



# Remediation Roundtable

## October 29, 2024

# Remediation Roundtable Agenda

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- ❖ Announcements
- ❖ Website Updates
- ❖ Updates:
  - ❖ Release Characterization Guidance
  - ❖ Release-Based Clean Up Program Regulation Development
  - ❖ QA Update: EPA TSCA Methylene Chloride Ruling
  - ❖ EUR Compliance Project and 5 Year Inspection Form
  - ❖ PFAS Action Plan



# Announcements

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## Dates for 2025 Roundtable Meetings

- March 25th
- June 17th
- October 28th



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# Announcements

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New Staff Member:

**Jessica Wessner** has joined the  
Southwest District



## DEEP's CERCLA 128(a) Brownfields Grant - Round #2

- Funding by BIL through EPA
- Projects that promote reuse as open space:
  - park space, greenways, other public recreational spaces
- Open to non-profits and municipalities
- Total available funding for Round #2: **\$750,000**
- Maximum request per application:
  - \$250,000 for assessment
  - \$250,000 for remediation
- DEEP committed to awarding 60% to projects in EJ areas
- Round 2 closes November 22, 2024 at NOON
- Application: [Brownfields in Connecticut](#)
- Contact: [DEEP.Brownfields@ct.gov](mailto:DEEP.Brownfields@ct.gov) for more information

# Webpage Updates

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The [Remediation Roundtable Public Forum](#) and the Remediation Roundtable Agenda webpages will be combined into one page. Removing unnecessary information such as Zoom instructions and will archive outdated presentations from 2013 and before.

[Remediation Division Contacts](#)

[Remediation Division Documents](#) (formerly Scanning Project page)

[Examples of Stewardship Permits Issued](#)

[List of Significant Environmental Hazards Reported to DEEP](#)



# Webpage Updates

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Release-Based Clean Up Program Regulation Development

Release-Based Cleanup Regulations Formal Regulation Adoption **NEW!**

Stakeholder Engagement Advice and Recommendations

Release-Based Working Group Meetings

Brownfields in Connecticut – funding announcement

Federal Brownfields Resources

Connecticut Brownfields Inventory



# Webpage Updates

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Licensed Environmental Professional Program – easier to use Approved Courses list

LEP Roster

2024 LEP Board Meetings- updated with meeting minutes

- Also please note LEP administrator will be asking for a deadline of February 1 for new LEP exam applications for the 2025 exam. This will likely be decided at the November 14th LEP board meeting



# Updated Forms

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Municipal Brownfield Liability Relief Application

DEEP CERCLA 128(a) Brownfield Grant Program Application **NEW!**

Sodium Chloride Complaint Form

Voluntary Remediation (22a-133x) Verification - Parcel

Voluntary Remediation (22a-133x) Verification - Release Area

Voluntary Remediation (22a-133x) Verification - Portion of Property

The 133x parcel, portion, and release area verification forms have been modified to allow LEPs to verify to either: **The date the verification is signed or The date of an interim verification previously submitted for the same Rem #**





# RELEASE CHARACTERIZATION GUIDANCE

Presented by: Kevin Vanderveer, Environmental Analyst, Remediation Division

# RELEASE CHARACTERIZATION GUIDANCE [DRAFT]

## Road map for:

- ❖ Constructing a conceptual site model (CSM) for a release.
- ❖ Designing and conducting investigations to support and refine a release CSM.
- ❖ Implementing a site-wide, multi-phased approach.
- ❖ Effectively documenting and communicating a CSM.

[RCG Draft.pdf \(ct.gov\)](#)

[Release-Based Clean Up Program  
Regulation Development \(ct.gov\)](#)

# RELEASE CHARACTERIZATION GUIDANCE STRUCTURE [DRAFT]

## 2010 Site Characterization Guidance Document

List of Acronyms

Definition of Terms

1 – Introduction

2 – Conceptual Site Modeling

3 – Phase I Site Assessment

4 – Phase II Investigations

5 – Phase III Investigations

## Draft Release Characterization Guidance

1 – Introduction and purpose

2 – Conceptual Site Modeling

3 – Release Characterization

4 – Site Characterization

5 – Reporting

Glossary of Terms

Appendix A – Research Tools

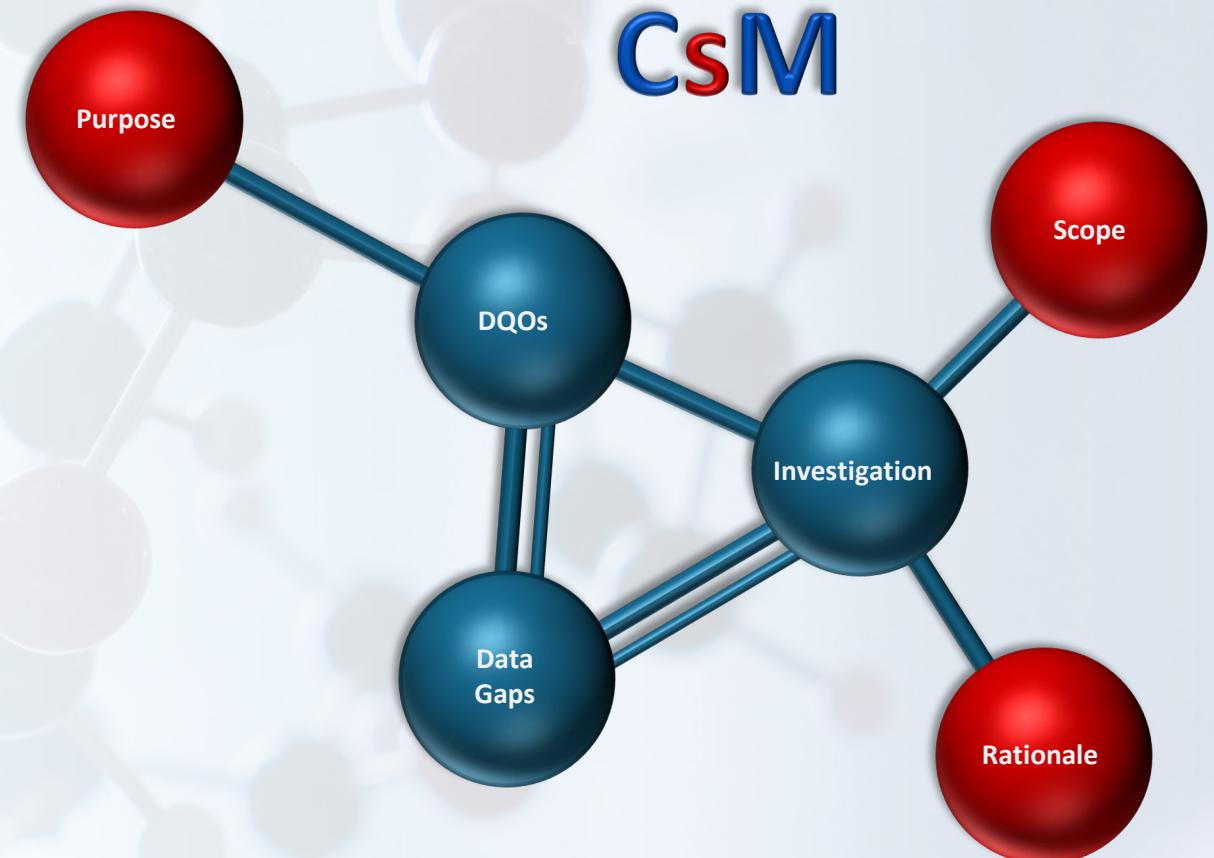
### Emergent Reportable Release: Guide Notes

Where appropriate, guide notes specifically relating to Emergent Reportable Releases (ERRs) will be called out to emphasize differences in the characterization process.

