



Department
of Health

2022 Updates to the Water Supply Emergency Plan Program

Operations Section

Bureau of Water Supply Protection

Outline

1. Background
2. 2022 Document Updates
3. SDWIS Data Entry
4. Enforcement

Background

Why are we here?

- PHL Section 1125 & Subpart 5-1.33 require PWS which serve more than 3,300 people to submit a water supply emergency plan (WSEP) every 5 years
- WSEP includes vulnerability analysis assessment to terrorist (2003) and cyber attack (2018)
- 5-year update cycle for guidance and templates
 - Field memo issued September 16, 2022

Roles

- County/City Health Departments
 - Use local knowledge during review
 - Verify required content is included
 - Endorse once documents are complete
 - Forward to one (1) ERP and two (2) VA to BWSP
 - Update SDWIS
- Bureau of Water Supply Protection
 - Review against regulations and guidance
 - Issue approvals
 - Update SDWIS
 - Provide one (1) copy of VA to DHSES

Roles

- State District Offices
 - Use local knowledge during review
 - Verify required content is included
 - Issue approvals
 - Forward one (1) ERP and two (2) VA to BWSP
 - Update SDWIS
- Everyone
 - Update SDWIS
 - Currently 318 systems statewide
 - Enforcement actions based on data in SDWIS

2022 Document Updates

Letter to Community Water Systems

- Answer all questions, complete all tables
- Frequently missing information
 - Law enforcement consultation
 - Proposed corrective actions for vulnerabilities
 - Location of public version of ERP
- Pandemic and supply chain shortages
- AWIA requirements
- EPCRA Tier II information availability
- Submit two (2) copies of VA and two (2) copies of ERP

Document Protection Protocol Updates

- Modification to allow electronic submissions
 - At LHD discretion
 - Encryption and password protection
 - Encrypted storage
 - Working towards electronic submissions to BWSP
- Updated per PHL to provide access to DHSES, State Police and ITS

Small System Templates

Systems that wish to continue using the small system templates must use the 2022 version

- PHL §1125(1)(a) “The [water supply emergency] plan shall follow a form which shall be specified by the department...”
- 2012 and earlier versions of the templates will not be approved by the Department.

Small System Templates

Revised for 2022

- AWIA compliance
- Supply chain and pandemic
- Cybersecurity incorporated into VA template
 - Updated terminology
 - Separated process control and business questions
- Definitions Appendix

Small System Templates

Ten (10) New Utility Resilience Questions (Section III)

- Assess capability to respond to and recover from incident
 - No actions required based on answers to these questions
7. Select the statement below that best describes the percentage of response-capable staff who are cross-trained in critical operations and maintenance positions and available as staff backup:
- Less than 10% or unknown
 - 10 to 25%
 - Greater than 25 to 50%
 - Greater than 50 to 75%
 - Greater than 75 to 100%

Small System Templates

Water System Assets (Section IV)

Use, Storage and Handling of Chemicals			
Component	Number/ Size /Location (if applicable)	Description	Single Point of Failure? (Check if Yes)
Treatment Chemical Use and Storage			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>
			<input type="checkbox"/>

- Headings align better with AWIA
- Only list critical assets

Small System Templates

Updated Risk Assessment Tables (Section V.2)

Risk is a combination of:

- Threat
- Vulnerability
- Consequence

The tables step through an evaluation of each factor

Small System Templates

Updated Risk Assessment Tables (Section V.2)

Emergency: Flood (Example)

Check the system components that have a HIGH PROBABILITY of being affected by this emergency.

Distribution System:

- Pumps and pump stations
- Transmission mains
- Water mains
- Valves
- Booster chlorination stations
- Interconnections to other water
- Important service connections
- Appurtenances

- No components have a high probability of being impacted.**
Continue to next emergency.

Financial Infrastructure:

- Billing, payment, and accounting
- Third-party service provider

Physical Barriers

- Fences, bollards, perimeter walls and
- Locks, card readers, hardened doors, and equipment cages

- Check assets that have a high probability of being affected by flood
- If no assets, check last box and move on

Small System Templates

Updated Risk Assessment Tables (Section V.2)

Threat	Does this emergency have a moderate, high, or very high probability of occurring? (Refer to your threat probability assessment on pages 14-15):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, complete the rest of the table:		
Vulnerability	Review the system assets you identified as vulnerable on the previous page and enter below the most critical assets which, if impacted by this emergency, would significantly impair the operation of your system. For each asset, propose a corrective action which would reduce the risk to the asset or your system. Provide the priority and completion date this action. Use additional sheets if more than three critical assets were identified. Check the box below and continue to the next emergency if no critical assets were identified.	
	<input type="checkbox"/> No critical assets identified. System will be able to operate at normal capacity with the identified assets unable to operate due to impacts from this emergency.	

