

## Attachment 9

# CONTINGENCY PLANNING

### 9.1 INTRODUCTION

A vital aspect of a Wellhead Protection Program is the development of a contingency plan. A typical contingency plan would include the following elements:

1. Background information, such as water system characteristics, potential sources of water supply contamination or disruption, water supply replacement alternatives, logistical support resources, and financial resources;
2. Water supply disruption response procedures, such as emergency identification, notification roster, direction and control of emergency, internal communications procedures, public communications procedures, on-going incident assessment, contamination containment, special procedures for non-contamination emergencies, and water use restrictions; and
3. Future steps to be taken, such as training local responders, educating the public, and reviewing and updating the plan.

The Local Planning Team has several members that participated in the development of the original contingency plan. These members have participated in the Metro government's effort to develop emergency plans for disasters for the City/County. The Contingency Plan Committee met once, and informed the Local Planning Team that county-wide questions on emergency and disaster handling could be referred to the Metro Government's Emergency Operations Plan.

Other emergencies that are specifically related to water supply are a part of LWC's internal emergency and disaster planning team. With the City of Louisville and Jefferson County Merger that has taken place recently, several of the original members may have new titles, or may have designated other members of their section to participate in future activities. The KY Department of Transportation acted as an advisory to the committee, based on changes to highways near the WHPA.

### 9.2 EXISTING EMERGENCY PLANNING

In response to increased awareness of security and other issues promulgated by the September 11, 2001 tragedy, most city/county governments and utilities are developing a series of emergency response plans. The Louisville/Metro Emergency Management Agency has developed an "Emergency Operations Plan", in coordination with the KY Division of Emergency Management. In addition, the Louisville Water Company has developed a complex and comprehensive "Emergency Response Plan" for water supply emergencies.

Copies of both plans are kept in-house at the Louisville Water Company, and are available for use by water company personnel who are specially trained in handling emergencies. Both plans will be referenced in this report, either as Metro EOP or as LWC ERP.

Most conceivable emergencies, including groundwater supply emergencies, have an emergency/contingency plan that describes emergency procedures to mitigate the effects of the disaster. These emergency/contingency plans may be found within the Metro EOP or the LWC ERP. A very brief description of the emergency plans may be seen below in Table 9.2.1.

**Table 9.2.1**

**Specific Emergencies/Disasters Discussed within the Metro EOP or the LWC ERP**

Emergency/Disaster	Reference
Notification Call Check List	Metro EOP, Annex B; LWC ERP, Section 2
Notification Trees per plant	LWC ERP, Section 3
Communication & Message Procedure	Metro EOP, Annex C; LWC ERP, Section 3.4, B. E. Payne Notification by Media – Section 7.5, Notification for Health Office of Potential Water Contamination – Section 7.6
Tornado Emergency Actions	Metro EOP, Appendix D-1; LWC ERP, Section 7
Flood Emergency Actions	Metro EOP, Appendix D-2; LWC ERP, Section 7
Earthquake Emergency Actions	Metro EOP, Appendix D-3
Mass Destruction/Conventional War Increased Readiness	Metro EOP, Appendix D-4
Evacuation – Reception & Care	Metro EOP, Annex F
Military Support	Metro EOP, Annex G
Radiological Protection	Metro EOP, Annex I
Health & Medical	Metro EOP, Annex M
Manpower Coordination	Metro EOP, Annex N
Resource Management	Metro EOP, Annex O
Hazardous Materials Hazardous Materials Response Agencies Hazardous Materials Incident Report Form Chemical Accident Procedures Radiological Incident Procedures Pipeline Emergency Response Facility Emergency Response Hazardous Materials Definitions Personal Protective Equipment Decontamination	Metro EOP, Annex Q