# RELEASE CHARACTERIZATION GUIDANCE

## CONTENT [DRAFT]

- Carries over core components of the Site Characterization Guidance Document
- **Strong focus on developing and updating a conceptual site model (CSM) and structuring the CSM narrative** (6 pages)
- Release characterization methods (17 pages)
  - Research → investigation design → sampling → modeling → CSM
- Site characterization (5 pages)
  - How to build from a release-focus to site-wide understanding
- Report structure tips (3 pages)



# RCG FEEDBACK

## Release-Based Clean Up Program Regulation Development (ct.gov)

<https://portal.ct.gov/DEEP/remediation--site-clean-up/comprehensive-evaluation-and-transformation/release-based-clean-up-program-regulation-development>



DEEP is requesting comments on the Release Characterization Guidance. Please send all comments to:

[DEEP.Cleanup.Transform@ct.gov](mailto:DEEP.Cleanup.Transform@ct.gov)

**by: Tuesday, 1/14/2025**



Link to Release Characterization Guidance:

[RCG Draft.pdf \(ct.gov\)](#)

# Questions or Comments?

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Please type your Questions into CHAT

If we need further clarification, we may take you  
off mute to speak

[www.ct.gov/deep/remediationroundtable](http://www.ct.gov/deep/remediationroundtable)



# Release-based Cleanup Regulations – Update

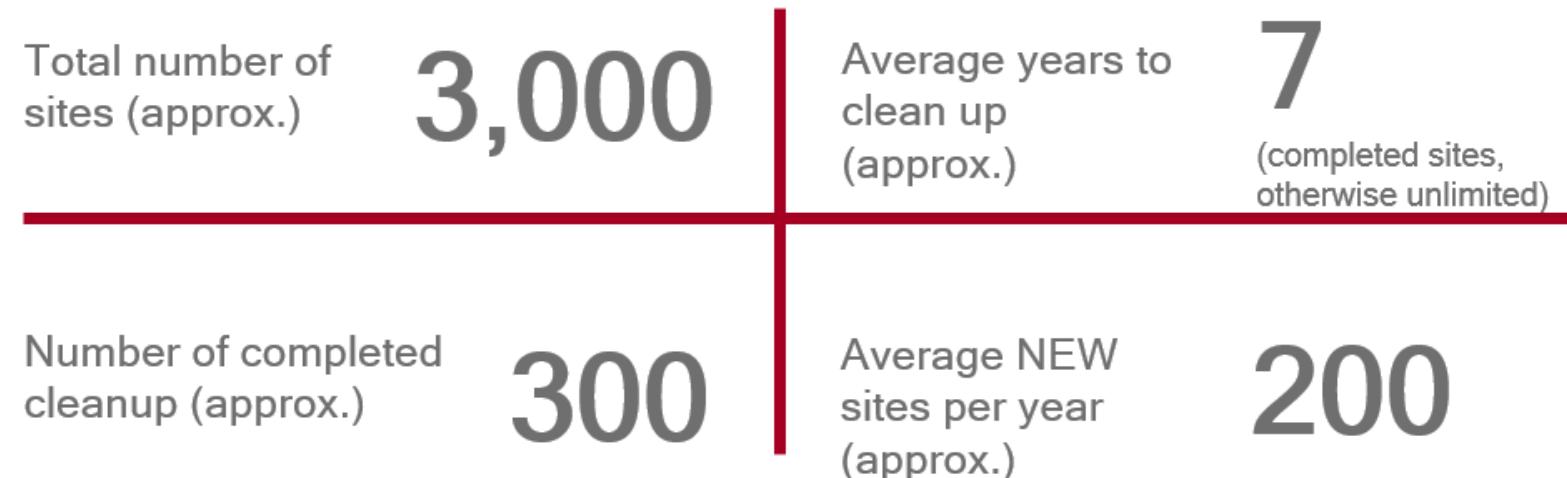
Graham J. Stevens, Chief of Water Protection and Land Reuse

# What Is This Initiative?

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- DECD is working with DEEP and a Legislatively-created Working Group to sunset the Transfer Act and replace it with a risk-based and release-based cleanup program
- No longer will CT be an outlier with a site-wide Transfer Act system

## TRANSFER ACT – STALLED CLEANUPS AND COMMUNITY BURDEN





## Benefits of Replacing Transfer Act



### Private Market Drives Investigations

Banks and buyers want to know environmental conditions of properties



### New Program Applicable to All Releases

Transfer Act only applied to certain business operations



### Multi-Tier Cleanup System

Lower risk releases addressed quickly / DEEP can focus on highest risks and Brownfields

# What's Happened so far?

**10**  
Subcommittees

**4**  
Years of monthly  
Working Group  
meetings

**12**  
Outreach Sessions  
on the original  
draft regulations

**4**  
Workshops on draft  
regs

**3**  
Privately-  
sponsored Q&A  
sessions

**2**  
Rounds of public  
comments on  
the draft regs

# Regulatory Adoption Steps



# What's Next with Stakeholder Engagement?

<b>Review</b>	DEEP will be reviewing the comments
<b>Meet</b>	Working Group meetings will continue monthly until regs adopted
<b>Collaborate</b>	As DEEP reviews comments, we will be discussing certain regulatory changes at Working Group meetings

# 22a-454 Licenses

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# Who Does the Cleanup?

## Spill Response Contractors

All New Releases

All Existing Releases

## New 22a-454 General Permittees

Certain Existing Releases

## No Permit Required

Installation and maintenance of remedial systems (i.e., sparging, pump-and-treat)

Collecting Samples

# Who “Closes” the Cleanup?

LEPs

“Verify”

Any Release  
to the Land  
and Waters  
of the State

“Spill Contractor”

PEPs

Certify

Certain New  
Releases

Home  
Heating Fuel  
Releases

“In-House”

PEPs

Certify

Certain New  
Releases  
Created by  
their  
employer

# General Permit Timeline

- Draft GP will be out to notice in the **next 10 days**
- Planned **30-day** comment period
- Expedited issuance
- *Change is not tied to Release-based Cleanup Regulations*



# Online Interface for the Cleanup Program



## **Release, Environmental Assessment, and Cleanup Tracker (“REACT”) is an online platform launching Summer 2025**

- Online tracking for Release Based Cleanup Regulations and other cleanup programs to harmonize “One Cleanup” approach
- Easy compliance tracking with automated workflows and status views, as well as breadcrumbs to show clients where they are in process
- Advanced online portal for submittals and requests, with automated acknowledgments and due date notifications
- Consolidation of information related to cleanup milestones achieved, supporting economic development
- Ties together programs across DEEP units and platforms, including integration of Geographic Information System (GIS) layers to auto-populate and assess environmental setting

## What's in it For You...

### REACT Elements in Response to Subcommittee Suggestions

- *Public can run simple queries, and conduct searches*
- *Dashboards, case list views, and summary pages*
- *Only Registered Users can upload documents*
- *No fee to become a Registered User of the REACT system*
- *Registered Users can report existing releases, submit documents, and update information in the same platform*
- *Public and Users can view data on existing (historical) and emergent releases*

# Registered Users can Report an Existing Release

- Release Reporting
- Remediation Program Type
- Contact Information
- Environmental Setting
- Environmental Concern
- Program Information
- Summary

## Remediation:

### Release-Based

#### CASE INTAKE FORM

Add program information below.

#### ▼ RELEASE BASED

I confirm that I am reporting an existing release.

\* Date Of Discovery Of The Release

mm/dd/yyyy



\* Reporting Party Identification Statement

\* Date Of Document

mm/dd/yyyy



# Registered users can review their associated cases

DEPARTMENT OF ENERGY  
AND ENVIRONMENTAL  
PROTECTION PORTAL

Search for Articles, FAQ's & more

Home Sites Cases Submittals Schedules and Milestones Remediation Financials Reports Dashboards

New Case

Recently Viewed

50+ items

Case Number	Agency ID	Case Name	Site	Case Status
1 00001321	1234567890	Sitewide Brownfield - MLRP	Site-0000000009	New
2 00001823		Sitewide Property Transfer Program (PTP)	Site-0000000009	New
3 00001822		Sitewide Property Transfer Program (PTP)		New
4 00001383	1234567890	Sitewide Significant Environmental Hazard (SEH)	Site-0000000009	New
5 00001395				
6 00001371				
7 00001385				
8 00001391				
9 00001376				
10 00001806				

Cases

All Cases

50+ items

LIST VIEWS

- All Cases
- Cases PK
- My Cases
- Recently Viewed (Pinned list)
- Recently Viewed Cases
- Test

Search this list...

