

2024 Spring Conference at Great Wolf Lodge  
Perryville, Maryland



**Implementing Technology Tools to Improve Overall Management of  
Compliance Programs to Protect the Environment and our Community**

Cynthia Alden, PE, LEED AP  
Jennifer Peterson, CSM

May 3, 2024

## Speaker – Cynthia Alden, PE

- Howard County, Bureau of Environmental Services
- Professional Engineer – MD, CA
- 24 years of experience in Environmental Compliance, Project Management, Regulation Interpretation and Environmental Monitoring
- At the County for 19 years
- Responsible for enforcement of the County Stormwater Code



## Speaker – Jennifer Peterson, CSM

- 4.5 years at EA Engineering, Science, and Technology, PBC., Inc
- Certified Scrum Master (CSM)
- Deputy Technology Chief for Business Processes and Director of Software Implementations
- 25 years experience in managing software products and development, business process analysis, project management and implementations



# ***Implementing Technology Tools to Improve Overall Management of Compliance Programs to Protect the Environment and our Community***

1 PDH

- Provide an overview of the Howard County Compliance Landscape and Challenges Faced
- Share experienced insights on the process used to understand Howard County's pain points, business objectives and data management and reporting needs
- Review the implementation process and best practices used to implement their selected software solutions
- Convey the benefits realized after adopting a modernized software solution to digitizing data collection, tracking and reporting in centralized solution
- Provide a brief software demonstration on specific use cases for managing SWPPP Inspections and tasks from cradle to grave and routine field data collection and reporting



# Integration of Engineering, Science, and Technology



- **5** decades in business
- **650+** staff in 27 nationwide offices
- **100%** employee-owned Public Benefit Corporation
- **80%** of business is from repeat clients
- **\$255M** annual revenue
- **~1,700** projects for over 575+ clients executed annually



Engineering



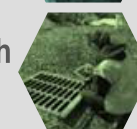
Environmental Health and Safety



Site Characterization and Remediation



Natural Resources Management



Data Management and Technology



Laboratory Studies

## EA'S PBC FRAMEWORK AND CSR PROGRAM



PROFESSIONAL  
DEVELOPMENT



COMMUNITY  
SUPPORT



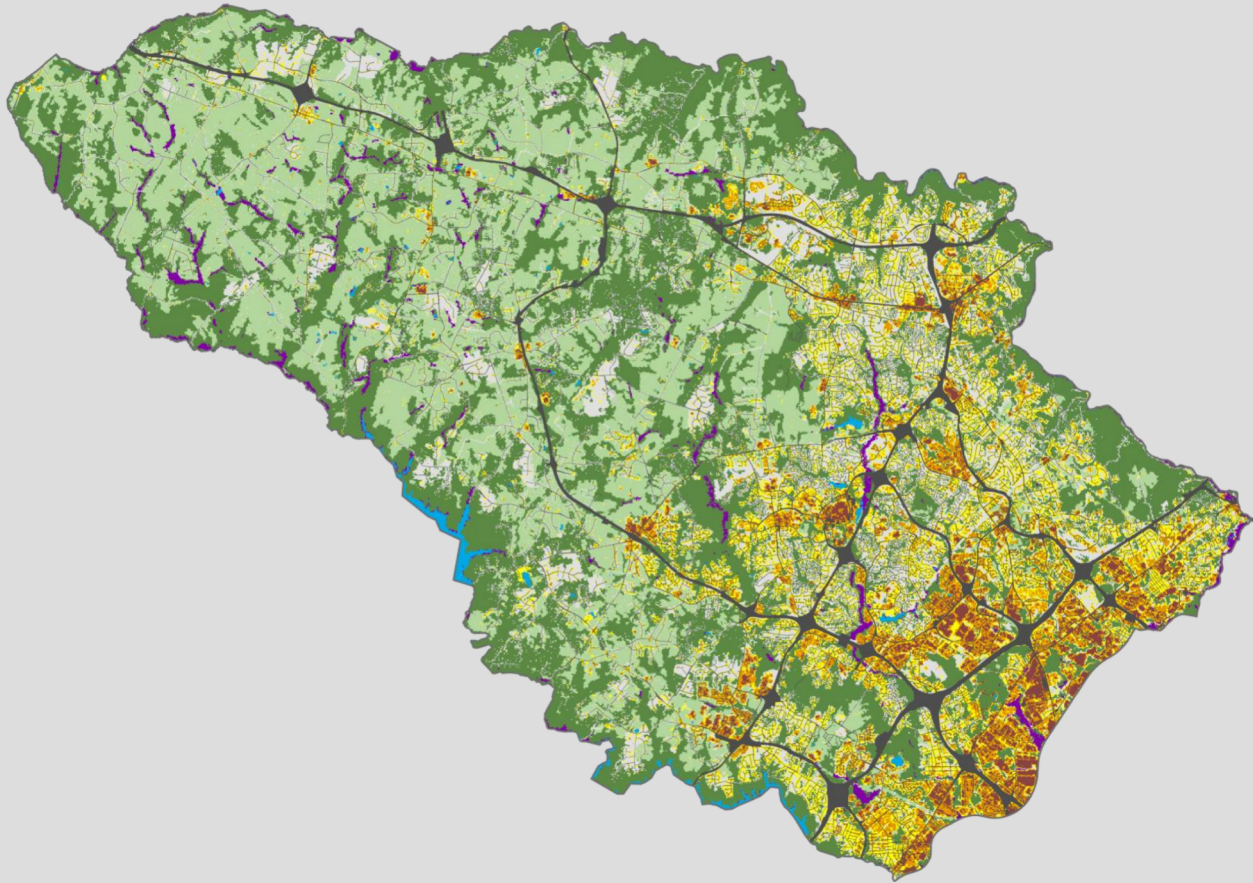
CHARITABLE  
GIVING



EA'S SUSTAINABILITY PROGRAM



# About Howard County



POPULATION  
**~300,000**

AREA  
**~160,000**  
Acres

FOUNDED  
**1851**



Department of Public Works

# DPW – Bureau of Env. Services, Operations Division

## Operate the landfills and responsible for county environmental compliance

### ▪ 3 Landfill Sites

- ◆ New Cut Landfill – closed
- ◆ Carrs Mill Landfill – closed
- ◆ Alpha Ridge Landfill – open
  - Opened in 1980
  - 190 acres
  - Export 61,000 tons of waste annually to King George Landfill in VA
  - Send out 28,000 tons of recyclables annually
  - State of the Art Compost Facility



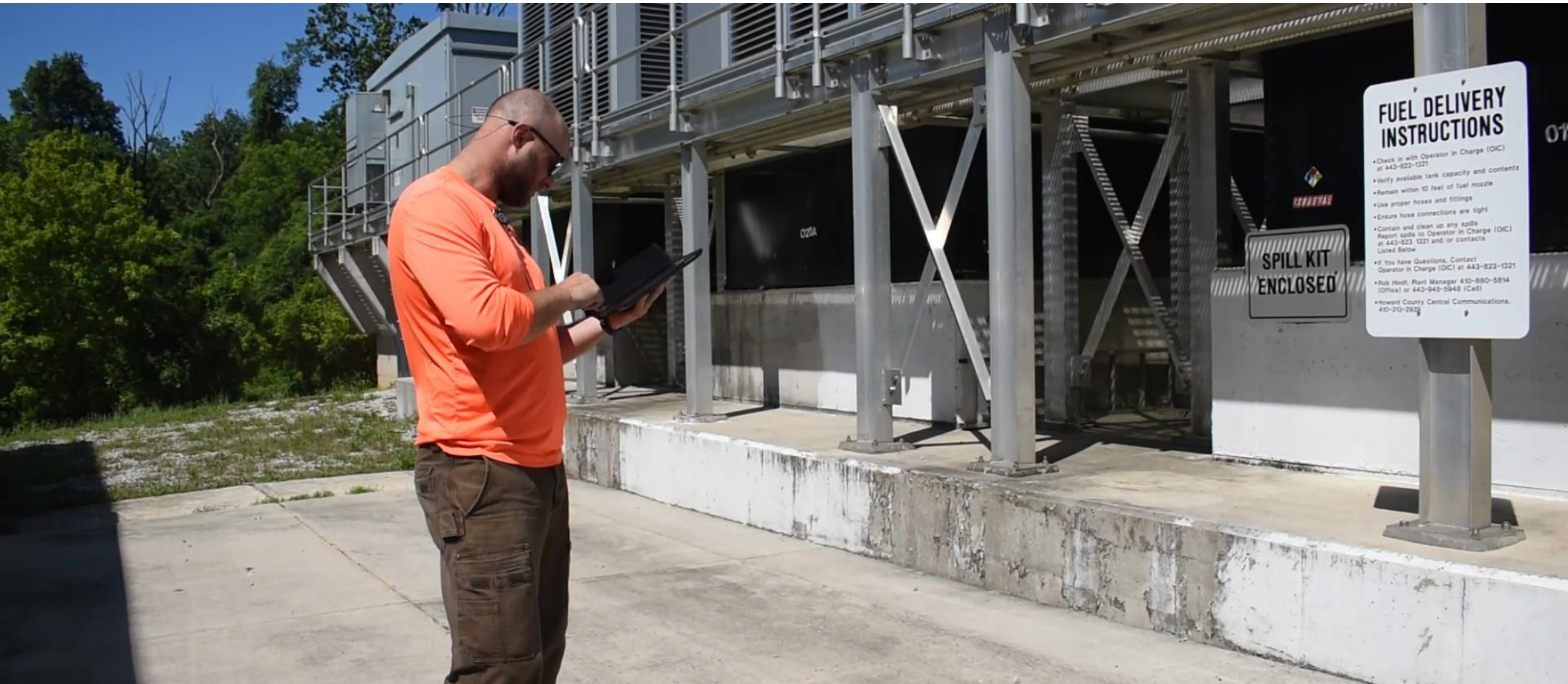
## Multi-Media Compliance Program Management

- Air
- Wastewater
- Stormwater
- Groundwater
- Surface Water
- Hazardous Waste
- Fuel Storage
- Landfill Gas
- Leachate, etc.

