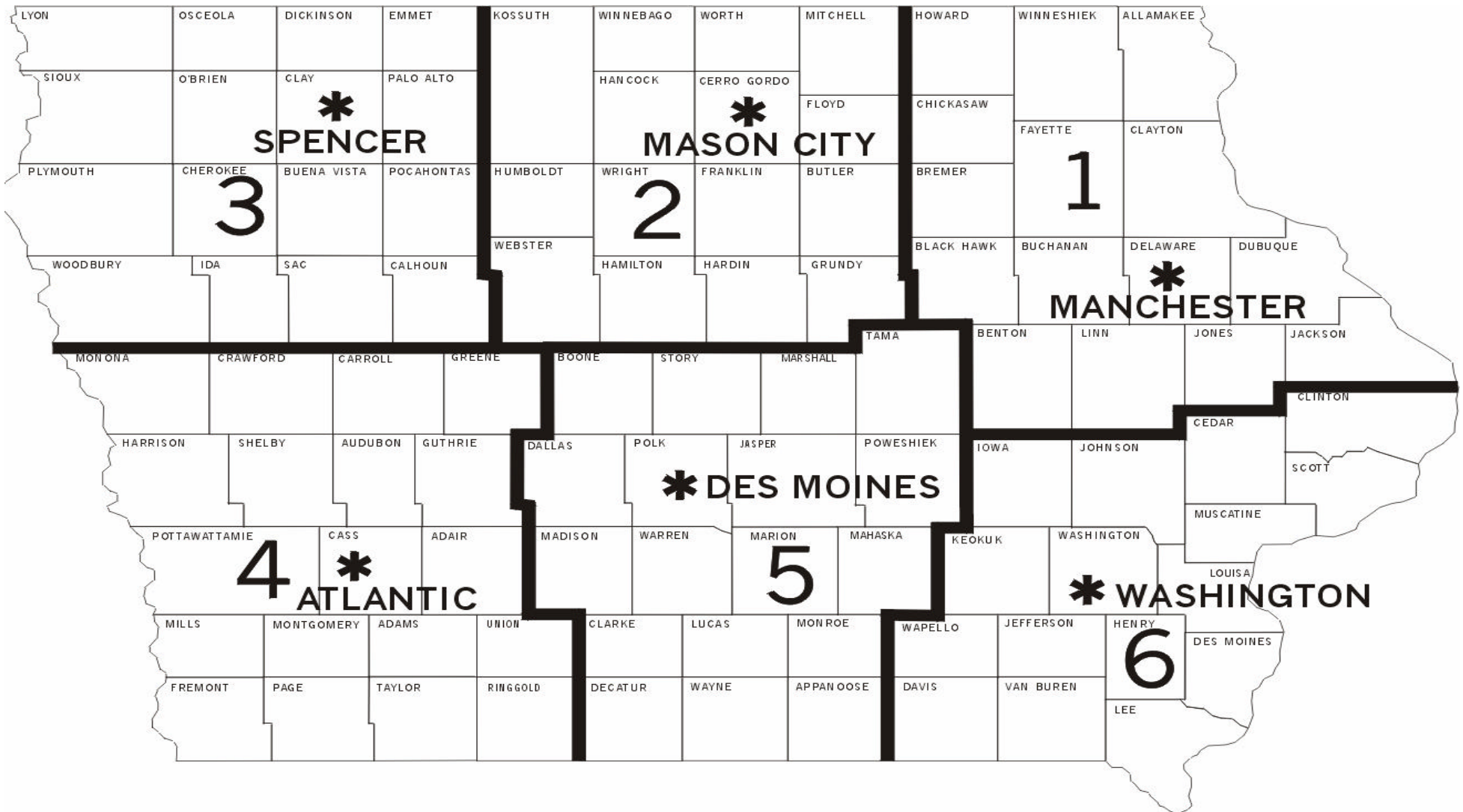
E-mail Addresses for IDNR staff: first_name.last_name@dnr.state.ia.us (example: dennis.alt@dnr.state.ia.us)

Websites: IDNR WS Homepage: <http://www.state.ia.us/epd/wtrsuply/wtrsup.htm>
EPA Office of Groundwater and Drinking Water Homepage: <http://www.epa.gov/ogwdw/>
Iowa Onsite Wastewater Assistance Program: <http://www.onsiteiowa.com>

Cross-connection Control Manual: www.epa.gov/ogwdw/crossconnection.html

Appendix 2

Map of DNR Field Office Locations




IOWA DEPARTMENT OF NATURAL RESOURCES

 Environmental Services Division
Field Services and Compliance Bureau
Field Office Staff

Revised: 4/26/2004

Field Office #1
 909 West Main St., Suite 4
 Manchester, IA 52057
(563) 927-2640
 FAX: (563) 927-2075

 Joe Sanfilippo, Supervisor
 Doug Hawker, ES Senior
 Clark Ott, ES Senior
 Mike Wade, ES Senior

 Don Chase
 Chad Kehrl
 Rick Martens
 Susan Miller

 Tom McCarthy
 Amber Sauser

Secretary
 Brenda Streicher
Field Office #2
 2300 15th St. SW
 Box 1443
 Mason City, IA 50401
(641) 424-4073
 FAX: (641) 424-9342

 Vacant, Supervisor
 Glenn Carper, ES Senior
 Clay Swanson, ES Senior
 Al Tompkins, ES Senior
 Jeff Vansteenburgh, ES Senior

 Andrea Evelsizer
 Curt Krieger
 Trent Lambert
 John Pecchia

 Eric Wiklund
 Scott Wilson

Secretary
 Phyllis Maskarina
Field Office #3
 Gateway North Mall
 1900 North Grand Avenue
 Spencer, IA 51301
(712) 262-4177
 FAX: (712) 262-2901
 Storm Lake Office

 Ken Hessenius, Supervisor
 Neil Cook, ES Senior
 Bryon Whiting, ES Senior

 Jennifer Christian
 Michelle Johnson
 Alan Lemke
 Cindy Martens

 Bert Noll
 Greg Olson
 Jeff Prier

Secretary
 Londa Selk

Julie Sievers (712) 732-8350

Field Office #4
 1401 Sunnyside Lane
 Atlantic, IA 50022
(712) 243-1934
 FAX: (712) 243-6251

 Dan Stipe, Supervisor
 Jerry Jordison, ES Senior
 Holly Andersen, ES Senior
 Kirk Mathis, ES Senior

 Al Bertelson
 Alison Manz
 Thaddueus Nanfito
 Daniel Olson

 Matthew Rhodes
 Mike Spetman

Secretary
 Rhonda Pahl
Field Office #5
 401 SW 7th St., Suite I
 Des Moines, IA 50309-4611
(515) 725-0268
 FAX: (515) 725-0218

 Jim Stricker, Supervisor
 Bill Gross, ES Senior
 Randy Lane, ES Senior
 Dave Perry, ES Senior

 Dennis Appelhons
 Kate Bason
 Janet Gastineau
 Bill Gibbons
 Julie Leonard

 Julie Nelson
 Ted Petersen
 Malia Schepers
 Amy Scott

Secretary
 Linda Berry
Field Office #6
 1004 W. Madison
 Washington, IA 52353
(319) 653-2135
 FAX: (319) 653-2856

 Dennis Ostwinkle, Supervisor
 Jerry Bartachek, ES Senior
 Paul Brandt, ES Senior
 Jim Sievers, ES Senior

 Shane Dodge
 Mark Heiderscheit
 Terry Jones
 Kurt Levetzow

 Ken Marsengill
 Bob Pyle
 Russell Royce
 Josh Sobaski

 Ryan Stouder

Secretary
 Jean Pearce

Appendix 3

County Emergency Management Coordinators

County	Coordinator	City	Admin Phone
Adair	Lynn Eddy	Greenfield	641-743-6141
Adams	Brian Kannas	Corning	641-322-3798
Allamakee	Jeff Mitchell	Waukon	563-568-3411
Appanoose	Bill Milani	Centerville	641-437-1909
Audubon	Lester Larsen	Audubon	712-563-3483
Benton	Scott Hansen	Vinton	319-472-4519
Black Hawk	Frank Magsamen	Waterloo	319-291-4373
Boone	Clay North, Jr.	Boone	515-433-0592
Bremer	Scott LaRue	Waverly	319-352-0332
Buchanan	Rick Wulfekuhle	Independence	319-334-6411
Buena Vista	Robert Christensen	Storm Lake	712-749-2705
Butler	Donavon Kampman	Allison	319-267-2801
Calhoun	Bruce Holm	Farnhamville	515-544-3335
Carroll	Don Nepple	Carroll	712-792-0790
Cass	Rob Koppert	Atlantic	712-243-1500
Cedar	Jill L. Randolph	Tipton	563-886-3442
Cerro Gordo	Steve O'Neil	Mason City	641-421-3665
Cherokee	Aimee Barritt	Cherokee	712-225-6721
Chickasaw	Ken Rasing	New Hampton	641-394-2406
Clarke	Allan Mathias	Osceola	641-342-6654
Clay	Gary Stover	Spencer	712-262-1019
Clayton1	Verdean Dietriech	Garnavillo	563-245-2422
Clayton2	Carl Kuehl	Garnavillo	563-245-2422
Clinton	Walter D. Henry	Clinton	563-242-5712
Crawford	Gregory J. Miller	Denison	712-263-9902
Dallas	Barry Halling	Adel	515-993-2134
Davis	Craig C. Scott	Bloomfield	641-856-3893
Decatur	Richard Erke	Leon	641-446-7307
Delaware	Norm Wellman	Manchester	563-927-5561
Des Moines	Gina Hardin	Burlington	319-753-8206
Dickinson	Tim Kinnetz	Okoboji	712-336-3987
Dubuque	Tom Berger	Dubuque	563-589-4170
Emmet	Terry Reekers	Estherville	712-362-5702
Fayette	Wally Rundle, Acting	Oelwein	319-283-5722
Floyd	Kenneth Mahler	Charles City	641-257-6144
Franklin	Steve O'Neil	Hampton	641-456-4254
Fremont	Don Bartholomew	Sidney	712-374-2801

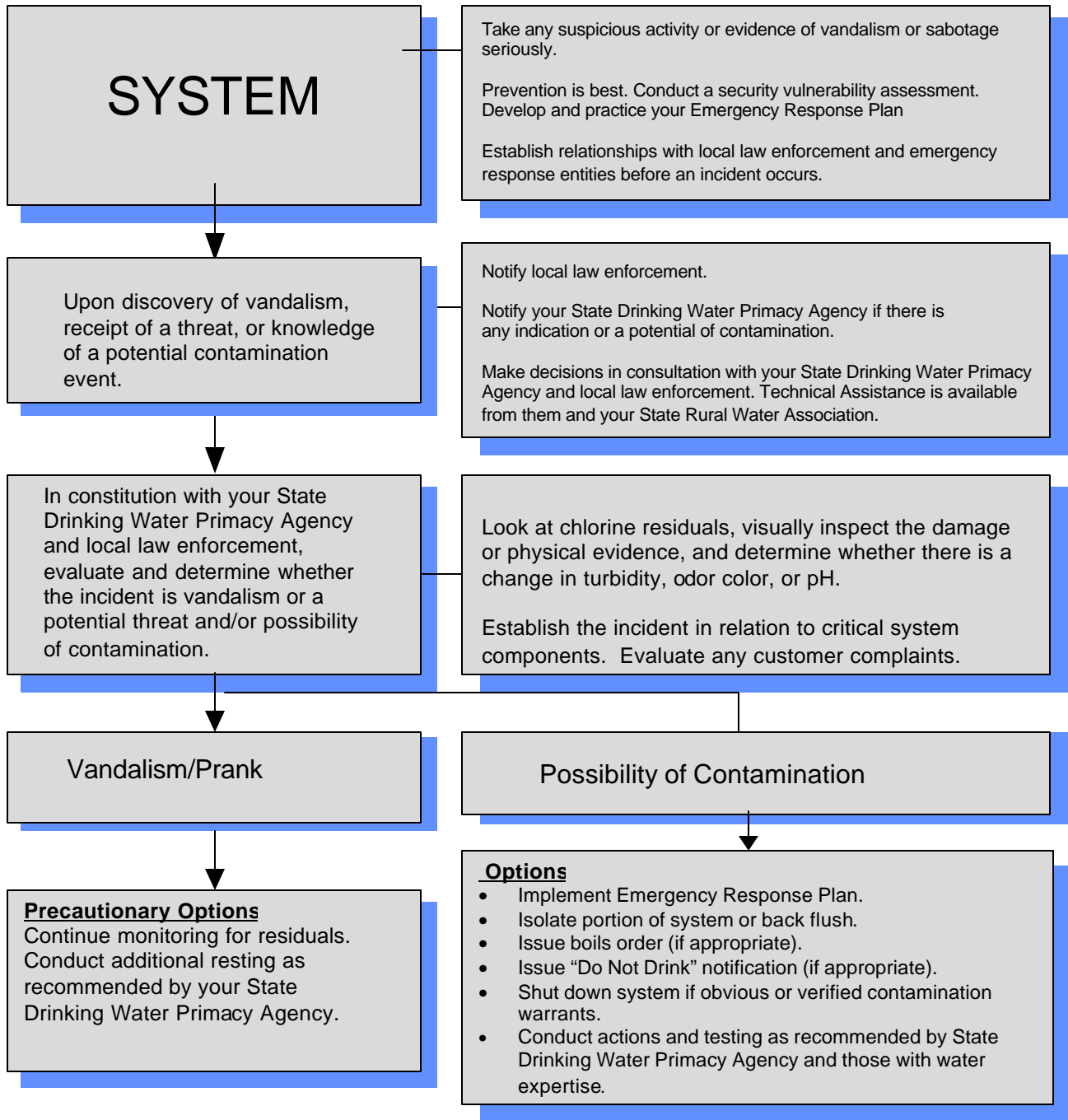
Greene	Dennis Morlan	Jefferson	515-386-4404
Grundy	Chris Heerkes	Grundy Center	319-824-6933
Guthrie	Stephen Patterson	Guthrie Center	641-747-8320
Hamilton	Terry A. Johnston	Webster City	515-832-9518
Hancock	Andrew Buffington	Garner	641-923-2702
Hardin	David Roelfs	Eldora	641-939-8132
Harrison	Todd Baber	Logan	712-644-2353
Henry	Ed Farley	Mt. Pleasant	319-385-1479
Howard	Darrell Knecht	Cresco	563-547-1165
Humboldt	Doug Wood	Humboldt	515-332-4809
Ida	Edward Sohm	Ida Grove	712-364-2533
Iowa	Alan Husband	Marengo	319-642-3151
Jackson	Buddy Olson	Maquoketa	563-652-3312
Jasper	John Schermerhorn	Newton	641-792-7555
Jefferson	Jerry Calnon	Fairfield	641-472-4146
Johnson	Tom Hansen	Iowa City	319-356-6028
Jones	Diane DeSotel	Anamosa	319-462-2735
Keokuk	Larry Smith	Sigourney	641-622-2528
Kossuth	Jim Kelley	Algona	515-295-5904
Lee	Frank Mohrfeld	Ft. Madison	319-372-4124
Linn	Walter "Ned" Wright	Cedar Rapids	319-363-2671
Louisa	Tom Colthurst	Columbus	319-658-3851
Lucas	Supervisors	Chariton	641-774-2018
Lyon	Wayne Jepsen	Rock Rapids	712-472-8330
Madison	Todd Brown	Winterset	515-462-1496
Mahaska	R.D. Keep	Oskaloosa	641-672-1209
Marion	Ray Stone	Knoxville	641-828-2256
Marshall	Deanna Neldeberg	Marshalltown	641-754-6385
Mills	Larry Hurst	Glenwood	712-527-3643
Mitchell	Ray Huftalin	Osage	641-732-5872
Monona	Randy Ross	Onawa	712-423-1294
Monroe	Jack Briggs	Albia	641-932-7815
Montgomery	Joni Ernst	Red Oak	712-623-4931
Muscatine	Jeff Carter	Muscatine	563-288-2526
O'Brien	Anne Koontz	Primghar	712-757-4305
Osceola	Debra Goettig	Sibley	712-754-2381
Page	Raymond Bryant	Shenandoah	712-246-4254
Palo Alto	Jarrett Lee	Emmetsburg	712-852-4997
Plymouth	Mike Van Otterloo	LeMars	712-546-8191
Pocahontas	Tim McKiernan	Pocahontas	712-335-3188
Polk	Justin Dehnert	Des Moines	515-286-2107
Pottawattamie	Terry Hummel	Council Bluffs	712-328-5777
Poweshiek	Douglas Shutts	Montezuma	641-623-3061
Ringgold	Merle Walter	Mt. Ayr	641-464-3311
Sac	Jim Bullock	Sac City	712-662-4789
Scott	Ross Bergen	Davenport	563-326-8663
Shelby	Robert (Bob) Sievert	Harlan	712-755-5160

Sioux	Mark Dunlop	Orange City	712-737-4010
Story	Lori Morrisey	Nevada	515-382-7315
Tama	Scott Bruns	Toledo	641-484-3760
Taylor	Michael Ware	Bedford	712-523-2840
Union	Roger Nurnberg	Creston	641-782-1622
Van Buren	Donald Pool	Keosauqua	319-293-3663
Wapello	Stephen O'Connor	Ottumwa	641-683-0666
Warren	Mahala Cox	Indianola	515-961-1105
Washington	Owen White	Ainsworth	319-657-2762
Wayne	Bill Yeager	Allerton	641-873-6527
Webster	Tony Jorgensen	Ft. Dodge	515-573-1403
Winnebago	Allen Eastvold	Forest City	641-585-2828
Winneshiek	Bruce Goetsch	Decorah	563-387-4095
Woodbury	Gary Brown	Climbing Hill	712-876-2212
Worth	Marty Martin	Northwood	641-324-1535
Wright	Dennis Borrill	Belmond	641-444-3357

Appendix 4

A Utility Guide for Security Decision Making

These guidelines are designed to assist utilities in determining the level of security concerns if a break-in or threat occurs at the water system and to assist the utility in appropriate decision making and response actions. The various steps and action scan be adjusted to meet the needs of specific situations and to comply with individual state requirements. Specific actions should be undertaken in consultation with your IDNR. Technical assistance is available from you state drinking water primacy agency and state rural water association for prevention initiatives such as vulnerability assessments, emergency response planning, and security enhancements.