Case Number	Program	Case Status	EPA ID
te-0000000009	Brownfield - MLRP	New	987654321
te-0000000009	Brownfield - ABC	New	987654321
te-0000000009	Brownfield - ABC	New	987654321
te-0000000009	Brownfield - MLRP	New	987654321
te-0000000009	Release-Based	New	987654321
te-0000000009	Brownfield - MLRP	New	987654321
7 00001305	1234567890	TEST	Site-0000000009
9 00001206	1234567890	Sitewide Voluntary Testing	Site-0000000009
			Voluntary

Connecticut Department of Energy & Environmental Protection

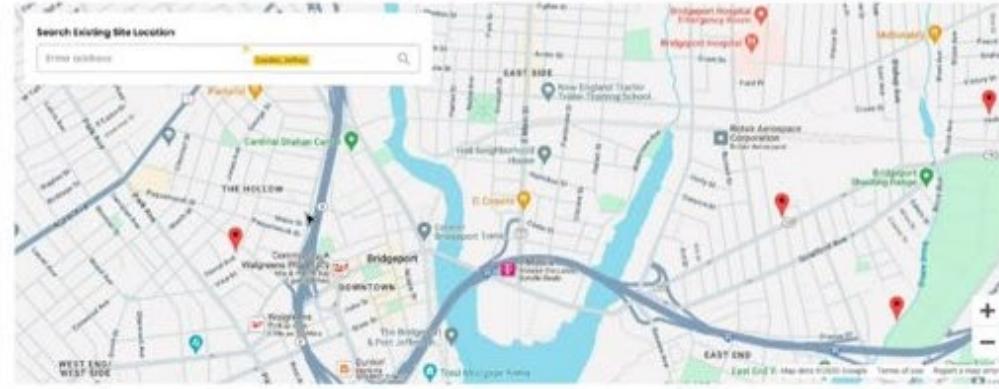
# Geospatial Integration

**Remediation:**  
**Site Information**

**SELECT SITE**  
Search for a site by entering a known address or clicking on a specific point on the map.

**SELECT A POINT ON THE MAP**  
If you know the address, you can use the map to mark the site's location.

Search Existing Site Location



+ Add New Site   Choose this Site >

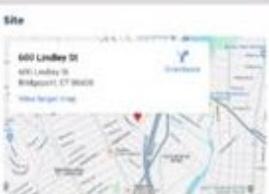
**Detail**

Site Address	Program	Case Status	Cleanup Stage	Case Number
3220 Litchfield Lane, Hartford, CT 06053	Release-based Remediation	[Status]	[Stage]	000000

**Details**   **Schedules & Milestones**   **Related**

Case Name	Case Name: Good name	Acknowledgment Date	08/10/2014
Date Received	08/10/2014	Case Number	000000
Site	Site Name: Does Here	Site Address	Site Address: Does Here
Town	Town: Does Here	County	County: Does Here
Regulated Entity	Regulation Entity: Does Here	Agency Name	Agency: Does
Council of Government	COG: Does	Remediation District	RD: Does
Local Health District	LHD: Does	EPA ID	EPA ID: Does
Agency ID	Agency ID: Does	Program	Program: Name
Case Status	Case Status: Does Here	Cleanup Stage	Cleanup Stage: Does Here
Closed	Closed (Good): Does Here	Cleanup Lead Other	Cleanup Lead Other: Does Here

**Site**



**Case Chemicals (3)**

Auto Number: 0000001	Chemical: Acetyl bromide	Medium: Soil	Highest Concentration: 0,00000000
Auto Number: 0000002	Chemical: Acetyl bromide	Medium: Soil	Highest Concentration: 0,00000000
Auto Number: 0000004	Chemical: Acetyl bromide	Medium: Soil	Highest Concentration: 7,00000000

**Case Team (3)**

Team Member 1	Role: Does
Team Member 2	Role: Does
Team Member 3	Role: Does

# Online Payment of Fees

**FILING**

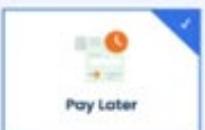
Filing #62638	Type	Fee Category	Amount
	DTX	Annual Fee	\$10.00