## LEAN TEAM

~20 that operate the landfills, 4 engineers and geologists managing the various compliance programs





## OVERVIEW OF THE HOWARD COUNTY PROJECT

# Howard County's Compliance Responsibilities



## Regulatory Agencies

Federal - EPA  
State – MDE and MDA  
Clean Water Act  
Clean Air Act  
RCRA  
Oil Control Program and more



## Regulations and Obligations

Maintain compliance for 3 landfills  
20+ Permits  
500+ obligations to manage  
25+ inspection forms at different frequencies  
Daily, weekly, monthly quarterly review of information  
Maintenance and more



## Sampling and Monitoring

Monthly groundwater levels  
Quarterly Stormwater Sampling  
Semi annual Sampling  
Continuous Monitoring data collection and review  
Gas Probe, Flare Readings  
Gen-set data  
Methane emissions and more



## Inspections

Annual and Monthly tank inspections (over 55 locations)  
Daily Leachate, Compost Temp.  
Weekly Maintenance, Vault Readings, Leachate Pump Log  
Weekly Stormwater  
Quarterly and Annual SWPPP  
Hazardous Waste and more



## Reporting

Semi Annual GW and Air Report  
Quarterly Stormwater Report  
Biennial Hazardous Waste NetDMR  
Tier II  
Ad hoc requests and more

# Howard County's Data Management Compliance Challenges



# HoCo's Data Management State (Pre-Software)

- **Managed by**
  - ♦ Siloed systems and processes
  - ♦ Paper, excel files, access databases
  - ♦ Stored in various locations
- **Several ways to track tasks**
  - ♦ Each person doing their own way
  - ♦ Paper, outlook, standalone program
- Information not easily shareable
- Manual processes with redundant steps taken (paper to excel to pdf transfer)
- Lack of quality data checks on data entered or uploaded



All of this, makes it harder to manage compliance assurance for the programs

# Standardized Technology Adoption was Needed



**EHS and ESG programs  
rely on a lot of data**

Data comes from direct and  
indirect sources



**Your EHS/ESG program  
needs technology to  
succeed**

Technology enables data to be  
transmitted electronically, making it  
fast and simple to receive the  
information you need



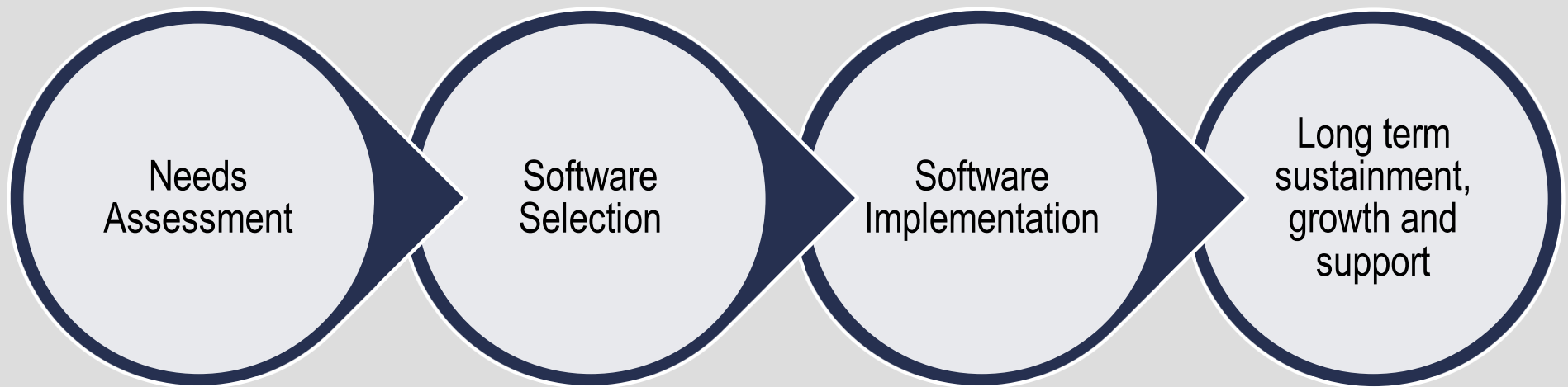
**Utilizing technology  
allows you to  
analyze data quickly  
and accurately**



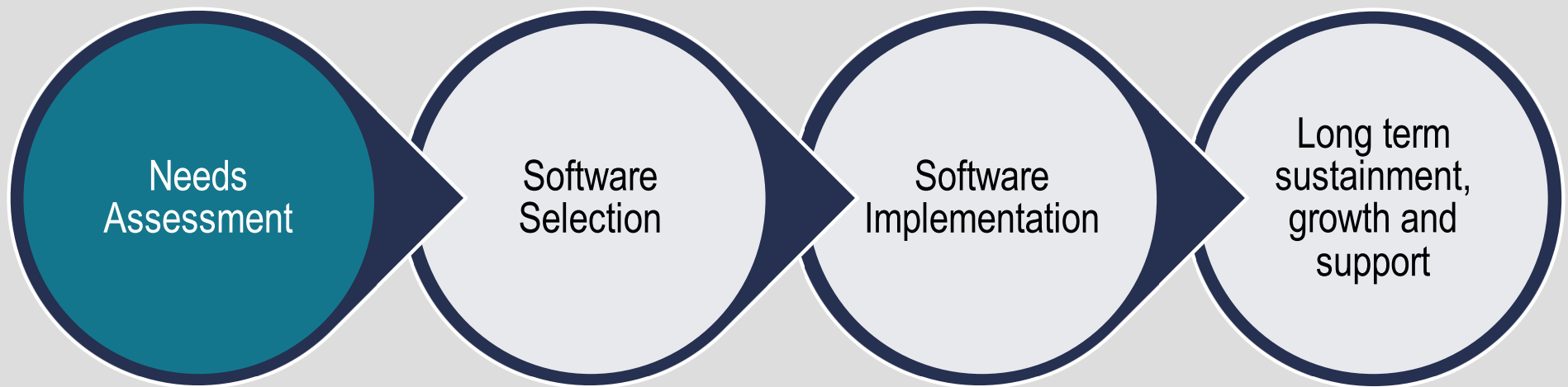
**It was time to streamline the process and adopt a  
software tool**



