PENNTEC 2022 ANNUAL CONFERENCE | SAFETY TECHNICAL PROGRAM

IMPLEMENTING EMERGENCY RESPONSE PLANS JUNE 8, 2022 9:00-9:30 AM

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Why is an ERP important?

- In an emergency situation, people aren't thinking clearly!
- Need specific procedures to ensure that response doesn't cause further harm.
- Should be reviewed and updated on annual basis at minimum.
 - Review and update must include those responsible for the implementation
 - Updates after an incident
- Training and practice for routine situations and "what if" situations.
 - Private training
 - Table top drills
 - Full-scale exercises

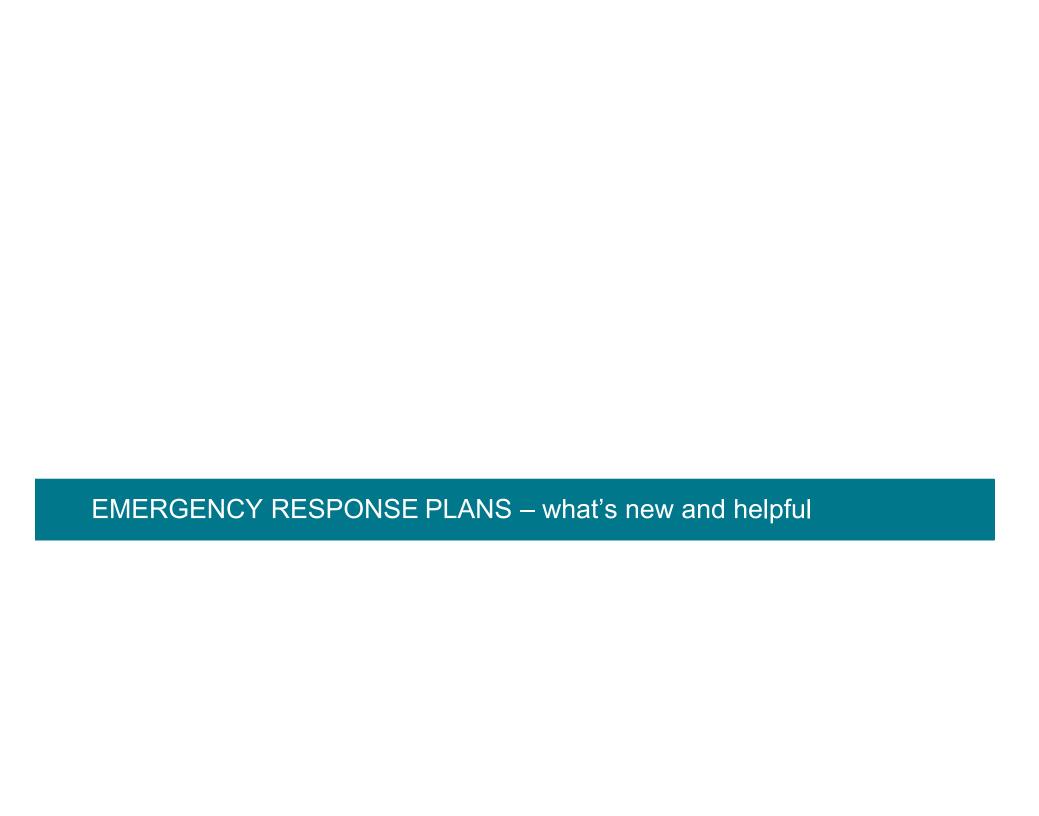
What we're reviewing today!

Emergency Response Plans (ERPs) may not be used frequently, staff looks at it periodically to "update" it. This session is designed to remind attendees the importance of these ideas:

- Tools for keeping the ERP current
- Differences between DEP and EPA requirements
- Tips to make sure plan is implemented as intended.

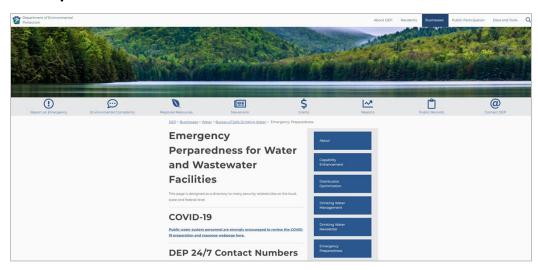






PA Department of Environmental Protection

- 25 PA Code Chapter 109.707
- 2014 Template Word document fill in the blanks
- Instructions provided to organize the ERP and describe each component.



https://www.dep.pa.gov/Business/Water/BureauSafeDrinkingWater/EmergencyPreparedness/Pages/default.aspx

PA Department of Environmental Protection

DEP 24/7 Contact Numbers

Public Water Systems should report to DEP within one (1) hour for Tier 1 violations/situations and Tier 2 violations involving an MCL, MRDL or TT violation (refer to Public Notification section for Tier definitions).

