



INTRODUCTION TO RELEASE BASED CLEANUP REGULATIONS (RBCRs)

REV. 1/30/2026

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Joint Effort: Bureau of Water Protection and Land Reuse and Bureau of Materials Management & Compliance Assurance

WELCOME AND GENERAL HOUSEKEEPING

- Please remain muted
- Please enter questions in the chat
- AM & PM sessions will end with a Q&A session from chat
- Questions not answered during available time will be compiled in FAQs, as appropriate, and posted to website
- “knowledge checks” – feedback to support future training needs, will not impact LEP credits

Regulation of the

Department of Energy and Environmental Protection Concerning

Release Based Cleanup Regulations

Regulations adopted after July 1, 2013, become effective upon posting to the Connecticut eRegulations System, or at a later date if specified within the regulation.

Posted to the Connecticut eRegulations System on **May 16, 2025**

EFFECTIVE DATE

March 1, 2026

Approved by the Attorney General on

March 31, 2025

Approved by the Legislation Regulation Review Committee on

April 22, 2025

Electronic copy with agency head certification statement electronically submitted to and received by the Office of the Secretary of the State on

May 6, 2025

TODAYS AGENDA: MORNING

Accessing new Regulations & Intro

Sections 1-4 content (Definitions, Discovery, Reporting, Release Characterization)

Break (~10 minutes)

Section 5 (Immediate Actions)

Q&A from chat



TODAYS AGENDA: AFTERNOON

Section 6 (Tiering)

Sections 7-10 (updates to clean-up standards)

Break (~10 min)

Section 11-13 (administrative sections)

Wrap up & future trainings

Q&A from chat



ICONS USED IN THIS PRESENTATION

| *Future training planned*



Future training intended and expected to be covered across multiple sessions, no clear date for this content



This image points to the content is found in Section 1. Subsections (b)-(i) contain lots of content which will be touched on throughout this training



Calendars identify the tentative date additional training will be offered for content on these slides
(subject to change)

MORE TRAINING WILL BE AVAILABLE

January 21st

- Introduction to Release-Based Cleanup Regulations



January 28, February - March

- RBCRs In-depth focused sessions (Wednesdays)

February-March

- REACT portal Training (Thursdays)
- REACT portal Help sessions (Fridays)

Beyond (TBD)

- additional training
- intermediate topics



Provide requests
in chat



Webpage link with dates, times:

- [REACT and Release-Based Cleanup Regulation Training](#)



How To Access The Regulations & Program Overview

Learning Objective: Participants will know where to access a copy of the regulations, and the purpose of this training.

RELEASE-BASED CLEAN UP REGULATIONS GUIDING PRINCIPLES



Statute introduces requirement for risk-based cleanup approaches for all releases and creates process framework specified in regulations



RSRs are incorporated into the Release-Based Cleanup Regulations. The cleanup standards will be the RSRs with modifications we will touch upon today



Anti-degradation – DEEP's statutes and Water Quality Standards prevent actions that will degrade groundwater or surface water statewide



Encourage investigation and cleanup – program can't be a barrier to conducting investigations



Above all – protect public health and the environment

ACCESSING THE REGULATIONS

eRegulations website at
www.eregulations.ct.gov

We anticipate the final
eRegulation page will be
published in March.

Connecticut eRegulations System: Portal to Connecticut Regulations

Home Search Browse Information

Regulation Making Record

Tracking Number: PR2024-025
LRRC Docket #2025-014A

Summary Information	
Agency Name	Department of Energy and Environmental Protection
Agency Contact Email	Brendan.Schain@ct.gov
Subject	Release Based Cleanup Regulations
Current Status Of Regulation	Final Approved
Section(s) Affected	null

RMR History			
ID	Posted Date	Description	Details
41	03/27/2025	Attorney General Office - Due Date Is 04/28/2025 Agency Head Regulation Certification	No Details Available
42	03/27/2025	Attorney General Compliance	No Details Available
44	03/27/2025	Updated Proposed Regulation	No Details Available
45	03/31/2025	AG Approved Regulation	No Details Available
46	03/31/2025	AG Certification	No Details Available
47	03/31/2025	Cover Letter To LRRC	No Details Available
48	03/31/2025	Submit to LRRC	No Details Available
49	03/31/2025	LRRC Meeting Date Updated to 04/22/2025 11:00 AM	No Details Available
50	03/31/2025	LRRC Decision Due Date Updated to 05/06/2025 12:00 AM	No Details Available

Notes

There are no notes to display at this time.

WHAT'S IN THIS REG PACKAGE?

(OR, "WHY IS IT SO LONG?")

Sec. 1 – Released-Based Cleanup Regulations (22a-134tt-1 to 22a-134tt-13 and 22a-134tt-App1 to 22a-134tt-App12)

- 207 Pages total
- Incorporates about 90 pages of the state's existing cleanup standards (the RSRs) in sections 22a-134tt-1, 22a-134tt-7, 22a-134tt-9 and 22a-134tt-10

Sec. 2 – Remediation Standards Regulations

- About 87 pages of existing regulatory text bracketed for deletion because incorporated in sections noted above

This Training

Sec. 3 – Administrative Penalties (22a-6b-8(5))

- About 1 page

Sec. 4 – Release Reporting Regulations (22a-450-1(d))

- 1 paragraph (minor adjustment)

Sec. 5 – Environmental Use Restriction Regulations

(22a-133q-1 to 22a-133q-9 and 22a-133q-App1 – 22a-133q-App2)

- 58 Pages
- Adjustments to cross references only, no substantive changes

RBCRs GENERAL STRUCTURE

Sections for discovery, reporting, characterization, immediate and tiers risk management, and cleanup documentation processes and timelines	Discovery Reporting Characterization Tiers
Section for Cleanup Standards applicable to all cleanups generally.	Completion Documentation Cleanup Standards
	Audits

ADDITIONAL RELATED STATUTES

Future training planned



CGS 22a-134pp to 134xx

RBCR authorizing statute

PA 25-6 (SB 1404)

Section 1	Repeals & replaces CGS § 22a-134rr	Changes related to the effective date of the RBCRs
Section 2	Repeals & replaces CGS § 22a-134	Changes related to the effective date of the RBCRs
Section 3	Amends CGS § 22a-6u (SEHs)	Continued SEH applicability with respect to RBCR exceptions in CGS 22a-134rr
Section 4	Repeals & replaces CGS § 22a-133y	Creates a release-based voluntary parcel-wide cleanup program

PA 25-54 (HB 7085)

Section 1	Repeals & replaces CGS § 22a-134tt	Adds continuance of working group activities
Section 2	Amends CGS § 22a-134	Defines portion, release, and release remediation closure report
Section 3	Repeals & replaces CGS § 22a-134a	Release closure reports function as portion verifications. Provides bridge from Property Transfer Program to Release-Based
Section 4	Repeals & replaces CGS § 22a-134rr(b)	Changes related to discovery and effective date of the RBCRs
Section 5	Amends CGS § 22a-134uu	Remediation not to be reopened by the commissioner for a single-family residence for violations of 22a-134qq to -134tt
Section 6	New	Residential activity definition and applicability

TRAINING FOR EXISTING PROGRAMS

Existing Transfer Act obligations remain, new obligations will not be generated

Significant Environmental Hazard program only remains for Brownfields & applicable PTP sites

Brownfield programs will remain site-wide investigation and cleanup



RCRA Hazardous Waste Cleanup (facility-wide Corrective Action) continues; Enforcement actions in effect continue



NEW “OFF-RAMPS”

Future training planned



- “Walk away” background numbers for certain common, naturally-occurring metals
- Potential buyer **due diligence** can usually be conducted without “discovering” releases
- Reporting of discovered existing releases (non-SER) not needed for certain types of existing releases if cleaned up within the **first year**
- New, less stringent cleanup numbers for:
 - Managed **Multifamily** Residential
 - **Passive** Recreation
- Expedited “Permit by Rule” allowable remedies, with certain obligations, using Affidavit of Facts rather than use of EUR
 - Soil **under paving or concrete** (parking lots, roads, building foundations)
 - “**Historically impacted material**” (materials typically found in urban areas)

ORGANIZATION INTO “BUCKETS”

22a-134tt : RBCRs

13 Sections that fit into 4 general categories, plus Appendices:

Basics

- Definitions
- Discovery
- Reporting
- Characterize
- Immediate Action

Longer Term

- Tiers

Cleanup Standards

- General
- PEPs & Home Heating Fuel
- Soil
- Groundwater

Documents

- Verifications & Certifications
- Closure Completion
- Audits

Appendices

REMINDER... PLEASE ENTER QUESTIONS INTO THE CHAT





22a-134tt-1

Definitions and Miscellaneous Provisions

Learning Objective: Understand new definitions, confirm old definitions & acknowledge additional sub-sections

22a-134tt-1(a) DEFINITIONS



There are 174 definitions listed in Section 1. (most are from RSRs)

Some are highlighted in this presentation.

Some other definitions are found throughout other sections of the regulations.

Who is the Regulated Entity?