- Do not disturb evidence and document what you see. Keep notes and take photos as you go.
- Collect samples of future analysis and store appropriately.
- Alert other officials as appropriate and keep the public informed (designate one spokesperson).
- Use the experts in public drinking water supplies and public health in the decision making process.
- Preventative measures are the best practice to prevent such an incident.
- Prior communication with the local law enforcement authorities and local emergency response entities prevents confusion and defines who has responsibility for what, when an incident occurs.

Information provided by ASDWA and NRWA.

Appendix 5

Have You Already Improved Security?

Consider Whether These Strategies Apply To You

Sound Business Practices

- Adopt security as an integral part of overall operations;
- Develop policies and procedures, train and test employees on them;
- Put someone in charge of implementing an effective security program;
- Review and revise emergency response plans – drill, drill, drill;
- Cooperate with adjacent utilities or regional utility networks;

System Upgrades

- Eliminate single points-of-failure;
- Store back-up equipment off-site in a secure location;
- Develop back-up systems;
- Reduce risks from hazardous chemicals; or
- Optimize treatment;

Security Upgrades

- Employ detection devices that characterize the intrusion – who has entered, how many people, with what equipment;
- Use physical barriers to delay intruders (e.g., doors, vaults, walls, locks and distance or separation between assets);
- Establish contacts and agreements with local law enforcement and emergency response officials to ensure minimal response times.

Appendix 6

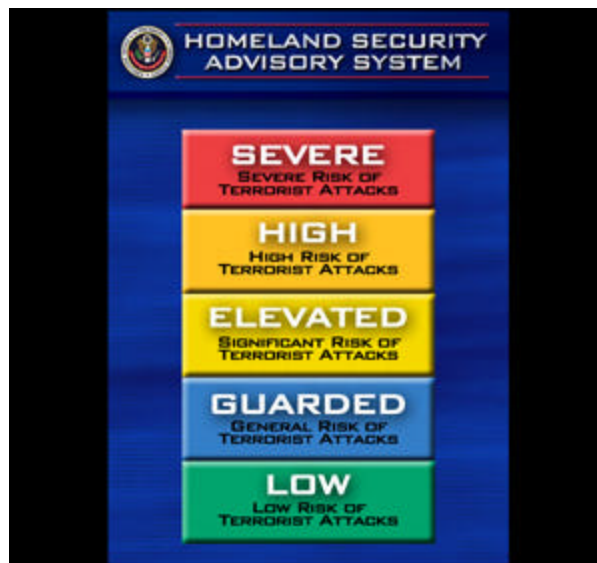
Homeland Security Advisory System

Gov. Ridge Announces Homeland Security Advisory System

The Homeland Security Advisory System will provide a comprehensive and effective means to disseminate information regarding the risk of terrorist attacks to Federal, State, and local authorities and to the American people.

As part of a series of initiatives to improve coordination and communication among all levels of government and the American public in the fight against terrorism, President Bush signed Homeland Security Presidential Directive 3, creating the Homeland Security Advisory System (HSAS). The advisory system will be the foundation for building a comprehensive and effective communications structure for the dissemination of information regarding the risk of terrorist attacks to all levels of government and the American people.

The Attorney General will be responsible for developing, implementing and managing the system. The Homeland Security Advisory System will provide the following:



National framework for Federal, State, and local governments, private industry and the public. There are many federal alert systems in our country -- each tailored and unique to different sectors of our society: transportation, defense, agriculture, and weather, for example. These alert systems fill vital and specific requirements for a variety of situations in both the commercial and government sectors. The Homeland Security Advisory System will provide a national framework for these systems, allowing government officials and citizens to communicate the nature and degree of terrorist threats. This advisory system characterizes appropriate levels of vigilance, preparedness and readiness in a series of graduated Threat Conditions. The Protective Measures that correspond to each Threat Condition will help the government and citizens decide what action they take to help counter and respond to terrorist activity. Based on the threat level, Federal agencies will implement appropriate Protective Measures. States and localities will be encouraged to adopt compatible systems.

Factors for assignment of Threat Conditions. The Homeland Security Advisory System will provide a framework for the Attorney General, in consultation with the Director of the Office of Homeland Security, to assign Threat Conditions, which can apply nationally, regionally, by sector or to a potential target. Cabinet Secretaries and other members of the Homeland Security Council will be consulted as appropriate. A variety of factors may be used to assess the threat. Among these:

- Is the threat credible?
- Is the threat corroborated?
- Is the threat specific and/or imminent?
- How grave is the threat?

Unified system for public announcements. Public announcements of threat advisories and alerts help deter terrorist activity, notify law enforcement and State and local government officials of threats, inform the public about government preparations, and provide them with the information necessary to respond to the threat. State and local officials will be informed in advance of national threat advisories when possible. The Attorney General will develop a system for conveying relevant information to Federal, State, and local officials, and the private sector expeditiously. Heightened Threat Conditions can be declared for the entire nation, or for a specific geographic area, functional or industrial sector. Changes in assigned Threat Conditions will be made when necessary.

A tool to combat terrorism. Threat Conditions characterize the risk of terrorist attack. Protective Measures are the steps that will be taken by government and the private sector to reduce vulnerabilities. The HSAS establishes five Threat Conditions with associated suggested Protective Measures:

**Low Condition
Green**

Low risk of terrorist attacks. The following Protective Measures may be applied:

- Refining and exercising preplanned Protective Measures
- Ensuring personnel receive training on HSAS, departmental, or agency-specific Protective Measures; and
- Regularly assessing facilities for vulnerabilities and taking measures to reduce them.

**Guarded Condition
Blue**

General risk of terrorist attack. In addition to the previously outlined Protective Measures, the following may be applied:

- Checking communications with designated emergency response or command locations;
- Reviewing and updating emergency response procedures; and
- Providing the public with necessary information.

**Elevated Condition
Yellow**

Significant risk of terrorist attacks. In addition to the previously outlined Protective Measures, the following may be applied:

- Increasing surveillance of critical locations;
- Coordinating emergency plans with nearby jurisdictions;
- Assessing further refinement of Protective Measures within the context of the current threat information; and

- Implementing, as appropriate, contingency and emergency response plans.

**High Condition
Orange**

High risk of terrorist attacks. In addition to the previously outlined Protective Measures, the following may be applied:

- Coordinating necessary security efforts with armed forces or law enforcement agencies;
- Taking additional precaution at public events;
- Preparing to work at an alternate site or with a dispersed workforce; and Restricting access to essential personnel only.

**Severe Condition
Red**

Severe risk of terrorist attacks. In addition to the previously outlined Protective Measures, the following may be applied:

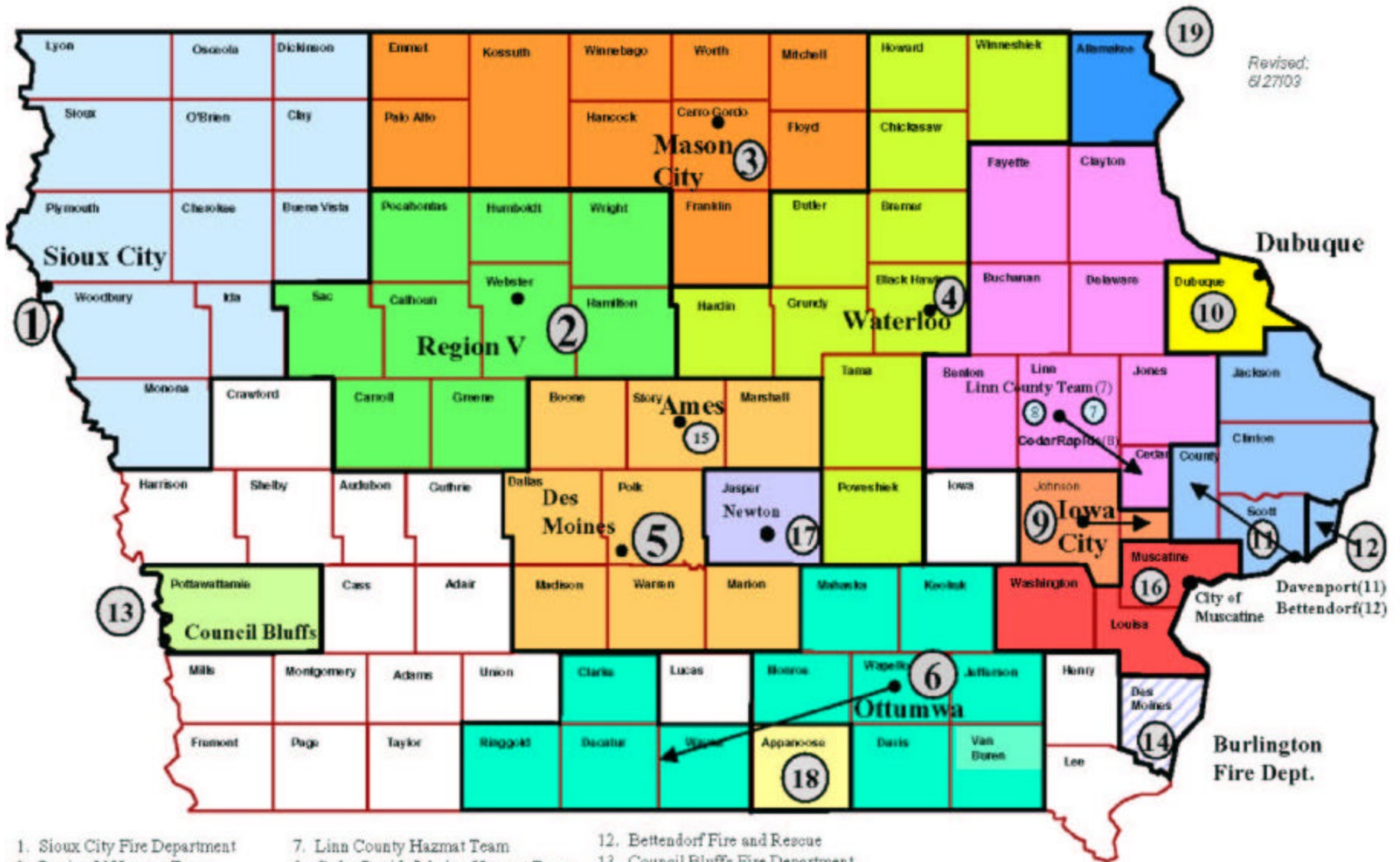
- Assigning emergency response personnel and pre-positioning specially trained teams; Monitoring, redirecting or constraining transportation systems;
- Closing public and government facilities; and
- Increasing or redirecting personnel to address critical emergency needs.

Appendix 7

Regional HazMat Team Contacts

1	SIOUX CITY	Bradley Robinson	robinson@avalon.net	712-279-6960
2	FORT DODGE	Steve Hergenreter	FDFD@Dodgenet.com	515-573-2323
3	MASON CITY	Bob Platts	mcfire@netconx.net	641-421-3640
4	WATERLOO	Dennis Duggan	HMRTC@Cedarnet.org	319-291-4460
5	DES MOINES	Jim Mason	JFMason@ci.des-moines.ia.us	Mason-240-2854, Cox-480-1892
6	OTTUMWA	Dave Sertterh	sertterhd@ci.ottumwa.ia.us	641-683-0666
7	LINN COUNTY	Tom Ulrich	linnema@jmbest.net	319-398-3911
8	CEDAR RAPIDS/MARION		KevinS@CedarRapids.org	319-286-5491
9	JOHNSON COUNTY	Ron Stutzman	Ron_Stutzman@Iowa-City.org	319-356-5177
10	DUBUQUE	John Hutchcroft		319-589-4415
11	DAVENPORT	Ed Grothus	dfd@revealed.net	563-326-7979
12	BETTENDORF	Thom Scheetz	Tscheetz@Bettendorf.lib.ia.us	563-344-4015
13	COUNCIL BLUFFS	Blaine Sorenson		712-328-4648
14	BURLINGTON	Earnie Ward	earnie.ward@mailcity.com	319-753-8373
15	AMES	Scott Siberski	Ssiberski@Hotmail.com	515-239-5133
16	MUSCATINE	Michael Hartman		dial dispatch, push "0"
17	NEWTON	Jim Sparks	newtonfd@pcpartner.net	641-792-1547
18	Midwest Environmental			800-510-8510
19	LA CROSSE	Mike Ethridge	ethridgem@cityoflacrosse.org	608-785-5947

HAZARDOUS MATERIALS TEAMS



- | | | |
|----------------------------------|---|---|
| 1. Sioux City Fire Department | 7. Linn County Hazmat Team | 12. Bettendorf Fire and Rescue |
| 2. Region V Hazmat Team | 8. Cedar Rapids/Marion Hazmat Team serves the City of Cedar Rapids/Marion | 13. Council Bluffs Fire Department |
| 3. Mason City Fire Department | 9. Johnson County Hazmat Team | 14. Burlington Fire Department |
| 4. Northeast Iowa Response Group | 10. Dubuque Fire Department | 15. City of Ames and backup for Des Moines HazMat team in Story County ONLY |
| 5. Des Moines Fire Department | 11. Davenport Fire Department | 16. City of Muscatine |
| 6. Southeast Iowa Response Group | | 17. Newton F.D. (Jasper Co.) |
| | | 18. Midwest Environmental (Appanoose Co.) |
| | | 19. La Crosse Fire Department (WI) - Allamakee Co. |

IMPROVING THE SECURITY OF OUR WATER INFRASTRUCTURE

Overview

The U.S. Environmental Protection Agency (EPA) works closely with partner organizations --other government agencies, and water utilities and associations (both drinking water and waste water) to ensure clean and safe water. Industry and government are also working cooperatively to improve drinking water and waste water security. More specifically, EPA helps the water sector to: (1) understand and utilize the best scientific information and technologies for water security; (2) assess vulnerabilities to possible attack; (3) take action to improve security; and (4) respond effectively and efficiently in the event that an incident occurs. These actions are outlined in EPA's Strategic Plan for Homeland Security. The strategic plan can be obtained on the Web at <http://www.epa.gov/safewater/security/>

Public Health Security and Bioterrorism Preparedness and Response Act of 2002

Drinking water utilities today find themselves facing new responsibilities. While their mission has always been to deliver a dependable and safe supply of water to their customers, the challenges in meeting that mission have expanded to include security and counter-terrorism. In Title IV of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (the Act), Congress and the Administration recognize the need for drinking water systems to redouble efforts on water safety and security. Title IV of the Act, Public Law 107-188, amends the Safe Drinking Water Act and specifies actions certain community water systems and the EPA must take to improve the security of the nation's drinking water infrastructure. More information is on the Web at: <http://www.epa.gov/safewater/security> Legislation addressing waste water utilities is being considered by Congress.

Requirements for Community Drinking Water Systems

The Act requires every community water system that serves a population of greater than 3,300 persons to:

1. Conduct a vulnerability assessment—Evaluate weaknesses to potential threats and identify steps that can reduce the risk of serious consequences from attack
2. Certify completion and submit a copy of the assessment to the EPA Administrator
3. Prepare or revise an emergency response plan that incorporates the results of the vulnerability assessment
4. Certify to the EPA Administrator, within 6 months of completing the vulnerability assessment, that the system has completed or updated their emergency response plan.

Note: Optional certification forms are available on the Web at <http://www.epa.gov/safewater/security/comunity.html>

Responsibilities of the U.S. EPA

EPA has the responsibility to implement a protocol to protect the vulnerability assessments from unauthorized disclosure, and to provide information on threats to community drinking water systems:

- In November 2002, EPA completed, with input from federal law enforcement and intelligence officials, an *information protection* protocol to safeguard vulnerability assessments submitted by community drinking water systems, and any information derived from these vulnerability assessments, once these documents are in EPA's possession.
- EPA completed the *Baseline Threat Information for Vulnerability Assessments of Community Water Systems* document in September 2002, and made it available to community drinking water systems that serve populations greater than 3,300 and thus, are required to complete vulnerability assessments. The document presents an overview of threats, methodologies, strategies and responses for water utilities to consider when conducting these assessments.

EPA Work in Progress

1. Support training and technical assistance for small and medium drinking water, and wastewater utilities
2. Facilitate development of tools for vulnerability assessments and emergency planning
3. Promote information sharing through the water sector Information Sharing and Analysis Center (Water ISAC) on the Web at <http://www.waterisac.org>
4. Support research and technology initiatives to improve contaminant detection, physical facility security, monitoring protocols and techniques, and treatment effectiveness.

More information on these topics can be found on the Water Infrastructure Security Web site at: <http://www.epa.gov/safewater/security/>

Appendix 9

Chemical Receiving Procedures

Chemical receiving procedures have been developed to maintain quality control on chemical deliveries to District treatment facilities. If any of the following steps is not followed, chemical deliveries are rejected

- Chemical suppliers will provide identifications to each treatment plant containing a picture? Name and driver license number of each driver delivering to District treatment plants. This information will be given to security officers at each plant, where applicable. If there is a new driver the identification will be faxed to the plant prior to the chemical truck leaving the chemical plant.
- Chemical suppliers will call the treatment plant prior to the delivery truck leaving the chemical plant. The supplier will provide the treatment plant operator with the truck driver's name type of chemical to be delivered, license plate number of the trailer and time of delivery (four-hour window). This information will be logged in the plant log and officer at each plant where applicable.
- Prior to coming on plant grounds the drivers will be asked his name and that will be checked against his photo identification card and the information provided by the vendor.
- The trailer license plate will be checked against the information provided by the vendor.
- Prior to opening any treatment plant valves a grab sample will be taken from the lowest point available on the trailer and be analyzed for pH, specific gravity and appearance. This information will be checked against the certificate of analyses. If everything matches, the load can be accepted A second sample will be taken approximately halfway through the delivery process and analyzed If everything matches, continue off loading.