DEP Emergency Response Contact Numbers

Public Notification

The PN rule became effective on May 6, 2002 and was published in Chapter 109 in August 2002. PN requirements were revised to provide for different delivery deadlines of notices based on the persistence of the violations and the seriousness of any potential adverse health effects that may be involved. In 2009, DEP revised the PN Rule to improve the delivery of Tier 1 public notices and the planning requirements under the Operation and Maintenance (O&M) plan and Emergency Response Plan (ERP).

DEP Public Notification

Emergency Response Template

Emergency Response Plan Template for Water Suppliers (3800-FM-WSFR0300) Water suppliers can use this template to address all emergency response plan elements required under Chapter 109.707 including new requirements that became effective May 9, 2009 when the PN revisions were published. This template includeseight sections. Print each section to get the entire template.

DEP Emergency Response Plan

EPA Water Security Site

EPA's site provides information to help drinking water and wastewater utilities: assess and reduce vulnerabilities to potential terrorist attacks, plan for and practice response to emergencies and incidents and develop new security technologies to detect and monitor contaminants and prevent security breiches

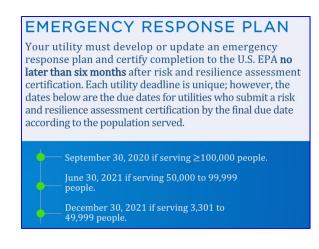
EPA Water Security 2

Emergency Preparedness	
Filter Plant Performance Evaluation	
Operator Certification	
Operator Outreach	
Partnership for Safe Water	
Professional Engineering Services	
Tips	
Water Allocation	
Noncommunity Water Systems	

EMERGENCY RESPONSE PLAN FOR Public Water System Name:						
Address:	- - - - -					
Address.						
Telephone No.:						
Municipality:						
County:						
System Type: (Please Check)	Community Nontransient None	community				
Population Served:						
Operation & Maintenance (O&M) Plan Location:						
Plan Prepared by:						
Plan Reviewers:						
Name	Title	Date				
_		_				
Name	Title	Date				
Name	Title	Date				
Date Completed:	Date Updated:					

U.S. Environmental Protection Agency

- 2018 America's Water Infrastructure Act (AWIA)
- Required conducting a Risk & Resilience Assessment for water systems serving >3,300 people.
- R&R assessment completed + certify to EPA by a deadline established by system size.
- Required to follow up with ERP updates within 6 months of R&R assessment, and also certify to EPA.



Now on 5-year cycle:

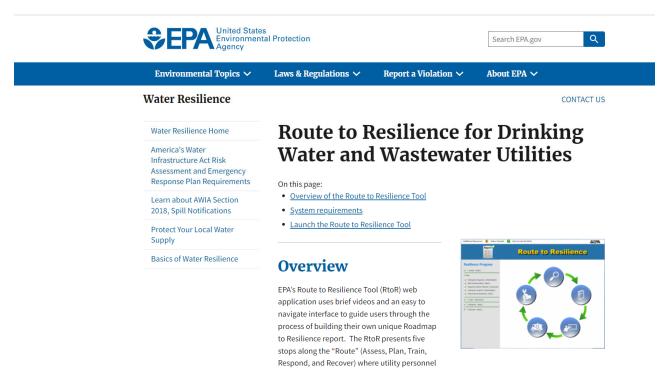
September 30, 2025 for >100,000 people

June 30, 2026 for 50,000-99,999 people

December 30, 2026 for 3,301-49,999 people

EPA Resources

 EPA has developed a series of resource pages for water system staff for Risk & Resilience and Emergency Response.