Person who creates or maintains a release, and upon discovery, reports if required and remediates release to cleanup standards

A Person is not just an individual. It also includes:

- Partnership, association, firm, limited liability company, corporation or other entity
- Federal government, the state or any instrumentality or subdivision of the state, including any municipality
- Any responsible corporate officer
- CGS 22a-134pp(5)

More detail in
22a-134tt-1(h)

Two types of persons subject to the requirements of the RBCRs:

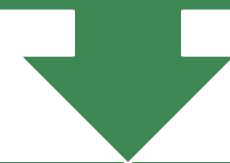
- **Creator** - Person who created a release
- **Maintainer** - Person who, regardless of fault for the creation of a release, owns a parcel of land on or under which such release, or a portion of such release, is located (or in limited circumstances, has possession of the land)

22a-134tt-1(a) – DEFINITIONS

Definition (126) - “Release” has the same meaning as provided in section 22a-134pp(6) of the Connecticut General Statutes



“Release” means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into or onto the land and waters of the state, not authorized under this title, of oil or petroleum or chemical liquids or solids, liquid or gaseous products or hazardous waste as defined in section 22a-448



“Release” does not include automotive exhaust or the application of fertilizer or pesticides consistent with their labeling

TYPES OF RELEASES

RELEASES SUBJECT TO RBCRs FIT INTO 3 GENERAL CATEGORIES:

Emergent Reportable Releases (ERRs)

New releases – identified by an observed change in conditions

Sec 22a-134tt-1(a)(37)

Significant Existing Releases (SERs)

Historical pollution that presents an immediate risk to human health and the environment

Sec 22a-134tt-1(a)(143) and 1(e)

Other Existing Releases

Historical pollution

Non-SERs - Sec 22a-134tt-2

22a-134tt-1(a) DEFINITIONS

Definition (37) - ERR (Emergent Reportable Release):

A release to the land and waters of the state discovered by an observed change in conditions that is required to be reported by regulations adopted pursuant to CGS Sec 22a-450

- Does not include:
 - A release required to be reported pursuant to section 22a-450-2(a) **Oil or Petroleum** if the quantity of the release is <10 gals; or
 - A release required to be reported pursuant to section 22a-450-2(b) **Materials Other Than Oil or Petroleum** if the quantity of the release is <20 lbs or <3 gals

Note: releases of less than these volumes may need to be reported and cleaned up under certain circumstances

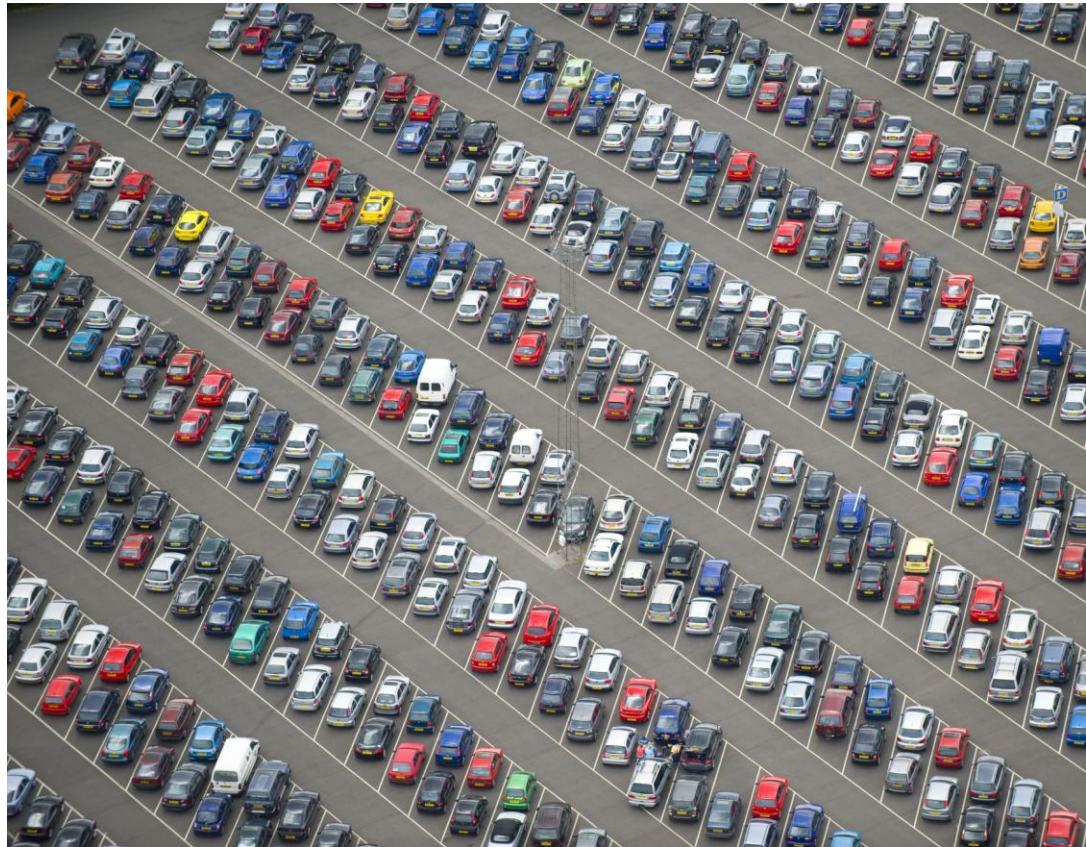


22a-134tt-1(a) DEFINITIONS

(143) “Significant existing release” means a release to the land and waters of the state discovered pursuant to section 22a-134tt-2 of the RBCRs that is present in the location identified in, or creating one or more of the impacts to human health or the environment identified in, section 22a-134tt-5(e) of the RBCRs;

**More details in
22a-134tt-1(e)**

22a-134tt-1(a) DEFINITIONS

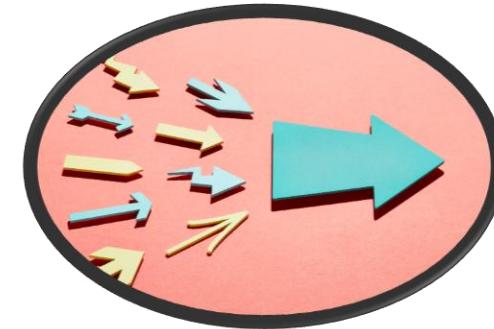


(70) - Incidental public roadway releases – not regulated by RBCRs

- Existing release to pavement or soil in right of way of a public road due to operation from passenger motor vehicles AND not an SER
- Includes chloride based, inorganic salts (including road salt)

22a-134tt-1

22a-134tt-1(b); construction of regulations – clarifies plural may still apply to the singular



22a-134tt-1 (c); use of forms –
Provides expectation of information to be included on “forms” AND requires following instructions for digital submission.

22a-134tt-1(d) General Requirements For Analytical Data

This subsection highlights considerations for data as applied to these regulations.

- (1) Analytical Data Quality and Usability**
- (2) Laboratory Reporting Limit Requirements**
- (3) Matrix Interference**
- (4) Instrument Limitations**



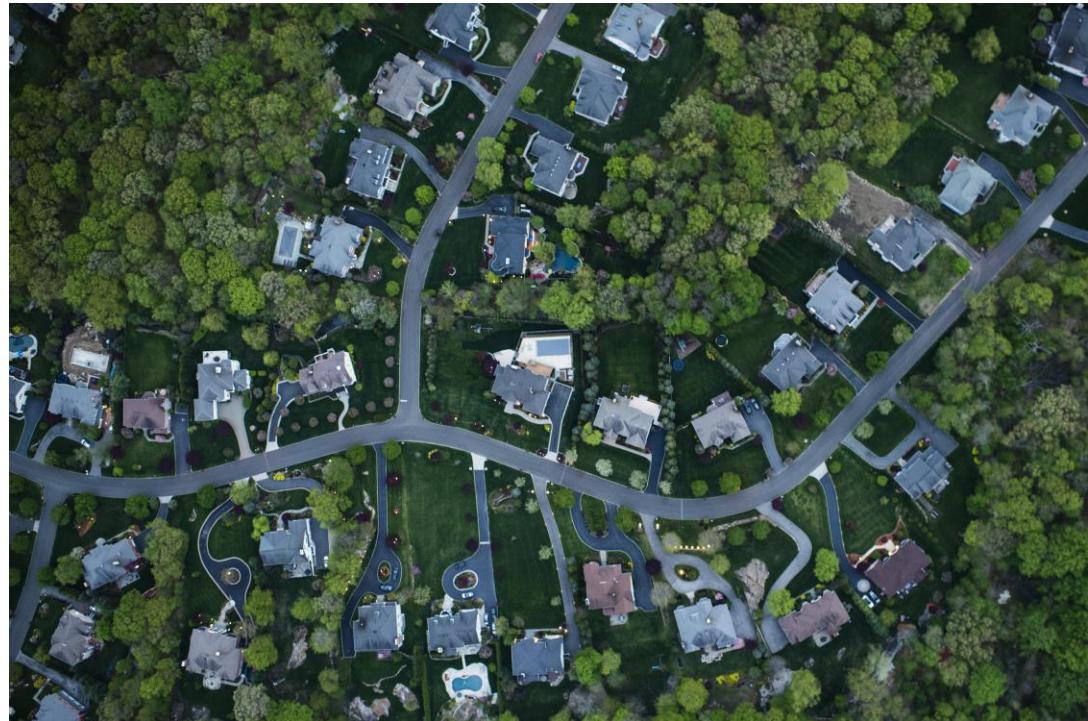
22a-134tt-1(e) Significant Existing Release (SER)

Types Of Impact	Distances And Location	Concentration And Criteria
Drinking Water Well (DWW) contamination	At any public or private DWW	<ul style="list-style-type: none">• Any
Groundwater plume (GW) → DWW	GW plume \leq 500ft from a DWW	<ul style="list-style-type: none">• Substance has Groundwater protection criteria (GWPC) specified;• \geq GWPC
Soil	Depth of discovered release is within 2ft from ground surface; Check land use; Use Industrial/Commercial Direct Exposure Criteria (I/C DEC) for arsenic or lead from pesticides only if parcel is $>$ 300ft from sensitive receptors.	<ul style="list-style-type: none">• $\geq 15 \times$ Res DEC• $\geq 30 \times$ I/C DEC• For certain metals, PCBs and arsenic or lead from pesticides: $\geq 15 \times$ I/C DEC

22a-134tt-1(e) Significant Existing Release (SER)

Types Of Impact	Distances And Location	Concentration And Criteria
Groundwater (GW) plume → volatile organic substances or volatile petroleum substances	GW plume within 15ft of a building; Check land use	<ul style="list-style-type: none">• $\geq 10x$ Residential Volatilization Criteria (VolC)• $\geq 10x$ Industrial/Commercial VolC
GW plume → surface water	≤ 500 ft from surface water body	<ul style="list-style-type: none">• $\geq 10x$ Surface Water Protection Criteria• Release of a non-aqueous phase liquid (NAPL), any concentration

22a-134tt-1(f) Criteria & Land Uses



All current uses on the parcel must be taken into consideration when applying criteria. If any use of the parcel is for residential use, then residential criteria apply.