Select Payment Option



Pay Now

Pay the filing today



Pay Later

Pay the filing at a later date

Client #G2345  
ABC Water Company

Next Step: Select Payment Type

Back

Next

Client #G2345  
ABC Water Company

PAYMENT TYPES

Select Payment Type



Credit Card



eCheck / ACH  
Personal



eCheck / ACH  
Commercial / Business

Back

Next

# Questions or Comments?

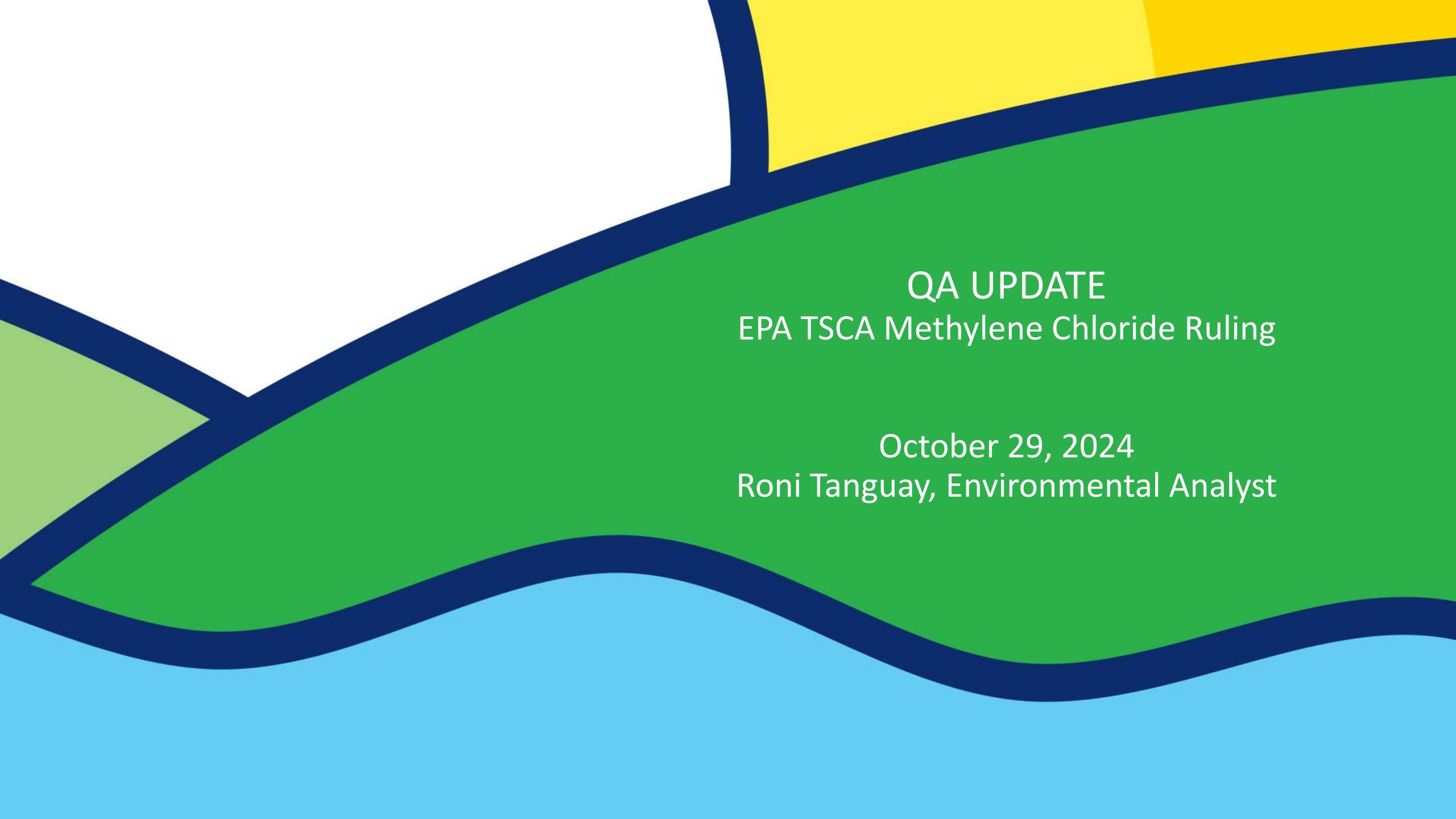
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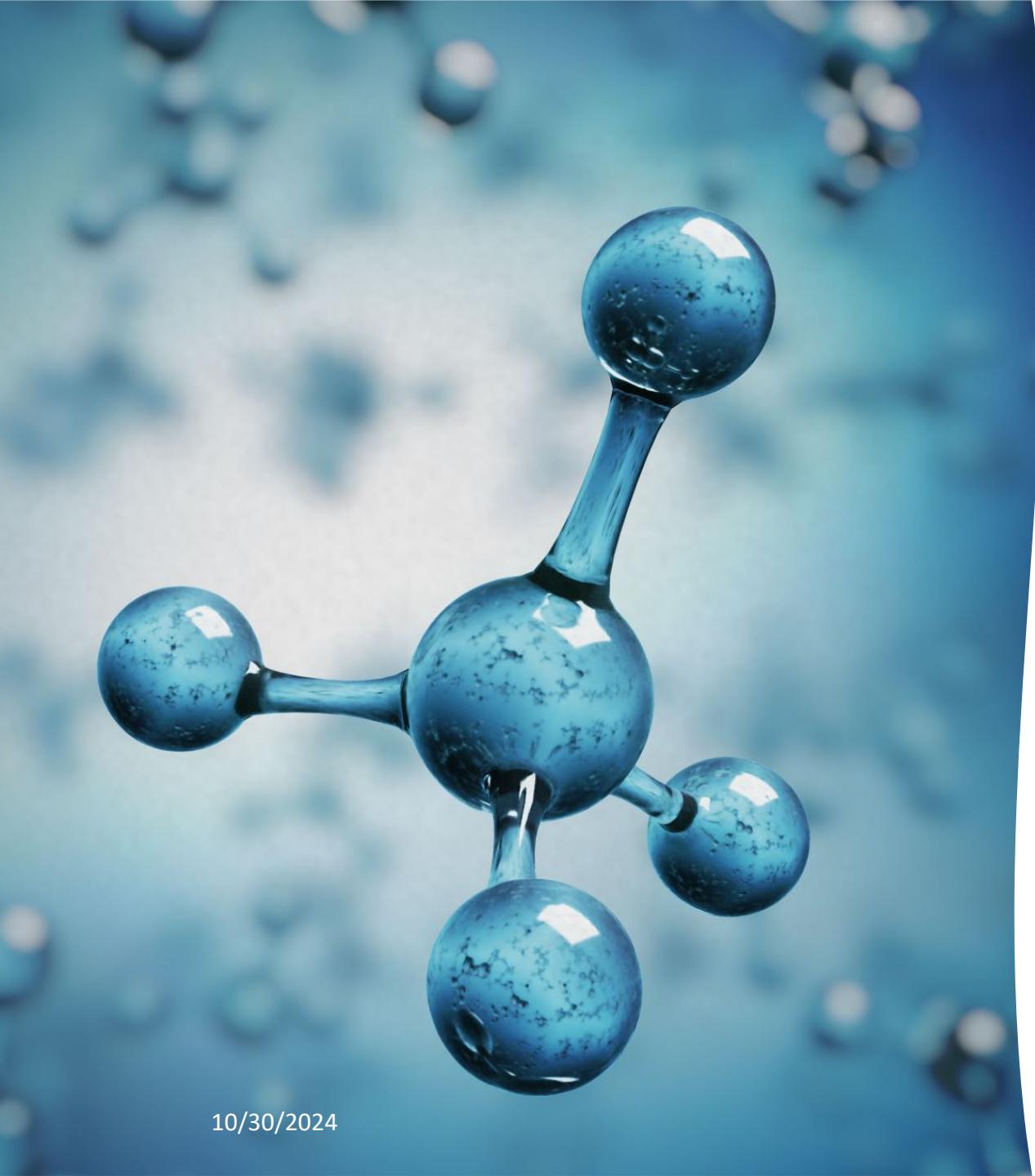
[www.ct.gov/deep/remediationroundtable](http://www.ct.gov/deep/remediationroundtable)





## QA UPDATE EPA TSCA Methylene Chloride Ruling

October 29, 2024  
Roni Tanguay, Environmental Analyst



# EPA TSCA METHYLENE CHLORIDE RULING

April 30, 2024: EPA TSCA issued final rule for methylene chloride

- Prohibits manufacture, processing, and distribution of methylene chloride for all consumer uses
- Prohibits MOST industrial & commercial uses
- Workplace Chemical Protection Program (WCPP) required for 13 specified conditions where continued use is permitted
- Establish recordkeeping & downstream notification requirements

Purpose of ruling is to decrease exposure to dangerous chemical known to cause cancers, neurotoxicity, liver damage, and even death

More details of the ruling can be found on at these pages:

- [EPA TSCA Methylene Chloride Webinar Materials](#)
- [Methylene Chloride Compliance Guide](#)

# WHY IS THIS IMPORTANT TO REGULATED COMMUNITY?

Methylene chloride (DCM)  
most common solvent  
used in organic extraction  
methods\*

Environmental labs are one  
of the 13 conditions that  
require a WCPP

Impacts of ruling could  
affect lab certification  
status

\*SW-846 Methods: 8270, 8081, 8082, 8151; CWA Methods: 525.1, 525.2, 608.1, 608.3, 615; CT ETPH.

The methods listed are not exhaustive, check with your lab on methods you need to use for your investigations.

# CT DPH ENVIRONMENTAL LABORATORY CERTIFICATION PROGRAM

September 2024

- CT DPH Environmental Laboratory Certification Program (ELCP) has shared circular letter to all CT Approved Environmental Labs regarding WCPP requirements

June 2025

- ELCP will be adding review of laboratory WCPP to their in-state lab evaluation process for any labs that use DCM in their analytical processes

Failure to meet deadlines for WCPP requirements may affect DPH Certification

- Dates are provided in the EPA's [Methylene Chloride Compliance Guide](#)



# WHAT ARE THE POTENTIAL IMPACTS OF THE RULING?

## Cost of Business

- Solvent cost may increase as available sources dry up
- Lab infrastructure may require upgrades to meet workplace exposure limits

## Lab Practices

- May need to modify methods to use less/alternative solvents to balance expenses & employee safety

## Certification Impacts

- Method modifications may affect DPH Certification

## Data Usability

- Remediation Standard Regulations (RSRs) & Reasonable Confidence Protocols (RCPs) require data submitted to DEEP originate from DPH Certified Lab

# IN SUMMARY...

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EPA TSCA has banned manufacturing, processing, and distribution of DCM for all uses

- Except for 13 conditions that require a WCPP to minimize human exposure

DCM is one of the most common solvents used for organic extractions of environmental samples

Prohibition could have trickle down effect on laboratory costs and methodologies

Could affect laboratory certification status

**Keep in touch with your labs on their certification status to ensure your data meet RSRs & RCPs!**

# Questions or Comments?

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[www.ct.gov/deep/remediationroundtable](http://www.ct.gov/deep/remediationroundtable)





# Environmental Use Restriction Compliance Project and 5 Year Inspection Form

Presented by: Joanna Burnham, Environmental Analyst, Remediation Division

# EUR COMPLIANCE AND INSPECTION PROJECT:

FUNDED BY  
DEEP'S CERCLA  
128(A) GRANT  
PROGRAM-ROUND #1

## Bid Process:

- Request for Proposal issued by DEEP in August 2023
- WSP USA was selected from a very competitive pool of proposals

## Goal:

Enhance property owner compliance with EUR regulations

### ▪ Includes:

- Outreach to property owners with EURs
- To assure their knowledge of the EUR in place on the property and understand their obligations
- To ensure that all required documents are being maintained as required by regulations

# COMPLIANCE PROJECT ACTIVITIES

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- ✓ DEEP and WSP sent notifications to property owners this Summer notifying them about the start of the project
- ✓ Identified site ownership and contact information for a large majority of EUR properties
- ✓ WSP has generated and continue to populate a database of current contact information
- ✓ WSP initiated a mailing campaign in October to further inform property owners of their EUR Regulatory Obligations

## Next Steps:

Continued outreach and education

DEEP will evaluate whether further outreach and/or follow up inspection of any properties will be necessary

# 5 YEAR INSPECTION OBLIGATION

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**EUR Regulations**: New requirement effective as of February 2021