EPA Resources

Assess



- Conduct a risk assessment
- Create Resilient Water Utilities
- <u>Develop water quality surveillance</u> and response capabilities
- Adopt cybersecurity best practices and see cyber alerts

Plan



- <u>Develop emergency response plans</u>
- <u>Build relationships in your community</u>
- Access lab resources
- · Build hazard resilience
- Share resources during an emergency

Train



- Access the All-Hazards Boot Camp
- Develop a training and exercise plan
- · Conduct tabletop exercises
- Find training opportunities

Respond



- Response On-The-Go Tool
- Print a checklist to help you respond
- · Monitor severe weather
- Respond to supply challenges

Recover



- Find federal funding for your utility
- Decontamination resources
- Get reimbursement tips
- <u>Learn about the Public Assistance</u> <u>Program</u>

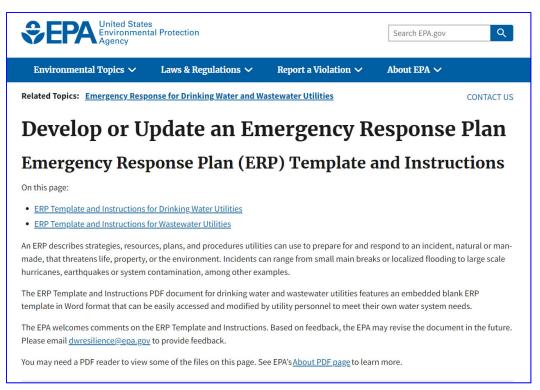
Surveillance



- <u>Learn about water quality</u> <u>surveillance</u>
- · Learn from other utilities
- · Access training resources

Template ERP Plan

 EPA also has a fill-in-the blank document that meets the AWIA requirements.



UTILITY INFORMATION				
	information about your water utility readily available for your personnel, fire			
responders, repair contractors/vendors, the n				
i. Utility. Overview				
Provide basic information about your utility.				
Utility Information				
PWSID				
Utility name and address				
Owner				
Directions to utility from major roadway, include lat./long. coordinates				
Total population served and total service connections				
Name, title, phone number of primary contact (e.q., ERP Lead)				
Alternate contact				
Location of treatment, distribution, collection schematics and operation manuals				
Use this checklist to ensure the following add	litional utility information (as applicable) is included as a part of your ERP.			
☐ Map of distribution systems				
☐ Pressure boundary map				
☐ Process flow diagram ☐ Site plans and "as built" drawings for	the following components of your system (as applicable):			
Pumping and storage facilities				
 Reservoir facilities 				
 Water treatment facilities Chemical storage locations 				
Booster pump stations				
 Pressure-regulating valve (P 				
☐ Distribution system diagrams and ins				
 Equipment specifications and operati Emergency power and light generation 				
	sition (SCADA) system operation instructions			
☐ Communications systems operation i				

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EPA Resources



Checklist Example

power outage events.

Actions to Prepare for a Power Outage **Actions to Recover from a Power Outage** Planning — Determine where your treatment facility and key Coordination — Fuel — pumping stations rank on the prioritization list Create and maintain an emergency response for power restoration. Try to get as high on the Check with your electric utility to make sure that Clean tanks as necessary and polish on-hand plan and a business continuity plan for all critical list as possible by making sure the list manager all three phases of power are available before fuel supply as time allows. system components. understands the reliance of the community (e.g., switching back to grid power. When power is fire protection, hospitals, shelters and sensitive Refill tanks as necessary. Stabilize fuel. restored, not all three phases may be initially Develop plans that specifically address actions populations) on drinking water and wastewater available, which can damage three-phase to be taken during power outages; plans should services. Establish new fuel vendor contracts as equipment. address both short-duration and long-duration outages. Make sure your electric utility has the actual Follow set procedures for taking your facilities off street addresses and locations of your treatment generator power and back onto grid power. Assess your on-site fuel storage and adjust as Develop and issue standard operating facilities and pumping stations. In case street procedures to manage power outages. signs are damaged or lost, also include latitude Conduct an after-action discussion with utility and longitude positions. Decimal latitude/ staff to identify portions of the response that Documentation — Know your system; have a plan for stationary longitude positions should be recorded with a went well and areas for improvement. and portable generators. Make sure, if possible, value six digits to the right of the decimal point. Compile damage assessment forms and cost that generators are pre-staged at locations when Share key after-action items and lessons learned documentation into a single report to facilitate an event can be expected to potentially affect Learn what alternative communication methods with your electric utility provider, emergency the sharing of information and the completion one or more of your stations. (e.g., 2-way radios, ham radio operators, satellite management agency and other response of state and federal funding applications. phones) are available in your community. partners (e.g., fuel vendors). Develop roles and responsibilities for staff Visit EPA's web-based tool, Federal Funding for Utilities—Water/Wastewater—in National before, during and after a power outage, Join your state's Water and Wastewater Agency Notifications -Disasters (Fed FUNDS), for tailored information including appropriate communication protocols. Response Network (WARN). and application forms for various federal disaster Revise or lift (as applicable) any water use Coordination funding programs. Develop an approved notification procedure for advisories that were put in place during the communicating boil water advisories, water use Develop a lessons learned document and/or Get to know key staff at your electric restrictions and other information to customers an after action report (AAR) to keep a record utility, especially your designated account during a power outage (e.g., precautionary boil Update your status with your regulatory or of your response activities. Update your risk representative, if assigned one. Learn if circuits water notices, reverse 911). primacy agency and your local emergency assessment, emergency response plans and (e.g., power transmission lines or electric service management agency. contingency plans. Develop standard written notification templates area zone) serving your utility are in high risk fire areas, such as in the western states. to quickly send alerts in emergencies. Ensure Notify utility staff that any energy consumption customer information is regularly updated. restrictions that may have been put into place Obtain 24/7 emergency contact information Notes: are now lifted. for your electric utility and local emergency Participate in local, state and federal emergency management agency and plan together for preparedness exercises.