22a-134tt-1(g) Issuing Permits To Permitted Environmental Professionals

PEPs are identified on a spill cleanup contractor's permit, or through a GP to a company in the business of spill response

Ability to be listed as a PEP on a permit depends on:

- Training and education
- Duration and nature of the person's professional experience
- Any credentials or licenses held

Approved training and more detailed requirements are posted on the Department's website: <https://portal.ct.gov/dep/emergency-response-and-spill-prevention/emergency-response-and-spill-prevention>

22a-134tt-1(h) Maintaining a Release

(1) A person shall be maintaining a release when, regardless of fault for the creation of such release, such person:

- (A) Owns a parcel of land on or under which such release, or a portion of such release, is located; or
- (B) Has the right to possess a parcel of land, or the portion of a parcel of land, where such release is located,
 - *except that if any person with the right to possess a parcel or portion of a parcel obtains knowledge of a release on the parcel or portion of a parcel they possess, such person shall not be determined to be maintaining such release if such person has notified the owner of the parcel of such release and such release has been reported to the department if such release is required to be reported pursuant to section 22a-134tt-3 of the RBCRs.*

22a-134tt-1(h) Maintaining a Release

Future training planned

(2) A release may be maintained by one or more persons.



(3) Any person maintaining *a release that has migrated* on or under the parcel or portion of a parcel owned or possessed by such person from a source on a different parcel may satisfy the cleanup standards sections of the RBCRs pursuant to section 22a-134tt-7(e) of the RBCRs.

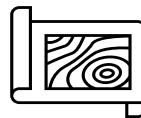
(4) A person shall *not be considered to be maintaining* releases on a parcel after such person no longer owns or has the right to possess such parcel or a portion of such parcel.

(5) A lender shall not be considered to be maintaining a release if such lender is exempt from liability pursuant to section 22a-452f of the Connecticut General Statutes

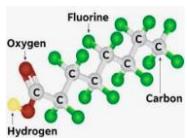
22a-134tt-1(i) RESIDENTIAL EXEMPTION, CATEGORICAL EXEMPTIONS, LOWER BOUNDS



Discovery of existing releases at owner-occupied single-family residences



Certain discoveries of PFAS in the land and waters of the state



Discovery of PFAS or road salt in a public or private drinking water supply



Incidental Releases

DISCOVERY OF EXISTING RELEASES ON PARCELS USED FOR RESIDENTIAL ACTIVITY

22a-134tt-1(i)(1)



Not considered "discovered" if:

- **Release is on a parcel used **only** for residential activity;**
- **Owner of that parcel is a person who obtained knowledge of the release and is occupant of single-family home;**
- **Not impacting another parcel; and**
- **Not an SER**

Example: house, single family, garden soil contaminated with pesticides at low levels.

DISCOVERY OF EXISTING RELEASE OF PFAS OR ROAD SALT IN PUBLIC OR PRIVATE DRINKING WATER WELL

22a-134tt-1(i)(2)

PFAS or chloride-based, inorganic salt (including road salt) is discovered in DWW, discovered by person who owns/operates the supply well:

- Upon discovery: **report to DEEP within 3 days**; and will not trigger requirement for Immediate Action.
- **Exception:**
 - DEEP investigated and found the parcel is the source

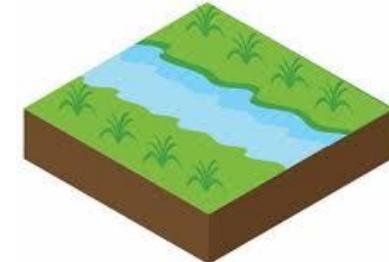


DEEP may issue Order to require remediation and provision of potable water

DISCOVERY OF EXISTING RELEASE OF PFAS

22a-134tt-1(i)(3)

Release **is** subject to RBCRs only when:



- Concentrations indicate PFAS source is other than atmospheric deposition, and it can be **reasonably expected that the source of such release is or was located on the parcel** where such release is discovered or another parcel that is or was owned or operated by the creator of such release
- To claim exemption:**
 - Report to DEEP within 365 days from discovery
 - Parcel must be Industrial or Commercial use



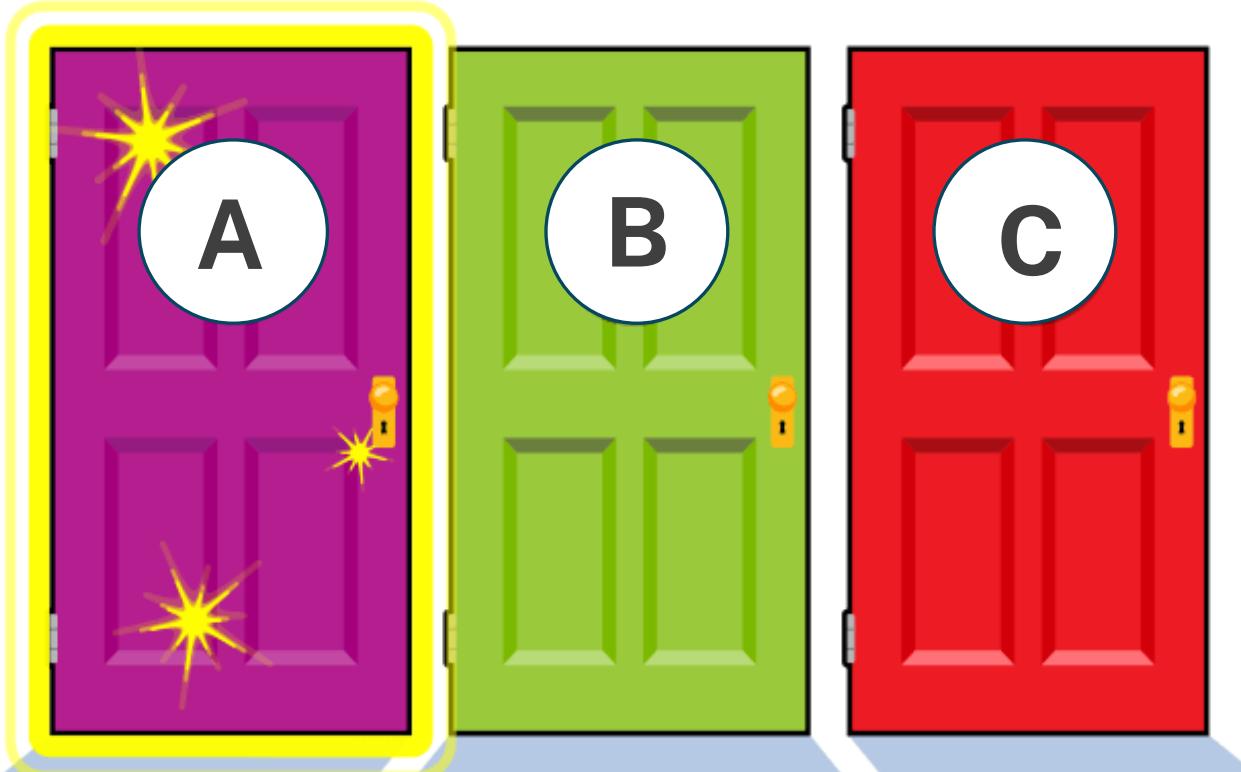
INCIDENTAL RELEASES

22a-134tt-1(i)(4) (A)-(C)

Three options where incidental releases are not determined to be a reportable release under RBCRs



- (A) specific exemptions
- (B) & (C) reported percentages of published soil criteria



INCIDENTAL RELEASES

22a-134tt-1(i) (4) (A)

The following are determined NOT a release under RBCRs



- (i) Trihalomethanes in GW believed to be *naturally occurring* or from *public water supply leak*.
- (ii) Byproducts of combustion from wood or charcoal used for *residential or recreation*.
- (iii) Substance from asphalt, paving or maintenance, provided *maintained for intended use*.
- (iv) Substances from utility poles or landscaping timbers serving *original intended* use.
- (v) Substances authorized by 22a-CGS, or auto exhaust, or application of fertilizer or pesticides per labeling

INCIDENTAL RELEASES CONT.

