

WORKING GROUP ON RELEASE-BASED
CLEANUP REGULATIONS
TOO MANY TO COUNTTH MEETING

Presented by: Graham J. Stevens and Brendan Schain

October 8, 2024

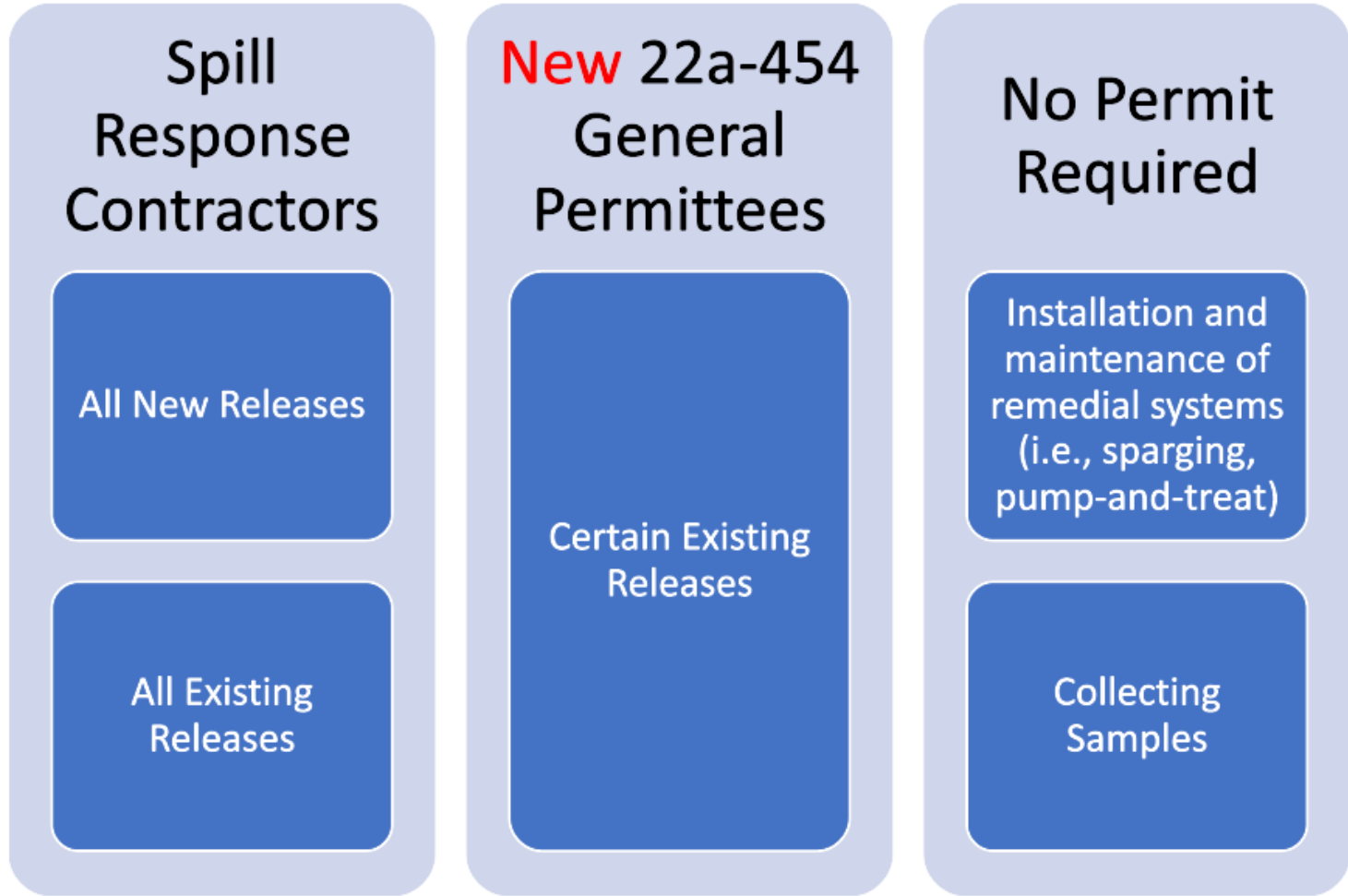
REMARKS BY
AGENCIES



REMARKS BY
LEGISLATORS



Who Does the Cleanup?