The only exception to this, will be if the chemical the treatment plant is receiving is in carboys, fifty-five gallon drums or forty-four pound containers being delivered by independent freight haulers. The following procedure will be followed.

- Chemical vendor will seal all drums and or carboys with identifiable markings covering all caps and barrel rings.
- The chemical vendor will call the plant operator with the identifiable marking. This will be logged in the plant log.
- The chemical vendor will give a delivery date to the treatment plant when the chemical order is made. If a change in the delivery date is required the vendor will notify the treatment plant with the new date. The delivery date will be given to security guard, where applicable, on the morning of expected delivery. The vendor will supply the treatment plant with the freight company's name prior to delivery date.
- Upon delivery the operator will verify all markings against those provided by the vendor and all paperwork provided by the, delivery driver.

If any of the above procedure is not followed the operator will call the vendor to try to identify the driver and or indefinable marking. When this is done the delivery can be accepted If identification cannot be confirmed, notify the plant supervisor or water treatment superintendent. The delivery will be rejected and sent back to the vendor upon management review.

Appendix 10

Information Control

Federal and State laws allow the general public to inspect and obtain copies of records in the utility's custody unless there is a statutory exception. In response to recent events, however, the manner in which utility documents and information are made available may be reviewed and revised. Changes are allowed when the need to protect the utility's assets, personnel and customers, outweigh the needs of the request. Utility employees need to be trained on what is considered sensitive information at your utility and how to handle requests for information.

Sensitive Information

Sensitive information may include:

- Water system schematics and facility maps.
- Pipeline maps
- Facility plans and specifications
- Consultant and internally generated reports that analyze water system vulnerabilities
- Documents that explain water system hydraulics or operational practices
- Emergency operations and response plans
- Operation and maintenance manuals
- Security related documents
- Personal information about employees and customers, such as their phone numbers or addresses

Note that sensitive information is not limited to printed materials. Data that are available on the utility's intranet and other computer systems, and even verbal responses to questions are considered sensitive information if they relay any of the above information.

Guidelines on Release of Sensitive Information

This is the area where the utility may have the greatest control over the release of information. The utility may limit the categories of individuals to whom sensitive information can be released, but if there are too many categories, the sensitivity of the information will come into question. Information can be limited to persons requiring it because of a current business relationship with the utility, either current contractors/consultants, businesses responding to RFPs, developers applying for service, etc. Information released to students can be open to all- no longer sensitive.

Sensitive information can be made available immediately on a "need to know" basis, to persons who have been positively identified. Examples would be providing this information to other utility staff, to consultants under contract to the utility, and to other agencies who have explained a specific need for the information. Do not release the information unless you have:

- Determined the person and organization receiving the information. This determination should be made by means of a photo ID and appropriate organizational identification (business card) unless you know the person on sight.
- Communicated that the information may not be passed on to others without District authorization.
- The requestor must complete an information request form consistent with the Public Records Act. The information request form must then be routed to the utility's record manager for processing. If the requestor demands immediate access to the information, refer the requestor to the utility's record manager.

Appendix 11

Notification Call List

Notification Call List

It is critical that the water utility pre-identify the internal and external agencies that must be contacted in the event of a threatened or actual event. Take the time now to produce the list.

1. For individual utility plans, list the key personnel who must respond to security events. Include office, home, pager, and cellular numbers.
2. Identify key agencies that must be contacted. EPA suggests the following:
 - Notify local law enforcement
 - Notify local FBI Field Office (to begin the threat assessment process) Your local FBI field Office can be located by visiting <http://www.fbi.gov/contact/fo/info.htm> or in the front pages of your local telephone book
 - Notify National Response Center (NRC) 1-800-424-8802 (to notify pre-determined federal response agencies). For more information on NRC see <http://www.nrc.uscg.mil>
 - Notify state/local emergency management organization
 - Notify Governor's office
 - Notify local EPA CID Special Agent in Charge (SAC)
 - Notify other associated system authorities (wastewater, water)
 - Notify local government official (responsible authority for the water utility)
 - Notify state/local health, water and/or environmental department
 - Notify critical care facilities
 - Notify employees
 - Notify EMS and Fire Department as deemed necessary
 - Consider when to notify customers and what notification to issue

Use any form you like to capture the data you need to make the right contact. The form on the following page is just one example.

Appendix 12

Tour Guide Procedures

Tour Guidance

During normal conditions tours or field visits at utility facilities are conducted for a variety of reasons, including those that:

- Benefit the utility's interest in serving the customers (i.e., educating legislators, gaining public support on utility's projects, site visits with contractors providing services, etc.)
- Benefit dignitaries and/or scholars (i.e., members from other water utilities gaining knowledge on system operations)
- Benefit the general public (i.e., school field trips, Audubon society wildlife counts, social club like scouts, etc.)

All tours must be prearranged and approved by a Supervisor at the site. A key contact and organizer must be identified. A list of tour participants and their affiliations must be provided to the utility one week in advance of the tour. A ratio of 1 utility staff to 10 attendees must be provided All members must remain as a group being escorted by utility staff. No attendee can wonder away from the group. Each person is to wear a nametag or identification.

Level Green or Blue Security

Tours can continue. In addition to the normal requirements, tour participants must present a form of personal identification that District staff can document.

Level Yellow Security

Tours limited to those that directly benefit the District's ability to serve customers. In addition to Level Green or Blue requirements, a ratio of 1:5 must be met.

Level Orange or Red Security

All tours cancelled.

Appendix 13

Emergency Response Contractors

The Iowa Department of Natural Resources does not register, certify or endorse contractors. Responsible parties are not required to hire contractors on this list. The Iowa DNR reserves the right to make the final determination as to whether a contractor will be listed based on our knowledge of their work practices. This list is provided as a courtesy to responsible parties to help expedite spill responses and cleanups. These contractors have indicated that they are in compliance with OSHA regulations for emergency response personnel (OSHA 1910.120).

It is essential that contractors communicate directly with the Iowa DNR once they have been hired by a responsible party. This will ensure that the contractor is aware of the onsite conditions, brings the proper equipment to the spill site, understands the Department's expectations for cleanup and coordinates with other state and local officials. We also advise responsible parties to determine if the contractor hired is actually performing the on-site work or is subcontracting the work to another contractor.

Whenever possible, we recommend that companies pre-plan for emergencies and contract potential contractors before an incident occurs. Keep in mind that a contractor may not always be available to respond to an incident due to previous commitments. Iowa is a predominantly rural state and it may take several or more hours for a contractor to respond to a site.

NOTES:

- **Public hazardous materials teams respond at the request of local officials, do not contract with private companies and do not respond outside of their regional contracts. Not all counties in Iowa have a contract with a public hazardous materials team.**
- **The Iowa DNR does not have a hazardous materials team and will not hire a contractor for you.**
- **Unless noted, the contractors listed do not provide services for nuclear/radiation incidents, biohazards, explosives or weapons of mass destruction.**
- **Any company determined to have misrepresented its qualifications, on-site authority, response levels or expertise will be removed from this list for a minimum of 3 years.**

Company	Company location, Service Area, Response Level, Limitations
<p>Advanced Service Corporation 220 35th Street Marion, Iowa 52303</p> <p>800-289-7371 319-377-0075 (fax)</p> <p>www.cc200.com sales@cc200.com</p>	<p>This company has offices in northeastern and central Iowa (Cedar Rapids & Des Moines)</p> <p>The company responds statewide</p> <p>Response Level: B</p> <p>The company does stinger operations. The company handles pressurized gases on a case by case basis.</p>
<p>Bay West 5 Empire Drive Saint Paul, Minnesota 55103</p> <p>800-279-0456 651-291-0099 (fax)</p> <p>www.baywest.com danh@baywest.com</p>	<p>This company is located in central Minnesota (Twin Cities).</p> <p>The company responds statewide.</p> <p>Response Level: A</p> <p>The company does not handle pressurized gases.</p>
<p>Enviromark 7301 Vine Street Court Davenport, Iowa 52806</p> <p>563-388-9100 563-388-1515 (fax)</p> <p>www.enviromark.com cbiellier@net.express.net</p>	<p>This company is located in eastern Iowa (Davenport, Quad Cities) along the Mississippi River.</p> <p>The company responds along the eastern corridor of Iowa.</p> <p>Response Level: B</p> <p>The company does not handle pressurized gases, stinger operations or off-load certain products.</p>
<p>Environmental Solutions 10204 S 152nd Street Omaha, Nebraska 68138</p> <p>402-896-3600 402-894-2444 (fax)</p> <p>www.esilink.com john@esilink.com</p>	<p>This company is located in eastern Nebraska, western Iowa (Omaha/Council Bluffs).</p> <p>The company responds in western Iowa.</p> <p>Response Level: A</p> <p>The company does not handle pressurized gases. <i>The company does not handle bb pathogens.</i></p>
<p>Environmental Specialists, Inc. 3001 E. 83rd Street Kansas City, Missouri 64132</p> <p>816-523-6878 816-523-0183 (fax)</p> <p>pjwesi@aol.com aewesi@aol.com</p>	<p>This company is located in the Kansas City, MO area.</p> <p>This company responds statewide.</p> <p>Response Level: A</p> <p>No limitations.</p>

<p>Evans Environmental 13585 192nd Street Council Bluffs, Iowa 51503</p> <p>712-366-5834 712-366-5407 (fax)</p> <p>evanseng@mcleodusa.com</p>	<p>This company is located in western Iowa (Omaha/Council Bluffs).</p> <p>The company responds statewide.</p> <p>Response Level: B</p> <p>The company handles pressurized gases on a case by case basis.</p>
<p>GeoTek Engineering 909 East 50th Street North Sioux Fall, South Dakota 57104</p> <p>800-354-5512 605-335-0773 (fax)</p> <p>www.feotek@ideassign.com</p>	<p>This company is located in southeastern South Dakota, northwestern Iowa (Sioux City/Rapid City).</p> <p>The company responds statewide.</p> <p>Response Level: C</p> <p>This company handles petroleum and some other spills. The company does not handle pressurized gases, stinger operations, or off-load tankers.</p>
<p>HazMat Response, Inc. 1203C South Parker Olathe, Kansas 66061</p> <p>800-229-5252 913-782-6206 (fax)</p> <p>www.haz-matresponse.com hazmat@haz-matresponse.com</p>	<p>This company is located in the Kansas City, MO area (Olathe).</p> <p>This company responds statewide.</p> <p>Response Level: A</p> <p>No limitations.</p>
<p>Heritage 1188 Pershall Road Bellefontaine, Missouri 63137</p> <p>800-377-2440 314-388-3430</p> <p>www.heritage-enviro.com</p>	<p>This company is located in east central Missouri and north eastern Illinois (St. Louis & Chicago).</p> <p>The company responds statewide.</p> <p>Response Level: A</p> <p>The company handles pressurized gases on a case by case basis.</p>
<p>Hydro-Klean 333 NW 49th Place Des Moines, IA 50313</p> <p>515-283-0500 515-283-0505 (fax)</p> <p>www.hydro-klean.com mdeutsch@hydro-klean.com</p>	<p>This company is located in central Iowa (Des Moines).</p> <p>This company responds statewide.</p> <p>Response Level: A.</p> <p>The company does not handle pressurized gases.</p>

<p>IT Group 42 North Central Drive O'Fallan, Missouri 63306</p> <p>800-537-9540 636-272-9456 (fax)</p> <p>www.theitgroup.com</p>	<p>This company is located in St. Louis, Missouri.</p> <p>The company responds statewide.</p> <p>Response Level: A</p> <p><i>The company does not handle radiation, biohazards, explosives and weapons of mass destruction.</i></p>
<p>J. Petticord, Inc. 5043 NE 22nd Street Des Moines, Iowa 50313</p> <p>515-263-8900 515-265-7750 (fax)</p> <p>caparrish@uswest.net</p>	<p>The company is located in central Iowa (Des Moines).</p> <p>The company responds statewide.</p> <p>Response Level: C</p> <p>The company handles petroleum spills and some other spills within the limits of Level C protection.</p>
<p>Midwest Environmental Services (Env. Mgt. Inc.) P.O. Box 338 Centerville, Iowa 52544</p> <p>800-510-8510 641-437-7040 (fax)</p> <p>mustang@iowaoceans.com</p>	<p>The company is located in south central Iowa (Centerville).</p> <p>The company responds in south central Iowa.</p> <p>Response Level: B</p> <p>The company handles pressurized gases on a case by case basis, and does not handle stinger operations. <i>The company handles biohazards on a case by case basis.</i></p>
<p>Seneca Environmental Services 4140 NE 14th Street Des Moines, Iowa 50313</p> <p>515-369-3500 515-262-2469 (fax)</p> <p>www.senecacompanies.com sreinders@senecaco.com</p>	<p>The company is located in central and eastern Iowa (Des Moines & Quad Cities along the Mississippi River).</p> <p>The company responds statewide.</p> <p>Response Level: B</p> <p>The company handles petroleum and most other spills. The company does not handle pressurized gases or stinger operations. Off-loading tankers done case-by-case.</p>
<p>West Central Env. Consulting 14 Green River Road P.O. Box 594 Morris, Minnesota 56267</p> <p>320-589-2843 320-589-2814 (fax)</p> <p>www.wcec.com perowitz@wcec.com</p>	<p>This company is located in west central and central Minnesota (Morris & the Twin Cities).</p> <p>The company responds statewide.</p> <p>Response Level: A</p> <p>The company handles pressurized gases on a case by case basis. <i>The company handles biohazards on a case by case basis.</i></p>

Definitions of Level of Protection A-B-C-D

- A) Protection Used When;
- Unknown conditions exist
 - Hazardous substance identified requires the **highest level** of protection
 - Confined space operations are performed
 - High potential exists for splash or immersion during operations
 - Potential exist for exposure to unexpected skin hazards
 - Conditions require skin to be protected
 - Highest level of eye and respiratory protection required for conditions
- B) Protection Used When;
- Less than 19.5% oxygen is present in the atmosphere
 - Direct contact with skin does not pose a severe skin hazard
 - Air contaminants are unknown
 - Atmosphere is known, APR (air purifying respirators) criteria cannot be met
 - IDLH conditions exist
 - Contaminants present would not be harmful to, or absorbed by, the skin
 - Highest level of eye and respiratory protection required
- C) Protection Used When;
- Atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect any exposed skin.
 - Air contaminants and concentrations have been identified
 - Air contaminants are monitored
 - A canister is available that can remove the contaminant
 - All criteria for the use of air-purifying respirators are met
 - IDLH atmosphere does not exist
 - Atmosphere contains at least 19.5% Oxygen
 - Apr criteria have been met
 - Skin will not be adversely affected by contaminants
- D) Protection Used When;
- The atmosphere contains no known hazard
 - Work functions preclude splashes, immersion, or potential for unexpected inhalation or contact with hazardous levels of any chemicals
 - No potential for exposure to liquid or solid contaminants form site
 - No exposure to contaminated atmospheres

Appendix 14

Iowa Department of Transportation Garages

DOT garages

City	Supervisor	Telephone Shop
Adair	Don Eggen	641-742-3216
Akron	Robert Conyers	712-568-2071
Albia	Dave Lewis	641-932-7171
Algona	Fred Follman	515-295-5218
Allison	Bob Edgar	319-267-2550
Alton	Robert Conyers	712-756-8814
Altoona	Kelly Morris	515-967-4246
Altoona	Harold McClain	515-967-4246
Ames	Paul Durham	515-232-8226
Ames	Jim Van Sickle, GOA	515-232-8226
Anamosa	David Jansssen	319-462-3676
Anamosa	Russell Brown	319-462-3676
Atlantic	Gene Purdy	712-243-3114
Avoca	Herchel Wilber	712-343-2655
Bedford	Don Herdliska	712-523-2383
Bloomfield	Brad Steinhart	641-664-2231
Boone	Jeff Vander Zwaag	515-432-5411
Carlisle	Kelly Morris	515-265-0310
Carroll	Phil Heinlen	712-792-2894
Cedar Rapids	Randy Roethlishberger, GOA	319-364-8189
Centerville	Dennis South	641-856-2670
Chariton	Dave Lewis	641-774-4217
Charles City	Steve Johnson	641-228-4165
Cherokee	Tim Peterson	712-225-2522
Clarion	Doug Stoffer	515-532-2626
Columbus Junction	Robert Morgan	319-728-7521
Coming	Jim Oshel	641-322-4335
Correctionville	Dixie Harrison	712-372-4762
Corydon	Dave Profitt	641-872-2445
Council Bluffs	Marshel Wilber	712-322-7543
Council Bluffs	Marshel Wilber	712-366-0332
Creston	Jim Oshel	641-782-4417
Davenport	vacant	563-391-3920
Davenport	David Lee	563-391-3920
Decorah	Daryl Cooper	319-382-4565
Denison	Dixie Harrison	712-263-4792
Des Moines (North)	Ed Mahoney	515-265-1614
Des Moines (North)	Gary McDaniel	515-265-1614
Des Moines (West)	Claude Frazier, GOA	515-225-3322
Des Moines (West)	Richard Hedlund	515-225-3322
DeSoto	Pete Wonders	515-834-2368
DeWitt	Mike Fahrenkrug, GOA	563-659-3551
DeWitt	Dick Banowetz	563-659-3551
Donnellson	Raymond Tull	319-835-5211
Dubuque	Greg Fredericks, GOA	563-582-3063
Dubuque	David Shanahan	563-582-3063