22a-134tt-1(i) (4) (B)

(B) lab data reports \leq 25% applicable criteria* in soil

- does **NOT** include VOCs or PFAS

*When compared to Appendix 2 (DEC) or Appendix 3 (PMC), or APS for soil criteria

\leq 25%

INCIDENTAL RELEASES CONT.

22a-134tt-1(i) (4) (C)

**(C) soil data \leq 50% criteria
AND**

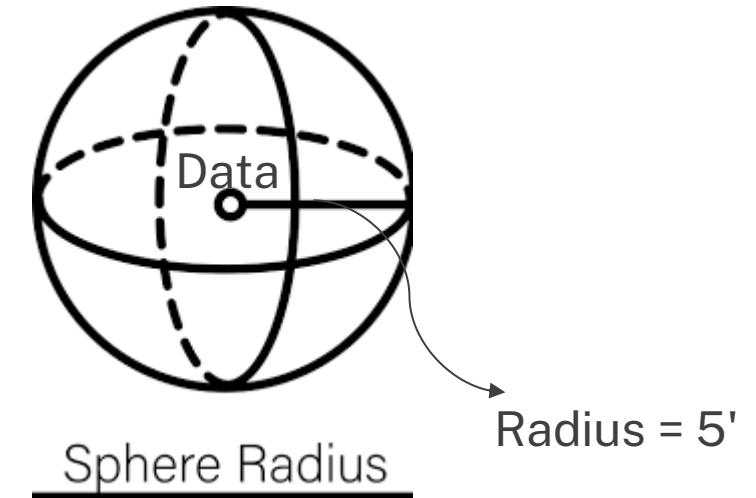
Source is known **AND**

- Minimum of 2 samples demonstrate concentration is reducing from source, **AND**
- Multiple lines of evidence show data point is the highest concentration in soil from the release

OR

(C) soil data \leq 50% criteria AND

Additional sampling confirms 5' radius of point (3 dimensional) remains \leq 50% criteria



CONDITIONAL EXEMPTION FOR INCIDENTAL SOURCES:

Sec. 22a-134tt-9 (b) (5) exemption from DEC

Sec. 22a- 134tt-9 (c) (5) (D) exemption from PMC

Sec 22a. 134tt-10 (f) exemption from Groundwater criteria*

- **Includes metals, petroleum hydrocarbons, or SVOCs not required to be remediated to criteria where:**
 - (A) incidental from normal operation of a vehicle
NOT refueling, repair or maintenance
 - (B) normal paving & maintenance of consolidated bituminous concrete when maintained for intended purpose

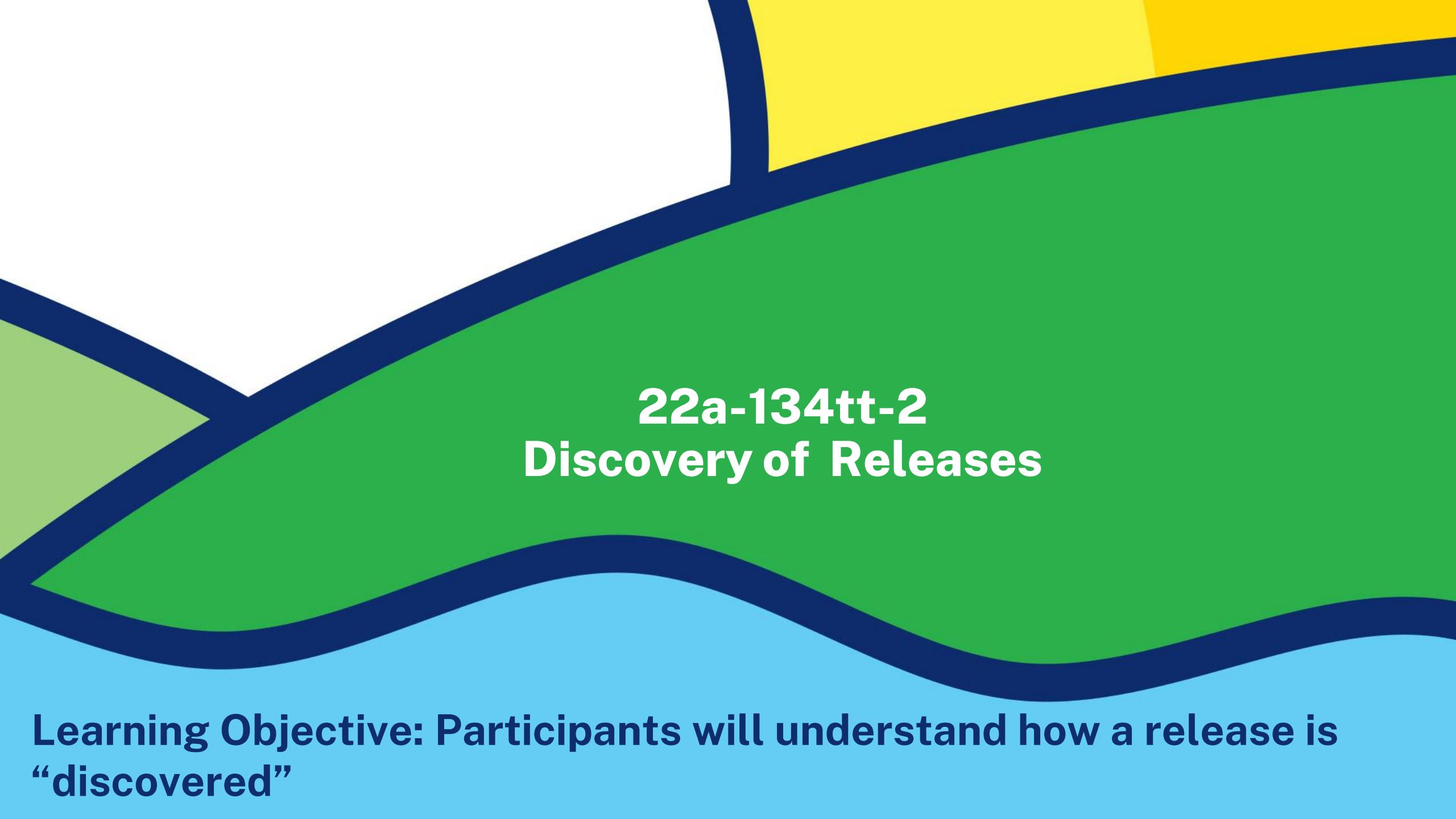
*also Trihalomethanes from drinking water

KNOWLEDGE CHECK

Review of Section 1



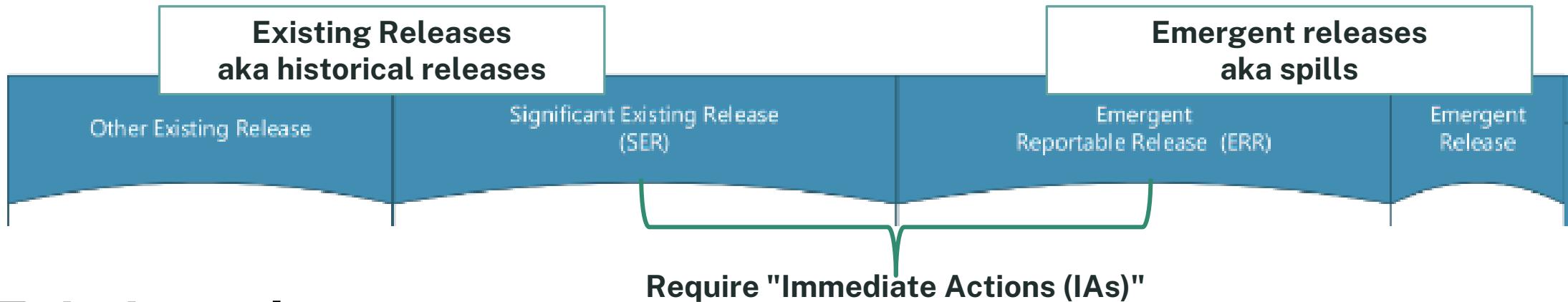
1. Who is the regulated entity in the RCBRs? (a) LEP assigned to release (b) Person who creates or maintains a release; (c) federal government
 - Answer: option (b)
2. Which of the following does NOT constitute a release? (select any that apply) (a) dumping or disposing into or onto the land and waters of the state; (b) automotive exhaust; (c) spilling and leaking; (d) application of fertilizer or pesticides consistent with their labeling
 - Answer: options (b) and (d)
3. How are Emergent Reportable Releases (ERRs) identified? (a) through historical environmental reports; (b) multiple lines of evidence; (c) observed change in conditions; (d) based on the laboratory reporting limit
 - Answer: option (c)



22a-134tt-2 **Discovery of Releases**

Learning Objective: Participants will understand how a release is “discovered”

Types of releases



Existing releases

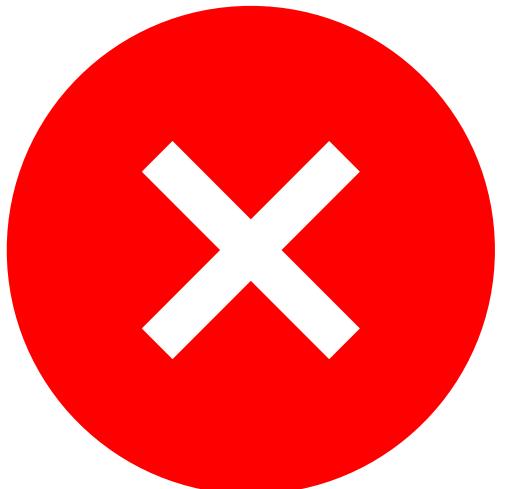
- **Discovered when knowledge is obtained:** lab results, multiple lines of evidence
- **Reporting** timelines varies based on condition type
 - Dangerous conditions - SERs - require Immediate Actions (IAs)
 - Other existing releases (that are not SERs):
 - reporting concentration and time ≠ SERs ; generally, more time is available

Emergent reportable releases

- **Discovered when a change in conditions is observed**
- Reportable under the Release Reporting Regulations (RRR) - section 22a-450 of the RCSA (exceptions apply)
 - ERRs always require IAs; all emergent releases must be addressed

DISCOVER AND REPORT... EVERYTHING?

