CONNECTICUT DEPARTMENT of **PUBLIC HEALTH** DRINKING WATER SECTION

DWS Incident Reporting and Disseminating Information to LHDs

Outline

Drinking Water Section

- Applicable Regulatory Requirements for PWS Notification
 - 19-13-B-46
 - Tier 1 Notification
- DPH Drinking Water Response
- Incident Report
- "Interim Measures"
- Emergency Incident Case Study



RCSA Section 19-13-B46

Notification by Water Officials in Water Supply Emergencies

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Whenever the security of a public water system is threatened or suspicious activities are observed on or near water company land or the treatment of a public water supply is interrupted or the source of supply is damaged so as to impair the quality or the sufficiency of the supply, the person, firm or corporation in charge of such public water system shall immediately notify the state department of Public health and the local directors of health of all cities, towns and boroughs where water from such systems is supplied.

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Connecticut Department of Public Health Such notification shall be made immediately either by telephone or messenger or whatever other means of rapid communication is available.

19-13-B46: Events that Might Occur

- Security of a PWS is threatened
 - Facilities broken into: Pumphouse, Treatment Plant, tank hatch
 - Threats to water system
 - SCADA breach
- Suspicious activities observed on or near water company land
 - Trespassers taking suspicious video, leaving bags on edge of reservoir
- Treatment of a PWS is interrupted
 - Chemical overfeed or underfeed
 - Problem with filters at SWTP
- Source of supply is damaged where quality or quantity is impaired
 - Spill in a reservoir, sewage outbreak in area of well
 - Well pump failure, low tank level, large water main break affecting critical customers

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19-13-B46: Requirements

What needs to happen:

- The PWS must contact DPH
- The PWS must contact the Local Health Director (LHD) for each town supplied by the water system

How PWS report:

- A phone call where you talk to a DWS staff person
 - Do not rely on a fax transmission, emails, or a voicemail
 - Going to the DPH or LHD office to report the event.



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• Provide follow up documentation with PWS Notification Form.

RCSA Section 19-13-B102

"**Tier 1 notice**" is required when a PWS fails to comply with any of the following requirements:

- Acute total coliform MCL for E.coli/fecal coliforms
- MCL for nitrate, nitrite, or total nitrate and nitrite;
- The MRDL for chlorine dioxide
- The MCL for turbidity at PWS using surface water or GWUDI
- Waterborne disease outbreak
- Chemical detected at such a level where it is determined to pose an acute health risk

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Tier 1 Notification to DPH and Customers

• Provide public notice 24 hours after violation is determined via:

- Broadcast media
- Conspicuous posting throughout service area
- Hand delivery
- Another method approved by DPH
- Initiate consultation with DPH ASAP (before you send notice)

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Connecticut Department

- Public Notice must contain 10 required elements
 - DPH has templates available on the website under "Public Notification" quick link

Getting the Message out to Stakeholders

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* 19-13-B46 notifications should go directly to DPH and LHD

- 19-13-B102 (Tier 1 situations) typically go first to DPH
 - DPH staff complete DWS Incident Report
 - Identify:

- Public Health Impact and Critical Customers
- Regulatory compliance issues
- Type of follow up required
- Determine if any Interim Measures are required
- Send completed Incident Report to all stakeholders



Connecticut Department of Public Health Drinking Water Section Public Water System Security Incident Report Form

Date: Time:	
DWS Staff Receiving Call:	
Public Water System:	PWSID:
Geographical Area Affected/Tow	n:
Service Connections:	Population Served:
Type of Service Area/Critical Cu:	stomers:
Incident Reported by:	
Telephone #:	
Date of Incident:	
Date of Incident: Description of Incident:	

Potential Public Health Impact: Yes 🔲 NO 🛄
Comments:
Nature of Impact:
Technical Assistance/Site Visit:
Other Agencies Involved:
Follow-up Required: Yes 🔲 NO 🔲 Comments:
Types of Follow-up:
Regulatory Compliance Issues:
Situation Resolved: Yes 🔲 NO 🔲 Comments:
Report Status:

Security Copy List:

Yvonne Addo, DPH, Deputy Commissioner Janet Brancifort, DPH, Deputy Commissioner Ellen Blaschinski, DPH, Chief Operating Officer Lori Mathieu, DPH, Drinking Water Section Maura Downes, DPH, Office of Health Communications Tracey Weeks, DPH, Environmental Health Section – Food Protection Program (when applicable) Director of Health, Local Health Department(s) (*All applicable jurisdictions*) Mark Sceery, EPA (sceery. mark@epa.gov) Connecticut Intelligence Center (CTIC@ct.gov) Water ISAC (waterisac.org) Daniel Coleman, (daniel.coleman@ic.fbi.gov) Francesca Provenzano, DPH, Public Health Preparedness CONNECTICUT DEPARTMENT Of PUBLIC HEALTH Current DWS Incident Report