City	Supervisor	Telephone Shop
Dyersville	David Shanahan	563-875-7615
Dyersville	Steve Benda	563-875-7615
Elkader	Roger Bums	563-245-2724
Emmetsburg	Roger Vigdal	712-852-4886
Fairfield	Brad Steinhart	641-472-5367
Fort Dodge	Edward Bergeson	515-955-8571
Garner	Fred Follman	641-923-2305
Gowrie	Edward Bergeson	515-352-3550
Greenfield	Gene Purdy	641-743-8324
Grinnell	Ronald Jones	641-236-3014
Grundy Center	Larry Mesenbrink	319-824-5259
Hanlontown	Douglas Lickteig	641-896-3100
Ida Grove	Dixie Harrison	712-364-2027
Independence	Brian Miller	319-334-2484
Independence	Kim Sheehy	319-334-2484
Indianola	Larry Pottridge	515-961-3111
Iowa Falls	Larry Mesenbrink	641-648-3135
Jefferson	Jeff Vander Zwaag	515-386-2176
Jefferson	Ron Mahoney	515-386-2176
Keosauqua	Timothy Peterson	319-293-3363
Knoxville	Larry Pottridge	641-842-4714
Latimer	Douglas Stoffer	641-579-6466
LeMars	Robert Conyers	712-546-6401
Leon	Dennis South	641-446-6214
Malcom	Ron Jones	641-528-3775
Malcom	Mark Lloyd	641-528-3775
Manchester	Penny Holtz	563-927-3979
Manchester	Kim Sheehy	563-927-3979
Maquoketa	Lionel Kenney	563-652-2885
Maquoketa	Russell Brown	563-652-2885
Marion	Dick Poole	319-373-1277
Marion	Jeff Tjaden	319-373-1277
Marshalltown	John Wilson	641-753-7783
Martensdale	Larry Pottridge	641-764-2755
Mason City	Douglas Lickteig	641-423-9441
Mason City	Pete Andera	641-423-9441
Missouri Valley	vacant	712-642-2178
Mt. Ayr	Don Herdliska	641-464-2340
Mt. Pleasant	Dale O'Brien	319-385-8641
Muscatine	Lonnie Ford	319-263-6241
Neola	vacant	712-485-2591
New Hampton	Steve Johnson	641-394-2541
Newhall	Scott Hepker	319-223-5890
Newhall	John Berry	319-223-5890
Newton	Gary Pickett	641-792-7783
Oakdale	Terry Zimmerman, GOA	319-626-2386
Oakdale	Travis Nitcher	319-626-2386
Oakland	Herchel Wilber	712-482-3190
Onawa	Ilo Jon Allen	712-423-2040
Osage	Steve Johnson	515-732-3637

City	Supervisor	Telephone Shop
Osceola	Dave Lewis	515-342-2711
Oskaloosa	Steve Vannoni	641-673-7697
Ottumwa	Brad Steinhart	641-684-8231
Pacific Junction	Ken Heitman	712-622-8140
Perry	Pete Wonders	515-676-2233
Pocahontas	Tim Peterson	712-335-4590
Red Oak	Jim Oshel	712-623-2450
Rock Rapids	Tom Jungers	712-472-3719
Rock Valley	Tom Jungers	712-476-5553
Rockwell City	Phil Heinlen	712-297-8222
Sabula	Russell Brown	563-687-2708
Sabula	Bert Shaw	563-687-2708
Sac City	Phil Heinlen	712-662-7674
Sheldon	Tom Jungers	712-324-3631
Shenandoah	Don Herdliska	712-246-4320
Sidney	Ken Heitman	712-374-2515
Sigourney	Steve Vannoni	641-622-3170
Sioux City (Hamilton)	Larry Franke, GOA	712-252-1836
Sioux City (Hamilton)	Steve Botos	712-239-2856
Sioux City (Leeds)	Steve Botos	712-239-2113
Sloan	Ilo Jon Allen	712-428-3300
Soldier	Ilo Jon Allen	712-884-2265
Spencer	Roger Vigdal	712-262-1645
Spirit Lake	Roger Vigdal	712-336-2112
Storm Lake	Tim Peterson	712-732-5670
Swea City	Fred Follman	515-272-4295
Tama	John Wilson	641-484-2402
Tama	Sherman White	641-484-2402
Tipton	Mike Nutter	563-946-2391
Tipton	Danny Laing, GOA	563-946-2391
Urbana	Gene Schmelzer, GOA	319-443-2370
Urbana	John Berry	319-443-2370
Wapello	Lonnie Ford	319-728-7521
Washington	vacant	319-653-3233
Waterloo	Bev Rust	319-233-3055
Waterloo	John Mixdorf	319-233-3055
Waterloo	Russell Frisch	319-233-3055
Waukon	Daryl Cooper	563-568-3773
Waverly	Robert Edgar	319-352-1045
West Burlington	Ray Tull	319-752-6065
West Union	Roger Burns	319-422-3279
Williams	Paul Durham	515-854-2217
Williamsburg	Jack Patterson	319-668-2397
Williamsburg	Larry Hopp, GOA	319-668-2397

Appendix 15

Spill Absorbent Information Sheet

Absorbing Capacity	
Petroleum Based / Hydrophobic Absorbents	All-Purpose Absorbents
<ul style="list-style-type: none"> • Pads - 0.5 gallons each • 4' socks - 1 gallon each • Loose Polymer - 2 gallons/lb.* • 10' socks - 20 gallon each <p>*Does not absorb heavy oils</p>	<ul style="list-style-type: none"> • Spill Pillow - 1 gallon each • 4' Boom - 0.8 gallons each • 10' Boom - 5.2 gallons each
DOT Garage Spill Kits for Petroleum Based Products	
95 - Gallon Overpack	30 - Gallon Overpack
<ul style="list-style-type: none"> • 25 pads • 5 - 4' socks • 4 - 10' socks • 20 lbs. - loose polymer • Drum plugging compound • 3 bags of personal protection equipment (PPE) • 95 gallon overpack 	<ul style="list-style-type: none"> • 25 pads • 5 - 4' socks • 20 lbs. - loose polymer • 3 bags of personal protection equipment (PPE)
Mobile Highway Spill Kits	
Petroleum Based Absorbents	All-Purpose Absorbents
<ul style="list-style-type: none"> • 95- gallon overpack holds 6 - 10' booms • 95- gallon overpack holds 32 - 4' socks & 100 pads 	<ul style="list-style-type: none"> • 95-gallon overpack holds 8 - 10' booms • 95-gallons overpack holds 20 - 4' socks & 100 pads & 15 pillows

Petroleum based absorbents will absorb petroleum products, solvents, etc. They will not absorb water or water soluble material.

The loose polymer will not absorb heavier oils. If used in sufficient quantities it will solidify any product it absorbs.

All-purpose absorbents will absorb any liquid including petroleum and water based products and should not be used in standing water.

All-purpose absorbents (HAZORB products) contain silica and must not be used on hydrofluoric acid or hydrazine. See MSDS included in spill kit for specific information.

DOT will deliver additional absorbent material if ordered by a governmental group. Charges may be passed on.

Appendix 16

DNR Guidelines for Reporting Hazardous Conditions

NOTIFICATION OF HAZARDOUS CONDITIONS

[Prior to 7/1/83, DEQ Ch 41]
[Prior to 12/3/86, Water, Air and Waste Management[900]]

567—131.1(455B) Definitions. For purposes of this chapter:

"Corrosive" means causing or producing visible destruction or irreversible alterations in human skin tissue at the site of contact, or in the case of leakage of a hazardous substance from its packaging, causing or producing a severe destruction or erosion of other materials through chemical processes.

"Department" means the department of natural resources.

"Hazardous condition" means any situation involving the actual, imminent or probable spillage, leakage, or release of a hazardous substance onto the land, into a water of the state or into the atmosphere which, because of the quantity, strength and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate or potential danger to the public health or safety or to the environment.

"Hazardous substance" means any substance or mixture of substances that presents a danger to the public health or safety and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances which, in sufficient quantity, may be hazardous: acids; alkalis; explosives; fertilizers; heavy metals such as chromium, arsenic, mercury, lead and cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons; radioactive materials; sludges; and organic solvents. "Hazardous substances" may include any hazardous waste identified or listed by the administrator of the United States Environmental Protection Agency under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, or any toxic pollutant listed under Section 307 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous substance designated under Section 311 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous material designated by the secretary of transportation under the Hazardous Materials Transportation Act (49 CFR §172.101).

"Irritant" means a substance causing or producing dangerous or intensely irritating fumes upon contact with fire or when exposed to air.

"Toxic" means causing or producing a dangerous physiological, anatomic or biochemical change in a biological system.

567—131.2(455B) Report of hazardous conditions. Any person manufacturing, storing, handling, transporting, or disposing of a hazardous substance shall notify the department at (515)281-8694 and the local police department or the office of the sheriff of the affected county of the occurrence of a hazardous condition as soon as possible but not later than six hours after the onset of the hazardous condition or discovery of the hazardous condition. A sheriff or police chief who has been notified of a hazardous condition shall immediately notify the department. Reports made pursuant to this rule shall be confirmed in writing as provided in 131.2(2).

131.2(1) Verbal report. The verbal report of such a hazardous condition should provide information on as many items listed in 131.2(2) as available data will allow.

131.2(2) Written report. The written report of such a hazardous condition shall be submitted to the department within 30 days and contain the following information:

- a. The exact location of the hazardous condition.
- b. The time and date of onset or discovery of the hazardous condition.
- c. The name of the material, the manufacturer's name and the volume of each material involved in the hazardous condition in addition to contaminants within the material if they by themselves could cause a hazardous condition.
- d. The medium (land, water or air) in which the hazardous condition occurred or exists.
- e. The name, address and telephone number of the party responsible for the hazardous condition.
- f. The time and date of the verbal report to the department of the hazardous condition.
- g. The weather conditions at the time of the hazardous condition onset or discovery.
- h. The name, mailing address and telephone number of the person reporting the hazardous condition.
- i. The name and telephone number of the person closest to the scene of the hazardous condition who can be contacted for further information and action.
- j. Any other information, such as the circumstances leading to the hazardous condition, visible effects and containment measures taken that may assist in proper evaluation by the department.

131.2(3) Reporting of subsequent findings. All subsequent finding and laboratory results should be reported and submitted in writing to the department as soon as they become available. These rules are intended to implement Iowa Code section 455B.115.

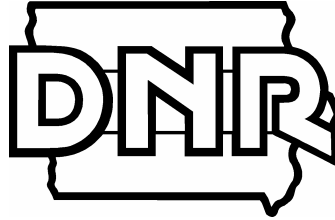
[Filed 2/3/78, Notice 10/5/77—published 2/22/78, effective 3/29/78]
[Filed emergency 10/31/80—published 11/26/80, effective 10/31/80]
[Filed emergency 6/3/83—published 6/22/83, effective 7/1/83]
[Filed emergency 11/14/86—published 12/3/86, effective 12/3/86]
[Filed 12/30/93, Notice 10/13/93—published 1/19/94, effective 2/23/94]

Written Reports: Written reports should include the DNR spill number and be addressed to the duty officer responding to the spill. Reports can be sent via mail, fax, or electronic mail.

MAIL:
IDNR Emergency Response Unit
7th St., Suite I
Des Moines, IA 50309

FAX:
515/725-0218

EMAIL:
Duty officer addresses can be 401 SW
found at the staff roster link at
www.state.ia.us/epd/spills.htm



Iowa Department of Natural Resources
Emergency Response Unit

Guidelines for Reporting Hazardous Conditions

**24 hour number for release reporting
515/281-8694**

All spills must be reported within a six hour period after discovery.

- ◆ The hazardous substance has the potential to leave the property by run-off, sewers, tile lines, culverts, drains, utility lines, or some other conduit.
- ◆ The hazardous substance has the potential to reach a water of the state - either surface water or groundwater.
- ◆ The hazardous substance can be detected in the air at the boundaries of the facility property by the senses (sight and smell) or by monitoring equipment.
- ◆ There is a potential threat to the public health and safety.
- ◆ Local officials respond to the incident.
- ◆ The release exceeds a Federal Reportable Quantity (RQ).

- It is recommended that all spills be cleaned up although a particular spill may not be reportable. A series of small spills over the years can result in one big cleanup!
- Department rules stress the immediate or potential danger that a spill may cause.

In general, Iowa reporting requirements are more stringent than Federal reporting requirements. However, the *time limit* for reporting at the Federal level is more immediate.

Appendix 17

Iowa Department of Natural Resources Public Water Supply System Security Checklist

Prepared by; Iowa Department of Natural Resources

CONFIDENTIAL (when complete)

Iowa DNR Public Water System Security Inventory Check List

System Name: _____ System Component Covered:

County: _____

- ___ Water Treatment Plant
- ___ Wastewater Treatment Plant
- ___ Distribution System
- ___ Collection System
- ___ Full System

Completed by: _____

PWSID# _____

Date: _____

(Other) _____

	Yes	No	N/A	Comments
<u>1. Structures:</u>				
a. Are all structures always locked ?				
b. Are alarms set?				
c. Are "Authorized Personnel Only " Signs posted at entrance to all facilities?				
d. Are important telephone numbers posted on outside of each building and/or on inside of fence, readily visible for emergency use by the public?				
e. Is each well and/or surface intake area physically inspected at least once per day?				
f. Is watershed adequately patrolled?				
g. Are all facilities regularly and thoroughly inspected, including those portions not readily visible?				
h. Where possible, is every access to water (outside clarifier, clearwell, reservoir, manhole, etc.) locked or fenced?				
i. Is protection provided (i.e., with concrete barriers) to prevent a speeding vehicle (Is the facility driveway similarly protected) from hitting plant or other facilities?				
j. Are all chemicals stored outside protected from vandalism and accidents?				
k. Are all existing emergency interconnections to other water supply sources functional and exercised on a regular basis?				
l. Are all treatment plants, storage tanks, pump stations and other remotely located facilities connected to a main control station via tele-metering, SCADA, or equivalent?				
m. Is a backup or exterior connection for electrical power supply provided?				

n. Is an electronic power outage alarm sent to a 24-hr. dispatch center?				
o. Are fire/ smoke alarms provided at all structures and sent to a 24 hr. staffed center?				
p. Is a finished water chlorine residual low-level alarm provided?				
q. Is each employee issued a personal safety device or PASS alarm? The device is wireless body button that can be activated in the event of an emergency. Connected to an alarm company, the dispatcher can speak to their employee and/or dispatch emergency personnel?				
r. Are all buildings (including walls, roof, windows, etc.) constructed to commercial grade standards? (not residential)				
s. Are all solar panel, roof vents, and other potential roof openings covered with bars or other materials to limit access?				
t. Keys: 1) Are distribution and number of keys known and controlled?				
2) Are all keys labeled as "Do Not Duplicate"?				
3) Are local police departments provided with access keys, or given numbers, page out or cell, to reach employees?				
4) Are keys always removed from all unattended equipment?				
u. Fencing: 1) Are entire perimeters of treatment plant property, physical walls, storage tank, and wellhead adequately fenced and gate(s) kept locked?				
2) Is all fencing 10 ft. high, with inward-facing barbed wire on top, including on entrance gate(s)?				
3) Is all fencing, including gates(s), secure to ground to prevent access under gate(s)?				
4) Is fence at least 4' higher than any structure or landscaping located directly outside of fence which may provide climbing access over fence?				
5) Is fence at least 6' away from any structure or landscaping located directly outside of fence which may provide climbing access over fence?				
6) Are all openings under fences secured from entry?				
7) Is all landscaping placed in a manner as not to hide structures or treatment processes?				
8) Are all culverts, storm sewers, and drainage pipes secured with security bars to restrict access?				