## Recommendation on Next Steps



# Needs Assessment

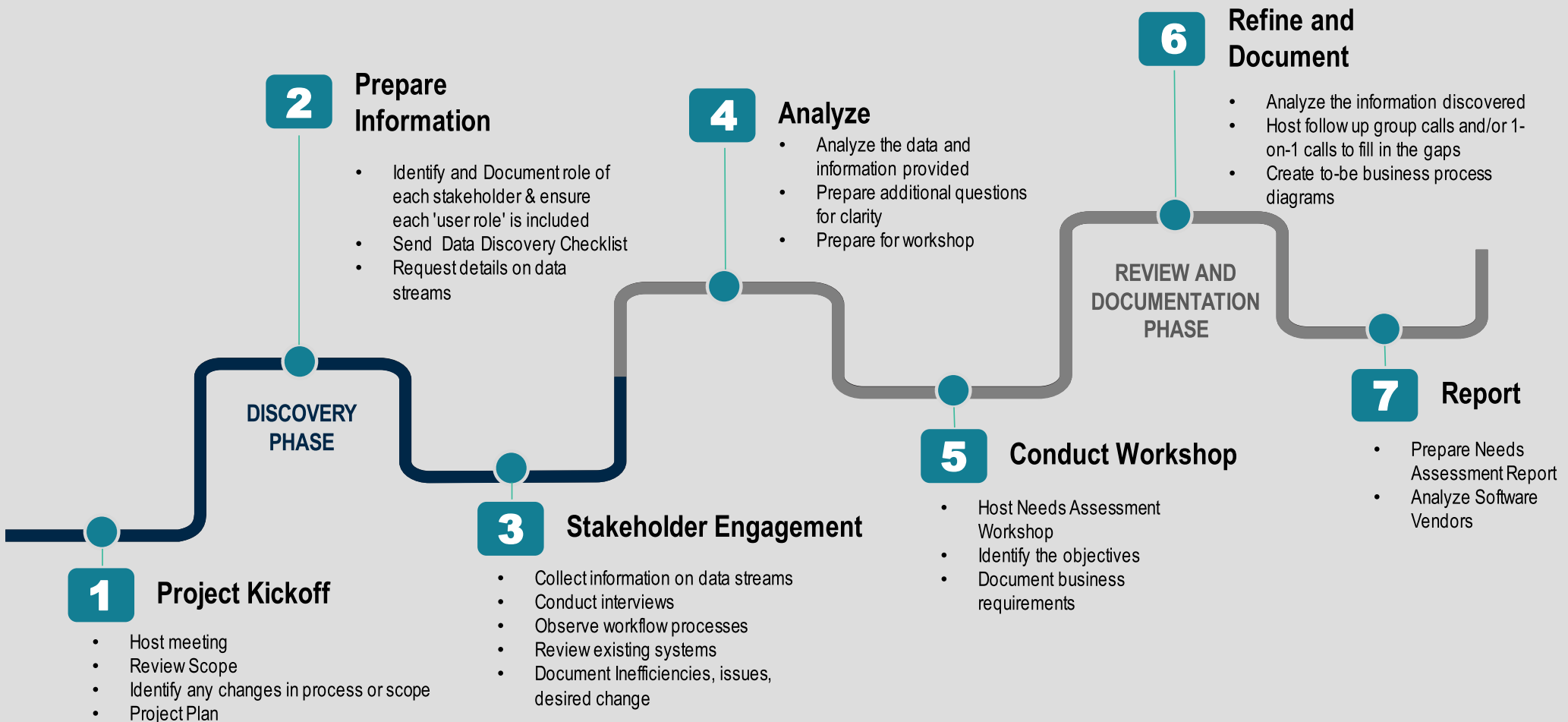


# Working through HoCo's Needs Assessment

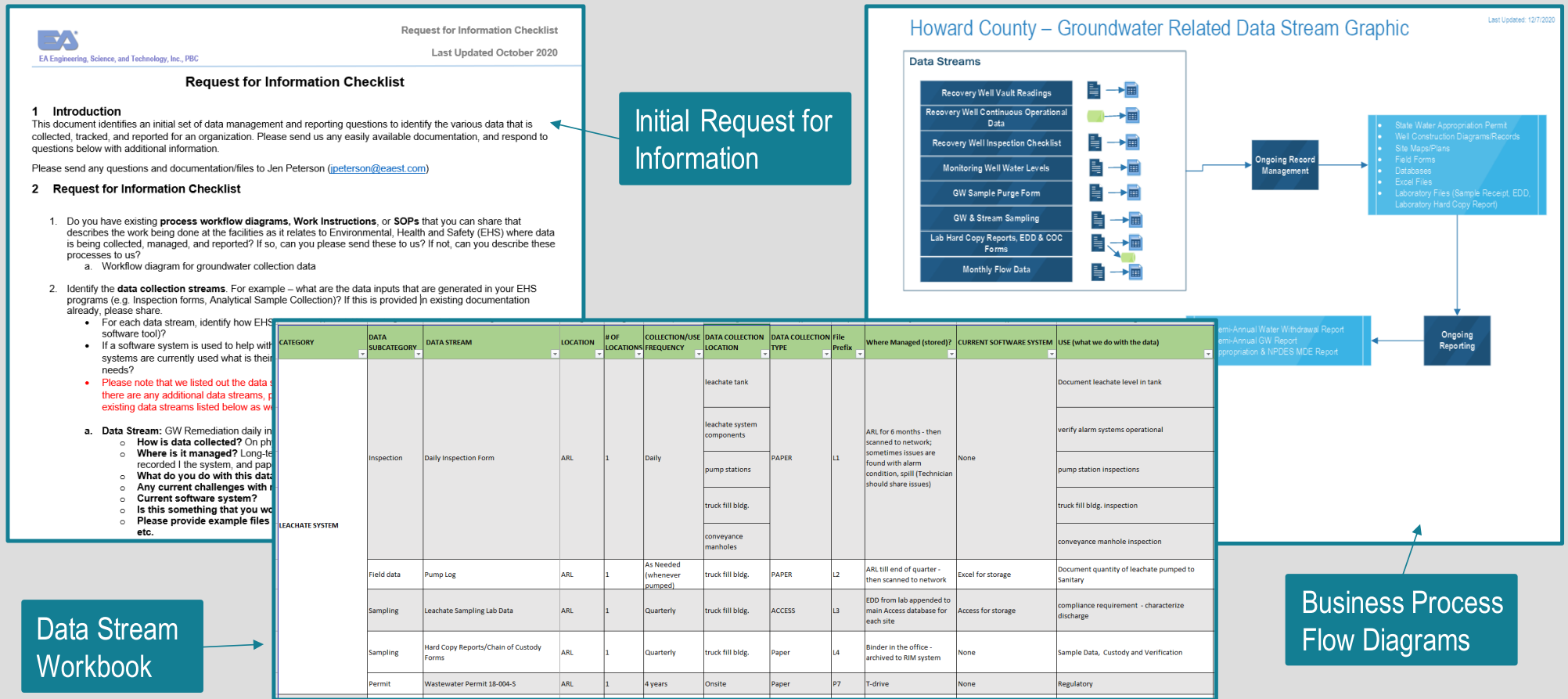
- **Define the business problem(s) and business goals**
- **Determine and document appropriate stakeholders and their role (what's their stake?)**
- **Discuss early on different solution offering types**
- **Create awareness on budget range and timeline**
  - ◆ Don't think first year cost only
  - ◆ Consider budgeting for investment overtime as changes occur
- **Review the common steps in needs assessment process**
- **Critical to stay customer focused and driven!**
  - ◆ Satisfy the needs of the business
  - ◆ Be a good listener
  - ◆ Ask good questions that promote discussion
  - ◆ Provides for better adoption and long-term sustainment



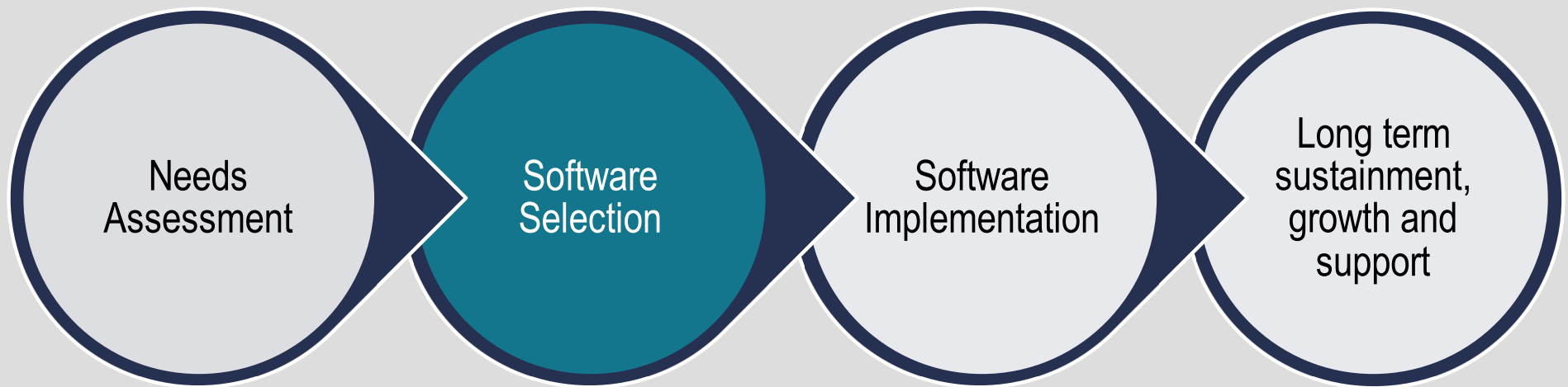
# EMIS Software Needs Assessment Process



# Example Needs Assessment Files



# Software Selection



# Software Selection Considerations

- 1. Research vendors that fit your top requirement priorities, budget (if available)**
  1. Do you need to hire experienced consultant to lead this process on your behalf?
- 2. Consider the various software types – SaaS/COTS, Custom, Low-Code**
- 3. Benchmark with other like organizations – what's their experience**
- 4. Reach out to vendors and schedule software demonstrations**
  1. Let them know your top business goals and functional priorities
  2. Send Demo Script – outlining key elements you want them to show you and/or address
  3. Record the sessions (if able) to look back at for comparison, consider inviting AI Notetaker
- 5. Document the benefits and challenges with all and any follow-up needed**
  1. Try to narrow down to top 2 choices for follow-up
  2. In the follow-up – discuss remaining questions, costs, implementation process, timeline, change management
- 6. Make final selection**
  1. Go into it as “partnership” – everyone should be transparent