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STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH INCIDENT REPORT

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Water	
Section	

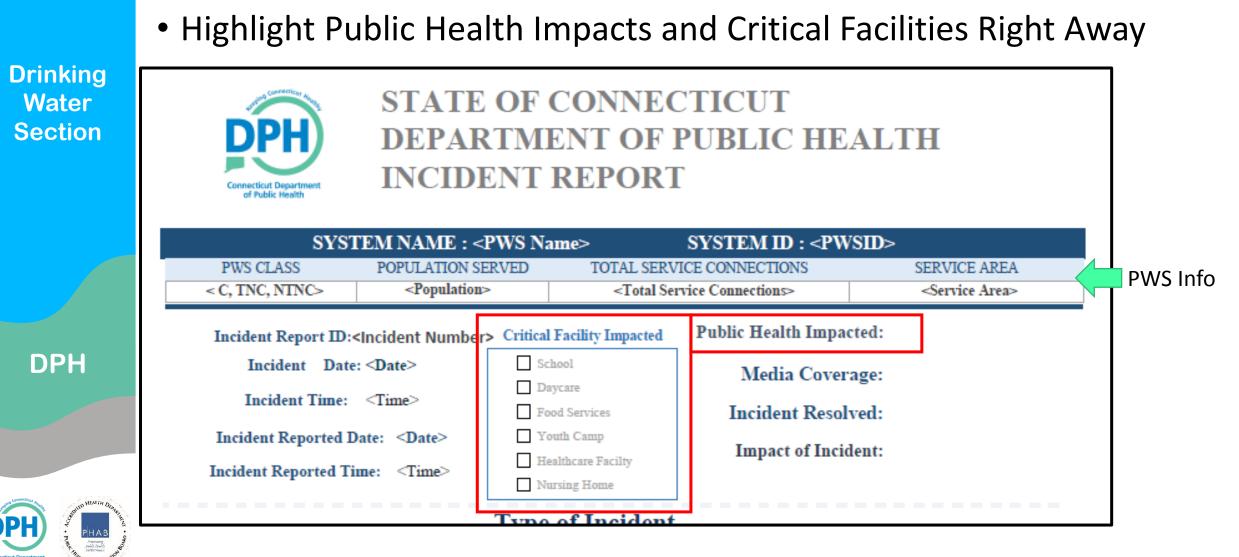
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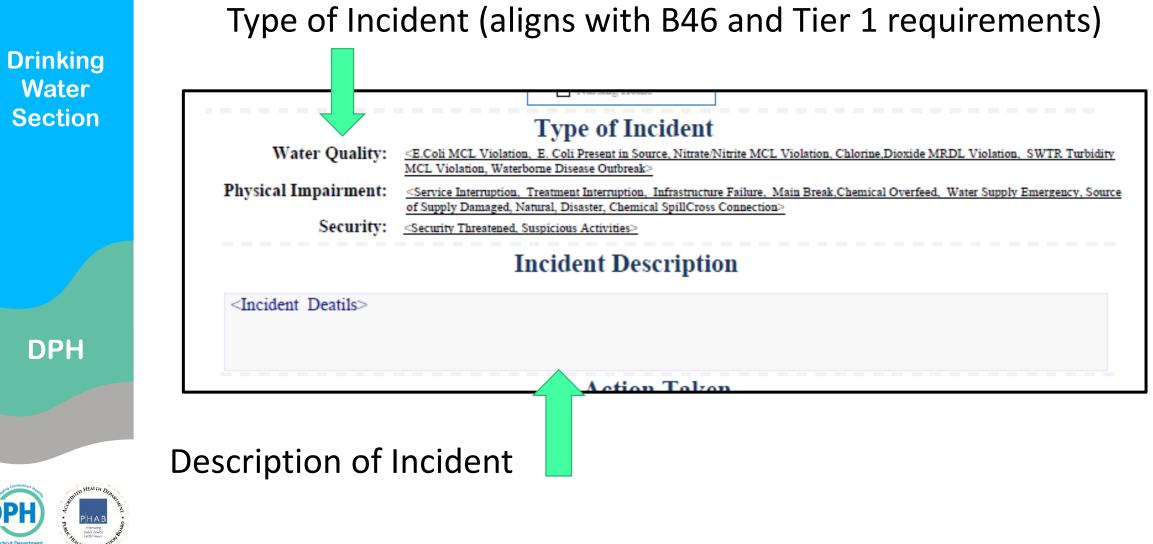
SYSTEM NAME : < PWS Name> SYSTEM ID : < PWSID>								
PWS CLASS	POPULATION S			DTAL SERVICE CONNECTIONS SERVICE AREA				
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Incident Time	: <time></time>		aycare ood Services	Incident Resolved:				
Incident Reported Date: <date></date>		-	outh Camp					
Incident Reported		I He	ealthcare Facilty	Impact of Incident:				
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Type of Incident								
Water Quality: www.ec.university.com www.ec.university.com"/>www.ec.university.com swaa.com								

DWS Incident Report 2.0!