- Is it likely to happen
- Would it impact critical assets and system operation

If either is “No” move on to next emergency

Small System Templates

Updated Risk Assessment Tables (Section V.2)

Have established:

- It is likely to happen
- It will impact critical assets

1. Vulnerable Critical Asset from Previous Page: Pump Station	
Consequence	Describe the impact to your system if this asset becomes non-operational or is only able to operate at a reduced capacity:
	Will be unable to pump water to high service area. High service will run out of water once tank is depleted.
Mitigation	Proposed Corrective Action: Move pumps and electronics above flood level
	Priority (High/Medium/Low): Medium
	Target Completion Date: 2025

Address identified risk

- Identify most critical assets (up to 3)
- Describe system impacts
- Describe corrective actions

Small System Templates

Security and Operations Questions (Section VI)

- Updated language
 - Removed duplicate questions
 - Changed question format
1. Are warning signs (tampering, unauthorized access, etc.) posted on all components of your water system, e.g., storage tanks, well houses and other buildings? *(5.2 Signage and Announcements - 5.2.07)*
 - Yes
 - No – Corrective Action:

Target Completion Date:
 N/A – Please Explain:

Small System Templates

Cybersecurity Questions (Section VII)

- Incorporated into VA template
 - Also available as standalone document
- Updated language
- Better separated PCS and Business systems
- Changed question format

Small System Templates

ERP Template Updates

- Added “Not Applicable” check boxes
- Added numbers to encourage additional actions
- Supply chain and pandemic specific response action plans
- AWIA specific questions

A. Power Outage

Not Applicable because:

Immediate actions:

1. _____
2. _____
3. _____
4. _____

Tools and equipment:

1. _____
2. _____

Small System Templates

ERP Template Updates

- Detection Strategies

Check each strategy used

- Intrusion detection alarms
- National Response Center notifications
- Notifications from emergency services
- Customer complaint surveillance
- Public health surveillance

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Review/Approval Checklist Updates

Reviewed PHL, Subpart 5-1.33 and AWIA

- Major infrastructure changes (update within 30 days)
- Uses 2022 small system templates (if applicable)
- VA prepared in consultation with law enforcement
- VA is all-hazard (malevolent and natural events)
- VA includes cybersecurity *and* is updated

Review/Approval Checklist Updates

Reviewed PHL, Subpart 5-1.33 and AWIA

- Location of public version of ERP (don't send copy to BWSP)
- ERP identifies all available storage
- ERP includes capacity and location of existing and emergency interconnections
- ERP has capability to meet peak flow and fire demand concurrently
- ERP cover pandemic & supply chain shortage responses
- ERP includes criteria to determine critical water levels or safe yield

Review/Approval Checklist Updates

AWIA Requirements

- Local Emergency Planning Committee Coordination
- Use, storage and handling of chemicals
- Alternate source water
- Flood protection barriers
- Intake relocation
- Strategies used to detect malevolent acts or natural hazards that threaten the system

Applying 2022 Updates

Significant program changes made with September update

- Documents are at various stages of preparation, review and approval
- Updating to 2022 small system templates will take effort by water system
- Where documents are still being prepared and revised, encourage to follow new guidelines and documents
- BWSP will begin using the new checklists for documents received by BWSP after January 1, 2023

SDWIS Data Entry

Entering Data in SDWIS

Compliance Schedule Maintenance List

- Inventory > Modify Water System > PWS Name or ID Number > Compliance Schedule, or
- Enforcement > Compliance Schedules > Maintain > PWs Number

Emergency
Response
Plan

Water System No.	Schedule Type	Status	Effective Date
NY0100189	Part 5 Requirement	F	04/01/2008
NY0100189	Emergency Response Plan	F	09/21/2001
NY0100189			

Entering Data in SDWIS

Continually adding new Compliance Schedule Activities

Compliance Schedule Activities

Name	Due Date	Achieved Date	Condition (Derived)	Defau Vio. Ty
ERPS CONDITIONAL APPROVAL BY STATE	08/08/2003	08/08/2003	On Time	
ERPS CS FORWARDED BY LHD	07/05/2022	07/05/2022	On Time	
ERPS CS FORWARDED BY LHD	01/01/2022	03/24/2021	On Time	

Number of rows displayed: 31

Add Change Delete

Entering Data in SDWIS



Compliance Schedule Activities


Due Date &
Achieved Date
mm/dd/yyyy


Name
(Next slide)

