CONTINGENCY PLANS
GUIDANCE FOR DEVELOPING A WELLHEAD PROTECTION PROGRAM PLAN

GOAL

The goal of a contingency plan should be the immediate and long-term protection of a public water supply system (PWSS) by identification of personnel, testing equipment, procedures, and materials which can be used for the rapid correction or mitigation of environmental accidents which might constitute a water supply emergency. A contingency plan should also include response protocol, notification procedures and methods of containment. Accidents which might directly impact the PWSS need to be addressed with methods for isolating portions of the PWSS and/or providing water from an alternative source.

WATER SUPPLY EMERGENCIES

A water supply emergency may range in severity from a power outage to the effects of a widespread natural disaster. For the purposes of wellhead protection, the most probable threat to a PWSS requiring an emergency response will be from a hazardous substance spill within the wellhead protection area. Such a spill may occur at a fixed location involving the handling or storage of chemicals or in association with a transportation related accident.

WATER SUPPLY INFORMATION

A comprehensive knowledge of the PWSS controls is critical in the case of a water supply emergency. Essential information which should be made available to an emergency response team includes:

- Location and capacity of all PWSS wells and storage tanks;
- Location and size of all major distribution lines (Distribution Map);
- Critical locations of isolating valves for the distribution system;
- The options available for providing an alternative water supply; and
- If applicable, location and capacity of PWSS treatment facilities.

ALTERNATIVE WATER SUPPLY OPTIONS

The logistics of providing water from an alternative source is an essential component of the contingency plan. In the case of a water supply emergency, the PWSS must have identified methods for rapidly providing uncontaminated water to any portion of the distribution system. Generally, there are four means of addressing a water supply emergency and/or providing water from an alternative source. The alternatives which should be considered are:

Reduction of Water Use

Where additional capacity is not available, restricting water use may be a viable alternative. However, application of this approach requires an effective means of communicating the problem to the PWSS users and obtaining a voluntary reduction in water use.

Supply from Within the System

An alternative water source may be available within the system through isolation of the affected area and providing water from wells and/or portions of the distribution system unaffected by the water supply emergency. This option requires a prior development of additional capacity, generally at a different location.

Well Field Management

The select pumping of preferred wells or the pumping of contaminated wells to prevent impact to other clean wells may be used as a short-term measure. Water from contaminated wells may also be "blended" with uncontaminated well water to obtain contaminant levels which represent an acceptable risk.

Water from Outside the System

Supply from outside the PWSS is another option for providing an alternative water source. This is generally accomplished by connection to an adjacent PWSS.

Treatment

A method may be made available to provide treatment to the affected source water by removing contaminants to an acceptable level.

CONTENTS OF THE CONTIGENCY PLAN

Response to a water supply emergency will generally involve the coordinated efforts on the part of a number of citizen and regulatory groups. The plan should identify the following:

- Name of person(s) responsible for directing public safety;
- Name of person(s) responsible for the environmental response activities;
- Listing of emergency response personnel and their telephone numbers (also posted on premises);
- Identification of EGLE, Drinking Water and Environmental Health Division contact;
- Facility specific information on the hazardous material stored or transported in the wellhead protection area; and
- An example emergency notification report form (see page 3).

SAMPLE FORM

Part A. Facts Related to the Emergency

1. Person calling in emergency: _____
2. Date/time call made: _____
3. Location and address of emergency: _____
4. Nature of emergency (e.g., broken water main; chemical spill; lost pressure; etc.):
   _____
   _____
5. Condition at scene:
   _____
6. Types/quantities of chemicals released, based on initial observation:
   _____
   _____

Part B. Emergency Action Taken

1. Emergency action taken: _____
2. Is immediate action: Permanent _____ Temporary _____
3. Additional action needed to bring water supply system back into operation:
   _____
   _____
   _____

Part C. Persons/Departments Notified of Emergency

Position/agency	Name	Phone	Time
- State Fire Marshal			
- County Sheriff			
- State Police			
- Local police (911)			
- PWSS superintendent			
- Local elected official			
- Water Resources Division MI Dept. of Environment, Great Lakes, and Energy			
- Remediation and Redevelopment Division, MI Dept. of Environment, Great Lakes, and Energy			
- Pollution Emergency Alert System (PEAS) MI Dept. of Environment, Great Lakes, and Energy		1-800-292-4706	
- Agriculture Pollution Emergency Hot Line MI Dept. of Agriculture		1-800-405-0101	
- Chemical spill cleanup company			
- Other personnel			