Generators -

Local Emergency Planning Committees

- AWIA also amended the Emergency Planning and Community Right-to-Know Act (EPCRA).
- The revisions basically require that community water systems receive prompt notification of any reportable release of hazardous substances that potentially affect their source water, and have access to Tier II information (i.e., hazardous chemical inventory data).
- Tier II reports are provided to the Local Emergency Planning Committees in their county. LEPCs are under the jurisdiction of the county Department of Emergency Services/EMA.
- Water systems are encouraged to coordinate with LEPCs to update their ERPs.



Integrating DEP and EPA Elements

Checklist to include both DEP and EPA requirements.

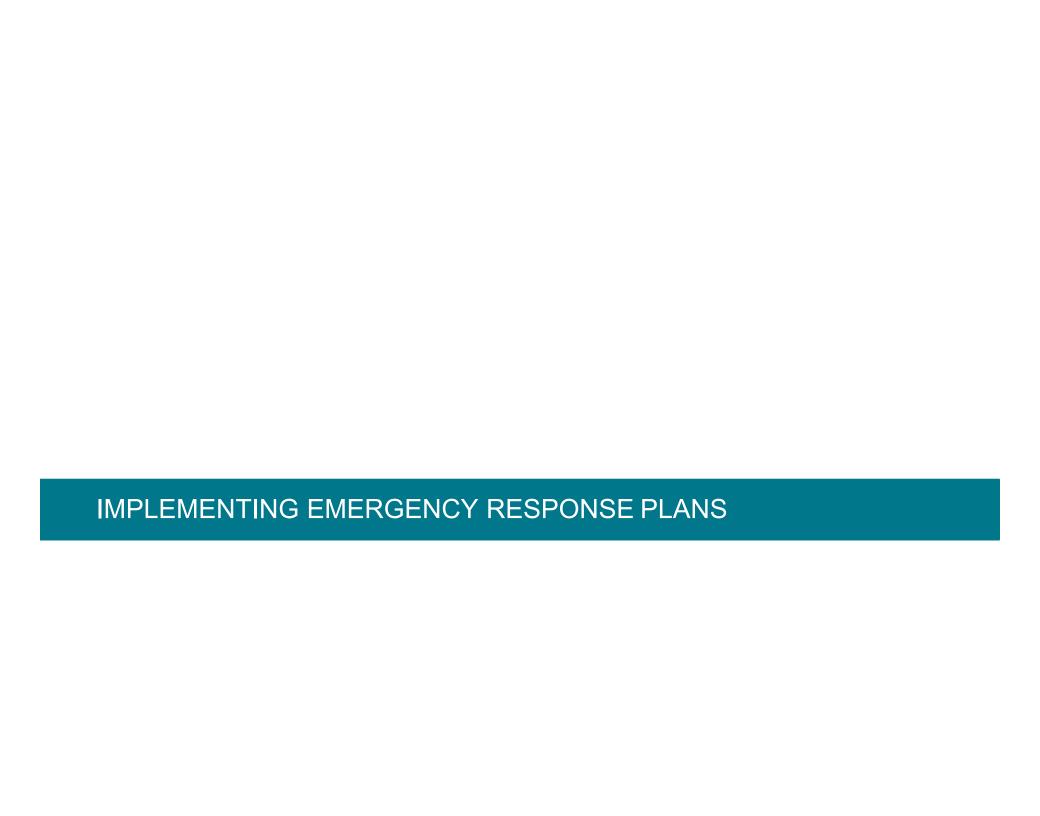
DEP Template Sections	Present in Existing ERP?	Present in Existing ERP?	EPA Template Sections	
Utility Information (Name, ID, Location, Population Served)			Utility Information (Name, ID, Location, Population Served)	
Plan Preparers and Reviewers			Plan Preparers and Reviewers	
			Plan Distribution	
			Change History	
			Checklist for Attaching Additional Utility Information	
			Full Personnel List (Name, Position, Contact)	
Personnel in Charge During Emergency (Name, Position, Contact)			Internal Personnel in Charge During Emergency (Name, Responsibilities, Contact Info)	
Who to Contact Based on Potential Emergency Situations - Chart				
Government Agencies Contact Info				
System Equipment Contact Info			External Partners in an Emergency (Name, Responsibilities, Contact Info)	
System Chemical Contact Info			external Partiers in an Emergency (Name, Responsibilities, Contact into)	
Mutual Aid Agreements				
Local Customers Contact Info			Critical Customer Contact List	
Industrial/Commercial Customers Contact Info			Critical Customer Contact List	
Media Contact Info			Media Contact Info	
Lines of Communication and Instructions			Communication Equipment Inventory (Type and Location)	
Locations of Communication Equipment				
Location of Pertinant Operational Info				
(Separate templates for this)			Public Notification Template	
Source Information (Wells and Pumps)			Source Information (Wells, Intake, Treatment Plants)	
Treatment Information (Location and Storage of Chemicals)			Treatment Information (Location and Storage of Chemicals)	