Compliance Schedule Activity

*Name


Due Date  Projected Date 

Achieved Date  Responsible Party

Reported Date  Comment

Condition

Violation Status

Category Code 

Entering Data in SDWIS

Activity Type Maintenance List (1/2) – Do Not Use

Activity Name	Category Code
DIRECT DELIVERY	PN
EMERGENCY PLAN APPROVED	CMPL
ERPS CONDITIONAL APPROVAL BY STATE	ERPS
ERPS COPY OF PLAN IN LHD OFFICE	ERPS
ERPS CS CONDITIONAL APPROVAL BY STATE	ERPS
ERPS CS FORWARDED BY LHD	ERPS
ERPS CS FULL APPROVAL BY STATE	ERPS
ERPS CS RECEIVED BY LHD	ERPS
ERPS CS RECEIVED BY STATE	ERPS
ERPS CS REVISIONS REQUESTED BY STATE	ERPS

No more
Conditional
Approvals

No more
cybersecurity
tracking

Entering Data in SDWIS

Activity Type Maintenance List (2/2)

Activity Name	Category Code
ERPS CS REVISIONS REQUESTED BY STATE	ERPS
ERPS EMERGENCY CONTACT VERIFIED	ERPS
ERPS ENDORSED BY LHD	ERPS
ERPS FULL APPROVAL BY STATE	ERPS
ERPS PLAN UPDATED	ERPS
ERPS RECEIVED BY LHD	ERPS
ERPS RECEIVED BY STATE	ERPS
ERPS REVISIONS REQUESTED	ERPS
ERPS SUBMITTED TO STATE BY LHD	ERPS
ERPS VULNERABILITY ASSESSMENT COMPLETED	ERPS
FINAL COMPLIANCE	CMPL

Used by
County



Used by
BWSP & DO


Entering Data in SDWIS


Compliance Schedule Activities

Compliance Schedule Activity

*Name >> Category Code ERPS

Due Date  Projected Date 

Achieved Date  Responsible Party

Reported Date  Comment

Condition On Time

Violation Status

Violation Type To Use When Creating a Candidate Violation

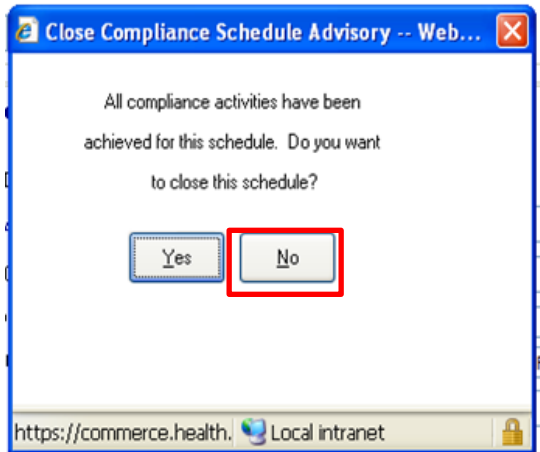
Vio. Type >>



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SDWIS Data Entry Updates

- “ERPS CS...” Activity Names no longer used
- LHD can use “ERPS Revisions Requested” Activity Name
- If pop up asks “Do you want to close this schedule?”



Please always
choose **“No”**

Enforcement

Enforcement

- Recent audit of the WSEP program found adequate follow up is not being provided when 5-year update deadlines are missed and when revised documents are not provided in response to comment letters.
- BWSP had developed an enforcement plan using quarterly data downloads from SDWIS, continuing the issuance of NOVs that started in 2021
- Increased time to respond to comments (120 days) with stricter enforcement

Enforcement

5-Year Updates or Revised Documents	BWSP Actions
More than 3 months past due	Notify LHD, advise NOV will be issued if documents are not submitted by 6 months past the due date
More than 6 months past due	Issue 1 st NOV, give 60 days to submit documents
More than 9 months past due	Notify LHD, advise a 2 nd NOV will be issued if documents are not submitted by 12 months past the due date
More than 12 months past due	Issue 2 nd NOV requiring Tier II notification, give 60 days to submit documents
More than 15 months past due	Additional enforcement per EHM ADM 2

Enforcement

- BWSP will run quarterly reports based on data in SDWIS and distribute to field
- Identify systems to remind that documents are due
- Identify systems to which BWSP *has issued* NOV
- Identify documents at LHD for review for 6+ months
- New due dates will still be distributed twice per year to assist with work planning
- Annual query of SDWIS to identify additional systems

Questions?