Proposed Incident Report Format



Proposed Incident Report Format



Proposed Incident Report Format

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Actions Taken Section includes any interim measures deemed necessary

Action Taken								
Action	Advised	Completed	Action	Advised	Completed			
Notify Local Health			Additional Sampling					
Public Notification			Disinfection					
Boil Water Advisory			Instalation of temporary treatment					
Boil Water Notice			Source Offline					
Do Not Drink			Emergency Interconnection					
Bottled Water			Notify Police/Emergency Services					
Do Not Use			DWS Notification Form					
PWS Closed								
Water Hauling								
Administrative Conta	ct Information:							
<ac name=""></ac>	Business Phone: <phone number=""></phone>		Emergency Phone: <phone number=""></phone>	Email:- <e< td=""><td>mail Address></td></e<>	mail Address>			
The contact person for this Incident at Drinking Water Section is <dws staff=""></dws>								

Interim Measures

Drinking Water Section Different Meanings to the words "Interim Measures" for DPH food protection and drinking water section

• DWS Interim Measures are required to be implemented to maintain public health protection until the PWS implements the necessary corrective action or the risk associated with consumption of the water is reduced to the satisfaction of DWS.

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• Interim measures are required per RCSA Section 19-13-B102 as a result of the Ground Water Rule when source is confirmed EC+.



DWS Interim Measures:

• Interim Measures include, but are not limited to, the following:

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- Provision of an Alternate Source of Water
- Boil Water Notice
- Temporary disinfection of water
- Inactivation of a water source or sources

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If implemented, the interim measures shall remain in place until such time that the corrective action has been completed.

Reminders: Incidents resulting in Boil Water

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- Work directly with DPH Food Protection Program when dealing with food service establishments while the water system has been required to go on boil water advisory or notice.
 - FPP does not accept operating FSE under boil water conditions
- RTCR and GWR have changed the rules with respect to total coliform and E Coli.
 - No more TC MCL violations instead TC+ triggers Level 1 or 2 Assessment
 - Interim Measures until Corrective Action is complete Source EC +
- Updated Guidance Document "What To Do if Coliform Bacteria are Detected at a PWS" is now available.



THANK YOU!



Any Questions?

Mandy B. Smith <u>Mandy.Smith@ct.gov</u>

860-509-7333



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Emergency Case Study: Danbury Main Break

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DANBURY WATER LINE BREAK INCIDENT

- Break is thought to have occurred around 3 pm on 4/23/2018
- Initial size of leak is about 3.5 MGD (about 2400 gallons per minute)
- Danbury Water Department begins attempting to close valves (some broke); leak slows to about 5-600,000 gallons per day
 - Boil Water Advisory (BWA) issued morning of 4-24-2018 to 62,000 residents
 - Aquarion Water Company (buys water from Danbury) also issues precautionary BWA to six of its systems in Danbury, Ridgefield and Bethel. Their Berkshire system in Bethel is most affected
- Lots of excitement ensues (see photos courtesy of Steve Wallett)
- Leak is isolated on 4-25-2018 and fully repaired on 4-26-2018 (initially thought to be on 16" line but actually on 4" fire service line that was not known to exist)
- BWA is lifted on 4-26-2018



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DANBURY WATER LINE BREAK INCIDENT

- Residents experience no water, low pressure and discoloration
- Danbury Hospital and other medical facilities affected
- Western Connecticut State University (downtown campus) is affected (just re-opening after norovirus investigation)
- Many Food Service Establishments (FSE) affected (local health recruited additional inspectors to verify affected establishments closed)
- Special valves needed to get the leak under control are manufactured in Buffalo and flown in on a private plane
- DWS works on various "return to service" documents for various types of facilities
- Legionella is a potential concern
- FLIS works with affected medical facilities
- FPP works with local health department and affected FSE