# Howard County Software Selection



## EA's sEAmless Compliance Tool

- To manage their compliance programs
- Obligations, Equipment, Documents, Tasks, Inspections, Training Records
- Standardized reporting and KPIs

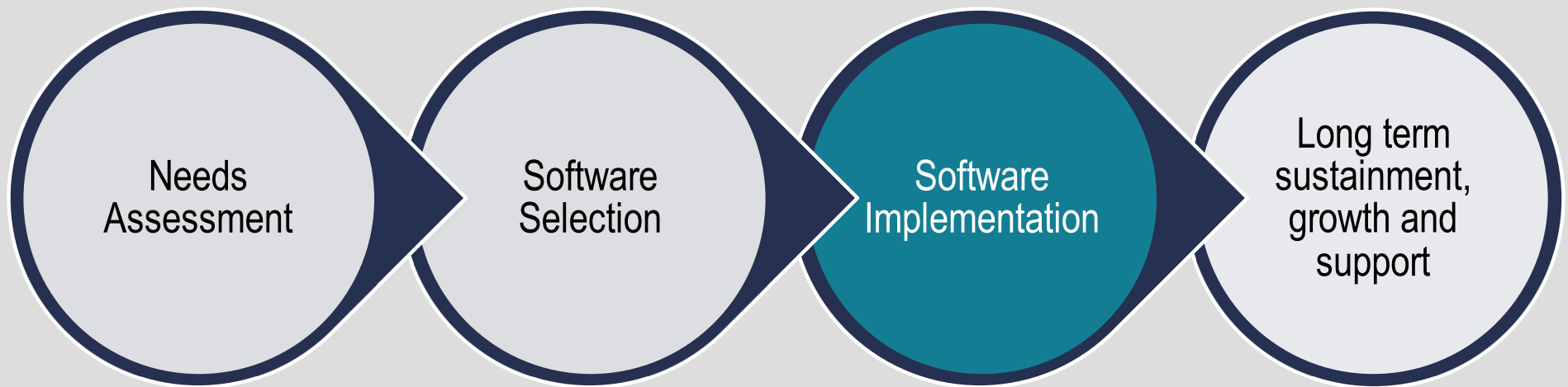


## Earthsoft EQulS

- To manage analytical and field data collections
- Streamline Data Analysis
- Streamline Data Reporting



# Software Implementation



# EMIS Software Implementation Approaches

## ■ Approaches

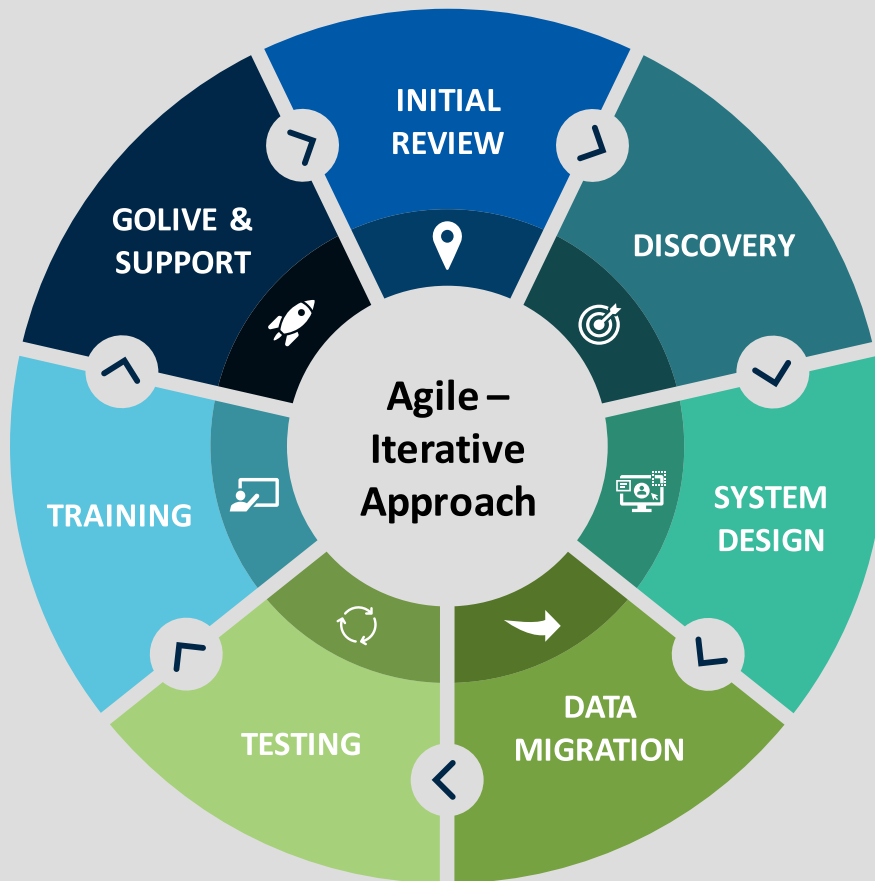
- ◆ Waterfall
- ◆ Agile and Scrum (Iterative)
- ◆ Phased approach
- ◆ Hybrid
- ◆ Rapid SaaS Implementation

## ■ What is the best approach for you?

- ◆ Outline the key stakeholders and roles
- ◆ Discuss the pros and cons of each with stakeholders
- ◆ Is there a critical module/function that is needed sooner?



# sEAmless and EQuIS Software Implementation



📍 INITIAL REVIEW
<ul style="list-style-type: none"> <li>• Kickoff Meeting</li> <li>• Review Scope</li> <li>• Collab Platform</li> <li>• Communication &amp; Implementation Plan</li> <li>• Change Management</li> <li>• Review Stakeholders</li> </ul>

🎯 DISCOVERY & REQUIREMENTS
<ul style="list-style-type: none"> <li>• Meet with Stakeholders</li> <li>• Review existing systems</li> <li>• Review Configuration Needs and Priorities</li> <li>• Requirements Document</li> <li>• System Design Documentation</li> </ul>

💻 SYSTEM DESIGN
<ul style="list-style-type: none"> <li>• Refine System Design Documentation</li> <li>• Design Database &amp; UI</li> <li>• Configure Modules</li> <li>• Develop Workflows &amp; Pages</li> <li>• Integrations</li> <li>• Testing Throughout</li> </ul>

➡ DATA MIGRATION
<ul style="list-style-type: none"> <li>• Review migration needs</li> <li>• Review existing data/system</li> <li>• Data Migration Plan</li> <li>• Conduct Migration, Verify</li> <li>• Data Migration Report</li> </ul>

🔄 TESTING
<ul style="list-style-type: none"> <li>• Internal Testing</li> <li>• UAT Test Plan</li> <li>• Conduct UAT</li> <li>• Address Defects</li> <li>• Review with Client</li> </ul>

💻 TRAINING
<ul style="list-style-type: none"> <li>• Training Plan</li> <li>• Execute Training Plan</li> <li>• Provide Training Material</li> <li>• Onboarding New Users</li> </ul>

🚀 GOLIVE & SUPPORT
<ul style="list-style-type: none"> <li>• Readiness GoLive Checklist</li> <li>• Review GoLive Schedule</li> <li>• Migrate to Production</li> <li>• Review Production</li> <li>• Meet routinely</li> <li>• Provide ongoing support</li> <li>• Establish growth plan</li> </ul>



## OVERVIEW OF CURRENT STATE – POST SOFTWARE IMPLEMENTATION



# How is it going today with sEAmless?

## sEAmless

- 21 users, 3 of which are EA users
- HoCo collecting daily, weekly, monthly, quarterly and annual inspection forms
- Almost 4,000 inspections completed
- Completed 3,000+ tasks
- Identified over 1,500 corrective actions
- Managing obligations for 24 permits

### Some Benefits Realized:

- Up to 25% time savings with mobile data collection, reducing manual tasks & automating reminders
- Centralized database with standardized workflows
- Improved compliance assurance
- Streamlined reporting and tracking efforts

#### + EHSS Program Overview (Counts)

##### Outstanding

Overdue Tasks	Active Tasks	Inspections Scheduled	Corrective Actions	Trainings Due
48	206	230	1540	55
Permits Due for Renewal				
5				

##### Completed

Tasks Completed	Inspections Completed	Trainings Completed	New/Updated Files
3098	3953	48	1007