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

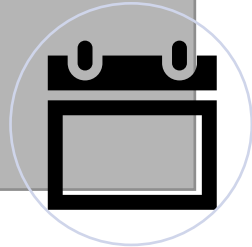
“In-House”
PEPs
Certify

Certain New
Releases
Created by
their
employer

Proposed Statutory Changes

22a-134rr
& 22a-134

“effective date”



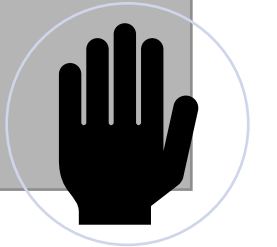
22a-6u

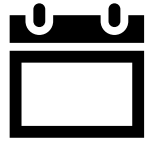
SEH notification



22a-133y

voluntary program





Replace “Adoption” with “Effective Date”

Why? Necessary to provide time between adoption date and effective date



§ 22a-134(1)

For the purposes of this section and sections 22a-134a to 22a-134e, inclusive, and sections 22a-134h and 22a-134i:

(1) “Transfer of establishment” means any transaction or proceeding, on or before the [effective](#) date [of](#) regulations **[are]** adopted pursuant to section 22a-134tt, through which an establishment undergoes a change in ownership, but does not mean:



§ 22a-133rr(a)

(a) Any person who creates or maintains a release to the land and waters of the state on or after the date when regulations are first [effective after being](#) adopted pursuant to section 22a-134tt shall, upon discovery of such release: (1) Report the release, if such a report is required by the regulations adopted pursuant to section 22a-134tt, and (2) remediate any release to the standards identified in regulations adopted pursuant to section 22a-134tt. If any person fails to comply with the provisions of this section and section 22a-134tt, such person shall be liable for any costs incurred by the commissioner in accordance with section 22a-451, or costs incurred by any other person who contains or removes or otherwise mitigates the effects of such release in accordance with section 22a-452.



Adjust Scope of § 22a-6u

Why? Limit the scope of SHE Notifications to those releases not subject to the RBCRs



§ 22a-6u

Section 22a-6u of the general statutes is amended by adding subsection (p) as follows (*Effective October 1, 2025*):

(NEW) (p) On and after the effective date of regulations adopted pursuant to section 22a-134tt, the requirements of this section shall apply only to releases that, pursuant to subsections (c) and (d) of section 22a-134rr, are not subject to the requirements of 22a-134qq to 22a-134xx, inclusive.



Create Voluntary Parcel-Wide Remediation Program

Why? Replace the “voluntary remediation program” in 22a-133y with a voluntary “parcel-wide” remediation program that works with, and provides certain relief from, the RBCRs

- Eligible if initiate a parcel-wide investigation before discovery of any release, or after a release is discovered
- 2 years for Tier Characterization
- Group releases for tiering into tier 2
- One, small annual fee
- Longer time for cleanup
- Liability relief (22a-134vv(b) & 22a-133aa covenant not to sue)

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				

Printable View New

Search this list...

LIST VIEWS

- ✓ All Cases
- Cases PK
- My Cases
- Recently Viewed (Pinned List)
- Recently Viewed Cases
- Test

Case Number	Agency ID	Case Name	Site	Program	Case Status	EPA ID
1			te-0000000009	Brownfield - MLRP	New	987654321
2			te-0000000009	Brownfield - ABC	New	987654321
3			te-0000000009	Brownfield - ABC	New	987654321
4			te-0000000009	Brownfield - MLRP	New	987654321
5			te-0000000009	Release-Based	New	987654321
6			te-0000000009	Brownfield - MLRP	New	987654321
7	00001305	1234567890 TEST	Site-0000000009	Brownfield - ABC	New	987654321
8	00001305	1234567890	Site-0000000009	Voluntary Y	New	987654321

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

Enter address



+ Add New Site Choose this Site

Site Address	Program	Case Status	Cleanup Stage	Case Number
3000 Main St, Bridgeport, CT 06610	Release-Related Remediation	[status]	[stage]	1111111


Details Schedules & Milestones Related

Case Name	Case Name Goes Here	Acknowledgment Date	05/12/2024
Date Received	05/12/2024	Case Number	1111111
Site	Site Name Goes Here	Site Address	Site Address Goes Here
Town	Town Goes Here	County	County Goes Here
Registered Entity	Registered Entity Goes Here	Account Name	XXXXXX
Council of Government	XXXXXX	Remediation District	XXXXXX
Local Health District	XXXXXX	EPA ID	XXXXXX
Agency ID	XXXXXX	Program	Program Name
Case Status	Case Status Goes Here	Cleanup Stage	Cleanup Stage Goes Here
Case Lead	Case Lead Goes Here	Cleanup Lead Other	Cleanup Lead Other Goes Here

Geographic Setting

Current Site Land Use	Classification Goes Here	Sensitive On-Site Land Use	On-Site Land Use Goes Here
Other Sensitive On-Site Land Uses	On-Site Land Use Goes Here	Site Operations	Value Goes Here
Other Sensitive Site Operations	Value Goes Here	Groundwater Classification	Value Goes Here
Is Public Water Currently Provided To The Site?	Value Goes Here	Is Public Water Currently Available Within 500 Ft of The Site?	Value Goes Here
Is The Site Connected To Municipal Sewer?	Value Goes Here	How On-Site Septic Systems Or Drywell Bore	Value Goes Here

