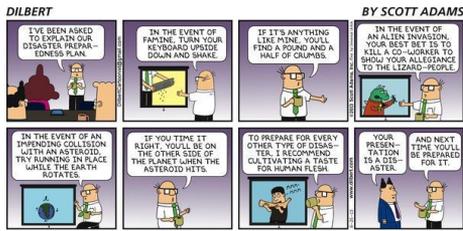


Contingency Plan Requirements



Contingency Plan Requirements OAC 3745-85-01

Contingency Plans (OAC 3745-85-01)	ERP Citation(s)
(A) Except as otherwise noted, the definitions in rule 3745-81-01 of the Administrative Code shall apply to this chapter.	NA
(B) Contingency plan required. Each community water system shall prepare and maintain a written contingency plan for providing safe drinking water to its service area under emergency conditions.	Entire ERP
(C) Location of copies.	Section 1.5
(1) One copy of the contingency plan shall be kept at the water treatment plant , if there is a plant, and another shall be kept in the water system administrator's office .	Section 1.5
(2) Public water systems serving a population of more than two hundred fifty shall keep three additional copies of the plan at various accessible, secure locations in the service area.	Section 1.5
(3) A copy of the contingency plan shall be available for inspection by representatives of the director.	Section 1.5
(4) A copy of the contingency plan for community water systems shall be made available to the county emergency management agency (EMA) upon its request.	Section 1.5



Plan Requirements

(D) Contents of contingency plan. The contingency plan shall contain:	
(1) A map of the distribution system , detailed locations for each valve in the system, including references that will aid in location of valves, and map of the well field and surface water intakes as applicable;	Appendix A
(2) A statement of amounts budgeted for emergency use , along with a statement showing who can authorize expenditures for such purpose, and under what conditions such authorization and expenditure can occur;	Section 5
(3) A determination of not less than ten of the most likely emergencies that will affect the water system and a description of the procedures to be followed and actions necessary to provide service during the emergencies. For systems serving fewer than one thousand five hundred people, the following emergency circumstances shall be included in such outline : (a) Short term power failure (time of interruption less than two hours); (b) Extended power failure (two hours or more); (c) Pump or motor failure; (d) Loss of water from a well or other water source; (e) Major water main break; (f) Unplanned absence of operator; and (g) Contamination of source water including, but not limited to, releases of oil and hazardous substances.	Section 7 Sections 7.2.2 Sections 7.2.2 Sections 7.2.1 Section 7.2.1 Section 7.3.3 Section 7.5.5 Section 7.1.2



Plan Requirements

(D) Continued...	Section 3
(4) A description of the method that will be used to obtain and transport water from an alternate source should such procedure become necessary (including connecting to another water system), and a description of at least three possible alternate sources of water and the method of disinfection that will be used for each source;	
(5) A list of water users having critical needs for a continuous supply of water;	Appendix F
(6) The methods of notification of users that an emergency exists;	Section 2.9
(7) If depressurization of the water system has occurred, the procedure that will be used to return the system to normal service;	Section 7.3.1



Plan Requirements

(D) Continued...	
(8) Twenty-four hour telephone numbers for:	Appendix F
(a) The Ohio Environmental Protection Agency, Division of Drinking and Ground Water;	Appendix F
(b) Police;	Appendix F
(c) Fire;	Appendix F
(d) The county EMA director;	Appendix F
(e) All water supply personnel;	Appendix F
(f) Municipal administrative personnel;	Appendix F
(g) Contractors for line breaks, "first call" and "second call".	Appendix F
(h) Electric power supplier;	Appendix F
(i) Electricians, "first call" and "second call";	Appendix F
(j) Well drilling and pump service contractors, "first call" and "second call";	Appendix F
(k) Plant mechanical contractors, "first call" and "second call";	Appendix F
(l) All suppliers of equipment and chemicals normally used;	Appendix F
(m) Hospital, emergency squad, medical assistance; and	Appendix F
(n) Critical water users who have requested notification.	Appendix F



Plan Requirements

(E) Revision required.	
(1) The contingency plan required by this chapter of the administrative code shall be revised and updated as necessary, but at least annually ;	Section 1.5
(2) Copies of the revised pages of the plan shall be promptly distributed to holders of the plan, as described in paragraph (C) of this rule.	Section 1.5
(3) Community water systems that have identified hazardous chemical contamination as one of their most likely emergencies under paragraph (D) (3) of this rule shall consult with the county EMA regarding participation in a hazardous spill exercise .	Section 6 and Multi-Year Training and Exercise Plan



Ohio EPA HAB Requirements

- HAB Emergency Response Plan, 24 new required items
 - Communications
 - Threat of or Actual Contamination Flow Chart
 - SOPs
 - Impacts to system
 - Draft advisory maps
 - Critical equipment
 - Alternate Water Suppliers
 - Water Haulers
 - Temporary Water Line



Proposed Changes to ORC

Ohio S.B. No. 333

- Introduced 5/18/16
- Includes proposed changes to Sec. 6109.24 (B)
 - A public water system shall demonstrate the technical, managerial, and financial capability of the system to comply with this chapter and rules adopted under it by implementing an asset management program not later than October 1, 2018.
 - (3) a public water system shall include in the asset management program...
 - (c) an Emergency Preparedness and Contingency Planning Program



Emergency Preparedness Program?