<b>Table 9.2.1 (continued)</b>	
<b>Emergency/Disaster</b>	<b>Reference</b>
Disaster Recovery Centers	Metro EOP, Appendix V-5
Individuals and Household Program	Metro EOP, Appendix V-6
Training and Exercising	Metro EOP, Annex W; LWC ERP, Section 21
Fixed Nuclear Facilities	Metro EOP, Annex X
Mass Destruction/Conventional War Nuclear, Biological, or Chemical War Conventional War	Metro EOP, Annex Y
Terrorism Nuclear Terrorism Response Bomb Threats Chemical Terrorism Response Biological Terrorism Response Contamination of Water Supplies by Terrorists Maritime Security Levels	Metro EOP, Annex AA; LWC ERP, Section 5
Agricultural Resource Management	Metro EOP, Annex BB
Water Resource Management	Metro EOP, Annex CC; LWC ERP, Section 7
Earthquake Preparedness	Metro EOP, Annex, DD
Schools	Metro EOP, Annex FF
Aircraft Incidents	Metro EOP, Annex GG
Civil Disturbances	Metro EOP, Annex HH
Flood Preparedness	Metro EOP, Annex II
B. E. Payne Water Treatment Plant	LWC ERP, Section 7
B. E. Payne Distribution System/Booster Pump Stations	LWC ERP, Section 7
B. E. Payne, Major Event	LWC ERP, Section 7
B. E. Payne, Physical Destruction of Critical Assets	LWC ERP, Section 7
B. E. Payne, Facility Map/Site Plan	LWC ERP, Section 7
Giardia/Cryptosporidium Response	LWC ERP, Section 9
LWC Storage Facilities	LWC ERP, Section 9
Water Shortage Plan	LWC ERP, Section 14
Utility Equipment and Resources Non-utility Equipment and Resources Warehouse Suppliers Chemical Suppliers	LWC ERP, Section 15

<b>Table 9.2.1 (continued)</b>	
<b>Emergency/Disaster</b>	<b>Reference</b>
Finance/Procurement	LWC ERP, Section 18
Response/Exercise Critique and Plan Review and Revisions	LWC ERP, Section 22

Notification charts, as noted above, are contained within each emergency plan, as well as phone numbers and organizational responsibilities. These are not shown here, due to security concerns. Additional numbers may be found on the Louisville Metro Government Web Site, which is listed below:

<http://metro.org/Department/MetroCall/default.asp>

Public Communications are also handled at both the city level and at the LWC level. Specific radio and television broadcast companies that are listed as being on the emergency call list may be found in Table 9.2.2. Media is contacted by email, as well as by telephone. On urgent issues, both an email and a telephone call is placed to the company.

**Table 9.2.2  
Radio and Television Broadcast Stations to be Contacted in an Emergency**

<b>Media</b>	<b>Phone</b>	<b>Fax</b>
WAVE TV	561-4150	561-4105
WDRB TV	561-7707	568-6751
WHAS TV	582-7220	585-5992
WLKY TV	893-7300	896-0725
Pioneer News	502-543-2288	502-955-9704
Business First	583-1731	587-1703
Courier-Journal	582-4691	582-4200
Louisville Defender	772-2591	775-8655
Voice	897-8910/8900	897-8915
Oldham Era	222-7183	222-7194
News Enterprise – Elizabethtown	270-351-1131	270-769-6965
Clear Channel	479-2200	479-2232
WFPL	814-6550	814-6560
Metro Network	452-1300	452-2254

The current emergency management system works very well for groundwater emergencies as well as other emergencies. In late summer of 2003, a tanker truck carrying a lawn care chemical overturned at the junction of I-71 and the Gene Snyder Freeway. Although outside the WHPA, the spill was reported to LWC personnel who observed remediation actions and initiated a testing program to determine the effects of contamination and remediation.

### **9.3 Alternative Long-term and Short-term Water Supplies**

The B. E. Payne Plant has both a surface water intake and a collector well, located at the plant, which operates as a surface water treatment facility. At the present time, when the collector well is not pumped, (i.e. for repairs and/or maintenance procedures), the surface water intake is opened, providing a source of water for the treatment plant. If a groundwater emergency occurs within the area, the collector well can be shut off indefinitely, and the surface water intake used as a source of supply, until remediation has occurred, with no interruption of service.

If an emergency occurs effecting both the surface water and the well at the B. E. Payne Plant, LWC has an additional treatment plant at the Crescent Hill Filter Plant, which supplies most of the water for LWC's customers. In addition, the Zorn Avenue Pump Station could conceivably supply water to the B. E. Payne Plant for treatment as a surface water source. In special cases, additional chlorinator boosting stations could be temporarily installed and boil water advisories posted.