#### STI SP001 Monthly Inspection Checklist Report

<b>Inspection Details</b>	
Facility: Ridge Rd. Shop	Location:
Equipment & Operations: Tanks - Aboveground Storage Tank 004A	
Date & Time: 03-30-2022 02:51 PM	Inspector: Mitchell Troy - Scientist III - S
Other Participants:	Weather Condition:
<b>Instructions:</b> <ul style="list-style-type: none"> <li>The periodic AST inspection is intended for monitoring the external AST condition and its containment structure. This requires a Certified Inspector. It shall be performed by an owner's inspector.</li> <li>Upon discovery of water in the primary tank, secondary containment area, interstice, or spill container, remove promptly; action. Inspect the liquid for regulated products or other contaminants and dispose of properly.</li> <li>Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action.</li> <li>Retain the completed checklists for at least 36 months.</li> <li>After severe weather or maintenance (such as coating) that could affect the operation of critical components, inspect as accessible.</li> </ul>	
QUESTION	RESPONSE
<b>TANK AND PIPING</b>	
1. Is tank exterior (roof, shell, heads, bottom, connections, fittings, valves, etc.) free of visible leaks? Note: If "No", identify tank and describe the leak and actions taken.	Yes
2. Is the tank liquid level gauge legible and in good working condition?	Yes
3. Is the area around the tank (concrete surfaces, ground, containment, etc.) free of visible signs of leakage?	Yes
4. Is the primary tank free of water or has another preventative measure been taken?	N/A
5. For double-wall or double bottom tanks or CE-ASTs, is interstitial monitoring equipment (where applicable) in good working condition?	No
6. For double-wall tanks or double bottom tanks or CE-ASTs, is interstice free of liquid? Remove the liquid if it is found. If tank product is found, investigate possible leak.	No
<b>EQUIPMENT ON TANK</b>	
7. If overflow equipment has a "test" button, does it activate the audible horn or light to confirm operation? If battery operated, replace battery if needed.	N/A
8. Is overflow prevention equipment in good working condition? If it is equipped with a mechanical test mechanism, actuate the mechanism to confirm operation.	N/A
9. Is the spill container (spill bucket), empty, free of visible leaks and in good working condition?	Yes

#### Photo Log

Photo Name: 03-03302022  
Description:



Photo Name: 03-03302022  
Description:



Photo Name: 03-03302022  
Description:



Revised Cooper's sEAmless Portal - Generated 4/3/2024

Page 3 of 3

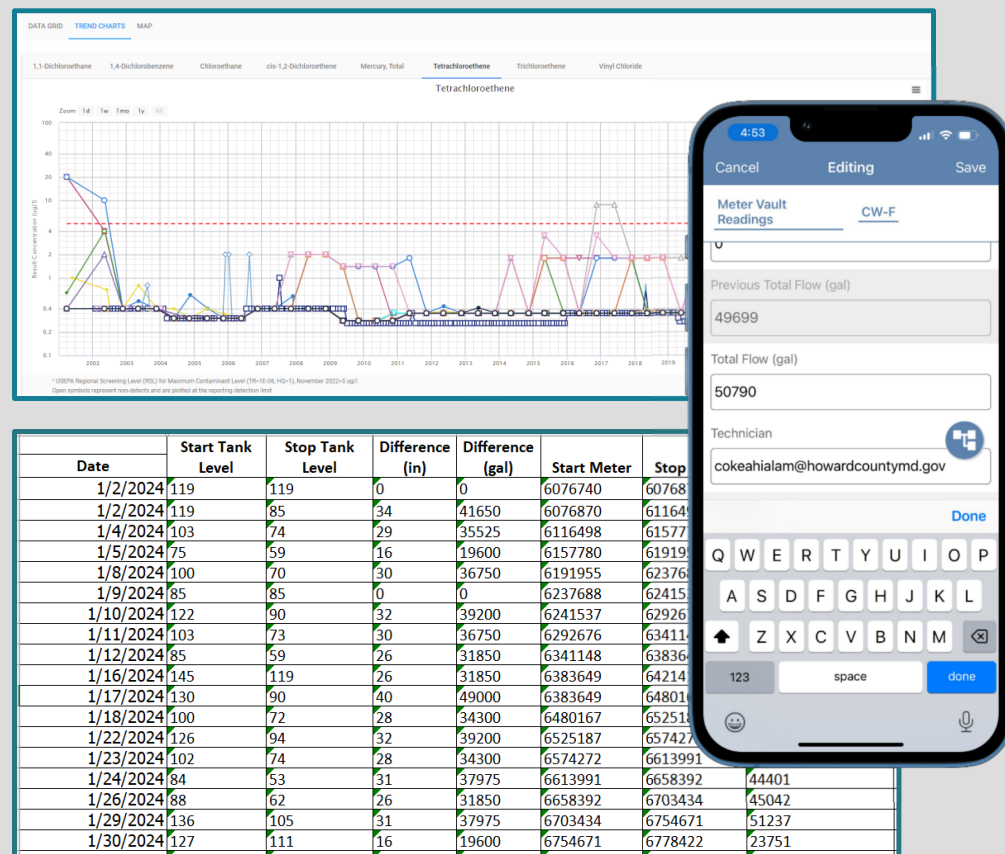
# How is it going today with EQuIS?

## EQuIS

- 5 mobile users, 10 EQuIS Enterprise
- For all 3 landfill sites
- Collected 130+ Leachate pump data forms
- Collected 450+ Vault reading data forms
- Collected 150+ Water Level data forms
- Collected 40+ Purge data forms

### Some Benefits Realized:

- Up to 25% time savings with mobile data collection, reducing manual paper form data collection
- Transparent process with centralized database
- Provided real time data quality/validation checks
- Streamlined reporting and tracking efforts







**DEMO OF SEAMLESS AND EQUIS SOLUTIONS**



# Closing Thoughts

- **Technology solutions are critical to our business operations!**
  - ◆ To manage increased and changing regulatory obligations
  - ◆ To minimize duplicative, manual intensive steps
  - ◆ To be more transparent and minimize loss of institutional knowledge
- **Knowing where and how to start the process can be overwhelming**
  - ◆ Consider seeking help from experienced 3<sup>rd</sup> partner consultant to be an extension of your organization, unbiased, trusted advisor
  - ◆ Many steps to consider and discuss before deciding on a solution
- **Stakeholder engagement throughout is imperative**
  - ◆ Listen, document, repeat what you heard
  - ◆ Find one or more things that each stakeholder will benefit from in the solution
- **Communication, Communication, Communication!**
- **Requirement Gathering and Documentation**
  - ◆ Critical to gather the functional requirements, prioritize and categorize
  - ◆ Discuss the documentation approach
- **Expect and Plan for Change**
  - ◆ Establish agreed upon Change Management Process
  - ◆ Client Resource Commitment can change overtime
  - ◆ Budget for annual growth of functional needs
  - ◆ Shouldn't be a one and done or expectation this is a one-year solution





# QUESTIONS?

Contact:

Cynthia Alden, PE

Howard County/Bureau of Environmental  
Services

E-mail: [calden@howardcountymd.gov](mailto:calden@howardcountymd.gov)

Jennifer Peterson, CSM

EA Engineering, Science, and Technology,  
Inc., PBC

E-mail: [jpeterson@eaest.com](mailto:jpeterson@eaest.com)

# Task Reminders

**From:** [help@seamlessmanager.com](mailto:help@seamlessmanager.com) <[help@seamlessmanager.com](mailto:help@seamlessmanager.com)>

**Sent:** Sunday, April 28, 2024 9:05 AM

**To:** Alden, Cynthia <[CAlden@howardcountymd.gov](mailto:CAlden@howardcountymd.gov)>

**Subject:** sEAmless Task Reminder

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

## sEAmless Task Reminder – Cynthia Alden

You are being notified of upcoming or overdue tasks assigned to you. To review or modify a task assigned to you, click on the "View" link below, and log into sEAmless when prompted.

Due Date	Days Until Due	Task Description	Facility	Equipment	Link
03/31/2024	Overdue	Cooksville Quarterly SWPPP Visual Monitoring	Cooksville Shop		<a href="#">View</a>
03/31/2024	Overdue	Dayton Quarterly SWPPP Visual Monitoring	Dayton Shop		<a href="#">View</a>
03/31/2024	Overdue	Mayfield Quarterly SWPPP Visual Monitoring	Mayfield Shop		<a href="#">View</a>
06/30/2024	63	ARL Monthly SPCC Inspections	ARL		<a href="#">View</a>
06/30/2024	63	Semi-Annual OWS Cleanout	ARL	Oil/Water Separator - ARL-OWS-1-Shop	<a href="#">View</a>
06/30/2024	63	Semi-Annual OWS Cleanout	ARL	Oil/Water Separator - ARL-OWS-2-TS	<a href="#">View</a>
06/30/2024	63	Semi-Annual OWS Cleanout	ARL	Oil/Water Separator - ARL-OWS-3-Metals	<a href="#">View</a>
06/30/2024	63	Send Monthly Walkthrough Inspection Report to MDE	Bureau of Utilities	Underground Storage Tank - Underground Storage Tank UST 4 (Heating Oil)	<a href="#">View</a>
06/30/2024	63	Send Monthly Walkthrough Inspection Report to MDE	Fire Station #10 - Rivers Park	Underground Storage Tank - Underground Storage Tank UST 4 (Diesel Generator)	<a href="#">View</a>