v. LIGHTING:				
1) Is entire perimeter of treatment plant property illuminated with street- type lighting fixtures?				
2) Is entire perimeter of treatment plant illuminated so that all shadows and dark areas are eliminated?				
3) Is lighting mounted at approximately a second story level?				
4) Are exterior light bulbs of commercial grade and break resistant?				
5) Is lighting provided in parking lots, treatment bays, and other areas with limited staffing?				
w. Entrance doors				
1) Built of commercial grade with metal frame fire rated construction?				
2) Outside hinges hidden/protected from vandalism?				
3) Fitted tightly and free from mail slot and excessive air gaps, including at floor/threshold?				
4) Provided with push ("panic") bar release on inside of door?				
5) Visitor entrances provided with a doorbell?				
6) Doors and locks in good condition?				
7) Electronically controlled so that each employee must use swipe card and enter a P.I.N. number to enter the plant? A computer should store the date, time, and employee who metered the plant?				
x. Windows				
1) Are all windows (including on Doors covered with metal security mesh?				
2) In case broken or opened, are all widows wired to loud audible alarm and to automatic telephone dialer or central station alarm?				
y. Electronic surveillance				
1) Is entire perimeter of treatment plant installed with infrared motion sensors in area between building and fence?				
2) Are infrared motion sensors electrically connected to automatic telephone dialer or central station alarm company?				
3) Is a video system provided to monitor property perimeter, which are either always on or activated by connection to infrared motion sensors?				
4) Is a video system provided to monitor all vital parts of the plant, including the main entrance and control room and recorded on a				

slow speed security VCR (tapes not reused, nor recycled for predetermined time)?				
2) SECURITY FORMS:				
a. Are emergency telephone numbers (including ambulance, police, fire, haz-mat, FBI, spill response) current and prominently displayed at each telephone?				
b. Are MSDS and chemical response information present for all stored chemicals?				
c. Written Plans				
1) Is a chain of command and emergency call list established, updated annually and prominently displayed (must include 24/7 telephone numbers for system superintendent and chief municipal officer)?				
2) Does a written security program plan exist, are employees frequently trained in the plan, and is the plan re-evaluated periodically?				
3) Is a plan in place to notify customers, after the state department of health determines a positive on the sample?				
4) Are all employees, including Customer Service staff, trained and checklists provided on how to handle a threat if called in? Practice drills should be exercised frequently.				
5) Are detection, response, and notification issues discussed with public health officials and a protocol established?				
d. Reporting the Emergency				
1) Do you have the numbers to report emergencies to the state DNR?				
2) Do you have a checklist to gather information from the caller on threats, bomb threats?				
3) Do you have caller I.D.?				
3) Procedures:				
a. Can operational procedure times be varied so as not to reveal working patterns?				
b. Is a daily log used and initialed by the last person who leaves the plant to verify that all (specific) doors and windows are locked, are appliances shut down, nightlights are on, and that entrance door is locked and alarm on?				
c. Is all mail opened off-site, at a non-water-related facility?				
d. Are all employees fully aware of the importance of reporting to the DNR any unusual entry point or distribution system monitoring result (such as chlorine residual), unusual customer complaint on water quality, or illness among the utility customers that may be associated with the water? An event log should be maintained.				
e. Is access controlled to computer networks				

and control systems, and passwords changed frequently				
<u>f. Law enforcement agencies:</u>				
1. Are police departments (both daytime and nighttime coverage's) familiar with system facilities; do they conduct routine patrol of facilities and, are protocols established for reporting and responding to threats and other emergencies (and updated annually)				
2. Are staffs aware, that they are to immediately report to the police and FBI any criminal threat, security breach, suspicious behavior, or attack on their water utilities?				
3. Are copies of operational procedures, including contacts and current telephone numbers, provided to police departments and emergency management personnel?				
4. Was a system facilities security survey conducted?				
<u>g. Employees:</u>				
1) Are employees uniformed?				
2) Does each employee display their sealed photo ID at all times?				
3) Are background security checks conducted on employees at hiring and periodically thereafter?				
4) Upon employee termination, are pass codes changed, keys, access cards returned, and is counseling available for the disgruntled employees?				
<u>h. Non-employee access:</u>				
1) Is a visitor and contractor access policy established for employees to limit/question/scrutinize stranger(s) in facilities? In the event that an unscheduled visitor or stranger arrives after normal business hours the employee should use the intercom for initial contact. No one should be admitted unless they have the proper credentials and clearance.				
2) Are all chemical and other supply deliverers required to show proper identification and sign-in?				
3) Do system personnel observe delivery personnel during delivery and until delivery personnel leave property?				
<u>i. Neighbors:</u>				
1) Are important facility telephone numbers given to neighbors of all system facilities?				
2) Is an informal "neighborhood watch" program established around each system facility?				
3) Is character of all neighbors considered/evaluated?				
<u>4) Cyber/ SCADA Systems</u>				
a. Are systems put in place as firewalls to				

protect outsider's from gaining access to phone line transmission sites to the SCADA program?				
b. Is dish signals protected from outside sources dialing in on the frequencies used on your system?				
c. Do you have a link to another system, such as PC Anywhere or any comparable system that allows maintenance from outside service providers?				
d. Are you able to disconnect the communication line from service providers when not in use?				
e. Have you trained staffs on running the system in hand operation? Was the system designed to operate in hand mode, as well as in the programmed automatic mode?				
f. Do you have back up computers				
g. Do you have web site information that if put into the wrong viewer, could disrupt any of your operations?				
5) Other:				
a. Were all system facilities (treatment plants, wellheads, meter pits, pump stations, reservoirs, storage tanks, etc.) considered during completion of this form?				
b. Are separate forms being prepared for other system components?				
c. Are maps, as built drawings, records, O&M's, SOP's, financial records, and checklist in secure places?				
d. Are vehicles secured, and properly identified?				
e. Do you have your Vulnerability Assessments complete, and sent to EPA?				
f. Do you have your VA Certification sent to EPA?				
g. Do you have your Emergency response plan complete?				
h. Is your Vulnerability Assessment Plan part of your Emergency Response plan?				
i. Is your Emergency Response Plan Certification sent to EPA				
j. Are your plans accessible to all employees that would have need in case of an event?				
k. Does your emergency plan include plans for; source protection, sampling, monitoring, emergency, contingency, repair, replacement, and contamination assessments?				
l. Are parts inventories adequate?				
m. Are all tower vents and air vents screened?				
n. Are you able to increase chlorine in the system if needed?				

o. Does your system have a written cross connection control plan, including inspections?				
p. Does your system have procedures on hydrant authorization and usage?				

This form is not to be considered a complete or comprehensive evaluation, **and is not meant to serve all sized water systems.**

Population of System _____

Administrated by: Water Board _____ **Governmental** _____

Appendix 18

Downstream Surface H₂O Water Supplies

Down Stream Surface Water Supplies (Sorted by Location)

City	Contact	Phone	2nd	3rd	Region	County	Watershed
Bedford	Joe Pace	712/523-2210	523-2311		4	Taylor	East Fork Hundred and Two River
Blair, NE	Mark Adams	402/426-9661	426-2073	426-4191	0	Washington	Missouri River
Bloomfield	Dan Westergard	641/664-1317	664-3329	459-2136	6	Davis	Lakes Fisher & Bloomfield
Burlington	Alen Borden	319/752-7611	754-6501		6	Des Moines	Mississippi below Flint & Iowa
Cedar Rapids	John North	319/286-5970	286-5912		1	Linn	Cedar River, gone alluvial, no intakes
Centerville	Bill Ursta	641/856-8495	856-8495	437-4703	5	Appanoose	"The Pond"
Central Water	Mike Miller	712/332-5000	338-4826		3	Dickinson	West Lake Okoboji
Chariton	Jim Corbish	641/774-4711	774-4513		5	Lucas	Lakes - Ellis, Morris & Red Haw
Clarinda	Steve Guthrie	712/542-2518	542-2194		4	Page	Lake Clarinda
Corning	Mike Goldsmith	712/542-2518	322-4230		4	Adams	Lake Icaria
Council Bluffs	John Elliott	712/328-9577	328-4635	328-1006	4	Pottawattamie	Missouri River
Creston	Steve Green	641/782-2554	782-6949	782-2710	4	Union	3 Mile Lake & 12 Mile Lake
Davenport-	Brock Earnhardt	563/324-3265	Ext 201	332-8814	6	Scott	Mississippi below Wapsipicon
Des Moines	Ted Corrigan	515/283-8709	283-8780	979-8307	5	Polk	Rivers - Raccoon & Des Moines
Eddyville-	Chris Lindgren	641/969-4511	969-3563	777-8643	5	Monroe	Des Moines River
Fort Madison	Norm Dodson	319/372-1623	372-1602		6	Lee	Mississippi below Skunk confluence
Greenfield	Mark Nelson	641/743-2914	743-2741		4	Adair	Lakes - Nodaway & Greenfield
Iowa City	Kevin Slutts	319/356-5160	356-5166		6	Johnson	Iowa River
Iowa City-	Ken Lloyd	319/335-5165	335-5168		6	Johnson	Iowa River
Keokuk	Sherri Roth	319/524-2011	795-1145		6	Lee	Mississippi River
Lake Manawa State Park	Park Manager Doug Coziaher	712/366-0220	366-1175	402-980-5430	4	Pottawattamie	Missouri River
Lamoni	John Barney	641/784-6911			5	Decatur	Home Pond
Leon	Junior Jennings	641/446-6232	446-6344	446-4111	5	Decatur	Little River Lake
Milford	David Coleman	712/338-2401	336-2525		3	Dickinson	West Lake Okoboji
Montezuma	Bill Moore	641/623-5675	623-0036		5	Poweshiek	Diamond Lake - Hwy 63 north to 80
Mount Ayr	City Hall	641/464-2402	464-3806		4	Ringgold	Loch Ayr Shut Down SWI Buying H2O
Mt. Pleasant –	Lori Glanzman/Steve Newman	319/385-2121	385-1470		6	Henry	Skunk River
Omaha	Joel Christiansen	402/554-7774	554-7946	449-8180	0	Pottawattamie	Missouri River

Osceola	Herman Gracey	641/342-2206	344-1178		5	Clarke	West Lake Osceola
Ottumwa	Rich Wilcox	641/684-4606	Ext 16		6	Wapello	Des Moines River
Panora	Sue Cosner	641/755-2164	755-2188	755-2420	4	Guthrie	Middle Raccoon River
Rathbun RWA	Ron Eggerman	641/647-2416			5	Appanoose	Chariton River
Sioux City WS	Rich Mach	712-279-6150			3	Woodbury	Missouri River
Spirit Lake	Dean Dodds	712/336-2127			3	Dickinson	Big Spirit Lake
Wahpeton	Tim Wilson	712/337-3522			3	Dickinson	West Lake Okoboji
Winterset	Scott Wesselman	515/462-3601			5	Madison	Cedar Lake

Down Stream Surface Water Supplies (Sorted by Water Source)

City	Contact	Phone	2nd	3rd	Regio	County	Watershed
Centerville	Bill Ursta	641/856-8495	856-2308	437-4703	5	Appanoose	"The Pond"
Creston	Steve Green	641/782-2554	782-6949	782-2710	4	Union	3 Mile Lake & 12 Mile Lake
Spirit Lake	Dean Dodds	712/336-2127			3	Dickinson	Big Spirit Lake
Winterset	Scott Wesselman	515/462-3601			5	Madison	Cedar Lake
Cedar Rapids	John North	319/286-5970	286-5912		1	Linn	Cedar River – gone alluvial
Rathbun RWA	Ron Eggerman	641/647-2416			5	Appanoose	Chariton River
Ottumwa	Rich Wilcox	641/684-4606			6	Wapello	Des Moines River
Eddyville-Cargill	Chris Lindgren	641/969-4511	969-3746	777-8643	5	Monroe	Des Moines River
Montezuma	Bill Moore	641/623-5675	623-5679		5	Poweshiek	Diamond Lake - Hwy 63 north to 80
Bedford	Joe Pace	712/523-2210	523-2311		4	Taylor	East Fork Hundred and Two River
Lamoni	John Barney	641/784-6911			5	Decatur	Home Pond
Iowa City-	Ken Lloyd	319/335-5165	335-5168		6	Johnson	Iowa River
Iowa City	Kevin Slutts	319/356-5160	356-5166		6	Johnson	Iowa River
Clarinda	Steve Guthrie	712/542-2518	542-2194		4	Page	Lake Clarinda
Corning	Mike Goldsmith	712/542-2518	322-4230		4	Adams	Lake Icaria
Chariton	Gary Ingram	641/774-4711	774-4513		5	Lucas	Lakes - Ellis, Morris & Red Haw
Greenfield	Kenneth Hoadley	641/743-2914	743-2741		4	Adair	Lakes - Nodaway & Greenfield

Bloomfield	Dan Westergard	641/664-1317	664-3329	459-2136	6 Davis	Lakes Fisher & Bloomfield
Leon	Junior Jennings	641/446-6232	446-7733	446-4111	5 Decatur	Little River Lake
Mount Ayr	City Hall	641/464-2402	464-3806		4 Ringgold	Loch Ayr
Panora	Sue Cosner	641/755-2164	755-2188	755-2420	4 Guthrie	Middle Raccoon River
Burlington	Alen Borden	319/752-7611	754-6501		6 Des Moines	Mississippi below Flint & Iowa
Fort Madison	Norm Dodson	319/372-1623	372-1602		6 Lee	Mississippi below Skunk confluence
Davenport-Iowa-	Brock Earnhardt	563/322-0161	324-3264		6 Scott	Mississippi below Wapsipinicon
Keokuk	Sherri Roth	319/524-2011	795-1145		6 Lee	Mississippi River
Sioux City WS	Rich Mach	712-279-6150			3 Woodbury	Missouri River
Omaha	Joel Christiansen	402/554-7774	554-7946	449-8180	0	Missouri River
Blair, NE	Mark Adams	402/426-9661	426-2073	426-4191	0	Missouri River
Council Bluffs	John Elliott	712/328-9577	328-4635	328-1006	4 Pottawattamie	Missouri River
Lake Manawa	Park Manager Doug Coziaher	712/366-0220	366-1175	401-214-	4 Pottawattamie	Missouri River
Des Moines Water	Ted Corrigan	515/283-8709	283-8780	979-8307	5 Polk	Rivers - Raccoon & Des Moines
Mt. Pleasant –	Lori Glanzman/Steve	319/385-2121	385-1470		6 Henry	Skunk River
Milford	David Coleman	712/338-2401	336-2525		3 Dickinson	West Lake Okoboji
Central Water	Mike Miller	712/332-5000	338-4826		3 Dickinson	West Lake Okoboji
Wahpeton	Tim Wilson	712/337-3522			3 Dickinson	West Lake Okoboji
Osceola	Herman Gracey	641/342-2206	344-1178		5 Clarke	West Lake Osceola

Vulnerability Assessment Certification

Public Water System ID Number: _____

System Name: _____

City where system is located: _____

State: _____

Printed Name of Person Authorized to sign this certification on behalf of system:

Title: _____

Address: _____

City: _____

State and Zip Code: _____

Phone: _____ Fax: _____ email: _____

I certify to the Administrator of the U.S. Environmental Protection Agency that this community water system has conducted a vulnerability assessment that complies with Section 1433(a)(1) of the Safe Drinking Water Act, as amended by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Public Law 107-188, Title IV – Drinking Water Security and Safety).

I further certify that this document and all attachments were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information (Safe Drinking Water Act (42 U.S.C. 300f et seq.))

The vulnerability assessment of this community water system conducted addresses the following components of my system Check YES if the CWS has the element in its system, check N/A if the element is not applicable to the system):

Yes	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	pipes and constructed conveyances
<input type="checkbox"/>	<input type="checkbox"/>	physical barriers
<input type="checkbox"/>	<input type="checkbox"/>	water collection
<input type="checkbox"/>	<input type="checkbox"/>	pretreatment
<input type="checkbox"/>	<input type="checkbox"/>	treatment

Certification of Conduct of a VA—Page 2 of 2

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | storage |
| <input type="checkbox"/> | <input type="checkbox"/> | distribution facilities |
| <input type="checkbox"/> | <input type="checkbox"/> | electronic, computer or other automated systems |
| <input type="checkbox"/> | <input type="checkbox"/> | which are utilized by the public water system |
| <input type="checkbox"/> | <input type="checkbox"/> | the use, storage, or handling of various |
| <input type="checkbox"/> | <input type="checkbox"/> | chemicals |
| <input type="checkbox"/> | <input type="checkbox"/> | the operation and maintenance of such system |

Other components in the CWS that are evaluated under this VA (List those applicable):

Signed: _____ Date: _____

Primary contact person that EPA can call if there are questions about this Certification and VA submission:

Name: _____
 Address (if different than that of Authorized Representative):

Phone: _____
 Email Address: _____

Alternate Contact Person: _____
 Address (if different than that of Authorized Representative):

Phone: _____
 Email Address: _____

Certification of Conduct of a VA—Page 2 of 2

**CERTIFICATION OF COMPLETION
OF AN EMERGENCY RESPONSE PLAN**

Public Water System ID number: _____

System Name: _____

City where system is located: _____

State: _____

Printed name of person authorized to sign
this certification on behalf of the system: _____

Title: _____

Address: _____

City: _____

State and ZIP Code: _____

Phone: _____ Fax: _____ Email: _____

I certify to the Administrator of the U.S. Environmental Protection Agency that this community water system has completed the Emergency Response Plan that complies with Section 1433 (b) of the Safe Drinking Water Act as amended by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Public Law 107-188, Title IV- Drinking Water Security and Safety).

Certification of Conduct of a ERP—Page 1 of 2

I further certify that this document was prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information (Safe Drinking Water Act (42 U.S.C. 300f *et seq.*)).

The emergency response plan that this community water system completed incorporates the results of the vulnerability assessment completed for the system and includes “plans, procedures, and identification of equipment that can be implemented or utilized in the event of a terrorist or other intentional attack” on this community water system. The emergency response plan also include “actions, procedures, and identification of equipment which can obviate or significantly lessen the impact of terrorist attacks or other intentional actions on the public health and the safety and supply of drinking water provided to communities and individuals.”

This CWS has coordinated, to the extent possible, with existing Local Emergency Planning Committees established under the Emergency Planning and Community Right-to-Know Act (42 U.S.C. 11001 *et seq.*) when preparing this emergency response plan.

Signed: _____ Date: _____

Primary contact person that EPA can call if there are questions about this Certification:

Name: _____
Address (if different than that
of the Authorized Representative): _____

Phone: _____

Email Address: _____

Alternate Contact Person:

Name: _____

Address (if different than that
of the Authorized Representative): _____

Phone: _____

Email Address: _____

Certification of Conduct of a ERP—Page 2 of 2

Appendix 20

Joint Collaboration between NRWA and the Association of State Drinking Water Administrators

ASDWA Water System Emergency Response Plan Outline

I. Introduction, Goals, and Importance

II. Emergency Planning Process

A. Planning Partnerships: Planning should include those parties who will need to help the utility in an emergency (e.g., first responders, law enforcement, public health officials, etc)

B. Scenarios: Incorporate V A findings to develop scenarios (events that could cause emergencies/severity of emergencies) in order to flesh out response needed.