**Beginning in 2025: Between April 1<sup>st</sup> and September 30<sup>th</sup>**

- For parcels with an EUR recorded prior to January 1, 2021, the first 5-year inspection shall be done in 2025. For parcels with an EUR recorded after 2020, 5-year inspections shall be done 5 years after EUR recording date.
- The owner of the parcel shall retain an LEP to conduct a comprehensive inspection where an EUR is in place
- Within 30 days, a report of such inspection shall be completed, signed and sealed by the LEP and signed by the owner of the parcel.
- An annual inspection is not required the same year a five-year comprehensive inspection is conducted



# COMPREHENSIVE INSPECTION FORM

## Goals for Comprehensive Inspection:

Unlike the annual inspection performed by the property owner, the 5 Year Comprehensive Inspection is performed by an LEP

**Includes:** Visual Inspection of the physical property, review of appropriate maintenance and EUR records to determine that the site is in compliance with the recorded restriction(s) and obligations specific to the site

Inspection Reports are to be maintained by the property owner and shall be provided to DEEP upon request

EUR Five Year Comprehensive Inspection Form

Site Address: [Address](#)

REM ID: [REM ID](#)

**Draft**

### Residential Activity Restriction – Soil (Non-PCBs)

There should not be any residential activity at the property, including, but not limited to, a residence, dwelling, house, apartment, condominium, nursing home, or dormitory; a pre-school, primary school, secondary school, day care center, playground, or outdoor recreational area; or a hospital, solely for the purposes of compliance with volatilization criteria.

Subject Area(s): [Subject Area](#)

Was Residential Activity identified on the property?  Yes  No

If Residential Activity was identified, was such activity discontinued?  Yes  No

If no, please provide a schedule and a plan for corrective actions: [Provide schedule and plan](#)

# WHAT'S NEXT

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- Draft Inspection Form was shared with EPOC with time for comments until November 1<sup>st</sup>
- DEEP Staff will review comments and make any edits deemed appropriate
- Once complete, Form will need final DEEP Management review and approval
- Final form will be posted on our Webpage with notifications going out to all e-alert subscribers
- Anticipate further in-depth review of the form in Spring 2025

# Questions or Comments?

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# PFAS Action Plan Update

## Remediation Roundtable

**Shannon Pociu, Supervising Environmental Analyst, CT DEEP Remediation Division**  
**October 29, 2024**

# CT PFAS FUNDING - BOND COMMISSION



**October 22, 2024, Special Meeting:  
\$3M in FY24 Potable Water Program  
Funding for PFAS actions**

- Private well testing/treatment (on-going)
- AFFF Take-Back Program (on-going)

**Uses will be amended to also include:**

- Municipally-owned PFAS sites (on-going and NEW)
- Sampling of environmental media, statewide (NEW)
- Data management (NEW)



# FEDERAL PFAS UPDATES

## National Primary Drinking Water Regulations & UCMR5

- EPA limits for 6 PFAS in drinking water – Final rule published on April 26, 2024, and became effective June 25, 2024. PWS are required to:
  - **Conduct initial monitoring by April 26, 2027.**
  - Conduct Public Notification (PN) and include PFAS in Consumer Confidence Reports.
  - Make necessary capital improvements and **comply with the PFAS MCLs by April 26, 2029.**
- Sixth release of UCMR 5 Results occurred on October 28th - (Data up to October 10, 2024, representing about 55% of results nationwide.)
  - 51 PWS in CT tested of the 63 required to test. (~1,000 PWS will need to comply with rule)
  - Since sampling began in January 2023, 54 sampling points (36%) from 27 PWS (53%) reported concentrations potentially exceeding the EPA's MCLs for PFAS.
  - 9 PFAS detected out of 29 analyzed for: PFOS, PFOA, PFBA, PFBS, PFHxA, PFHxS, PFHpA, PFPeA, ADONA.



# FEDERAL PFAS UPDATES

- CERCLA Hazardous Substance Designation for PFOA and PFOS - the rule was published in the Federal Register on May 8, 2024, and became effective on July 8, 2024.
- PFAS Federal Research and Development Strategic Plan released August 2024.
- On September 5, EPA extended the TSCA PFAS reporting deadline by 6 months (New Deadline: July 11, 2025; for small businesses: November 10, 2025)
  - TSCA Section 8(a)(7) Reporting and Recordkeeping Requirements for Perfluoroalkyl and Polyfluoroalkyl Substances | US EPA



# FEDERAL PFAS UPDATES

- Proposed Rule for Addition of Certain Per- and Polyfluoroalkyl Substances (PFAS) to the Toxics Release Inventory (TRI) published October 8. Comment period ends December 9, 2024.
  - EPA is proposing to add 16 individually listed PFAS and 15 PFAS categories to the TRI list of toxic chemicals subject to reporting.
- Updated Interim Guidance on the Destruction and Disposal of PFAS released earlier this year – comment period ended October 15.
- Biosolids risk assessment for PFOA and PFOS will come out by the end of 2024

# FEDERAL PFAS UPDATES



- Final Recommended PFAS Aquatic Life Criteria for PFOA and PFOS and Benchmarks for 10 PFAS, published in Federal Register on October 7.
  - PFOA & PFOS
    - Freshwater Aquatic Life WQC - Acute, Chronic, Invertebrate, Fish (whole-body and muscle)
    - Saltwater – Benchmarks for Acute exposure
  - PFBA, PFHxA, PFNA, PFDA, PFBS, PFHxS, 8:2 FTUCA, 7:3 FTCA
    - Freshwater Benchmarks for 8 data-limited PFAS



- ❖ States and authorized Tribes can adopt the EPA's recommended criteria and benchmarks into their water quality standards or adopt other scientifically defensible values, including values based on local or site-specific conditions

# EPA MCL ANNOUNCEMENT IS UNDER DPH REVIEW



Compounds in blue are included in 'mixture' MCL, or Hazard Index. At least 2 of these compounds must be present for the HI MCL to apply.

Compound	DWAL (ng/L)	MCL (ng/L)
9CI-PF3ONS (6:2 Cl-PFESA; F-53B major)	2	-
11CI-PF3OUDS (8:2 Cl-PFESA; F-53B minor)	5	-
GenX (HFPO-DA)	19	10
PFBS	760	(2,000)
PFBA	1,800	-
PFHxS	49	10
PFHxA	240	-
PFOS	10	4.0
PFOA	16	4.0
PFNA	12	10

# FUTURE CHANGES TO RSR ADDITIONAL POLLUTING SUBSTANCE CRITERIA FOR PFAS

Applies to  $\sum$  PFOA, PFOS, PFNA, PFHxS & PFHpA

Remediation Standard	Criterion
Residential Direct Exposure Criterion	1.35 mg/kg
Industrial/Commercial Direct Exposure Criterion	41 mg/kg
GA Pollutant Mobility Criterion	1.4 $\mu$ g/kg
GB Pollutant Mobility Criterion	14 $\mu$ g/kg
Groundwater Protection Criterion (adopts DPH's 2016 Drinking Water Action Level for $\sum$ PFOA, PFOS, PFNA, PFHxS, PFHpA)	70 ng/L
Surface Water Protection Criterion	In Development

- ❖ Existing summed PFAS APS criteria will be updated to criteria for individual PFAS in general with consideration of HI based criteria for drinking water exposures
- ❖ APS request form will be updated to reflect new recommended APS criteria

Chart shows current APS recommendations

[Requesting APS and Alternative Criteria \(ct.gov\)](#)

# PFAS LAB METHOD UPDATES

- **DPH Environmental Lab Certification Program (ELCP)** is currently certifying labs for EPA Methods 1633 and 1621
  - **Method 1633 (aqueous samples only):**
    - Pace – East Longmeadow, MA
    - Pace – Mansfield, MA (aka Alpha)
    - SGS North America – Dayton, NJ
  - **No Method 1621 certification requests received**
  - **List of CT certified labs for PFAS methods**

## Reminders:

- ✓ Potable Water Samples – EPA Method 533
- ✓ Environmental Samples – EPA Method 1633