Potential Sources of Contamination Nearby			List Nearby Industry Chemical Handling and Storage Facilities	
Finished Water Storage Info			Finished Water Storage Info	
			Distribution Information	
			Safety Materials and Information	
System Demand				
Procedure to Provide Reserve Capacity of Alternate Water Supply			Emergency Alternate Drinking Water, Source Water, and Interconnected Utilities	
Power Supply Equipment			Response Resources and Core Response Procedures	
Repair Equipment Available				
Spare Equipment for the Source Water			Rosmonea Rosaureas	
Spare Equipment for Distribution			Response Resources	
Spare Equipment for Treatment				
Vehicles and Construction Equipment				
			List of Key Local Services that may be needed in an Emergency	
			Incident-Specific Response Procedures	
Description of Corrective Actions for Probable Emergencies			Core Response Procedures (Access, Physical Security, Cybersecurity, Power Loss)	
			Core Response Procedures (Sampling Analysis, Laboratory Contacts)	
			Family and Utility Personnel Well Being	
			Other Mitigation Actions	
			Detection Strategies	

Integrating DEP and EPA Elements

- Ensure there is one central location for Contact Information that is referenced throughout the Plan.
- Include a copy of standard responses at each asset, with equipment and supplier information for easy access.
- Convert all scans or PDF documents to Word format for future updates.
- Utilities should ensure that more than one person is familiar with the Plan, and have back-up copies available in multiple locations.
- Include in the Plan a list of locations for other pertinent information on the water system.
- Review any final reports from emergency occurrences and ensure the outlined procedures were followed. Update the Plan with any additional or alternate steps that were taken.

Integrating DEP and EPA Elements

- Emergency Response Plan does not need to be uploaded or submitted.
 Only online certification with AWIA is required. Link:
 https://encromerr.epa.gov/registrationrequest/OW--AWIA--
 - Certifying%20Official%20-%20Emergency%20Response%20Plan?theme=awia
- Must be registered for an EPA Shared CROMERR Services (SCS) account.
- You will receive a confirmation email once certification is finalized.
- Allows access to certification submission history.