III. Emergency Response Plan

A. System Specific Information

1. PWS ID, Owner, Contact Person
2. Population served and service connections
3. System Components
 - Source Water
 - Storage
 - Treatment Plant
 - Distribution System

B. Alternative Water Sources

C. Chain of Command Chart in Coordination with Local Emergency Planning Committee (Internal and External Emergency Responders)

- Contact Name
- Organization and Responsibility
- Telephone number

D. Communication Procedures Who, What, When (using Chain of Command Chart and following Notification Lists)

1. Internal Notification Lists
2. External Notification Lists
 - First responders (local police and emergency & HAZMAT squad)
 - State Personnel
 - Health Department
 - Customers
 - Service/Mutual Aid
 - Others?

E. Emergency Response Protocols (To implement in the event of a terrorist attack or intentional act in order to lessen the impact)

1. Protocols must include:
 - Plans/ Actions
 - Procedures
 - Equipment identified
2. Protocols should provide for the following activities:

- Assess the Problem
- Isolate and Fix the Problem
- Monitoring
- Recovery
- Return to Safety
- Report of Findings

IV. Next Steps

- A. Plan Approval
- B. Practice! and Plan to Update (as necessary; once every year recommended)

V. Appendix of Resources/Links

Appendix 21

Web Sites for VA and ERP

Web Sites for Vulnerability Assessment and Emergency Response Plans

Water Sector Links

American Water Works Association	http://www.awwa.org
Association of Metropolitan Sewerage Agencies	http://www.amsa-cleanwater.org
Association of metropolitan Water Agencies	http://www.amwa.net
Association of State Drinking Water Administration	http://asdwa.org
Awwa Research Foundation	http://www.awwarf.com
National Association of Water Companies	http://www.nawc.org
National Rural Water Association	http://www.nrwa.org
Water Environment Federation	http://www.weg.org
Water Environment Research Foundation	http://www.werf.org
Presidential Decision Directive 63: Critical Infrastructure Protection	http://cio.gov/resource/directive
Executive Order 13231: Critical Infrastructure Protection	http://www.whitehouse.gov/news/releases/2001/10/2001101612.html
WaterISAC Water Information Sharing and Analysis Center Security Information and Terrorist Alerts to Drinking Water	http://www. waterisac.org/
AMSA Association of Metropolitan Sewerage Agencies V-SAT Water and Wastewater Security Software	www.VSATusers.net

Federal Links

Environmental Protection Agency

<http://www.epa.gov/safewater/security.htm>
<http://www.epa.gov/safewater/security/community.html>
http://www.epa.gov/safewater/security/va_fact_sheet_12-19.pdf
http://www.epa.gov/safewater/security/info_protect_11-30-02.pdf
<http://www.epa.gov/safewater/security/agency.html>
http://www.epa.gov/safewater/security/util_inst.pdf
http://www.epa.gov/epahome/downloads/epa_homelandsecurity_strategic_plan.pdf

National Infrastructure Protection Center(NIPC)	http://www.nipc.gov
Federal Bureau of Investigation (FBI)	http://www.fbi.gov
Critical Infrastructure Assurance Office (CIAO)	http://www.ciao.gov
Partnership for Critical Infrastructure Security (PCIA)	http://www.pcis-forum.org
Federal Emergency Management Agency (FEMA)	http://www.fema.gov
Office for State and Local Domestic Preparedness Support (OSLDPS)	http://www.ojp.usdoj.gov/osidps

Office of Emergency Preparedness (OEP)
US Army Soldier and Biological Chemical Command
(SBCCO OOM)
CDC, "Bioterrorism Alleging Use of Anthrax and
Interim Guidelines for mmwrhtml/00056353.html

<http://www.dhhs.gov>
<http://www.sbccom.army.mil>
<http://www.cdc.gov/epo/mmwr/preview/>
<http://www.bt.ctc.gov>

Other Links

International Association of Emergency Manager (IAEM)
National Emergency Management Association (NEMA)
National Volunteer Organizations Active in
Disasters (NVOAD)

<http://www.iaem.com>
<http://www.nemaweb.org/index.cfm>
<http://www.nvoad.org>

Terrorism Research Center
Emergency.com:Crisis, Conflict and Emergency
Service News, Analysis, and Reference
Information

<http://www.terrorism.com>
<http://www.emergency.com>

Monterey Institute of International Studies' Center
For Nonproliferation Studies (CNS): Chemical
and Biological Weapons Resource Page

[http://www.cns.miis.edu/research/cbw/
index.htm](http://www.cns.miis.edu/research/cbw/index.htm)

NSF

[http://www.nsf.org/consumer/consumer_
biolinks.html](http://www.nsf.org/consumer/consumer_biolinks.html)

The Henry L. Stimson Center's Chemical and
Biological Weapons Nonproliferation Project

<http://www.stimson.org/cwc/index.html>

Appendix 22

COUNCIL OF ENGINEERING COMPANIES OF IOWA

Milton Butzke, P.E., President
ALLENDER BUTZKE ENGINEERS INC.
3660-109th Street
Des Moines, Iowa 50322-8101
515/252-1885 Fax 515/252-1888

Michael E. Ament, P.E., CEO
AMENT, INC.
5825 Dry Creek Lane, N.E.
Cedar Rapids, Iowa 52402
319/378-1401 Fax 319/378-1975

William Bogert, P.E., President
**ANDERSON-BOGERT ENGINEERS
AND SURVEYORS, INC.**
4001 River Ridge Drive NE
Cedar Rapids, Iowa 52402
319/377-4629 Fax 319/377-8498

Gene Arnold, P.E., Principal
ARNOLD ENGINEERING
1410 Florence Drive
Waukee, Iowa 50263
515/987-1221 Fax 515/987-1261

William D. Ashton, P.E., President
ASHTON ENGINEERING, INC.
1225 E. River Drive
Davenport, Iowa 52803
563/324-3224 Fax: 563/324-8060

Brian L. Hoellein, P.E., Vice President
BARTLETT & WEST ENGINEERS, INC.
6913 Vista Drive
West Des Moines, Iowa 50266
515/440-2856 Fax: 515/440-2858

Gregory L. Sindt, P.E.
BOLTON & MENK, INC.
2730 Ford Street, P.O. Box 668
Ames, Iowa 50010-0668
515/233-6100 Fax 515/233-4430

Terry L. Martin, P.E., President
BROWN ENGINEERING COMPANY
2570-106th Street, Suite D
Des Moines, Iowa 50322
515/331-1325 Fax 515/331-1375

John C. Calhoun, P.E., President
CALHOUN-BURNS & ASSOCIATES, INC.
1801 Fuller Road
West Des Moines, Iowa 50265-5563
515/224-4344 Fax 515/224-1385

Ms. Sirpa Hall, P.E.
CH2M HILL
6200 Aurora Avenue, Suite 400W
Des Moines, Iowa 50322-2683
515/270-2700 Fax 515/270-7003

William Grabe, P.E., President
CLAPSADDLE-GARBER ASSOCIATES, INC.
16 East Main Street, Post Office Box 754
Marshalltown, Iowa 50158-0754
641/752-6701 Fax 641/752-2849

John R. Crawford, P.E., President
**CRAWFORD ENGINEERING &
SURVEYING, INC.**
205 Second Avenue, Post Office Box 793
Independence, Iowa 50644-0793
319/334-7077 Fax 319/334-7078

Bruce Jennings, P.E., President
**DeWILD GRANT RECKERT AND
ASSOCIATES COMPANY**
1302 South Union Street, P.O. Box 511
Rock Rapids, Iowa 51246-0511
712/472-2531 Fax 712/472-2710

James V. Dickinson, P.E., President
DICKINSON ENGINEERING, P.C.
461 North Ninth Street
Oskaloosa, Iowa 52577
641/672-2185 Fax 641/672-2141

James W. White, P.E.
DURRANT, INC.
700 Locust Street, Suite #942
Post Office Box 509
Dubuque, Iowa 52004-0509
563/583-9131 Fax: 563/557-9078

Charles Huddleston, P.E.
E & A CONSULTING GROUP
12001 "Q" Street, Suite A
Omaha, Nebraska 68137-3542
402/895-4700 Fax 402/895-3599

Joe A. Becker, P.E.
EARTH TECH, INC.
501 Sycamore Street, Suite #222
Waterloo, Iowa 50703
319/232-6531 Fax 319/232-0271

Douglas Saltsgaver, P.E., President
ENGINEERING RESOURCE GROUP, INC.
2413 Grand Avenue
Des Moines, Iowa 50312
515/288-4823 Fax 515/288-3860

Lindsay C. Erdman, P.E., President
ERDMAN ENGINEERING, P.C.
708 Commerce Drive, P.O. Box 246
Decorah, Iowa 52101-0246
563/382-4194 Fax 563/382-3623

Dale A. Watson, P.E., President
FOX ENGINEERING ASSOCIATES, INC.
1601 Golden Aspen Drive, Suite #103
Ames, Iowa 50010
515/233-0000 Fax 515/233-0103

Kenneth D. Bucklin, P.E., President
FRENCH-RENEKER-ASSOCIATES, INC.
1501 South Main, P.O. Box 135
Fairfield, Iowa 52556-0135
641/472-5145 Fax 641/472-2653

David C. Nelson, P.E., President
GARDEN & ASSOCIATES, LTD.
1701 3rd Avenue East, Suite 1
PO Box 451
Oskaloosa, Iowa 52577-0451
641/672-2526 Fax 641/672-2091

Michael T. Lustig, P.E.
GEOTECHNICAL SERVICES, INC.
2853-99th Street
Urbandale, Iowa 50322-3858
515/270-6542 Fax 515/270-1911

Perry Gjersvik, P.E., President
GJERSVIK CONSULTING, INC.
5075 E. University Avenue, Suite E
Pleasant Hill, Iowa 50327
515/263-8882 Fax 515/263-7075

Allen Witt, P.E., Treasurer
HALL & HALL ENGINEERS, INC.
209-29th Street, N.E.
Cedar Rapids, Iowa 52402
319/362-9548 Fax 319/362-7595

Carla J. Schumacher
HDR
12345 University Avenue, Suite 313
Des Moines, IA 50325
515/440-2373 Fax 515/440-2375

Kim I. McKeown, P.E., President
HGM ASSOCIATES INC.
P.O. Box 919
Council Bluffs, Iowa 51502-0919
712/323-0530 Fax 712/323-0779

Ralph J. Russell, P.E., President
HOWARD R. GREEN COMPANY
8710 Earhart Lane, SW
Cedar Rapids, Iowa 52404
319/841-4000 Fax 319/841-4012

Thomas Darnold, P.E.
JACOBS CIVIL INC.
4201 Westown Parkway, Suite #310
West Des Moines, Iowa 50266
515/327-1654 Fax 515/327-1659

Bob Bendixen, L.S.
JACOBSON-WESTERGARD & ASSOCIATES, INC.
105 South 6th Street, P.O. Box 387
Estherville, Iowa 51334-0387
712/362-2647 Fax 712/362-2668

George A. Parris, P.E.
JEO CONSULTING GROUP, INC.
724 Simon Avenue
Carroll, Iowa 51401
712/792-9711 Fax 712/792-9889

Jerry F. Shellberg, P.E., President
JFSCO ENGINEERING, P.C.
608-2nd Street, Suite #100
PO Box 449
Red Oak, Iowa 51566-0449
712/623-2579 Fax 712/623-5819

Craig R. Johnstone, P.E. & P.L.S., President
JOHNSTONE & ASSOCIATES, INC.
116 West 4th Street, South, P.O. Box 903
Newton, Iowa 50208
641/787-9600 Fax 641/787-9602

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KIRKHAM MICHAEL CONSULTING ENGINEERS
11021 Aurora Avenue
Urbandale Iowa 50322-7902
515/270-0848 Fax 515/270-1067

Neal R. Kuehl, P.E., President
KUEHL & PAYER, LTD.
1725 North Lake Avenue
Post Office Box 458
Storm Lake, Iowa 50588-0458
712/732-7745 Fax 712/732-6293

Larry Johnson, P.E.
McCLURE ENGINEERING ASSOCIATES, INC.
4700 Kennedy Drive
East Moline, IL 61244
309/792-9305 Fax 309/792-8974

Terry J. Lutz, P.,E., President
McCLURE ENGINEERING COMPANY, P.C.
705 First Avenue, North
Fort Dodge, Iowa 50501-3819
515/576-7155 Fax 515/576-4235

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M2B STRUCTURAL ENGINEERS, LLP.
422 Second Avenue, S.E., Suite B
Cedar Rapids, Iowa 52401-1330
319/364-0666 Fax 319/364-1456

Patrick Eikenberry, P.E., Bettendorf Office Manager
MISSMAN, STANLEY & ASSOCIATES, INC.
2415-18th Street, Suite #203
Bettendorf, Iowa 52722
563/344-0260 FAX 563/344-0263

Jeffrey Coon, P.E., Program Director
MWH AMERICAS, INC.
11153 Aurora Avenue
Urbandale, Iowa 50322-7904
515/253-0830 Fax 515/253-9592

John P. Nilles, P.E. & L.S., Owner
NILLES SURVEYING, INC.
Post Office Box 798
Ankeny, Iowa 50021-0798
515/965-0123 Fax 515/965-3322

Patrick Poepping, P.E., President
POEPPING, STONE, BACH & ASSOCIATES, INC.
3523 Main Street, P.O. Box 817
Keokuk, Iowa 52632
319524-8730 Fax: 319/524-7720

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1105 Grand Avenue, Suite 100
West Des Moines, Iowa 50265
515/225-9531 Fax 515/225-9570

R.K. Murthy, P.E., President
ROBINSON ENGINEERING COMPANY
5751 Westminster Drive
Cedar Falls Industrial Park
Cedar Falls, IA 50613
319/859-0293 Fax 319/859-0294

Curtis L. Martin, P.E., President
SCHLOTFELDT ENGINEERING, INC.
1440 Second Street, P.O. Box 220
Webster City, Iowa 50595-0220
515/832-2471 Fax 515/832-1609

Jerod Gross, P.E., Project Manager
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107 S. Court Street, Suite 8
Ottumwa, Iowa 52501
641/684-0300

Thomas Hayden, P.E., President
SHIVE-HATTERY
Post Office Box 1599
Cedar Rapids, Iowa 52406-1599
319/362-0313 Fax 319/362-2883

Steven Vanderah, P.E., President
**SHOEMAKER & HAALAND
PROFESSIONAL ENGINEERS**
160 Holiday Road
Coralville, Iowa 52241-1175
319/351-7150 Fax 319/337-6792

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SHUCK-BRITSON INC.
2409 Grand Avenue
Des Moines, Iowa 50312-5309
515/243-4477 Fax 515/243-4479

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1115 Summer Street
Burlington, Iowa 52601-3236
319/752-3603 Fax 319/752-3605

Stephen R. Rowe, P.E., Vice President
SNYDER & ASSOCIATES, INC.
501 S.W. Oralabor Road
Ankeny, Iowa 50021-9545
515/964-2020 Fax 515/964-7938

Larry L. Olson, P.E., President
STRUCTURAL ENGINEERS, P.C.
110 North 2nd Street
Marshalltown, Iowa 50158-5827
641/752-6334 Fax 641/752-6859

Andre Gallet, P.E.
TERRACON, INC.
5855 Willow Creek Drive, SW
Cedar Rapids, Iowa 52404-4312
319/366-8321 Fax 319/366-0032

Robert A. Long, P.E., Operations Vice President
THE SCHEMMER ASSOCIATES INC.
1920 Rue Street, Suite 1
Council Bluffs, Iowa 51503
712/329-0300 Fax 712/329-9970

Patrick E. Mullin, P.E., Vice President
THE STANLEY GROUP
225 Iowa Avenue
Muscatine, Iowa 52761-3764
563/264-6600 Fax 563/264-6658

Thomas J. Kellogg, P.E., Assistant Vice President
TRANSYSTEMS CORPORATION
16934 Frances Street, Suite 100
Omaha, Nebraska 68130
402/895-5400 FAX 402/895-3500

Brian K. Wight, P.E., Senior Civil Engineer
URS CORPORATION
319-7th Street, Suite 200
Des Moines, Iowa 50309
515/284-5500 FAX 515/284-5300

H.R. Veenstra, Jr., P.E., Chairman
VEENSTRA & KIMM, INC.
3000 Westown Parkway
West Des Moines, Iowa 50266-1320
515/225-8000 Fax 515/225-7848

James I. Warner, P.E., President
WARNER ENGINEERING ASSOCIATES, INC.
102 S. Saunders Avenue
Mt. Pleasant, Iowa 52641
319/385-4180 Fax 319/385-4401

Fouad Daoud, P.E., Vice President
WHKS & Co.
1412-6th Street, S.W. P.O. Box 1467
Mason City, Iowa 50402-1467
641/423-8271 Fax 641/423-8450

Craig R. Olson, P.E.
YAGGY COLBY ASSOCIATES
215 North Adams
Mason City, Iowa 50401
641/424-6344 Fax 641/424-0351

Appendix 23

State Wide Generator Suppliers

Cummins Great Plains - websites

www.cumminspowerrent.com

www.cumminspower.com

Cummins Omaha Branch

5515 Center Street

Omaha, Nebraska 68106

Phone Numbers:

Local: 402-551-7678

Fax: 402-551-1952

Cummins Des Moines Branch

1680 NE 51st Avenue

Des Moines, Iowa 50313

Phone Numbers:

Local: 515-262-9591

Fax: 515-262-0626

Cummins Rock Island Branch:

7820-42nd Street West

Rock Island, Illinois 61204

Phone Numbers:

Local: 309-787-4300

Fax: 309-787-4397

Cummins Cedar Rapids Branch

625-33rd Avenue SW

Cedar Rapids, Iowa 52406

Phone Numbers:

Local: 319-366-7537

Fax: 319-366-7562

Cummins Sioux Falls Branch

701 East 54th Street North

Sioux Falls, South Dakota 57104

Phone Numbers:

Local: 605-336-1715

Fax: 605-336-1748

United Rentals - Branch Locations

1805 NE 58th Avenue

Des Moines, IA 50313-1627

Manager: Gary W. Hodges

Phone: 515 264 1490

Fax: 515 264 1496

United Rentals – Branch Locations Continued

5222 Northwest 111th Drive
Grimes , IA 50111
Manager: Todd Hayes
Phone: 515 986 5944
Fax: 515 986 5945

3565 University Avenue
Waterloo , IA 50701-5639
Manager: Scott C. Tjelmeland
Phone: 319 234 5796
Fax: 319 234 0432

RSC - Branch Locations

Des Moines

2021 NE Broadway
Des Moines, IA 50313
Phone: 515-265-5050
Fax: 515-265-4611
Jim Johnson

Cedar Rapids

5735 4th Street SW
Cedar Rapids, IA 52404
Phone: 319-363-2045
Fax: 319-363-2175
Bob Vandersee

Davenport

321 W. Kimberly Road
Davenport, IA 52806
Phone: 563-445-0458
Fax: 563-445-0288
Steve Timmerman

Ames

2325 SE 5th Street
Ames, IA 50010
Phone: 515-233-2100
Fax: 515-233-2829
Mike DeFrancisco

Waterloo

2025 Westfield Avenue
Waterloo, IA 50701
Phone: 319-226-3835
Fax: 319-226-3840
Mike Miniaci

West Burlington

4117 W. Mount Pleasant Street
West Burlington, IA 52655
Phone: 319-758-0959
Fax: 319-758-9003
Paul Reese

RSC - Branch Locations Continued

Clinton

2700 S. 17th Street
Clinton, IA 52732
Phone: 563-243-8235
Fax: 563-243-8259
Chuck Hersey

Muscatine

1303 Washington Street
Muscatine, IA 52761
Phone: 563-263-5400
Fax: 563-263-1946
Greg Rawson

Dubuque

390 E. 12th Street
Dubuque, IA 52001
Phone: 563.583.1132
Fax: 563.583.0944
Tim Martens

Spencer

325 11th St. SW
Spencer, IA 51301
Phone: 712-262-8830
Fax: 712-262-8179
Tom Vodraska

Altorfer, Inc

P.O. box 1347
Cedar Rapids, IA
319-365-0551

Altorfer, Inc

4712 Buckeye St.
Davenport, IA
563-324-1935

Electrical Engineering&Equipment

Davenport, IA
563-323-2214

Electrical Engineering&Equipment

Des Moines, IA
515-266-8890

Interstate Detroit Diesel

Altoona, IA
515-957-3300

Ziegler Inc.