Emergency Management Phases



After-Action Review

ADB #	Lesson Learned	Corrective Action	Staff Assigned	Date Due	Date Complete
1	BMP Staff need to review and revise position descriptions.	Schedule training and review sessions. Update the COW updated Emergency Response Plan (ERP).	Luah Moore, BMP	6/30	2016 update
2	Assign one point of contact to schedule and send outreach letters, and to deliver notices.	Review Planning Unit information in the ERP.			
3	Review and establish SOPs for staff identification list and frequency of reports.	Add information to its Planning Section Task matrix.			
4	Leadership may need to make WBEEOC updates to provide identified assignments and adjust member rosters.	Require WBEEOC to include information in			
5	BMP Staff need additional training on CS forms.	Schedule CS forms training sessions with the BMP.			

N-2015 After-Action Report

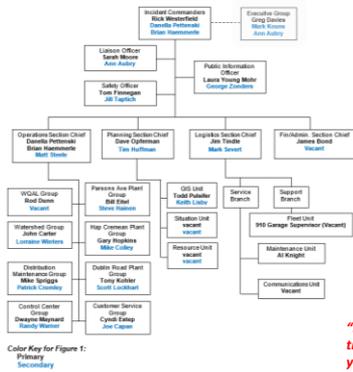
*Public Bond Water Treatment Plant Service Area
& Solon River Watershed Nitrate Event*

June 4 - June 22, 2015

City of Columbus, Department of Public Utilities, Division of Water

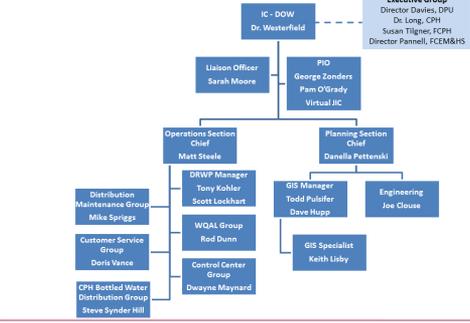


Figure 1 - DOW Incident Management Team



"Fight like you train, train like you fight"

Nitrate Activation Org Chart Days 5-10



Communications

- EPA Water Advisory Notification Guidelines
- Notification to satellite systems and critical users
- IMT to develop & IC approves
- Contacts with key stakeholders
- Updated contacts
 - Master Contact List
 - Key Personnel List
 - City Departments
 - Mayors
 - Suburban Municipality Emergency Contacts



Frequently Asked Questions About Nitrate in Columbus' Drinking Water

What makes elevated nitrate in the Columbus drinking water? Nitrate is a naturally occurring chemical found in soil, water, and air. It is also a byproduct of fertilizer use. Nitrate is a common contaminant in drinking water. In Columbus, nitrate levels in the water supply have increased since 2010. The City of Columbus is working to reduce nitrate levels in the water supply. This includes testing wells, installing denitrification technology, and promoting best management practices for agriculture and lawn care.

What are the health effects of nitrate? Nitrate is a potential health concern. High levels of nitrate in drinking water can lead to methemoglobinemia, a condition that reduces the oxygen-carrying capacity of the blood. This is most common in infants under the age of 6 months. High levels of nitrate may also be linked to certain types of cancer and other health problems.

What should be done? The City of Columbus is working to reduce nitrate levels in the water supply. This includes testing wells, installing denitrification technology, and promoting best management practices for agriculture and lawn care. Residents can also take steps to reduce nitrate in their own homes, such as using water filters and avoiding fertilizers and pesticides.

Our Disaster Recovery Plan Goes Something Like This...



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Emergency Operations & Resources

Resource Manual

- Appendix A- Facility Information
- Appendix B- Emergency Response Forms
- Appendix C- Equipment, Supply, and Resource Lists
- Appendix D- Incident Command System Position Guides
- Appendix E- Response Flow Diagrams and Checklists
- Appendix F- Emergency Contact Lists



Response Flow Diagrams and Checklists

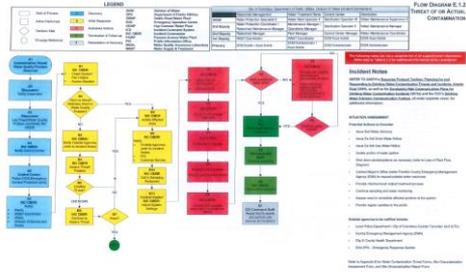
- Incidents fall into four main categories:
 - Supply Emergencies
 - Distribution Emergencies
 - Natural Events/Accidents
 - DOW-Wide Emergencies
 - Intentional Act Against the DOW
 - Threat of or Actual Contamination (UPDATED FOR HAB)
 - Bomb Threat / Suspicious Package
 - Use of Weapons of Mass Destruction (WMD)
 - Workplace Violence
 - Civil Disturbance
 - SCADA Intrusion / Loss of SCADA

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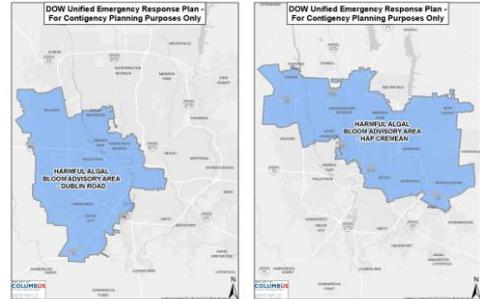
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Threat of or Actual Contamination



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Draft Advisory Maps



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SOPs

- Sampling
- Monitoring
- System adjustments
- Valve operations
- Critical equipment

Impacts

- Plants
- Distribution system
- PRVs
- Booster Stations
- Flushing
- Draft advisory maps

Alternate Water Supplies

- Interconnections
- Temporary Water Lines
- Filling Stations
- Water Haulers
- Bottled Water
- Points of Distribution
 - Outside assistance
 - Health Departments
 - Franklin County Emergency Management & Homeland Security



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Questions?

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