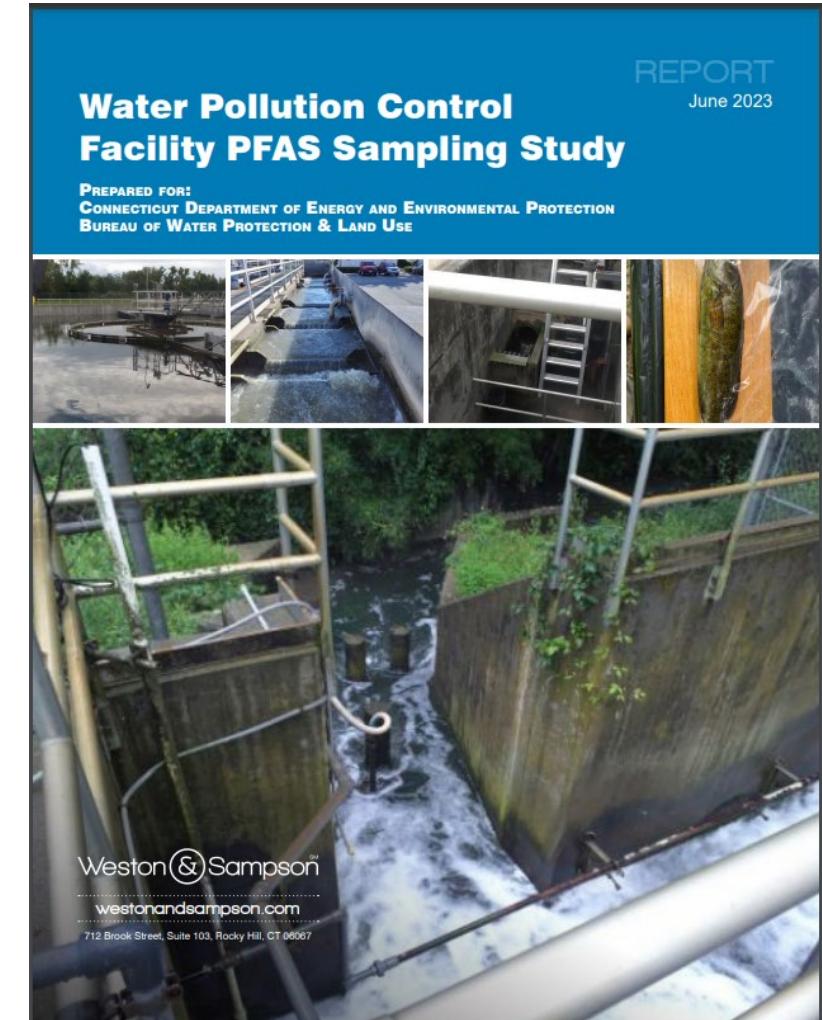
# MUNICIPAL POTWS – NPDES PERMITS

## Will implement monitoring through development of a General Permit

- **Target Issuance Date: Summer 2025**
- **Engage Stakeholders: Early 2025**

## Planned Monitoring Requirements:

- Influent, Effluent, and Sludge
- Frequency 2 times / year
- Phased approach for starting monitoring requirements to allow for municipal planning and budget impacts
- Use EPA approved methods by CT DPH certified lab
- Method 1633 - 40 PFAS parameters (all media)



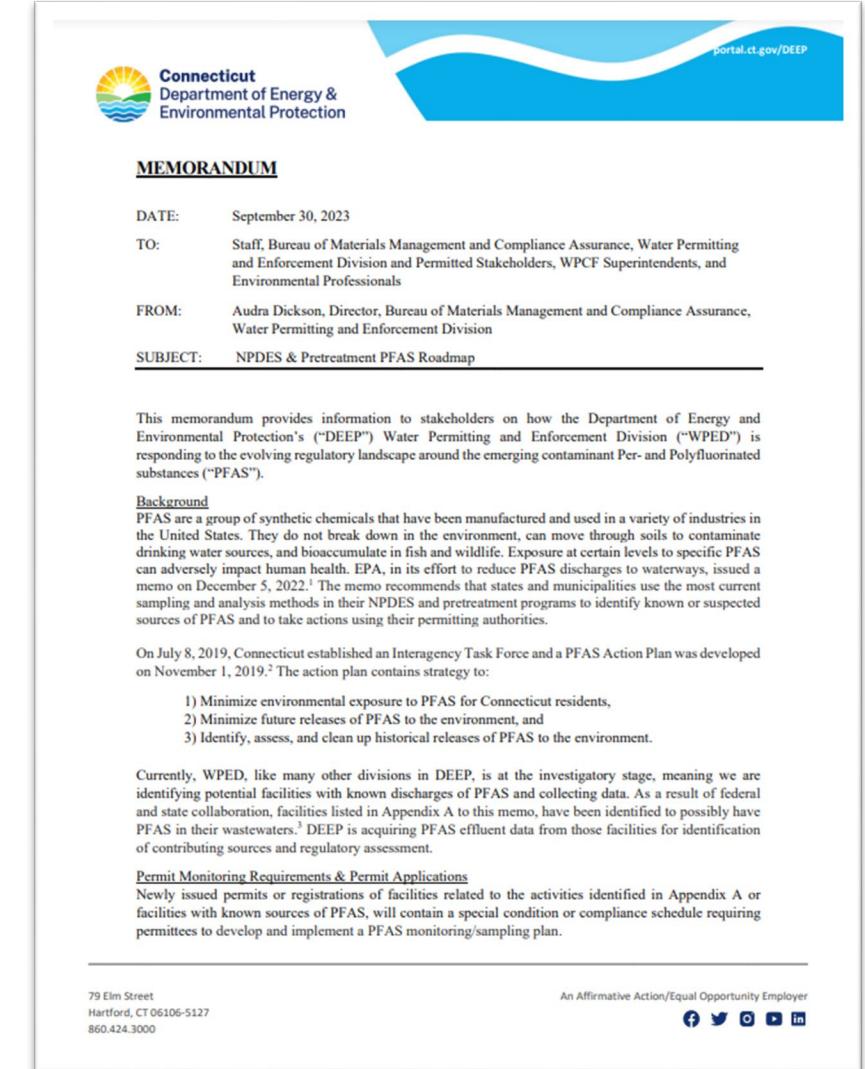
# INDUSTRIAL WASTEWATER PERMITTING

## Current Status:

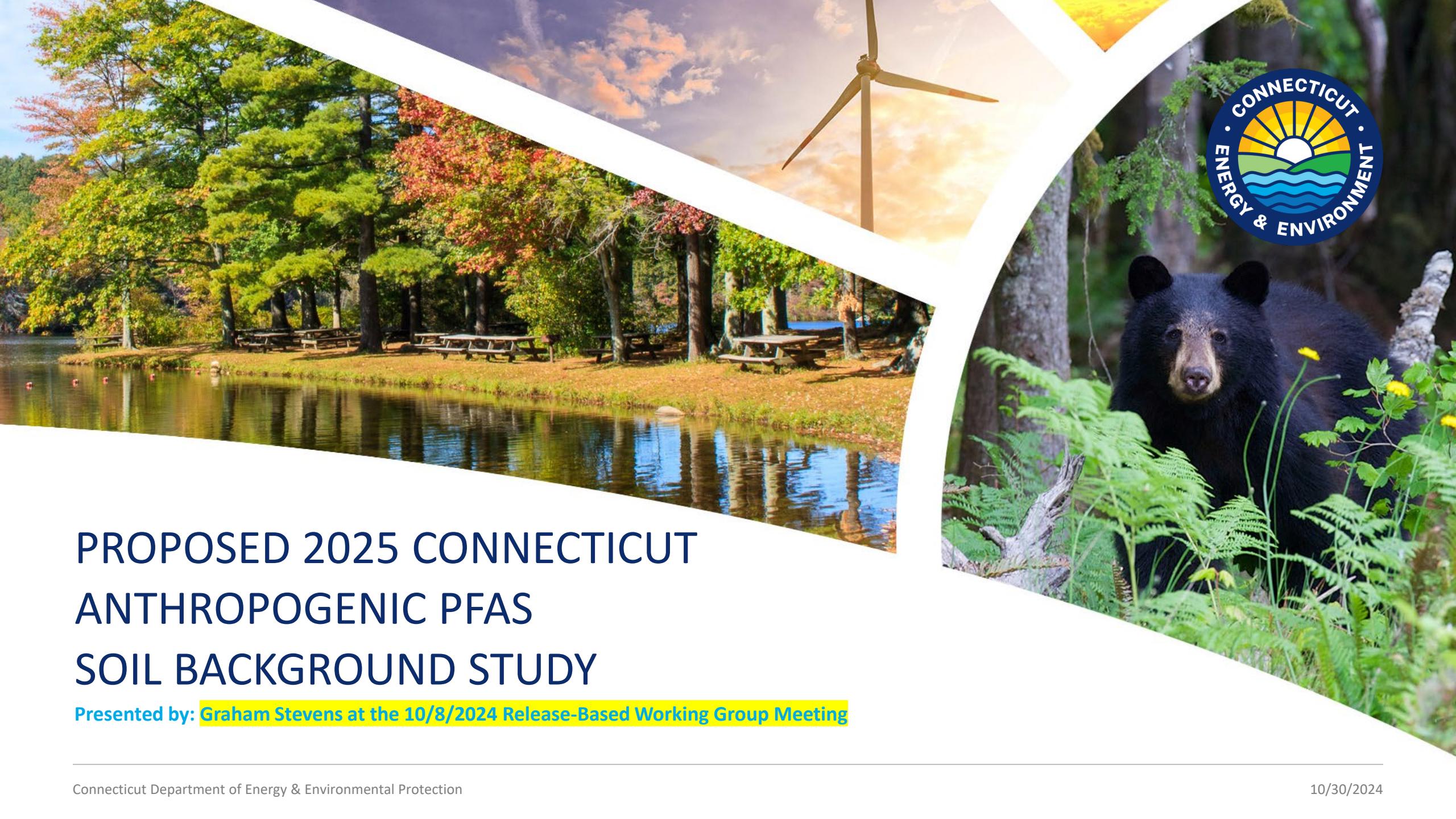
- Released an industrial wastewater permitting roadmap, requiring PFAS monitoring of certain industrial sectors for the purpose of initial characterization, identification of contributing sources, and regulatory assessment:

[NPDES and Pretreatment PFAS Roadmap \(ct.gov\)](https://portal.ct.gov/DEEP/Industrial-Wastewater-Permitting/Industrial-Wastewater-Permitting-Program/Industrial-Wastewater-Permitting-Roadmap)

- Require water quality standards to develop discharge limits
- Promulgation of EPA methods under CWA preferable



The image is a screenshot of a memorandum from the Connecticut Department of Energy & Environmental Protection (DEEP). The header features the DEEP logo and the URL [portal.ct.gov/DEEP](https://portal.ct.gov/DEEP). The subject of the memo is "MEMORANDUM" dated "September 30, 2023". The "TO:" field lists the "Staff, Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division and Permitted Stakeholders, WPCF Superintendents, and Environmental Professionals". The "FROM:" field is "Audra Dickson, Director, Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division". The "SUBJECT:" field is "NPDES & Pretreatment PFAS Roadmap". The body of the memo discusses the response to the evolving regulatory landscape around PFAS, mentioning the Interagency Task Force and the PFAS Action Plan. It also details the investigation of potential facilities with known discharges of PFAS and the acquisition of PFAS effluent data. The "Permit Monitoring Requirements & Permit Applications" section notes that newly issued permits for facilities with known sources of PFAS will contain a special condition or compliance schedule requiring permittees to develop and implement a PFAS monitoring/sampling plan. The footer includes the address "79 Elm Street, Hartford, CT 06106-5127, 860.424.3000", the statement "An Affirmative Action/Equal Opportunity Employer", and social media links for Facebook, Twitter, YouTube, and LinkedIn.

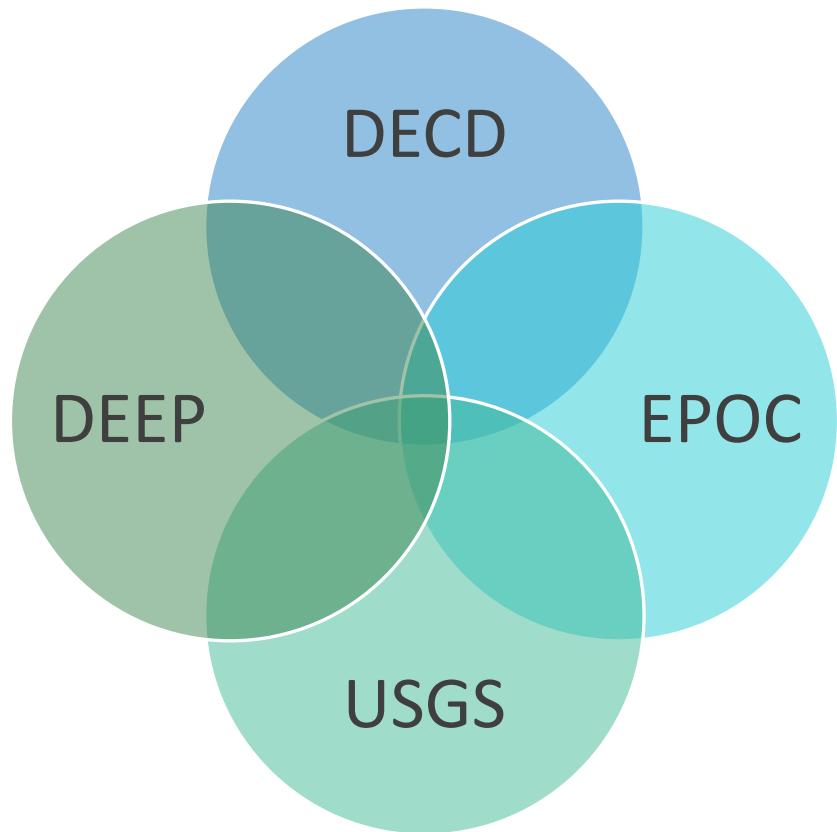


# PROPOSED 2025 CONNECTICUT ANTHROPOGENIC PFAS SOIL BACKGROUND STUDY

Presented by: **Graham Stevens at the 10/8/2024 Release-Based Working Group Meeting**



# PROJECT BACKGROUND



- S.B. 378 An Act Concerning a PFAS Background Data Study for the Purpose of Economic Development
  - Supported by EPOC, SWEP, CCM, and others
  - Raised by the Commerce Committee during 2024 session, but not brought to vote
- **\$1.0M ARPA Funding allocated to DECD for the purposes of conducting a PFAS background study.**
  - DECD is lead; DEEP serving as scientific advisor
  - EPOC review of proposal before contract execution
  - USGS to conduct work; contributing ~\$100K match

# ANTHROPOGENIC PFAS SOIL STUDY

## Project Objective:

## Conduct a science-based, technically defensible anthropogenic background PFAS soil study in Connecticut

- ✓ Utilize a rigorous, reproducible design and methods combined with low-level laboratory reporting and integrated QAQC
- ✓ Interpret study results to identify statewide variability, and potential risk factors for high concentrations

# Project Deliverables:

1. USGS data release
2. Published, peer-reviewed report

## *Example products from recent NH study*

USGS  
Science for a changing world

SCIENCE PRODUCTS NEWS CONNECT ABOUT

Latest Earthquakes | 🔍

DATA DATA RELEASES

## Pilot Study of Per- and Polyfluoroalkyl Substances (PFAS) Infiltration to Shallow Groundwater Through Selected Soils in New Hampshire, 2023

December 28, 2023

[View Data Release](#)

In a study conducted by the U.S. Geological Survey (USGS) and the New Hampshire Department of Environmental Services (NHDES) in December 2023, the detection of concentrations of per- and polyfluoroalkyl substances (PFAS) in shallow groundwater through selected soils in New Hampshire has since sparked critical interest into understanding concentrations of PFAS after infiltration through soils. To study this, a pilot study was designed to evaluate whether PFAS infiltrate through shallow groundwater through soils on previously observed PFAS concentrations, soil type, aquifer location (Santangelo and others, 2022). At each sample site, three sample points. At one sample site, two stainless steel lysimeters (in triplicate of the point sample) seven shallow soil samples and two groundwater samples and four porewater samples consisted of a source solution blank, three equipment Reference: Santangelo, L.M., Tokarany, A.K., Welch, S.M., Schlosser, K., Hartmann, J.L., 2022, Statewide survey of shallow soil concentrations and chemical and physical data across New Hampshire, 2018, <https://doi.org/10.5066/P9KG385>.