Urbandale, IA
515-270-2800

Appendix 24

Associated Builders and Contractors of Iowa

69 Inc.
PO Box 877
Durant, IA 52747
Cynthia M. Puck
563-785-6996
563-378-5643

A & W Electrical Contractors, Inc.
5372 NW 111th Drive
Grimes, IA 50111-8820
Bruno Andreini
5159863986
5159863987

A-C Contractors, Inc.
P. O. Box 1404
Des Moines, IA 50305-1404
Paul Chatham
5152440606
5152440735

Ace Heating & Electric, Inc.
3802 E. 14th Street
Des Moines, IA 50313-3812
David Mickle
5152628055
5152625153

Action Electric & Sound, Inc.
2203 Milligan Court SW
Cedar Rapids, IA 52404-2573
Chris Jedlicka
3193626109

Active Alarm Services, Inc.
4214 Fleur Drive, Suite 16
Des Moines, IA 50321
David Gutfreund
5152870500
5152870501

Advanced Electrical Services, Inc.
1233 S. Gilbert Court
Iowa City, IA 52240-4530
Pat Moore
3193516452
3193513080

A & A Electric, Inc.
2749 20th Avenue N
Fort Dodge, IA 50501-7840
Matthew Hermanson
515-576-5037
515-576-5931

A-1 Electric
1501 SW Evans Street
Des Moines, IA 50315-4444
John Stickel
5152872383
5152857769

ACE Electric, Inc.
P. O. Box 557
North Liberty, IA 52317-0557
Robin Schulty
3196263007
3196263020

ACI Mechanical, Inc.
P. O. Box 192
Ames, IA 50010-0192
Jami Larson
5152321236
5152320136

Action Electrical Contracting, Inc.
5847 NE 6th Street
Des Moines, IA 50313-1480
Randy Mease
5152892929
5152892553

Advance General, Inc.
P. O. Box 22
Camanche, IA 52730-0022
Richard McDonald
5632592422
5632598336

A-Lert Construction Services
P. O. Box 531
Fredonia, KS 66736-0531
Randy Shinkle
6203784401
6203783900

All County Electrical Co.
P. O. Box 1834
Waterloo, IA 50701-1834
Dave Trost
3192342580
3192341102

All Tri-R, Inc.
P. O. Box 1263
Cedar Rapids, IA 52406-1263
Rick Jourdan
3193625537
3193624853

American Fence Co., Inc.
1922 Delaware Avenue
Des Moines, IA 50317-6343
Mark Wolodkewitsch
5152656100
5152656108

Anderson Electric, Inc.
P. O. Box 274
Lamont, IA 50650-0274
Bill Anderson
5639242287
5639242401

Archer Daniels Midland
1251 Beaver Channel Parkway
Clinton, IA 52732-5935
Richard K. Roberts
5632421121
5632445232

Associated Electric, Inc.
P. O. Box 160
Marion, IA 52302-0160
Mark J. Barnd
3193776357
3193770075

Atwood Electric, Inc.
P. O. Box 311
Sigourney, IA 52591-0311
Duane Atwood
6416223626
6416222438

B. K. Electric, Inc.
8313 N 19th Avenue W
Colfax, IA 50054-7728
Ben Kolo
5156744595
5156744601

Badding Construction Co.
814 W. 9th Street
Carroll, IA 51401-2155
Nick Badding
7127924123
7127926719

Baty Electric
P. O. Box 363
Moravia, IA 52571-0363
James Baty
6417249851
6417249853

Bell Brothers Heating & Air Conditioning, Inc.
2822 6th Avenue
Des Moines, IA 50313-4186
Chuck Gassmann
5152448911
5152440344

Bierbaum Electric
2642 289th Place
Adel, IA 50003-8021
Dennis J. Bierbaum
5152249845
5159935088

Binder Electric, Inc.
2138 Lyon Street
Des Moines, IA 50317-5245
Glen Binder
5152668396
5152622834

Bishop Electric, Inc.
P. O. Box 448
Carlisle, IA 50047-0448
Jerry Bishop
515-989-9090
5159899888

Blaze Restoration, Inc.
5310 23rd Avenue
Moline, IL 61265-5049
Joan Troman
3097627252
3097624198

Blazek Electric, Inc.
115 8th Street SE
Mason City, IA 50401-5117
Ken Wiltsie
6414236686
6414248423

Bright Electric, Ltd.
P. O. Box 1733
Des Moines, IA 50306-1733
Don Davis
5152792787
5152880722

Brockway Mechanical & Roofing Co., Inc.
P. O. Box 1190
Burlington, IA 52601-1190
James M. Brockway
3197532753
3197531662

Brocon Services
6220 NW Beaver Drive, Suite 4
Johnston, IA 50131-1301
Chris Brault
5152782650
5152782481

Brooker Corp.
P. O. Box 1022
Newton, IA 50208-1022
Terry Purvis
6417922387
6417924748

Brown Electric
1373 Nook Place
Boone, IA 50036-2224
Craig T. Brown
5154320575
5154339899

Brown Electric Co.
1107 E. 7th Street
Atlantic, IA 50022-1812
Jim Copeland
7122435365
7122435379

Burke Electric
1175 427th Avenue
Clinton, IA 52732-8720
Richard Johannsen
5636827347
5636827347

C & K Heating, A/C & Plumbing, Inc.
P. O. Box 1787
Ames, IA 50010-1787
Steve Stephan
5152331175
5152320433

C. L. Carroll Co., Inc.
3623 6th Avenue
Des Moines, IA 50313-4154
Jon Rissman
5152827495
5152821406

Camblin Mechanical, Inc.
P. O. Box 520
Atlantic, IA 50022-0520
Robert E. Camblin
7122431535
7122431578

Campbell Electric
720 E. 59th Street, Suite B
Davenport, IA 52807-2627
Jim Campbell
5633860112
5633863126

Carl A. Nelson & Co.
P. O. Box 698
Burlington, IA 52601-0698
Tim Ballard
3197548415
3197532208

Carl's Electric Service
P. O. Box 69
Garwin, IA 50632-0069
Ray C. Zoffka
6414992225
6414992205

Central City Electric, Inc.
P.O. Box 806
Durant, IA 52747-0806
Devin R. Warner
5637854803
5637854911

Central Iowa Water Association
3801 SE Beltline Road
Newton, IA 50208-8245
James R. LaPlant
6417927011
6417926982

Chambers Electric
907 5th Avenue
Iowa City, IA 52240-6403
Rick Chambers
3193542765
3193581406

Channell Construction Co.
10540 Hickman Road, Suite H
Des Moines, IA 50325-3708
Dave Liebsack
5152518787
5152518794

Charlotte Electrical Service, Inc.
3157 Highway 126
Charlotte, IA 52731-9601
Brad Burken
5636772331

Christians Sheet Metal
P. O. Box 484
Spencer, IA 51301-0464
Jack Slaymaker
7122624240
7122626366

Cole Electric
2336 W. 49th Street
Davenport, IA 52806-3501
Raymond A. Cole
5633867145
5633866158

Concrete Technologies, Inc.
3809 NW 109th Street, Suite D
Urbandale, IA 50322-2094
Brad Baumler
5152521650
5152521642

Construction Services, Inc. (CSI)
1280 Office Plaza Drive
West Des Moines, IA 50266-2300
Thomas J. Fish
5152234518
5152237235

Contractors Group, Inc.
413 SW Cherry Street
Ankeny, IA 50021-2909
Rodney Knox
5159643449
5159641918

Cook Plumbing Corp.
1425 Fuller Road
West Des Moines, IA 50265-5143
Mark Cook
5152259532
5152259590

Creative Electric Service
1717 Keosauqua Way
Des Moines, IA 50314-1835
Eric Darling
5152832104
5152832105

Crown Electric, Inc.
783 Hwy. 1 West, # 6
Iowa City, IA 52246-4249
David M. Wright
3193380794
3193511661

Cunningham, Inc.
808 S Market Street
Oskaloosa, IA 52577-0487
Chuck A. Cunningham Jr.
6416738479
6416738577

Current Electric, Inc.
16995 110th Avenue
Davenport, IA 52804
Jeff Miller
5633814500
5633814400

Dahl Air Conditioning & Heating Co.
P. O. Box 253
Van Meter, IA 50261-0253
Ben Herr
5159962216
5159962621

Dakota Infrared & Electrical Services
P. O. Box 127
Bondurant, IA 50035-0127
Rusty Stephens
5159678227
5159570044

DeVries Electric, Inc.
P. O. Box 260
Pella, IA 50219-0260
Larry DeVries
6416281416
6416281499

DeWitt Electric, Inc.
P.O. Box 185
De Witt, IA 52742-0185
James R. Moldt
5636598131
5636599509

Dickinson Co., Inc.
P. O. Box 227
Oskaloosa, IA 52577-0227
David K. Dickinson
6416733256
6416733309

Domestic Plumbing Co.
P. O. Box 875
Clinton, IA 52733-0875
David W. Koch
5632420022
5632422036

Dorrian Heating & Cooling, Inc.
2584 U Avenue
Waukee, IA 50263-8029
Don Dorrian Jr.
5159874310
5159871551

Double M Electric, Inc.
1219 Vernon Hills Boulevard SE
Cedar Rapids, IA 52403
Mike Balfe
3193771966

Draughn Construction Co., Inc.
7012 Roseland Drive
Urbandale, IA 50322-3243
Larry E. Draughn
5152540805
5152541131

Duball Electric, Inc.
118 11th Street SW
Cedar Rapids, IA 52404-1826
Jerry Duball
3193681393
3193682965

Durlam Electric, Inc.
1108 N. Elm Street
Jefferson, IA 50129-1027
Chris Durlam
5153863166
5153863167

E & J Electric, Inc.
4960 Sutliff Road NE
Solon, IA 52333-9036
John Schmidt
3196242065
3196243297

E. B. Spencer Engineering Co.
P.O. Box 356
Janesville, IA 50647-0356
Earl P. Spencer
3199873119
3199873149

ECI of Iowa
P. O. Box 307
Clear Lake, IA 50428-0307
Larry Weakland
6413572125
6413574312

Eco-Tech Contractors, LLC
5600 Enterprise Drive
Grimes, IA 50111-6510
Steve Gillotti
5158675600
5152256953

Engineered Thermal Insulation
P. O. Box 6176
Des Moines, IA 50309-6176
Jack L. Copic
5152438781
5152435126

Enterprise Electric, Inc.
915 8th Street
Boone, IA 50036-2921
Mike Clark
5154327162
5154325542

Ethington Heating & Cooling, Inc.
P. O. Box 475
Marshalltown, IA 50158-0475
Tom Ethington
6417535525
6417530027

Evans Industrial Services, Inc.
576 S. Chambers Street
Galesburg, IL 61401-5063
Danita Evans
3093446219
3093447068

Everly Electric, Inc.
1378 118th Place
Knoxville, IA 50138-8757
Jeannie Everly
6418425969
6418423691

Farm Aids, Inc.
27761 Allens Grove Road
Donahue, IA 52746-9753
Garry L. Steffe
5638432078
5638432079

Farver Construction
P. O. Box 1353
Newton, IA 50208-1353
Matt Farver
6417921148
6417913315

Flynn Homes, Inc.
PO Box 1256
Cedar Rapids, IA 52406-1256
Dennis P. Flynn
3193666826
3193668837

FormanFord Glass Co.
1223 Locust Street
Des Moines, IA 50309-2917
Robert H. Wootten
5152840141
5152841066

Frye Builders & Associates, Inc.
P. O. Box 36
Muscatine, IA 52761-0036
Mike Frye
5632645045
5632645053

G & H Electric, Inc.
3021 74th Street
Atkins, IA 52206
Wayne Gibney
3194467875
3192277424

Garling Construction, Inc.
P. O. Box 97
Belle Plaine, IA 52208-0097
Dennis Garling
3194443409
3194442437

Gethmann Construction Co., Inc.
P. O. Box 220
Gladbrook, IA 50635-0220
Cornell W. Gethmann
6414732323
6414733241

Glass & Sons Electric, Inc.
4605 NW 53rd Court
Des Moines, IA 50310-2012
Gerald L. Glass
5152760318
5152789646

Gleason Electric
P. O. Box 11453
Cedar Rapids, IA 52410-1453
Bob Gleason
3198321508
3198321509

Greg's Electric
P. O. Box 165
Anamosa, IA 52205-0165
Greg Husmann
3194624133
3194623198

Grimes Asphalt & Paving Corp.
P. O. Box 139
Grimes, IA 50111-0139
Jerald M. Yonker
5159863649
5159863532

Gustin Electric, Inc.
3123 120th Street
Cumming, IA 50061-8509
Shawn Gustin
5159962002
5159962031

Hammer Electric, Inc.
10300 Douglas Avenue
Des Moines, IA 50322-2011
Doug E. Winger
5152784616
5152784425

Hanes Electric, L.C.
P. O. Box 391
Solon, IA 52333-0391
Jamie Hanes
3196312443
3196244068

Harris Electrical Service, Inc.
P. O. Box 310
Hopkinton, IA 52237-0310
Richard H. Harris
5639262842
5639262842

Henningsen Construction, Inc.
P. O. Box 407
Atlantic, IA 50022-0407
Keith Stork
7122434955
7122436521

Hintermeister Electric Co.
2358 Grove Street
Davenport, IA 52804-2902
Kurt Hintermeister
5633245873
5633262581

Hoddy Gates Electric Service
3555 Shaw Road
Central City, IA 52214-9634
Hoddy Gates
3198547436
3198547698

Hometown Plumbing & Heating
P. O. Box 4525
Davenport, IA 52804-4525
Michael P. O'Day
5633814800
5633814804

Homewood Electric
1821 Sterling Court
Iowa City, IA 52240-3044
Mike Homewood
3193383255
3193386221

Hopkins Contracting, Inc.
P. O. Box 13
Sloan, IA 51055-0013
Steve Hopkins
7124286285
7124283299

HPC, LLC (Harold Pike Construction)
P. O. Box 429
Ames, IA 50010-0429
Harold E. Pike
5152323133
5152327818

Hy-Brand Industrial Contractors, Ltd.
P.O. Box 734
Muscatine, IA 52761-0734
Jon Woods
5632628710
5632633227

Interstates Electric & Engineering Co., Inc.
P. O. Box 260
Sioux Center, IA 51250-0260
Larry DenHerder
7127221662
7127221667

Iowa City Excavating & Grading, Inc.
717 E. 2nd Avenue
Coralville, IA 52241-2201
Robert Siems
3193516605
3193513976

Iowa Falls Heating & Air Conditioning, Inc.
1854 Crescent Drive
Iowa Falls, IA 50126
Rick Gustin
6416482327
6416485331

Iowa Insulation, Inc.
P. O. Box 626
Ames, IA 50010-0626
Darrell Bunting
5152334537
5152335401

Iowa Signal & Electric Co.
7840 University Avenue
Des Moines, IA 50325-1251
Ronald Johnsen
5152557748
5152551442

J & T Electric, Inc.
1469 7th Street SE
Mason City, IA 50401-5403
Jeffrey Kehm
6414245790
6414245660

Jaspering Electric, Inc.
2716 SE 5th Street, Suite 2
Ames, IA 50010-7713
Don Jaspering
5152324276
5156638890