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National Incident Management System (NIMS)

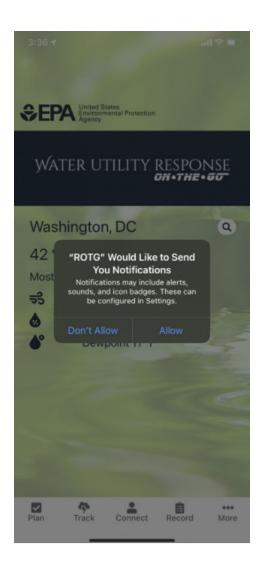
- FEMA Federal Emergency Management Agency has allowed PADEP to sponsor online training for Waster/Wastewater Incident Command certification.
- Incident Command Systems trains staff in managing small or large emergency and non-emergency situations.



EPA Resources

Water Utility Response On-the-Go App

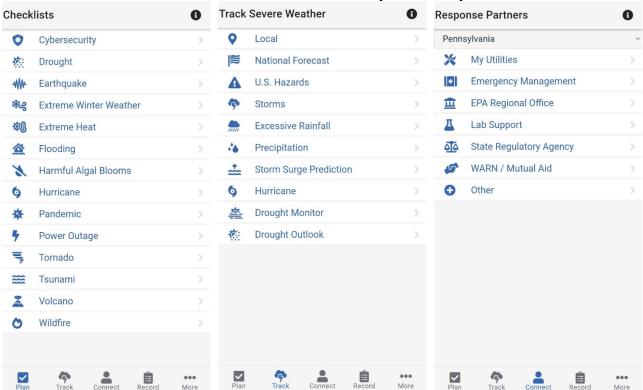




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Water Utility Response On-the-Go App

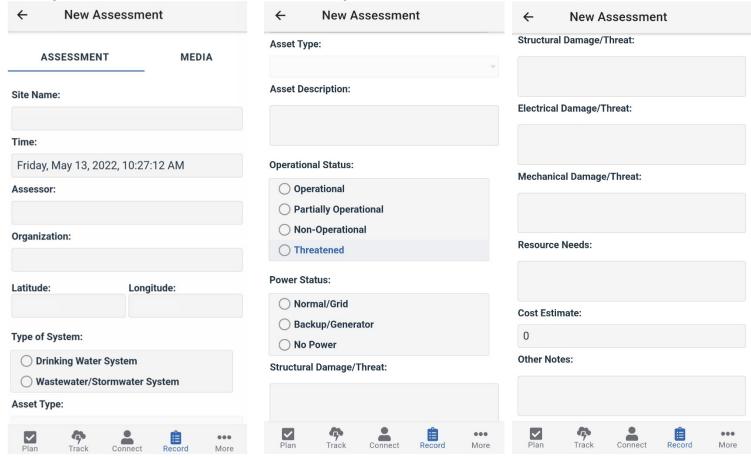
- Checklists for preparation, response, and recovery actions.
- Live tracker and links for weather events and hazards.
- Accessible contact information for response partners and utilities.



EPA Resources

Water Utility Response On-the-Go App

Locally stored small-scale utility assessment, with photos.

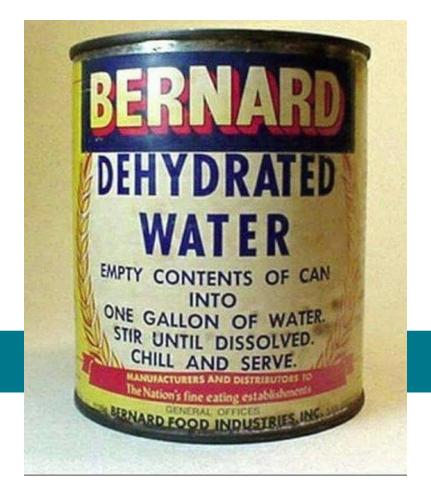


Keeping Up - ERP Maintenance

Reasons why the ERP should be reviewed annually:

- Life changes quickly "that won't happen", until it does.
- Unforeseen situations arise the pandemic lockdown.
- Personnel changes retirements, resignations new staff need to be informed on responses and their roles in an emergency.
- Conditions change supply chain, shortage issues.

STORIES TO SHARE? QUESTIONS?



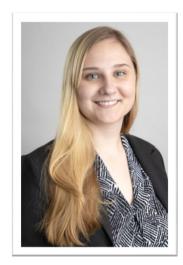
Thanks for joining us! Download the slides at ssmgroup.com



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