NO



Existing releases: are **not** discovered if the only evidence is data available or generated before the date the RBCRs are **effective**.

Regulated Underground Storage Tank releases are **not** a RB Process "Discovery." 22a-134tt-2(d)

Naturally occurring metals: Certain metals found in soil samples are considered "**naturally occurring**" and **not** evidence of a release.

Incidental releases: the presence of certain substances in certain situations are considered "**incidental**" and not evidence of a release.

Public Roadways: Persons responsible for the maintenance of public roadways are not considered to be maintaining releases in certain circumstances

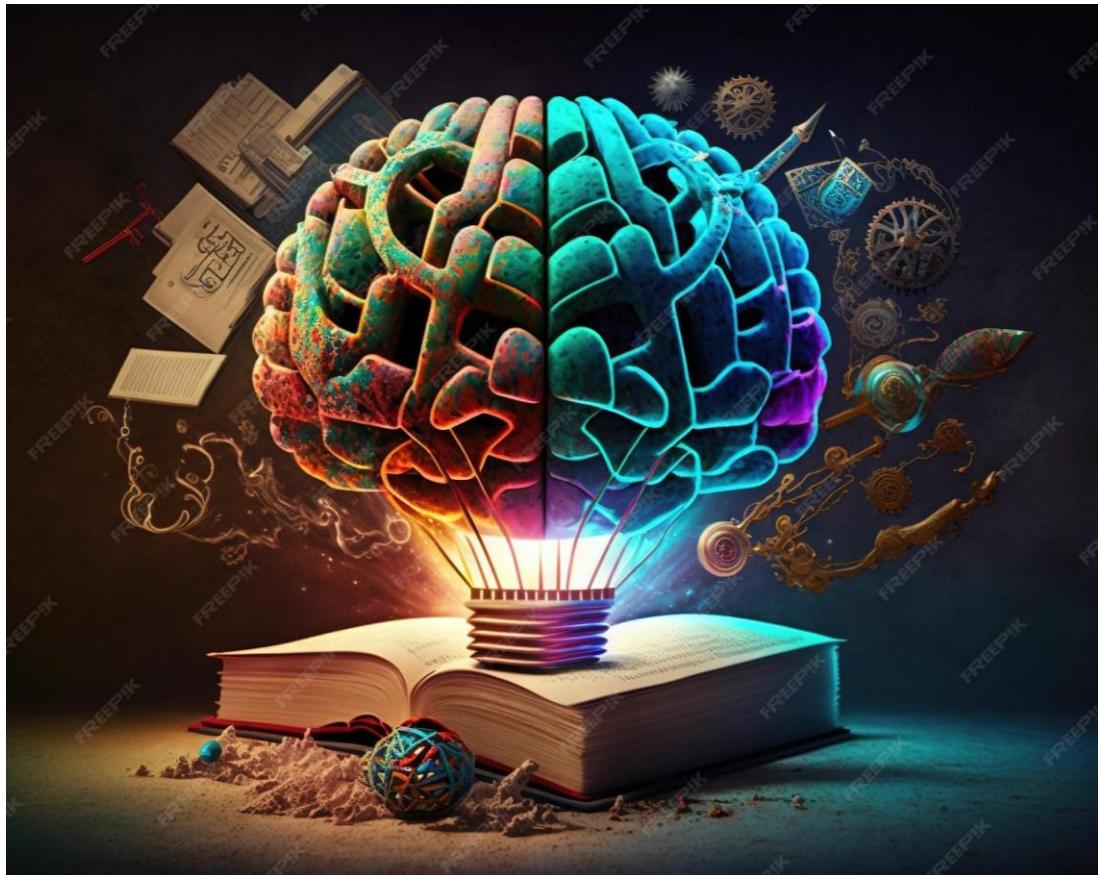
THE FOLLOWING ARE NOT RELEASES UNDER RBCRS.



These are reportable under RCSA 22a-450-1 through 6, but not considered releases to the land and waters of the state so are not subject to the RBCRs:

- Release to air
- Release to a secondary containment system within a structure
- Release outside a structure to a secondary containment system if release does not contact soil
 - E.g., an above ground storage tank used for secondary containment
- Release is inside a structure and does not contact soil and is removed within 2 hours of discovery

22a-134tt-2 Discovery of Existing Releases



Knowledge based

- Becomes aware of the results of laboratory analysis of soil, groundwater, sediment or soil vapor that indicate concentrations of substances above laboratory reporting limit;
- Becomes aware of the observed presence of non-aqueous phase liquid; or
- In course of investigation, becomes aware of multiple lines of evidence:
 - Use of the area; field screening results; staining of soil, concrete floors or pits; odors; indoor air samples; presence of non-native materials such as asphalt, etc.

DISCOVERY OF EXISTING RELEASES - 22a-134tt-2

• **Existing releases discovered by others – 22a-134tt-2(b)**

- “If characterization of an existing release [...] has identified the source of such release, and information regarding such characterization, indicating concentrations of such substances above the laboratory reporting limit, is provided to any person who would be considered to have created or be maintaining a release by the person performing such characterization, the person who receives such notice shall be presumed to have created or be maintaining a release.”
- “Such presumption may be rebutted through characterization of the area from which such release is believed to be emanating.”

DISCOVERY OF RELEASES



- **Discovery of an existing release**

- **Filing cabinet exemption:** release shall not be deemed discovered if the only evidence of such release is data available or generated before the date the RBCRs are effective.



DISCOVERY OF RELEASES

- **Naturally occurring metals at the time of discovery – 2(f)**

There are several methods for determining if metals concentrations represent natural background:

- **Method 1 – Direct comparison of a sample result to a default “low” value in § 2(f)**
- **Method 2 – Assess natural background concentrations outside the release area**
 - 3 Samples – if metals concentrations are between the default “low” and “high” values**
 - 5 Samples* – if metals concentrations are between the default “high” value and the Res DEC**
 - 7 Samples* – if metals concentrations are above the Res DEC (requires DEEP approval)**
- *require elimination of outliers from the data set.**
- **Method 3 – Use another method of determining natural background (requires DEEP approval)**

NATURALLY OCCURRING METALS

Selected Metals	LEP Implemented			Commissioner Approval		
	Reference Metal	Low Value (mg/kg)	High Value Cap (mg/kg)	Res DEC Cap (mg/kg)	Metals > Res DEC	Use a Different Method
		Direct Comparison	3 Samples	5 Samples	7 Samples	
Arsenic		3	6	10	TBD	TBD
Barium		385	756	4700	TBD	TBD
Cadmium		ND < 0.1	0.3	34	TBD	TBD
Chromium		31	60	100 (Cr ⁶)	TBD	TBD
Copper		17	45	2500	TBD	TBD
Lead		18	27	400	TBD	TBD
Mercury		0.03	0.08	20	TBD	TBD
Nickel		13	36	1400	TBD	TBD
Selenium		ND < 0.2	0.8	340	TBD	TBD
Silver		ND < 1	ND < 1	340	TBD	TBD
Zinc		44	104	20000	TBD	TBD