### Study Area

**Per- and Polyfluoroalkyl Substances (PFAS) in New Hampshire Soils and Biosolids**

#### What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a diverse class of fluorinated organic compounds that are used for a variety of industrial purposes and that can be found in consumer products such as food packaging, nonstick cooking surfaces, water- and stain-resistant fabrics, cosmetics, and water-repellent clothing (U.S. Environmental Protection Agency, 2018; Agency for Toxic Substances and Disease Registry, 2020). Many PFAS are currently detected in the environment, including in soil, water, and human tissues (fig. 2). Although some PFAS have been produced and used in products since the 1940s, they have only recently come under intense scrutiny for their potential link to adverse health effects, including decreased response to vaccines, thyroid disease, and decreased birth weight (U.S. Environmental Protection Agency, 2018; Agency for Toxic Substances and Disease Registry, 2020).

**Figure 1.** The inner circle of this diagram depicts the chemical structures of examples of perfluoroalkyl substances (PFAS), perfluorooctane (top), perfluorooctanoic acid (FOA, top), perfluorooctane sulfonate (POS, bottom left), and perfluorooctane sulfonic acid (FOOS, bottom right). Surrounding the PFAS compounds are depictions of products that might contain PFAS and of industry, which can produce or use PFAS. Line drawings in outer circle are from Pixabay.

**EXPLANATION**

- Hydrogen
- Sulfur
- Oxygen
- Fluorine
- Carbon

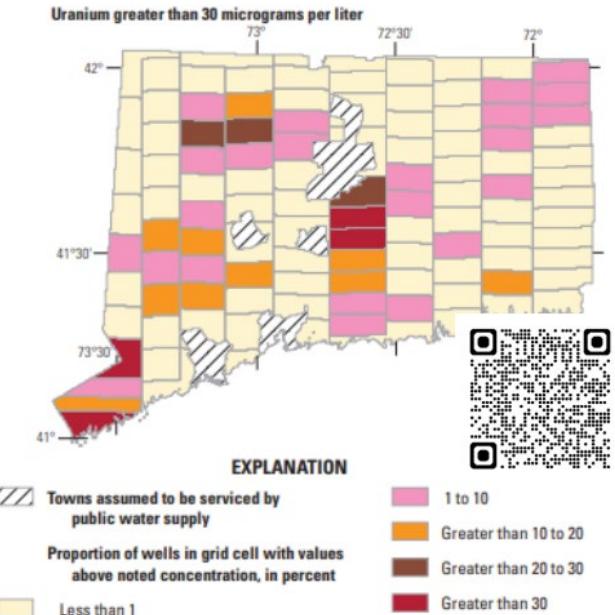
U.S. Department of the Interior  
U.S. Geological Survey

General Information Product 200

# PROJECT APPROACH

- 100 sample locations, statewide
  - Stratified-random, equal-area, grid-based design
  - Target minimally disturbed areas
- Shallow soil focus (0- to 6-inch depths)
  - 50 sites also collect 6- to 12-inch samples
  - 6 sites also collect down to 36-inches
- Composed samples.
  - Subset of sites where evaluate individual samples for PFAS and compare to composites
- Standard QAQC samples (duplicates, blanks) also collected
- Analyze for PFAS, TOPA, TOC, pH, particle size, solids, metals

Random design similar to previous arsenic and uranium study in groundwater...



# DRAFT IMPLEMENTATION TIMELINE

- **Jan–Dec 2025** – Obtain access permissions, collect and analyze samples
- **Mid-2026** – Data release and draft report shared. (Project data and updates released as soon as available.)
- **Early 2027** – Final scientific report release. Requires internal USGS review and quality control process

## Design Notes:

- Designed in response to set budget and desired duration
- Allows for comparability to other states
- Allows for implementation of additional studies (e.g., groundwater), if funding is identified
- **Actively exploring opportunities to add shallow, and possibly, deep groundwater to the study design / as a concurrent study.**



# POTENTIAL RBCP DATA USE

DEEP is considering using study results to develop a similar approach as that developed in 22a-134tt-2(f) for naturally occurring metals

- **22a-134tt-2(f) allows for use of increasingly elevated background concentrations with increasing level of sampling effort and numbers of samples collected**

## Refresher on Naturally Occurring Metals in 22a-134tt-2(f)

Option	Number of Additional Samples Needed	Background Concentration	Implementation Authority
Option 1	None	Low Value in 22a-134tt-2(f) Table	LEP-implemented
Option 2	Minimum 3	Must be $\leq$ High Value in 22a-134tt-2(f) Table	LEP-implemented
Option 3	Minimum 5	Must be $\leq$ RDEC	LEP-implemented
Option 4	Minimum 7	May be $>$ RDEC	Commissioner Approval

# PFAS IN PRODUCTS AND PACKAGING

## PA 21-191 AAC The Use of PFAS in Class B Firefighting Foam was enacted in 2021.

- Section 1 outlines a phased in ban for PFAS in **firefighting foams**. Codified at CGS Section 22a-903a.
- Sections 2-4 restricts intentionally added PFAS in **food packaging**.
  - Contact: Tom Metzner, [Tom.Metzner@ct.gov](mailto:Tom.Metzner@ct.gov) or (860) 424-3242

## PA 24-59 AAC The Use of PFAS in Certain Products was passed in early 2024:

- PFAS-containing **sludge/biosolids-derived soil amendment** ban effective October 2024
- Phased-in PFAS in **consumer products** notification requirement & ban to occur over 2026-2028
  - Contact: Brenna Giannetti, [Brenna.Giannetti@ct.gov](mailto:Brenna.Giannetti@ct.gov) or 860-424-3536



FOOD  
PACKAGING

**AFFF / CLASS B FOAM BAN IMPLEMENTATION (2021-2024)**

SOIL  
AMMENDMENTS

**July 2021**

Immediate ban on the use of **AFFF** for training purposes or to test systems (unless federally required)

**Oct. 2021**

Use of Class B firefighting foam banned with limited exceptions:

- Airports
- Other DOD required facilities
- Chemical plants\*
- Oil refineries and terminals\*

*\*Eligible to request 2-year extension*

**Oct. 2023**

Use of Class B firefighting foam ban expanded to include

- Airports (unless required by FAA)
- All facilities granted a 2-year extension

**Jan 2024**

Ban on intentionally added PFAS in **food packaging**

**Sept. 2024**

Previously federally required **AFFF** users must convert to fluorine-free foam, including **Part 139 airports and DOD facilities**

**ALL USES  
OF AFFF  
BANNED  
IN CT!**

**Oct. 2024**

Ban on sale/offer for sale/use of **soil amendments made from biosolids or wastewater sludge that contain PFAS**

## CONSUMER PRODUCTS\* (2026-2028)

### January 2026

- **New severe wet weather outdoor apparel:** “Made with PFAS Chemicals” labelling requirements.
- **Turnout Gear:** Written notice to the purchaser of intentionally added PFAS and rationale required.

### July 2026

#### Consumer Products

- Written notification to CT DEEP is required if they contain intentionally added PFAS.
- Must be labelled as “Made with PFAS chemicals” if contain intentionally added PFAS.

### January 2028

#### Consumer Products

- Ban on the manufacture, sale, offer for sale, or distribution for sale of any products that contain intentionally added PFAS.

\*Consumer product categories include apparel, carpets/rugs, cleaning products, cookware, cosmetic products, dental floss, fabric treatment, children’s products, menstruation products, textile furnishings, ski wax, and upholstered furniture.



# PFAS QUESTIONS?

**Shannon Pociu or Meghan Lally, PFAS Lead**  
CT DEEP Remediation Division  
[DEEP.PFAS@CT.GOV](mailto:DEEP.PFAS@CT.GOV) or (860) 424-3061

# Remediation Roundtable

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E-mail: [DEEP.remediationroundtable@ct.gov](mailto:DEEP.remediationroundtable@ct.gov)

Web: [www.ct.gov/deep/remediationroundtable](http://www.ct.gov/deep/remediationroundtable)





# Remediation Roundtable

Next meeting March 25, 2025