### **9.4 Review and Update**

Both the Louisville Water Company Emergency Response Plan and the Louisville/Metro Government Emergency Operations Plan are scheduled for yearly reviews and updates. Future updates for the LWC ERP may include additional plans for specific emergencies that effect groundwater usage for the B. E. Payne Plant. Emergency planning is an on-going process at LWC.

An update of the Contingency Plan will be performed according to 401 KAR 4:220. Several activities may trigger an update on a more frequent basis:

1. Addition of new wells or a significant change in the withdrawal from existing wells;
2. Changes in zoning or land usage;
3. Additions, deletions, or major changes in the Louisville Metro EOP;
4. Changes in state and/or federal laws governing Wellhead Protection;
5. Increased terrorism, natural disaster, or other activities; or
6. Changes in the potential contaminant source inventory.

The process of the update and review will consist of the following steps:

1. Review of the Louisville/Metro EOP to note any changes made in the general plan;
2. Review of current training procedures and effectiveness of disaster drills;
3. Determine if any of the regulatory agencies responsible for enforcement of these laws, regulations, rules, or ordinances have changed, and update the plan to reflect these changes; and
4. Based on the update of the potential contaminant survey, address issues presented by changes in the survey.

The results of the review and update will be submitted, according to 401 KAR 4:220 to the KY DOW as required.

## 9.5 Identification of Future Problems

As with any community, problems may arise in the future that are not addressed in current documents and plans, and are in addition to the items addressed within the current plans. A brief, general description of these possible issues may be seen in Table 9.5.1. It must be noted that the table may not include all future issues.

**Table 9.5.1**

**Listing of Possible Potential Contamination Issues & Possible Solutions**

Possible Future Issue	Committee	Possible Solution
Installation of bridge linking Gene Snyder Freeway with I265 in Indiana	LWC	On-going discussions with KY DOT and subcontractors to mitigate as much as possible the additional hazards presented by a major highway within a WHPA
Construction of additional marina, recreational boating facilities	Management & Compliance Committees	Will meet with zoning board to determine the need for additional precautions to be taken during construction. Compliance committee will encourage marinas to meet federal and state laws and regulations.
Conversion of horse farms to feed lots	Management and Compliance Committees	Will meet with zoning board to determine legality of conversion. Will meet with KY Dept. of Agriculture to inquire about current laws regulating feed lots. Compliance committee will encourage farmer to comply with state regulations and laws.

<b>Table 9.5.1 (continued)</b>		
<b>Possible Future Issue</b>	<b>Committee</b>	<b>Possible Solution</b>
Construction of new industries	Management Committee	May meet with zoning board to determine special requirements for construction, or restrictions on the types of industry that may be constructed. (Limits may be placed on chemical manufacturing plants, power plants, or other heavy industrial plants.)
Construction of new commercial properties that represent a lower potential risk to the groundwater.	Management and Compliance Committees	May meet with owners of new businesses to provide educational materials about specific processes and Best Management Practices. Compliance committee may encourage owners to comply with existing federal, state, and local laws and regulations.
Barge accident	LWC	Notification of US Coast Guard, Metro Government Hazardous Materials Agency
Geological Hazards, (i.e. landslides, natural gas, earthquake, salt water intrusion, stream bank erosion, etc.)	LWC	Earthquake preparedness is already a part of the Louisville/Metro EOP. Other disasters will be managed as they occur. May modify pumping schedule, treatment process, or site layout, or temporarily switch to surface water supply.

## Attachment 10

### PUBLIC NOTICES

Few public meetings have been held for the Wellhead Protection Plan, as a whole. Most meetings have been accomplished during meetings with various Real Estate Groups, clubs, and at museums, fairs, and the Water Festival.

One public meeting was held during the Source Reduction Grant, dealing with “Greener” Lawn Care. This report is also submitted, as it required two years to complete, and significantly added to the Wellhead Protection Plan.

The information produced for the grant, and for the Public Outreach Program is included within this volume.



## Attachment 11

### PUBLIC COMMENTS AND RECORDS

Public comments have been restricted to letters received by the Wellhead Protection Coordinator, usually about the materials produced by completion of the Source Reduction Grant. The web site that contains these reports has been very active. In fact, the web pages are among the top ten web pages viewed by the public within the Louisville Metro Government and, in fact, throughout the state, and surrounding states. A table showing the results of the active web pages is included on the disk, attached to this report.