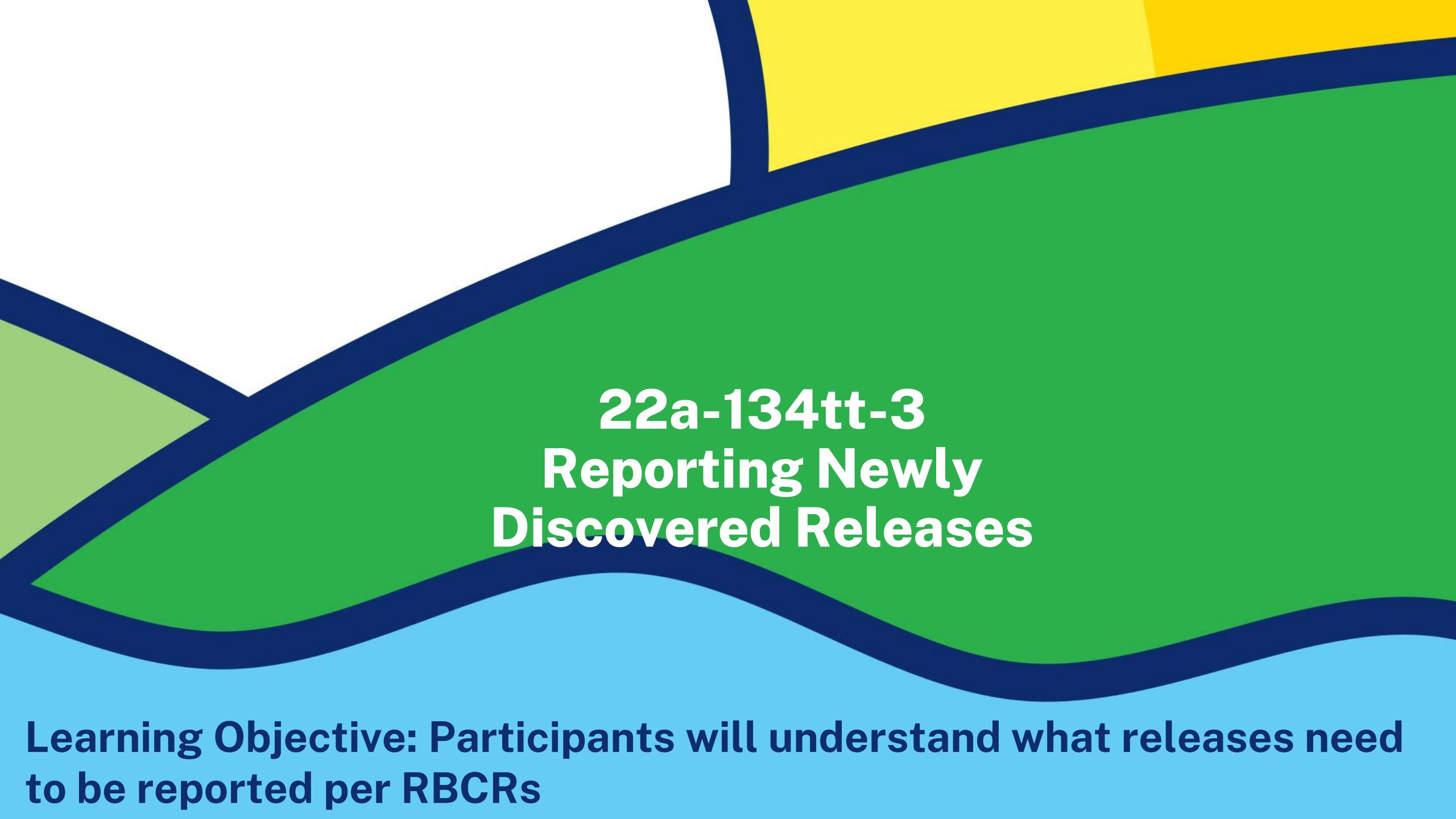
TBD = to be determined through investigation

KNOWLEDGE CHECK



Review of Section 2

1. How many methods are described in the RCBRs for determining if metals concentrations represent natural background? (a) 5; (b) 12; (c) 3; (d) 2
 - Answer: option (c)
2. Which of the following is NOT considered knowledge in Discovery? (a) lab report post 3/1/26; (b) lab report pre 3/1/2026; (c) NAPL; (d) Field readings at stained soil near an outfall
 - Answer: option (b)
3. True or False: An incidental release means you need to report a discovered release, but after reporting, take no further actions. (a) True; (b) False (c) Sometimes
 - Answer: option (c) *(corrected)*



22a-134tt-3

Reporting Newly Discovered Releases

Learning Objective: Participants will understand what releases need to be reported per RBCRs

Emergent Reportable Release (ERR)

- subset of the releases required to be reported under 22a-450
- all ERRs are reportable under 450, not everything reportable under 450 is an ERR

Is it reportable under 450?



Yes

It may be an ERR



22a-450 of the RCSA are the **Release Reporting Regulations (RRRs)**
Link [Connecticut Department of Energy & Environmental Protection](https://eregulations.ct.gov/eRegs/Portal/Browse/RCSA>Title_22aSubtitle_22a-450/</p></div><div data-bbox=)

22a-134tt-3 REPORTING NEWLY DISCOVERED EXISTING RELEASES

Upon discovery of an existing release, a report of such release shall be provided to the commissioner by a person who created or is maintaining the release within the applicable time period.

- ✓ SERs timelines
 - Discovery by Creator or Maintainer
 - Discovery by other Person
- ✓ Other reportable existing releases (non-SERs)
- ✓ Report contents and process
- ✓ Reports of Existing Releases Discovered on Transfer Act Sites

Future Training



REPORTING TIMELINES FOR SERs

Note - "Person" needs consent from C/M to access the area.

Timelines for SERs	SER in DWW	SER not in DWW
C/M → DEEP	24 hours	72 hours
Agent of C/M → C/M C/M → DEEP	6 hours 24 hours	1 business day 72 hours
Agent of 3rd Party → 3rd Party 3rd Party → C/M C/M → DEEP	1 business day 6 hours 24 hours	1 business day 1 business day 72 hours

" → " means notify

SER – Significant Existing Releases
C/M - Creator or Maintainer
DWW – drinking water well

REPORT REQUIRED AND TIMELINES FOR OTHER EXISTING RELEASES (NON-SERs)

Report within 120 days of discovery	Report within 365 days of discovery
<p>There is a numeric criteria or APS:</p> <ul style="list-style-type: none">➤ Concentration greater than 2x criteria for soil, GW	<p>There is a numeric criteria or APS:</p> <ul style="list-style-type: none">➤ Concentration less than or equal to 2x criteria for soil, GW
<p>Substance without numeric criteria or APS, and an APS cannot be calculated:</p> <ul style="list-style-type: none">➤ Any concentration is detected	---
<p>If the detected substance(s) are constituent components of oil or petroleum in soil:</p> <ul style="list-style-type: none">➤ Vol of soil $\geq 2 \text{ yd}^3$.	---
<p>NAPL in a GW MW, excavation, or subsurface structure</p> <ul style="list-style-type: none">➤ NAPL thickness $\geq 1/8 \text{ in}$	---

REPORTING OF EXISTING RELEASES

Do not report

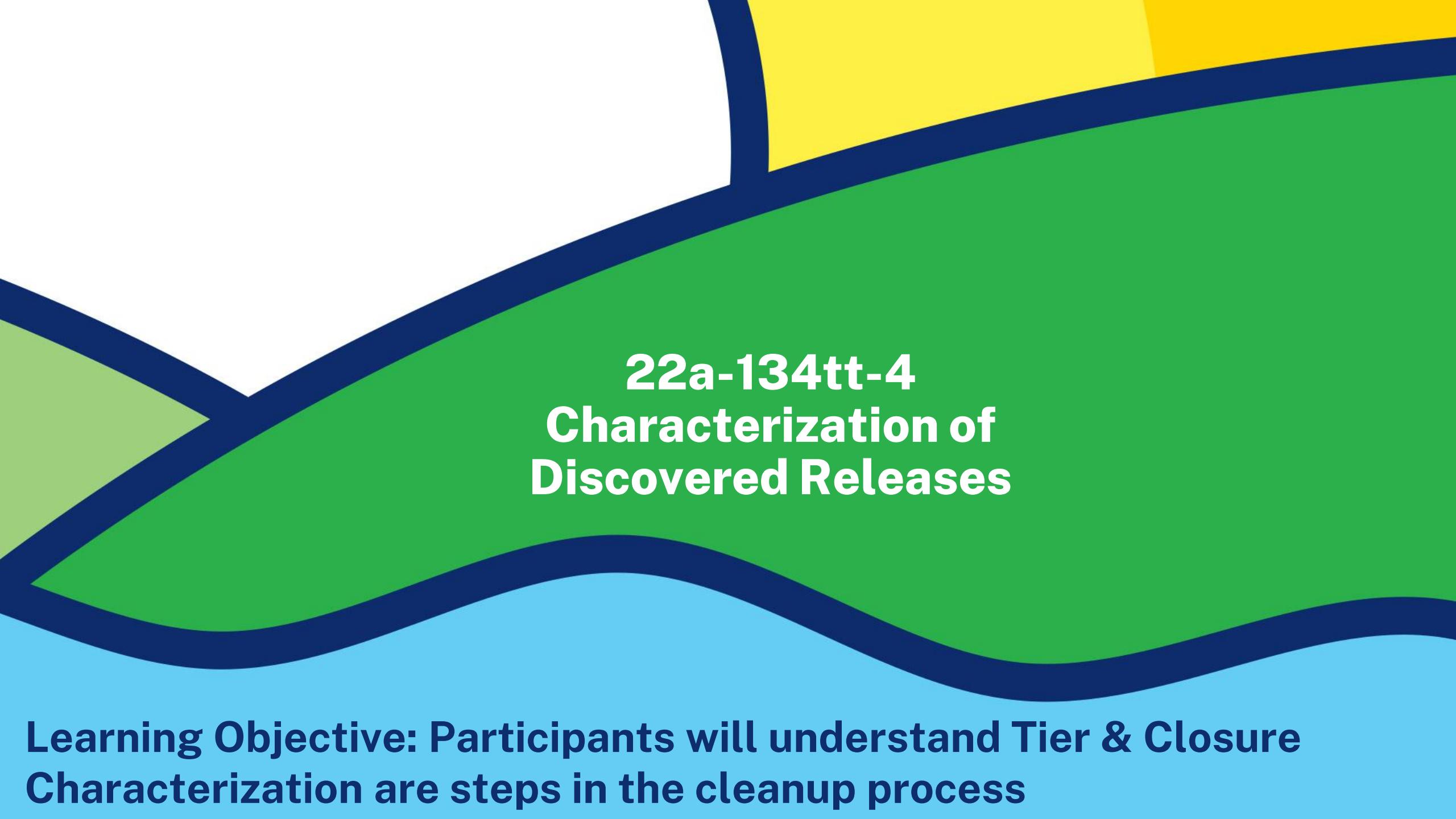
If the release is remediated to the standards before the deadlines specified in previous slide and Release Remediation Closure Report has been verified by an LEP

KNOWLEDGE CHECK



Review of Section 3

1. Do all releases reportable under 450 constitute an ERR? (a) yes; (b) no
 - Answer: option (b)
2. A SER condition in soil of a substance other than NAPL discovered by the Creator/Maintainer shall be reported to DEEP within how many hours after the discovery of such release? (a) 24 hours; (b) 72 hours; (c) 56 hours; (d) 48 hours
 - Answer: option (b)
3. An existing release of a substance other than oil or petroleum is discovered in groundwater at concentration below 2 times the applicable numeric cleanup criteria. What is the reporting timeline for this scenario if the release is not remediated within 365 days after the discovery? (a) Report within 120 days of discovery; (b) This release is not reportable; (c) Report within 365 days of discovery; (d) Report within 72 hours of discovery
 - Answer: option (c)



22a-134tt-4

Characterization of Discovered Releases

**Learning Objective: Participants will understand Tier & Closure
Characterization are steps in the cleanup process**

CHARACTERIZATION – RELEASE SPECIFIC

Characterize the release based on the nature and extent

Each release must be characterized

CHARACTERIZATION REQUIRED

22a-134tt-4(a)

Characterization relies on the Conceptual Site Modeling process to determine the nature and extent of a release prior to determining the appropriate remedial action.