JB Electric & Communications
16866 Spring Valley Road
Morrison, IL 61270
Jon Bush
8157722392
8157728744

Jeff Hackett Electric, Inc.
2310 Burlington Road
Muscatine, IA 52761
Jeff Hackett
5632628185
5632886319

Jetco, Inc.
P.O. Box 397
Altoona, IA 50009-0397
Richard L. Blanchard
5159675874
5159674110

John's Electric & Technical Service
1755 P Avenue
Marengo, IA 52301
John O'Brien
3196629837
3196629837

K & W Electric, Inc.
P. O. Box 967
Cedar Falls, IA 50613-0967
Jerry Maifeld
3192770415
3192771418

Kaas Electric, Inc.
2506 SW Woodside Court
Ankeny, IA 50021-9571
James Kaas
5159633908
5159633908

Kapaun & Brown, Inc.
P.O. Box 399
Marshalltown, IA 50158-0399
Keith Brown
6417533563
6417534084

Karl Peters Construction
P. O. Box 1232
Newton, IA 50208-1232
Karl Peters
6417917424

Keel Electric, Inc.
1040 E. Post Road
Marion, IA 52302-0000
Keel Peterson
3193779895
3193739228

Kerr Plumbing & Heating, Inc.
612 3rd Street
Underwood, IA 51576
Larry Kerr
7125662087
7125662355

Kinseth Plumbing & Heating
148 E. Main Street
Belmond, IA 50421-1014
Rick Kinseth
6414444428
6414444782

Kinzler Construction Services, Inc.
PO Box 1068
Ames, IA 50014-0000
Kevin Kinzler
5152925714
5152920440

Klinger Companies/Younglove Construction Co.
P. O. Box 8800
Sioux City, IA 51102-8800
Michael D. Rueckert
7122773906
7122775300

Koester Construction Co., Inc.
5604 Enterprise Drive, Suite A
Grimes, IA 50111-6510
Paul Koester
5159865500
5159865503

Kruck Plumbing & Heating Co., Inc.
734 7th Street
Boone, IA 50036-2815
Steve Kruck
5154322210
5154322227

Kulish Electric, Inc.
4198 Pikeview Drive
Center Point, IA 52213-9523
Craig Kulish
3198492618

Kurrent Electric, Inc.
27676 Timber Road
Kelley, IA 50134-8558
Daniel J. Krogman
5157692447
5157692445

L & L Electric Inc.
P. O. Box 2241
Davenport, IA 52809-2241
Robert Lantz
5633880797
5633888575

L. A. Fulton & Sons, Inc.
3401 104th Street
Des Moines, IA 50322-3823
Jeff Fulton
5152764265
5152769235

Lanser Home Service
217 S.E. 16th Street
Pella, IA 50219-2132
Virgil Jansen
6416284093
6416281795

Larsen Plumbing & Heating, Inc.
P. O. Box 165
Fertile, IA 50434-0165
Dennis Faber
6417972219
6417972202

Larsons, Inc.
P. O. Box 37
Hubbard, IA 50122-0037
Kim Larson
6418642252
6418643378

Lewis Electric Co.
2424 E. 5th Street
Sioux City, IA 51101-2226
Daniel P. Lewis
7122522785
7122524757

Lewis Plumbing, Inc.
6700 Indianola Avenue
Des Moines, IA 50320-9311
Edward Lewis
5152855343
5152855416

Lillie Plumbing, Heating, & Electric, Inc.
P. O. Box 388
Earlham, IA 50072-0388
Brian Gibson
5157582769
5157583037

Linahon Electric, Inc.
1055 15th Street SW
Mason City, IA 50401-5648
Dan Linahon
6414235528
6413800190

Lowry Electric, Inc.
P. O. Box 447
Montezuma, IA 50171-0447
Dennis E. Lowry
6416233170
6416230052

Mangieri Electric, Inc.
810 Lyman Street
Galesburg, IL 61401-4250
Joe Mangieri
3093427340
3093421845

Manning-Seivert Mechanical Contractors, Inc.
P. O. Box 99
Granger, IA 50109-0099
Butch Manning
5159992597
5159992871

Manuel Masonry, Inc.
4835 NW 53rd Court
Des Moines, IA 50310-2016
Michael Manuel
5152708015

May Electric, Inc.
344 2nd Avenue S
Clinton, IA 52732-4448
Larry A. May
5632422125
5632422196

McCubbin Construction Corp.
8845 Northwest Boulevard
Davenport, IA 52806-6422
Michael W. McCubbin
5633914741
5633914741

McIntire Electric Co.
4221 Melanie Drive
Des Moines, IA 50322-1316
Stephen C. McIntire
5152516979
5152517276

Mechanical Air Systems Co.
P. O. Box 1706
Mason City, IA 50401-1706
Carl G. Anderson
6414237032
6414244376

Mechanical Comfort, Inc.
302 Sondrol Avenue
Ames, IA 50010-9104
Gale Lamberson
5152322105
5152327027

Meisner Electric, Inc.
P. O. Box 219
Newton, IA 50208-0219
Carroll DePenning
6417924211
6417922285

Menninga Electric, Inc.
P. O. Box 384
Pella, IA 50219-0384
Norm Vos
6416283851
6416212057

Merit Electric, Ltd.
P. O. Box 1428
Iowa City, IA 52244-1428
Mike Maher
3193545612
3193510858

Meyer Electric, Inc.
19245 Landis Road
Anamosa, IA 52205-7655
James Meyer
3194623668
3194623668

Meyer Mechanical Contracting & Service Co.
204 2nd Avenue NE
Dyersville, IA 52040-1294
Russell Meyer
5638752761
5638752757

Mickle Electric & Heating Inc.
1448 E. Madison Avenue
Des Moines, IA 50313-3952
Terry Mickle
5152610058
5152610061

Mihalovich Plumbing & Heating Co.
P. O. Box 3085
Des Moines, IA 50313-3085
John Mihalovich
5152461717
5152806063

Miller Electric Co., Inc.
4975 Sharon Center Road
Iowa City, IA 52240
Gene Miller
3196832288
3196832289

Miller Electrical Services, Inc.
P.O. Box 354
Indianola, IA 50125-0354
Marty Miller
5159615842
5159614193

Mississippi Valley Restoration, Inc.
PO Box 100
Joy, IL 61260
Ruth Ann Jackson
3095844690
3095849003

Moore Electrical Service, Inc.
2000 James Street. #101-D
Coralville, IA 52241
Brad Moore
3196880079
8888379039

Morrell Co.
P. O. Box 908
Waukee, IA 50263-0908
Steve Morrell
5159871515
5159875049

Mt. Pleasant Electric Contractors, Inc.
P. O. Box 495
Mount Pleasant, IA 52641-0495
Todd Mabeus
3193853711
3193851912

Mt. Vernon Construction, Inc.
P. O. Box 86
Mount Vernon, IA 52314-0086
Rick Elliott
3198958147
3198956797

Nate Moore Wiring Service, Inc.
1000 Melrose Avenue
Iowa City, IA 52246
Paul Moore
3193377152
NA

Neighbors Heating, Cooling & Plumbing
2700 Graham Street
Ames, IA 50010-7700
Jason Miller
5152327777
5152336366

Nelson Electric Co.
239 S. Bell Avenue
Ames, IA 50010-6439
Jerry Nelson
5152322445
5152321774

Neumiller Electric
PO Box 335
North Liberty, IA 52317
Matt Neumiller
3196311828

Nikkel & Associates, Inc.
728 E. Lincoln Way
Ames, IA 50010-6523
Carroll Nikkel
5152328606
5152324012

Norwood Electric, Inc.
301 Madison Street S.
Prairie City, IA 50228-3860
Neil Norwood
5159942511
5159942249

Oldson Plumbing, Heating & A/C, Inc.
114 N. Commercial Street
Eagle Grove, IA 50533-1720
Robert Oldson
5154483456
5154483734

P. J. Electric & Equipment Co.
P. O. Box 993
Sioux City, IA 51102-0993
Nancy Johnson
7122520348
7122520348

Packard Electric, Inc.
P. O. Box 285
Belmond, IA 50421-0285
Rodney A. Meints
6414443374
6414443068

Pella Concrete Contractors
517 Monroe Street
Pella, IA 50219-1112
Nelson Bogaard
6416283753
6416288730

Peterson Contractors, Inc.
P. O. Box A
Reinbeck, IA 50669-1012
Cordell Peterson
3193452713
3193452991

Pinnacle Construction, Inc.
P. O. Box 368
Glenwood, IA 51534-0368
Greg Esterling
7125279745
7125279728

Pleva Plumbing & Heating, Inc.
1350 Bittersweet Road
Woodward, IA 50276-8053
Mark Pleva
5154382279
5154384761

PMI Iowa, LLC
1175 McCormick Street
Ames, IA 50010-5600
Gary W. Sondgeroth
5152322595
5152323816

Polk County Heating & Cooling
201 N 3rd Street, Suite C & D
Polk City, IA 50226-0000
Mel Lint
5159846276
5159846277

Powerhouse Electric, LLC
121 SE Shurfine Drive, Suite 9
Ankeny, IA 50021
Kane Powell
5152769489
5152763283

Precision Electric, Inc.
4185 Alyssa Court, # 2
Iowa City, IA 52240-8609
Wayne Maas
3193380123
3193383031

Preferred Electric
1625 8th Avenue S
Clinton, IA 52732-5324
Joe Gandrup
5632428604

Price Industrial Electric, Inc.
1482 Hawkeye Drive
Hiawatha, IA 52233
Jeremy Price
3193936406
3193936294

Pritchard Brothers, Inc.
P. O. Box 476
Boone, IA 50036-0476
Gary Nystrom
5154326816
5154326817

Proctor Mechanical Corp.
63 College Avenue
Des Moines, IA 50314-3524
Mike Proctor
5152882251
5152882722

Professional Plumbing Service, Inc.
P. O. Box 43
Walford, IA 52351-0043
Randy L. Von Lienen
3198468185
3198462838

QCI Thermal Systems
405 Dry Creek Avenue
West Burlington, IA 52655-1657
Tom Sawyer
3197525554
3197524735

Quality Electric
P. O. Box 157
Mitchellville, IA 50169-0157
Mike Blanchard
5159670552
5159670552

R & D Plumbing
P. O. Box 426
Altoona, IA 50009-0426
Doyle Ables
5159673957
5159673687

R. Friedrich & Sons, Inc.
619 Lincoln Way
Ames, IA 50010-6910
Robert K. Friedrich Jr.
5156639999
5156639939

Rasch Construction, Inc.
1828 Johnson Avenue
Fort Dodge, IA 50501-8572
Joel Rasch
5155764175
5155765675

Redmond Mechanical, LC
1322 XB Place (West Ames)
Boone, IA 50036-7482
Jerry Redmond
5152685131
5152685138

REEP, Inc.
P. O. Box 308
Baxter, IA 50028-0308
James C. Robinson
6412273191
6412273867

Resource Services, Inc.
P. O. Box 3338
Des Moines, IA 50316-3338
Dennis Sult
5152669900
5152660591

Rhiner's Plumbing Co., Inc.
P. O. Box 71249
Clive, IA 50325-0249
Dan Geneser
5159871800
5159871546

Roberts Plumbing, HVAC, Inc
P. O. Box 426
Carlisle, IA 50047-0426
Arch Roberts
5159890092
5159890092

Robison Electric
P. O. Box 35985
Des Moines, IA 50315-5985
Dallas R. Robison
5152568083
5152568084

Rochon Corporation of Iowa, Inc.
2928 104th Street
Urbandale, IA 50322-3815
Matt Stence
5152789446
5152789767

S & S Electric, Ltd.
175 Highway 6 W
Grinnell, IA 50112-8223
Scott Sieck
6412365533
6412365549

S G Construction Co.
2850 Mt. Pleasant Street, Suite 102
Burlington, IA 52601-2001
Dan Massner
3197527154
3197522911

Schoppe Construction
1267A - 240th Street
State Center, IA 50247
Dean Schoppe
6414832656
6414832970

Septagon Construction Co., Inc.
5704 Gateway Drive
Grimes, IA 50111-6598
Cliff Callis
5159867313
5159867309

Shaw Electric, Inc.
930 E. River Drive
Davenport, IA 52803-5737
Steven Shaw
5633233611
5633233830

Shriver Construction Co.
P. O. Box 30
Jefferson, IA 50129-0030
Sam Harding
5153863121
5153863124

Smith Electric
P. O. Box 305
Dunkerton, IA 50626-0305
Jerry Smith
3198227794
3198227337

Stateline Electric & Automation, Inc.
P. O. Box 303
Sioux City, IA 51102-0303
Russell Spearman
7122931950

Steve's Electric Service
4041 Cosgrove Road SW
Oxford, IA 52322
Steve Rohret
3195452118
3195451543

Stickfort Electric Co., Inc.
201 E. 22nd Street
Cedar Falls, IA 50613-4291
Thomas Stickfort
3192665438
3192777721

Stokes Electric
P.O. Box 1049
Sergeant Bluff, IA 51054-1049
Dave B. Stokes
7129438080
7129438181

Story Construction Co.
P. O. Box 1668
Ames, IA 50010-1668
Dick Johnson
5152324358
5152320599

Sweeney Mechanical Contractors
P. O. Box 309
Granger, IA 50109-0309
Ed M. Sweeney
5159999236
5159999296

T.E.C. Electric
432 E. 4th Street
Davenport, IA 52801-1711
Donald E. Timmermann
5633221146
5633221148

Tesdell Electric Ltd.
1514 NE 69th Place
Ankeny, IA 50021-8883
Ron Tesdell
5152894000
5152892541

The Electric Company of Greater Des Moines, Inc.
4620 NW 62nd Avenue
Johnston, IA 50131-1013
Larry M. Ball
5152701655
5152701687

The Electricians
612 - 12th Street NE
Mason City, IA 50401-7410
Kim Thyne
6414237000
6414230106

The Henningsen Co.
1932 Dean Avenue
Des Moines, IA 50316-3758
Larry Welder
5157274285
5152762566

The Sargent Group
620 Arrasmith Trail
Ames, IA 50010-9022
Paul Sondgeroth
5152320442
5152320682

Thompson Electric
2103 Ferndale Avenue
Ames, IA 50010-5007
Brian Thompson
5152327973
5152327973

Tigges Construction
1975 NW 92nd Court
Des Moines, IA 50325-5452
Mike Tigges
5152219323
5152250538

Tim Hildreth Company, Inc.
PO Box 185
Norwalk, IA 50211
Tim Hildreth
5152875882
5152870959

TPI Plumbing
3308 Ute Avenue
Waukee, IA 50263-8081
Ted A. Torstenson
5159871911
5159871913

Tri-Tech Construction
P. O. Box 1120
Keokuk, IA 52632-1120
Richard L. Aicher
3195249002
3195241699

Twedt Enterprises, Inc. (Roto-Rooter)
5225 NW 114th Street
Grimes, IA 50111-2092
Larry Hunt Sr.
5152785668
5152761979

Two Brothers Electric
P. O. Box 1922
Cedar Rapids, IA 52406-1922
Erik Pfiffner
3192868523
NA

U.S.A. Corp.
P. O. Box 15
Eldridge, IA 52748-0015
Steve Freeman
5632858311
5633553738

Ultimate Electric and Construction, Inc.
PO Box 2403
Davenport, IA 52809-2403
Randy Speth
5633863114
3097558982

United Construction Co.
3531 S. 11th Avenue
Eldridge, IA 52748-9309
James Stewart
5632858318
5632858319

United Electric, Inc.
1412 W. Route 30
Rock Falls, IL 61071-1594
Alfred J. Segneri
8156262211
8156262250

United Services of Des Moines, Inc.
5600 Gateway Drive, Suite A
Grimes, IA 50111-6603
Kent McMillen
5159864442
5159863940

Vogt Plumbing, Heating, & A.C.
PO Box 751
Oskaloosa, IA 52577
Jeff Danels
6416734313
6416731965

Voltmer Electric, Inc.
1826 State Highway 9
Decorah, IA 52101-7301
Mike Voltmer
5633829214
5633825923

Warnke Construction Co., Inc.
P. O. Box 691
Carroll, IA 51401-0691
Randy Warnke
7127929546
7127929569

Webster Electric, Inc.
495 Alices Road, Suite B
Waukee, IA 50263-9634
Larry Webster
5159874949
5159875065

Weems Electric
P.O. Box 513
Center Point, IA 52213
Damon Weems
3198491503

Wubbens Electric, Inc.
800 N. Main Street
Charles City, IA 50616-2146
Jim Wubbens
6412284347
6412286197

Wyckoff Industries
P. O. Box 35070
Des Moines, IA 50315-5070
Job Cooper
5152876000
5152876539

Xenia Rural Water District
P. O. Box 39
Bouton, IA 50039-0039
Dan Miller
5156762117
5156762208

Yeager Mechanical
2570 W. 12th Street N
Newton, IA 50208-9805
Daniel A. Warnick
6417921414
6417921838

Appendix 25

Terrorism Definitions

FBI Definition

“The unlawful use of force against persons or property to intimidate or coerce a government, civilian population, or any segment thereof, in furtherance of political or social objectives.”

Sandia National Laboratories - Definition

“An individual or a group with the motivation and capability for theft or sabotage of assets, or other malicious acts that would result in the loss of assets, destruction of consumer confidence or in illness/ death of your customers.”

Appendix 26

DNR Web Site and Water Security Web Site

Iowa Department of Natural Resources Web Site

www.iowadnr.com

Iowa Water Supply Security Web Site

www.iowawatersecurity.org

For Additional Information Contact:

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Des Moines, Iowa 50309-4611

Phone (515) 725-0340

e-mail: lynn.pitts@dnr.state.ia.us