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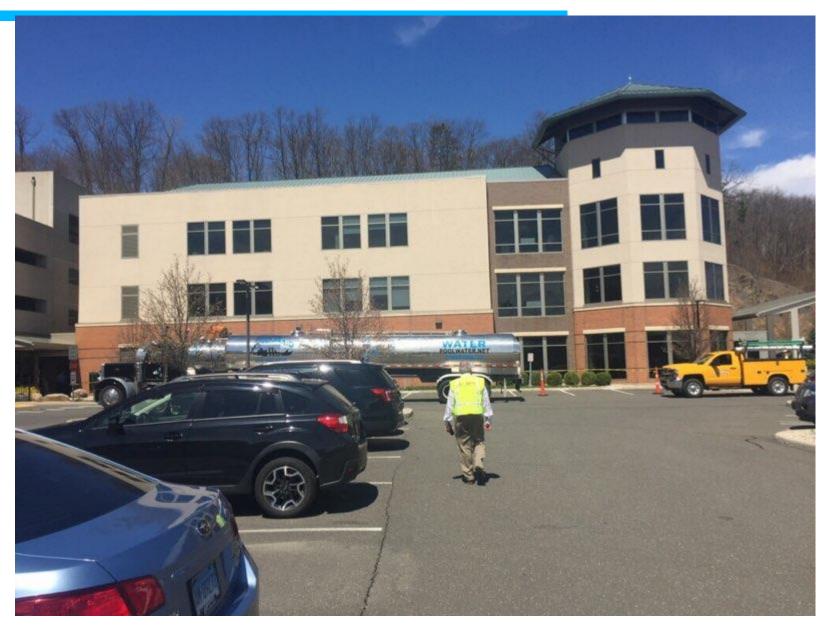


Tanker at Dialysis Center

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Temporary Pump Setup from Tanker and Water Delivery

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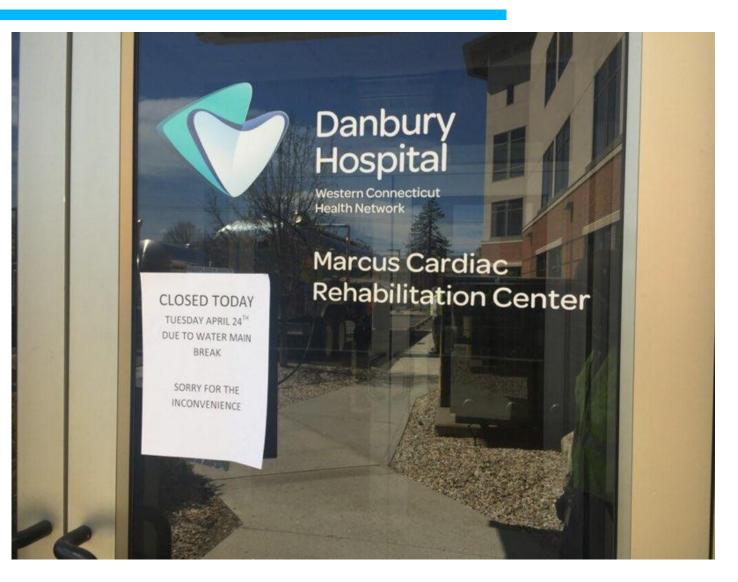


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Some Facilities Closed

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Temporary Hydrant to Hydrant Connection to serve Hospital

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Repair is complicated by presence of other utilities

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Line exposed in preparation of line stop installation

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Bottled Water Staged at Danbury Hospital

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Construction Challenges

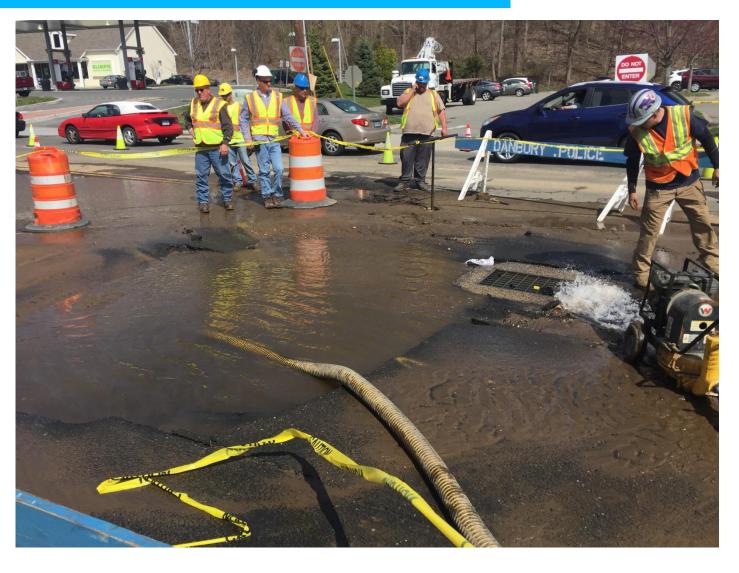
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Dewatering for Construction

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Questions?

• Thank you again!

Drinking Water Section Vicky.carrier@ct.gov or 860-509-7333 or 860-422-0988