Various degrees of characterization are also used to provide sufficient information to meet RBCR milestones:

- The Immediate Action (IA) section (22a-134tt-5) specifies the characterization necessary to carry out and comply with IAs.
- Tier characterization must be completed within 1 year of discovery to facilitate tiering.
- Closure characterization delineates the three-dimensional extent of a release and must be completed before verification/certification.
- **Release Characterization Guidance is available online!**

TIER CHARACTERIZATION

22a-134tt-1(a)(159)



Delineation of the nature and extent of each substance to the higher of:

50% of the applicable cleanup standard

or

The applicable laboratory reporting limit

OR

Demonstrate that each substance is present at background concentrations (see 22a-134tt-4).

Exceptions:

- Pesticides – Demonstrate they were applied consistent with labeling.
- Polluted Material – Demonstrate it is suitable to be managed by permit by rule as historically impacted material

CLOSURE CHARACTERIZATION

22a-134tt-1(a)(23)



Characterization of a release such that the horizontal and vertical extent is delineated to the points at which it is no longer detected

or

the extent of such release has otherwise been determined in a manner consistent with prevailing standards and guidelines.

Note: closure characterization is not necessarily the same as confirmatory sampling:

- Confirmatory sampling confirms meeting cleanup criteria.
- Closure characterization defines the extent of the release, not just the exceedances.

PREVAILING STANDARDS AND GUIDELINES: 22a-134tt-4(b)

The DEEP webpage contains protocols for characterization that are the prevailing standards and guidelines.

Following the guidance posted on the webpage will be sufficient for all purposes required by the RBCRs.

If an alternative standard is used, it needs to be described and submitted for DEEP review at the earliest of:

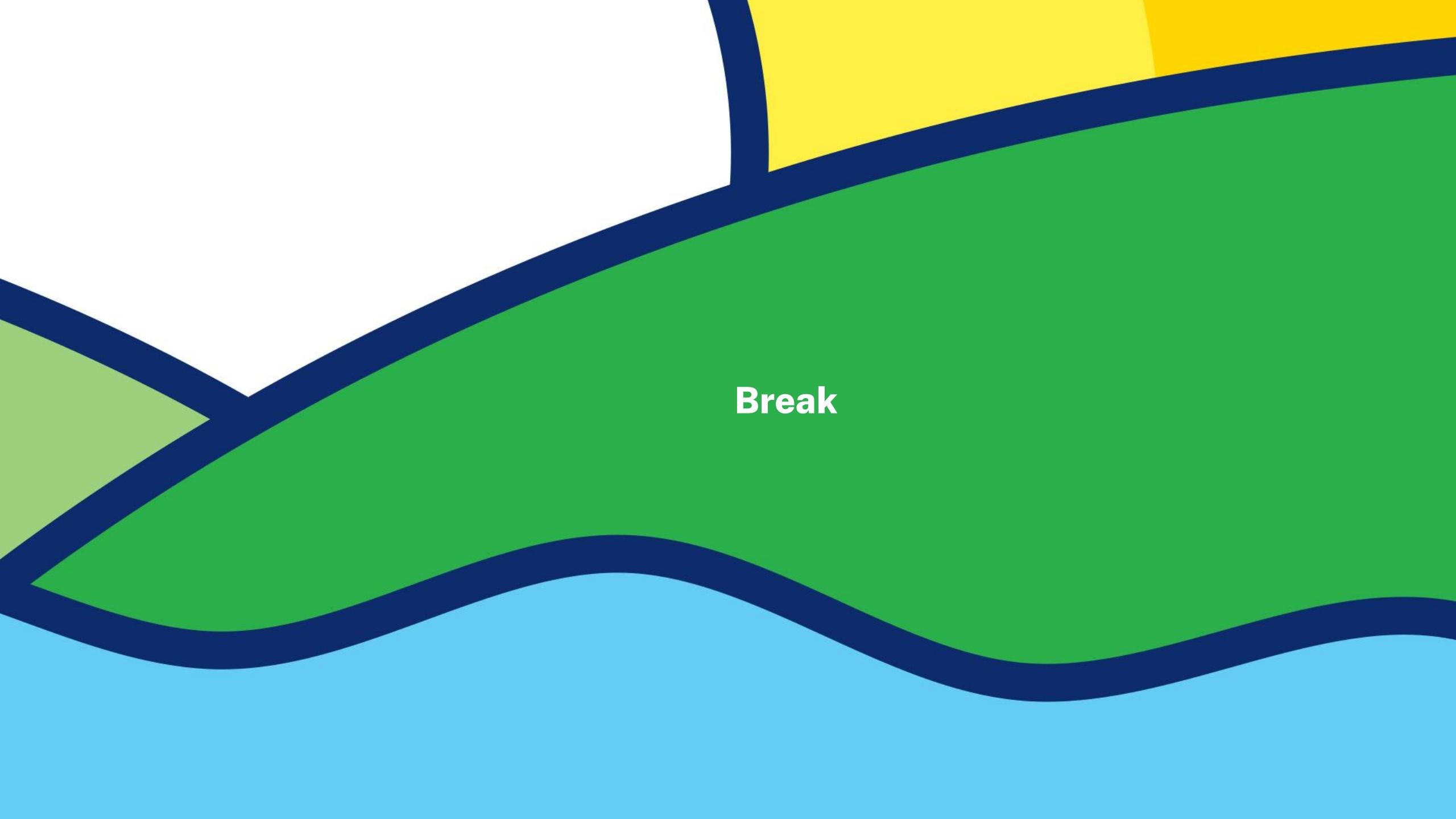
- IA completion (if required)
- Submission of closure report (if completed within 1/year)
- Tiering (if required)