Site



600 Lindley St
Bridgeport, CT 06608

Case Chemicals (3)

Auto Number:	CC00001
Chemical:	Arsenyl bromide
Medium:	Soil
Highest Concentration:	3,000,000,000

Case Team (3)

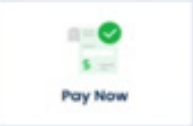
Jacobson Smith

Online Payment of Fees

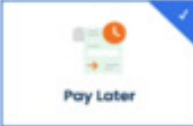
FILING

Filing #02631	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 #02345


ABC Water Company

PAYMENT TYPES


Select Payment Type



Credit Card



eCheck / ACH
Personal

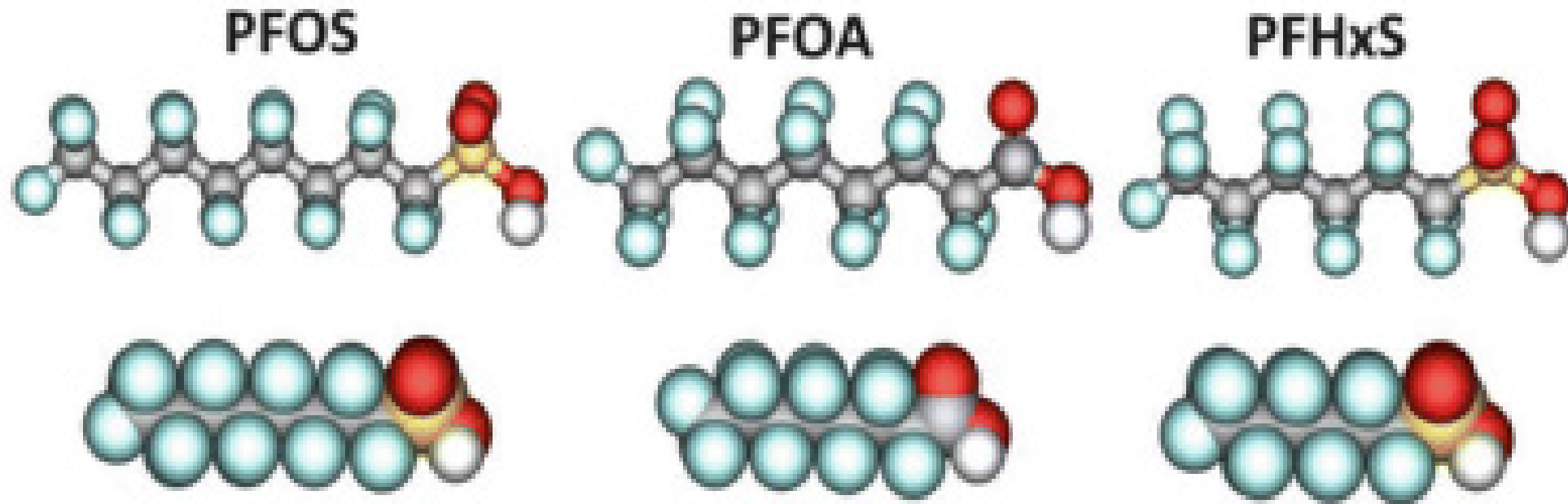


eCheck / ACH
Commercial / Business

Back Next

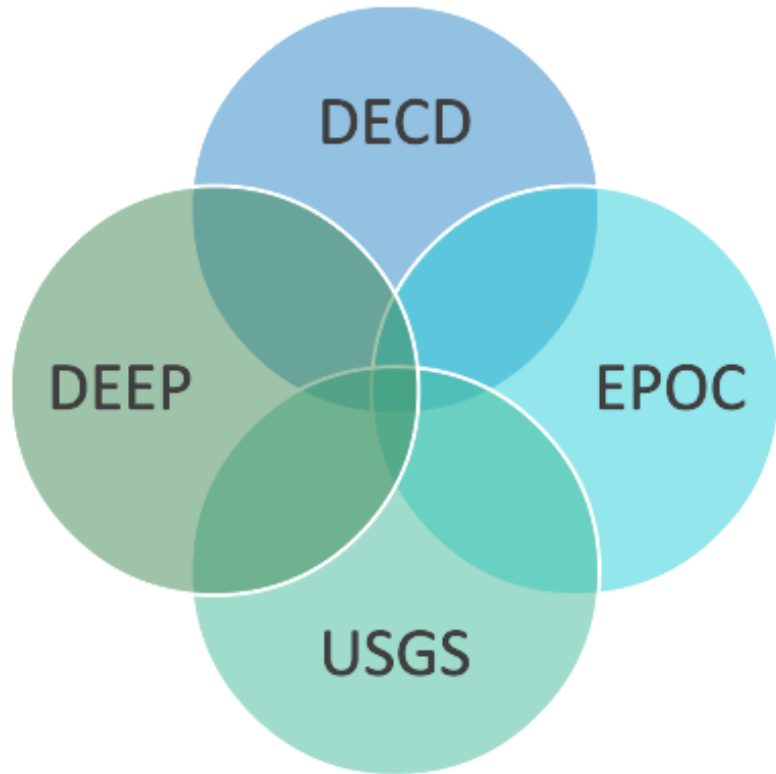
- Select Payment Option
- Select Invoices
- Review Amount
- Select Payment Type**
- Enter Payment Details
- View Receipt