## Task Review

## Calendar View

List View

Projected

Overdue

Active

Pending Closed

Filters

Responsible Party

[All]

Task status

[All]

Task Calendar

<

>

today

May 2024

month

week

day

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4
<div>ARL NPDES Discharge Re...</div> <div>Check Air Flow in Phase II...</div> <div>+3 more</div>	<div>ARL SWPPP Weekly Insp...</div> <div>ARL Weekly GW</div> <div>+9 more</div>	<div>ARL Monthly SPCC Inspec...</div> <div>ARL SWPPP Monthly Insp...</div> <div>+8 more</div>	<div>Check Air Flow in Phase II...</div>	<div>Check Air Flow in Phase II...</div>	<div>ARL Daily GW</div> <div>ARL Daily Leachate</div> <div>+9 more</div>	<div>Check Air Flow in Phase II...</div>

## Task

## Task: 5264 - Dayton Shop

## Task Information

Task ID	5264
Facility	Dayton Shop
Equipment and Operations	
Associated Element	
Responsible Party	Alden, Cynthia
Task Title	Dayton Quarterly SWPPP Visual Monitoring
Task Description	Dayton Quarterly SWPPP Visual Monitoring

## Task Status

Due Date	3/31/2024
Status	Overdue
Notes	

## Task Source

Template ID	<a href="#">172</a>
Functional Area	Stormwater
Category	Monitoring
Compliance Driver	Permit
Priority	High
Source/Citation	
Deliverable Type	Documentation
Deliverable Description	
Frequency	Every 3 Month

# Inspection Demo – Creating your own templates

Add New Template						
Template Name <span>↓</span> <sup>A</sup> <sub>2</sub>	Template Description	Inspection Completion	Functional Area(s)	Status	Last Updated By	Last Updated Date
<input type="text"/>	<input type="text"/>	[All] ▼	[All] ▼	[All] ▼	[All] ▼	[All]
ARL (Daily and Weekly Requirements) Leachate Management System	ARL Leachate management system daily with the weekly requirements (needs to be completed once a week)	All Questions Required	Leachate	Active	Config Admin, EA	2/26/2024
ARL - SWPPP Inspections - Monthly	Alpha Ridge Landfill Stormwater Pollution Prevention Plan - Monthly Inspection of Inactive Landfill Areas	All Questions Required	Stormwater	Active	Config Admin, EA	3/16/2022
ARL - SWPPP Inspections - Weekly	Alpha Ridge Landfill Stormwater Pollution Prevention Plan - Weekly Inspection of Active Landfill Areas	All Questions Required	Stormwater	Active	Config Admin, EA	3/16/2022
ARL 2000 Hours Maintenance and Inspection Form	ARL 2000 Hours Maintenance and Inspection Form	All Questions Required	Air Quality	Active	Config Admin, EA	5/26/2022
ARL 4,000 Gallon AST Gasoline Delivery Inspection	AST Gasoline Delivery Inspection Form	All Questions Required	Aboveground Storage Tanks	Active	Config Admin, EA	3/16/2022
ARL Daily Compost Temperature	Compost Temperature	Exception Based	Compost	Active	Support, sEAmless	4/4/2024
ARL Daily Compost Temperature (old)	Compost Temperature	All Questions Required	Compost	Archive	Config Admin, EA	4/4/2024

# Inspection Template – Review Edits

SWPPP Inspections - Annual CSCE

## SWPPP Inspections - Annual CSCE Template Information

### Status

Active

### Template Name

SWPPP Inspections - Annual CSCE

### Template Description

SWPPP Annual Facility Inspection Form

### Inspection Completion

All Questions Required

### Functional Area(s)

Stormwater

### Instructions

Note: This inspection may be conducted in place of one of the quarterly routine facility inspections.

### Last Updated By

Config Admin, EA

## Template Header Info

### Show Regulatory Reference in Blank Forms?

No

### Show Corrective Action Comment in Blank Forms?

Yes

### Pre-populate photo titles on Mobile?

Yes

### Photo Title Suffix

## Checklist

# *	Parent #	Question Text *	Category *	Regulatory Reference	Response Type *
1		Notice of Intent and Permit on-site	Records Review		Yes or No or N/
2		SWPPP on site	Records Review		Yes or No or N/
3		SPCC on-site	Records Review		Yes or No or N/
4		Inspection records on site (Routine, Quarterly Visual, Annual CSCE)	Records Review		Yes or No or N/
5		Spill records/log on site	Records Review		Yes or No or N/
6		Waste records/manifests on site	Records Review		Yes or No or N/

## Checklist of Questions

- Various response types
- Ability to assign parent/child questions

# Inspection Scheduler

List of Scheduled Inspection Forms  
-Automates form creation for the mobile app

Inspection Template	Inspector	Frequency	Start Date	Facilities	# Facilities	# Equipment
[All]	[All]	[All]	[All]	[All]		
ARL Leachate Management System Daily Data Sheet	Ozbolt, Joel	Weekly	4/24/2023	ARL	1	

ARL Leachate Management System (Weekly Alarms and Requirements)	Ozbolt, Joel	Weekly	1/29/2024
ARL Leachate Management System Daily (Monthly Requirements Only)	Okeahialam, Chigozie	Monthly	12/19/2022
Monthly Transformer Inspection Checklist	Troy, Mitchell	Monthly	12/19/2022
Monthly Transformer Inspection Checklist	Troy, Mitchell	Monthly	12/19/2022
Monthly Transformer Inspection Checklist	Troy, Mitchell	Monthly	12/19/2022
Monthly Transformer Inspection Checklist	Troy, Mitchell	Monthly	12/19/2022

Example SWPPP Schedule  
-Assigned to multiple facilities  
-can copy responses from previous inspection

## Inspection Setup

Inspection Template\* SWPPP Inspections - Annual CSCE

Inspector\* Alden, Cynthia

Other Participants Alden, Cynthia x

Inspection Level\* Facility

☐ Select All

Facility\* ARL x Bureau of Utilities x Cedar Lane Park x Centennial Park x CMRTF x Cooksville Shop x Corridor Rd. x Dayton Shop x Fire Station #10 - Rivers Park x Fire Station #7 - Bannaker x Fire Station #9 - Long Reach x LPWRP x Mayfield Shop x PSTC x Rec & Parks HQ x Ridge Rd. Shop x Rockburn Branch Park x Savage Park x Schooley Mill Park x Western Regional Park x

Pre-Populate responses from previous inspection ☒ Responses Only

## Schedule Setup

Status\* Active

Frequency\* Monthly

Frequency Pattern\* ☐ On the  of every  Month(s)  
☒ On Calendar Day 30 of every 12 Month(s)  
☐ On the First day of every  Month(s)

Start Date\* 5/1/2023 ☐ End Date:

# Mobile Data Collection

## Inspection Forms on Mobile App



ARL

4/1/2024

**Facility Inspection:**  
ARL

*ARL - SWPPP Inspections - Monthly*

**Inspector:** Hord, Howard  
**Status:** Not Started



Edit



ARL

4/1/2024

**Facility Inspection:**  
ARL

*ARL - SWPPP Inspections - Weekly*

**Inspector:** Hord, Howard  
**Status:** Not Started



Edit



ARL

3/4/2024

**Facility Inspection:**  
ARL

*ARL - SWPPP Inspections - Quarterly*

**Inspector:** Hord, Howard  
**Status:** Not Started



Edit



Cooksville Shop

4/9/2024

**Facility Inspection:**  
Cooksville Shop

*SWPPP Inspections - Quarterly*

**Inspector:** Triplett, Darrell  
**Status:** Not Started



Edit

## ARL - SWPPP Inspections - Weekly

**Inspection Template:** ARL - SWPPP Inspections - Weekly

**Status:** In Progress

Inspection Date/Time\*  
4/1/2024, 12:00:00

Inspector Title (Hord, Howard)  
Landfill Superintendent

Other Participants:

Weather Condition

Comments

## Layout of Form in Sections

ARL - SWPPP Inspections - Weekly

Location Information: ARL

Checklist

Photos

Completion Information

# Inspection Form Details - Mobile

Checklist

Records Review

Effectiveness of Spill Prevention and Response Measures

11. Outdoor areas free of spilled material or evidence of release

Response:

Yes

No

N/A

Response is required

Comment

☐ Action Needed

Next

Checklist of Questions

-Review each question, respond

-Add Corrective Actions

-Add Photos if needed


-Complete (back in Wi-Fi connection)

Photos

Select Photo(s)

Title\*

02-04292024




2850 x 3800 (1.4 MB)

Description

Title\*

01-04292024



2850 x 3800 (1.11 MB)

Description



# Completed Inspection

Dayton Shop - 5/22/2023

Generate Inspection Report

2 Photo Layout



☒ Include Corrective Actions?

Navigation icons: back, forward, search, refresh, zoom in, zoom out, print, email



## SWPPP Inspections - Annual CSCE Report

### Inspection Details

Facility:	Dayton Shop	Location:	4301 Road
Date & Time:	05/22/2023 08:55 AM	Inspector:	Cynthia Alden
Other Participants:	Cynthia Alden	Weather Condition:	75, sunny
Instructions:	Note: This inspection may be conducted in place of one of the quarterly routine facility inspections.		

QUESTION	RESPONSE
----------	----------

### RECORDS REVIEW

1. Notice of Intent and Permit on-site	Yes
2. SWPPP on site	Yes
3. SPCC on-site	Yes
4. Inspection records on site (Routine, Quarterly Visual, Annual CSCE)	Yes
5. Spill records log on site	Yes
6. Waste records manifests on site	Yes
7. Oil/water separator inspection and pump out records onsite	Yes
8. Training records on-site?	Yes
9. Structural control maintenance records available?	No
10. Corrective action records on site	N/A

### EFFECTIVENESS OF SPILL PREVENTION AND RESPONSE MEASURES

11. Outdoor areas free of spilled material or evidence of release	No	Asphalt equipment leaked oil onto ground; Clean up oil leak, repair equipment, and clean up used absorbent.
12. Storage/waste containers in good condition	No	Cardboard box in flammable cabinet in Radio Shop; Remove cardboard from flammable cabinet in Radio Shop.
13. Storage/waste containers clearly labeled	No	Two haz waste drums were incorrectly labeled; Correctly label haz waste drums
14. Spill kits available and stocked	Yes	
15. Secondary containment units free from liquid		
16. Material storage areas managed to prevent spills		
17. Salt storage piles/containers managed to prevent spills		

View Final Report - download, email, print  
Assign Corrective Actions as trackable tasks  
Manage photos

### Associated Tasks

ID	TASK TITLE	TASK DESCRIPTION	RESPONSIBLE PARTY	DUE DATE	STATUS	CLOSED DATE
2915	Clean up oil leak, repair equipment, and clean up used absorbent.	Clean up oil leak, repair equipment, and clean up used absorbent.	Barker, Jim	5/23/2023	Closed	9/5/2023
2919	Store used batteries on spill pallet labeled (Used Batteries for Recycling)	Store used batteries on spill pallet labeled (Used Batteries for Recycling)	Anderson, Anthony (Andy)	5/26/2023	Closed	8/21/2023
2920	Update SWPPP to include new Stormceptors	Update SWPPP to include new Stormceptors	Alden, Cynthia	6/19/2023	Closed	7/31/2023
2917	Pump out wash pad tank and repair alarm panel.	Pump out wash pad tank and repair alarm panel.	Polek, Matt	6/19/2023	Closed	6/13/2023
2914	Clean and pump out OWS and wastewater holding tank, repair alarm panel.	Clean and pump out OWS and wastewater holding tank, repair alarm panel.	Polek, Matt	6/19/2023	Closed	6/13/2023
2913	Add Andy Anderson, Fleet Supervisor, to P2 Team	Add Andy Anderson, Fleet Supervisor, to P2 Team			Closed	7/31/2023
2916	Correctly label haz waste drums	Correctly label haz waste drums			Closed	9/5/2023
2918	Remove cardboard from flammable cabinet in Radio Shop.	Remove cardboard from flammable cabinet in Radio Shop.			Closed	9/5/2023

## Howard County SWPPP Inspections - Annual CSCE

### Photo Log

Photo Name: Cardboard in Flammable Cabinet  
Description: 2023-05-22 Cardboard in Flammable Cabinet



Photo Name: Leaking Asphalt Equipment  
Description: 2023-05-22 Leaking Asphalt Equipment



# View from an Equipment

Track Equipment Details  
Associate Equipment to Tasks, Inspections, Documentation

Equipment & Operations List

Equipment & Operations Details

Tank Information Regulatory Inspection Overfill Protection Precision Testing

Associated Tasks Associated Inspections

Tank: 001A - All Saints WPS

## General Information

Asset ID 001A  
Tank Type Aboveground Storage  
Status Active  
AST Category Drum Storage Area  
Owned By Other  
Comments No tank ID

## Location Information

Facility All Saints WPS  
Location/Address 10056 Superior Ave.,

## Use Information

Use Generator  
Installation Date  
Removal Date  
Contents Diesel  
Capacity 1800 gallons  
Approximate Number of Drums

## Construction Information

Tank Construction Type Double Walled  
Tank Construction Material Epoxy Coated Steel  
Supply Pipe Type Suction  
Supply Pipe Construction Type Single Walled  
Supply Pipe Construction Material Unknown  
Tank Level Gauge Make/Model  
Interstitial Sensor Make/Model  
Normal Vent in Place? Yes  
Emergency Vent in Place? Yes  
Secondary Emergency Vent in Place? Yes  
Bollards in Place? No  
Tank Grounding in Place? Yes  
Meets minimum distance requirement from property line and buildings? Yes

Associated Tasks

Associated Inspections

Tank: 001A - All Saints WPS


Inspection Date ↓  
[All]

Facility Name  
[All] ↓

Equipment & Operations


1/23/2024	All Saints WPS	Tanks - Aboveground Storage Tank 001A
1/27/2023	All Saints WPS	Tanks - Aboveground Storage Tank 001A
2/22/2024	All Saints WPS	Tanks - Aboveground Storage Tank 001A
2/23/2023	All Saints WPS	Tanks - Aboveground Storage Tank 001A


# EQuIS – Managing Analytical and Field Data

 EQuIS Enterprise  
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Welcome to EQuIS Enterprise

Howard County

 ALPHA RIDGE LANDFILL



Various Reports and Data Collection Forms

FIELD DATA REPORTS

COLLECT DATA FORMS

COLLECT FORM SCHEDULES

EQUIS DATA PROCESSOR (EDP)

WATER LEVELS DATA GRID




SDG SUMMARY

DASHBOARDS

Leachate Pump Log

Leachate Pump Log




Last Download: 2024-04-29, 10:51  
Run Time: 4.9 seconds  
File Size: 18.76 KB  
Record(s): 109

 **DOWNLOAD**  Send me this report 

Water Levels (Defaults to 2022-preset)

Water Levels II Crosstab user report




Last Download: 2024-04-24, 15:08  
Run Time: 5.2 seconds  
File Size: 10.52 KB  
Record(s): 62

 **DOWNLOAD**  Send me this report 

Leachate Pump Log with Bypass Changes

Leachate Pump Log Crosstab User Report




Last Download: 2024-04-25, 11:28  
Run Time: 4.8 seconds  
File Size: 13.52 KB  
Record(s): 50

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Elkins

Elkins Results Crosstab Report

Last Download: 2024-04-24, 15:08  
Run Time: 11.1 seconds  
File Size: 110.02 KB  
Record(s): 1713