PFAS Soil Background Study



Examples of PFAS chemicals. This Photo by Unknown Author is licensed

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 QA/QC
- ✓ 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

The screenshot shows the USGS Data Release page for the study. The title is "Pilot Study of Per- and Polyfluoroalkyl Substances (PFAS) Infiltration to Shallow Groundwater Through Selected Soils in New Hampshire, 2023". The date is December 28, 2023. There is a "View Data Release" button. Below the title, there is a summary of the study and a "Citation Information" table.

Publication Title	Year
Pilot Study of Per- and Polyfluoroalkyl Substances (PFAS) Infiltration to Shallow Groundwater Through Selected Soils in New Hampshire, 2023	2023
DOI	10.3133/D23-001
Authors	Harriet C. Hawkins, Sydney H. Wells, et al.
Product Type	Data Release
Record Source	USGS Asset Identifier Service (AIDS)
URL	New England Water Science Center

Example products from recent NH study

The report cover features the USGS logo and the title "Per- and Polyfluoroalkyl Substances (PFAS) in New Hampshire Soils and Biosolids". It includes a central diagram showing various PFAS chemical structures and icons of everyday products like a pan, a spray bottle, a pair of shoes, and a pair of pants. The diagram is labeled "PFAS Per- and polyfluoroalkyl substances".

What Are PFAS?
Per- and polyfluoroalkyl substances (PFAS) are a class of thousands of synthetic compounds that are used for a variety of industrial purposes and that can be found in numerous products such as food packaging, household cleaning supplies, water and wastewater treatment facilities, cosmetics, and recreational equipment. According to U.S. Environmental Protection Agency (EPA), PFAS are frequently detected in the environment, including in soil, water, and air (Fig. 2). Although water PFAS have been produced and used in products since the 1940s, they have only recently come under intense scrutiny for their potential to affect human health effects, including decreased response to vaccines, blood thinner, and decreased body weight (U.S. Environmental Protection Agency, 2023; Agency for Toxic Substances and Disease Registry, 2023).

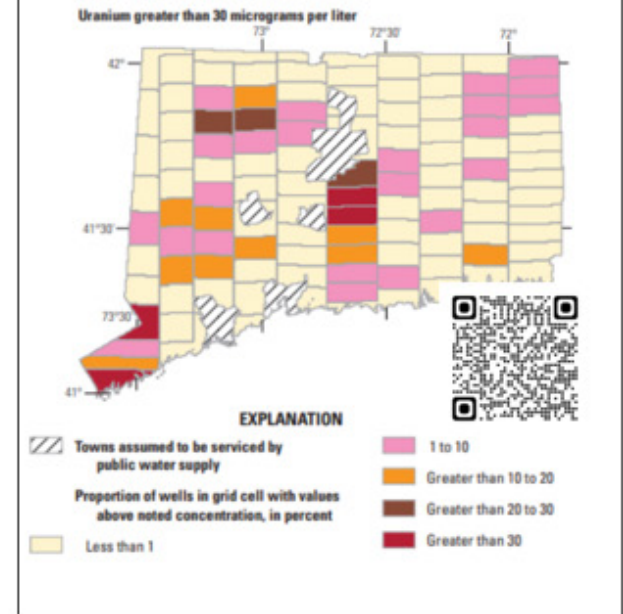
EXPLANATION
Polymer
Salt
Organic
Plastic
Carbon

Figure 1. The cover image of this report depicts the chemical structures of example per- and polyfluoroalkyl substances (PFAS): perfluorooctanoic acid (PFOS), hexa-perfluorooctane sulfonamide (PFHxS), and PFAS. Perfluorooctanoic acid (PFOS) is shown in red, hexa-perfluorooctane sulfonamide (PFHxS) is shown in blue, and PFAS is shown in green. The PFOS and PFHxS are examples of products containing carbon PFAS and of industry which can produce or use PFAS. Line drawings in order from top to bottom: Pan, Spray bottle, Pair of shoes, Pair of pants.

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
- Compositing 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



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

We are happy to take your questions ...

<https://portal.ct.gov/deep/remediation--site-clean-up/comprehensive-evaluation-and-transformation/release-based-cleanup-regulations-formal-regulation-adoption>

Please reach out to the Department at