 **DOWNLOAD**  Send me this report 

Field Data Reports  
-Formatted tabular outputs  
-Filter options

# EQUS Standardized Table Example – Leachate Pump Data

Date	Technician	Start Tank Level	Stop Tank Level	Difference (in)	Difference (gal)	Start Meter	Stop Meter	Gallons Metered	Time Start	Time Stop	Total Time Pumped (min)	Flow (gpm)
5/1/2023	jherring@howardcou	92	64	28	34,300	4,354,984	4,393,362	38,378	05/01/2023 08:51	05/01/2023 15:00	369	104.01
5/5/2023	cokeahialam@howar	93	61	32	39,200	4,393,362	4,438,612	45,250	05/05/2023 07:55	05/05/2023 15:14	439	103.08
5/11/2023	cokeahialam@howar	101	67	34	41,650	4,438,612	4,484,005	45,393	05/11/2023 08:14	05/11/2023 15:25	431	105.32
5/17/2023	jherring@howardcou	106	73	33	40,425	4,484,005	4,530,862	46,857	05/17/2023 07:56	05/17/2023 15:14	438	106.98
5/19/2023	cokeahialam@howar	82	52	30	36,750	4,530,862	4,571,435	40,573	05/19/2023 07:38	05/19/2023 14:26	408	99.44
5/26/2023	jherring@howardcou	93	63	30	36,750	4,571,435	4,613,955	42,520	05/26/2023 08:25	05/26/2023 15:15	410	103.71
6/2/2023	cokeahialam@howar	99	75	24	29,400	4,613,955	4,652,514	38,559	06/02/2023 07:38	06/02/2023 13:50	372	103.65
6/7/2023	cokeahialam@howar	97	68	29	35,525	4,652,514	4,692,309	39,795	06/07/2023 08:52	06/07/2023 15:08	376	105.84
6/12/2023	dmmartinez@howar	93	61	32	39,200	4,692,309	4,736,549	44,240	06/12/2023 08:22	06/12/2023 15:29	427	103.61
6/15/2023	dmmartinez@howar	73	43	30	36,750	4,736,549	4,778,128	41,579	06/15/2023 07:47	06/15/2023 15:05	438	94.93
6/23/2023	cokeahialam@howar	83	59	24	29,400	4,778,128	4,812,430	34,302	06/23/2023 07:22	06/23/2023 13:00	338	101.49
6/29/2023	cokeahialam@howar	88	65	23	28,175	4,812,430	4,843,037	30,607	06/29/2023 10:16	06/29/2023 15:14	298	102.71
7/5/2023	cokeahialam@howar	98	64	34	41,650	4,843,037	4,889,422	46,385	07/05/2023 07:44	07/05/2023 15:06	442	104.94
7/10/2023	cokeahialam@howar	84	56	28	34,300	4,889,422	4,926,934	37,512	07/10/2023 07:45	07/10/2023 13:56	371	101.11
7/19/2023	cokeahialam@howar	94	58	36	44,100	4,926,934	4,974,752	47,818	07/19/2023 07:43	07/19/2023 15:26	463	103.28
7/26/2023	jherring@howardcou	93	60	33	40,425	4,974,752	5,019,746	44,994	07/26/2023 07:48	07/26/2023 15:05	437	102.96
8/3/2023	cokeahialam@howar	95	61	34	41,650	5,019,746	5,064,607	44,861	08/03/2023 07:52	08/03/2023 15:07	435	103.13
8/8/2023	cokeahialam@howar	96	66	30	36,750	5,064,607	5,107,022	42,415	08/08/2023 08:30	08/08/2023 15:21	411	103.2
8/16/2023	cokeahialam@howar	96	62	34	41,650	5,107,022	5,152,264	45,242	08/16/2023 07:44	08/16/2023 15:06	442	102.36
8/28/2023	jherring@howardcou	93	63	30	36,750	5,152,264	5,193,335	41,071	08/28/2023 08:02	08/28/2023 14:40	398	103.19
9/7/2023	cokeahialam@howar	98	66	32	39,200	5,193,335	5,236,613	43,278	09/07/2023 07:45	09/07/2023 14:39	414	104.54
9/11/2023	jherring@howardcou	100	68	32	39,200	5,236,613	5,278,932	42,319	09/11/2023 07:35	09/11/2023 14:20	405	104.49
9/18/2023	cokeahialam@howar	104	78	26	31,850	5,278,932	5,324,319	45,387	09/18/2023 07:22	09/18/2023 14:31	429	105.8
9/22/2023	cokeahialam@howar	83	58	25	30,625	5,324,319	5,357,682	33,363	09/22/2023 07:28	09/22/2023 12:59	331	100.79
9/27/2023	cokeahialam@howar	98	70	28	34,300	5,357,682	5,396,942	39,260	09/27/2023 07:20	09/27/2023 13:36	376	104.41
10/4/2023	cokeahialam@howar	97	66	31	37,975	5,396,942	5,440,399	43,457	10/04/2023 07:33	10/04/2023 14:31	418	103.96
10/12/2023	cokeahialam@howar	94	60	34	41,650	5,440,399	5,485,699	45,300	10/12/2023 07:41	10/12/2023 15:02	441	102.72
10/23/2023	cokeahialam@howar	100	66	34	41,650	5,485,699	5,531,385	45,686	10/23/2023 07:30	10/23/2023 14:48	438	104.31

Tabular Report  
-Calculates Differences in 2 units

# EQuIS Dashboard – For Data Analysis, Ad hoc Queries

**EQuIS Enterprise**  
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**Data Grid**

DATA GRID TREND CHARTS MAP

Location Groups

Filter - Date Range

Action Level Flagging

Action Level

① Select filters to update the information displayed in the data grid. The results in the data grid can be filtered, sorted.  
**By default, the data grid shows semi-annual COC detects in groundwater for the last 5 years.**

**Data Grid**

DOWNLOAD Analytical Results for Dashboard

Location ID	Loc Name	Sample Date	Chemical Name	Fraction	Result
AW-H	AW-H	2019-09-16T00:00:00	Tetrachloroethene	N	28.5
AW-I	AW-I	2019-09-16T00:00:00	Tetrachloroethene	N	12.6
GW-026	GW-026	2019-09-17T00:00:00	Tetrachloroethene	N	12.7
GW-007	GW-007	2019-09-18T00:00:00	Tetrachloroethene	N	53.9
GW-007	GW-007	2020-03-12T00:00:00	Tetrachloroethene	N	83
GW-026	GW-026	2020-03-16T00:00:00	Tetrachloroethene	N	6.8
GW-026	GW-026	2020-03-16T00:00:00	Tetrachloroethene	N	6.5
AW-H	AW-H	2020-03-23T00:00:00	Tetrachloroethene	N	32
AW-I	AW-I	2020-03-23T00:00:00	Tetrachloroethene	N	16
GW-007	GW-007	2020-09-10T00:00:00	Tetrachloroethene	N	28

EZView (Includes all columns when downloading to Excel)

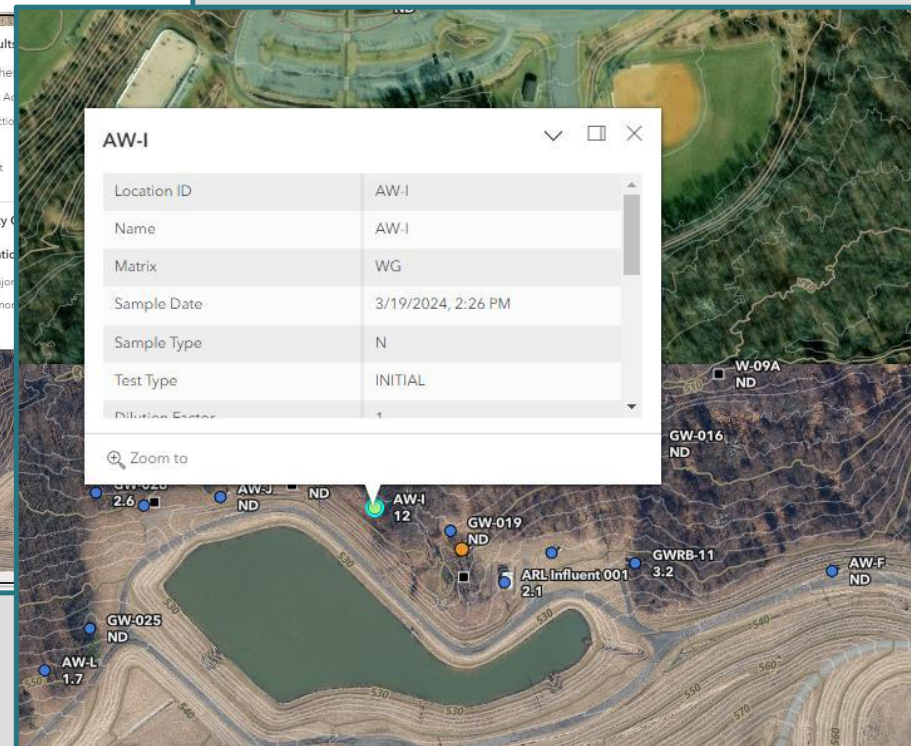
- Data Grid – tabular files, exportable
- Trend Charts – Analytical Data
- Map View – interactive map, layers, trend chart analysis



# Interactive Map View



- Map of Compound Selected
- Different Icons for Detects and Exceedances



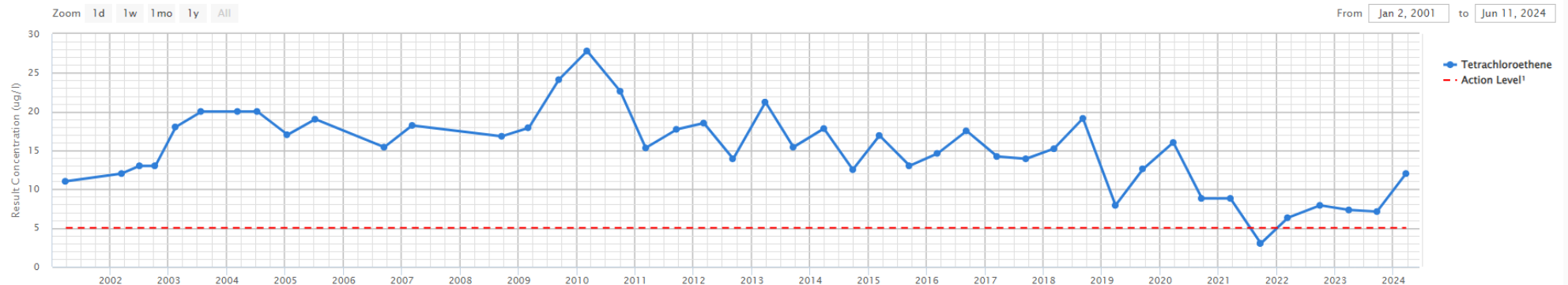
# Analytical Trend Chart

- Analytical Trend Chart
- Interactive

Click on a location on the map to view a trend chart

AW-I

AW-I



<sup>1</sup> USEPA Maximum Contaminant Level (MCL) (TR=1E-06, HQ=1), November 2023=5 ug/l

# QUESTIONS?

Contact:

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Services

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