KNOWLEDGE CHECK

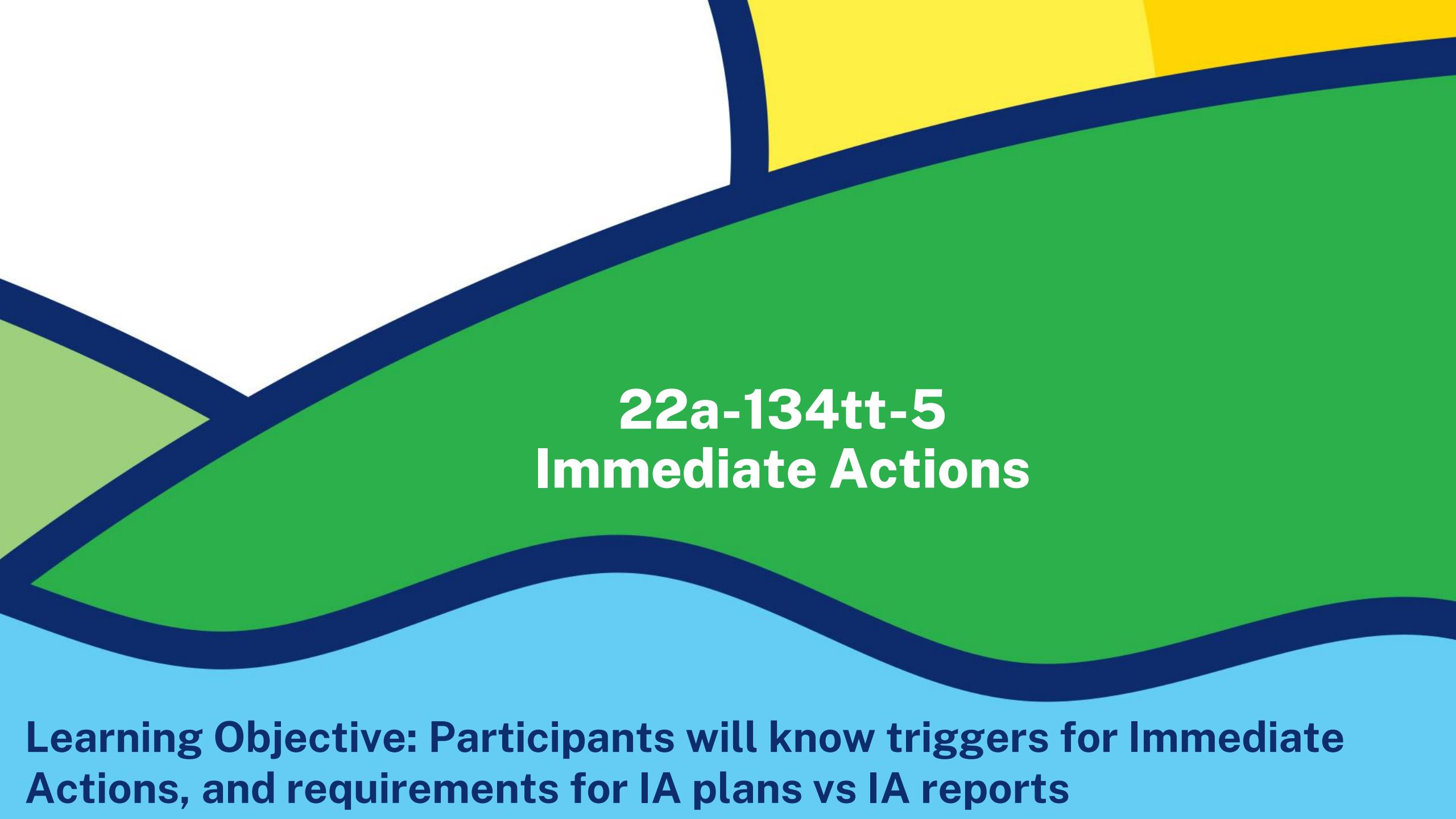


Review of Section 4

1. Which of the following is NOT a type of characterization specified in RCBRs? (a) Tier characterization; (b) Closure characterization; (c) Underground characterization
 - Answer: option (c)
2. True or False: Characterization is NOT required in the first 365 days following discovery until Tier Characterization is required. (a) True, (b) False
 - Answer: option (b)
3. True or False: If a release is discovered but not reportable, Characterization is not required. (a) True; (b) False
 - Answer: option (b)

The image features a central white rectangular area surrounded by a dark blue border. This central area contains the word 'Break' in a bold, black, sans-serif font.

Break



22a-134tt-5 **Immediate Actions**

Learning Objective: Participants will know triggers for Immediate Actions, and requirements for IA plans vs IA reports

IMMEDIATE ACTIONS (IAs)



What is an immediate action?

22a-134tt-5(d)

For the releases that pose a significant risk to human health and/or the environment, a rapid response is required to:

- Identify and eliminate source
- Remove the substance released
- Prevent migration
- Investigate, stabilize, contain, mitigate, remediate, or monitor

IMMEDIATE ACTIONS (IAs)

- **What types of releases require immediate actions [22a-134tt-5(a)]**
 - **Emergent Reportable Releases (ERRs)**
 - Release discovered based on an observed change in conditions (a.k.a. spills)
 - **Significant Existing Releases (SERs)**
 - Release causing one or more potential serious impacts to human health or the environment
- **When to begin immediate actions? [22a-134tt-5(c)]**
 - **ERR – not later than 2 hours**
 - **SER – the RBCRs specify actions for different types of releases that must be initiated once they are reported**
- **Characterization will generally be conducted concurrent with immediate actions**
- **Please check the RCBRs for IAs timelines and requirements.**

IMMEDIATE ACTIONS (IAs)

What types of releases require immediate actions?

Media	ERRs [-5(e)]	SERs [-5(f)]
Groundwater	Public or private drinking water well impacted	Public or private drinking water well impacted
	Groundwater within 500 ft of a drinking water well is impacted	Groundwater within 500 ft of a drinking water well is impacted above GWPC
	Volatile substances released to groundwater within a certain distance from a building	Volatile substances detected in groundwater > 10x the applicable Volatilization Criteria VolC (based on building use) within a certain distance from the building
Surface Water	Visible impact to surface water	Groundwater within 500 ft of surface water is impacted above 10x Surface Water Protection Criteria
Soil	Releases to soil	Impacted soil within the top 2 ft. > 15 or 30 times the applicable Direct Exposure Criteria depending on land use

IMMEDIATE ACTIONS (IAs)

What types of immediate actions are required?

Media	IA Condition	Immediate Actions	
		ERR [-5(e)]	SER [-5(f)]
Groundwater	Drinking water well impacted or at risk	Limit migration Well survey Well sampling Alternative potable water supply IA report (ERR); IA plan (SER)	
	Volatile substances in GW near a building	Ventilate building Prevent vapor migration IA plan	Ventilate building IA plan
Surface Water	Surface water threatened or impacted	Remove release Possible sediment sampling IA report	IA report
Soil	Soil impacted	Remove release IA report	Remove/mitigate IA plan

IMMEDIATE ACTIONS (IAs)

If compliance with cleanup standards is not achieved, then meet an IA Transition Point and submit an Immediate Action Report:

Media	IA Condition	IA Transition Point	
		ERR [-5h](1)]	SER [-5(h)(2)]
Groundwater	Drinking water well impacted	<ul style="list-style-type: none"> With or without treatment: 4 quarters < criteria or Water main connection 	
	Volatile substances in GW near a building	<ul style="list-style-type: none"> Mitigation installed (ELUR not recorded yet) 9 monthly samples meet TACs 	
	Drinking water well threatened	<ul style="list-style-type: none"> Enter cleanup tier w/ DEEP oversight (Tier 1A) 	
Surface Water	Surface water threatened or impacted	<ul style="list-style-type: none"> Source removed/mitigated to max. extent practicable No visible sheen 	<ul style="list-style-type: none"> Tier characterization Enter cleanup tier
Soil	Soil impacted	<ul style="list-style-type: none"> Removal to max. extent practicable Direct exposure risk mitigated 	<ul style="list-style-type: none"> Direct exposure risk mitigated

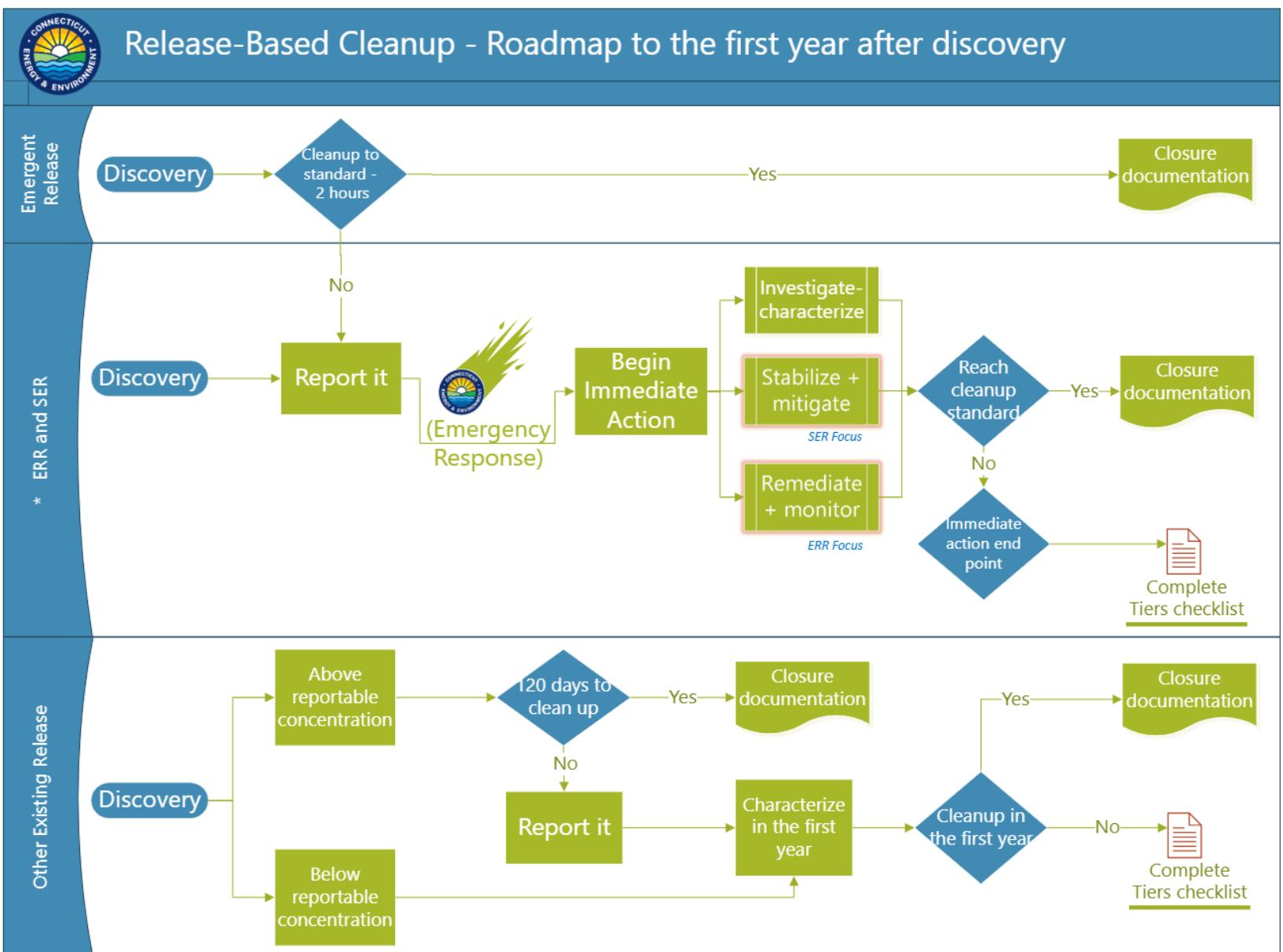
IMMEDIATE ACTIONS (IAs)

Information to be included in IA Plans and Reports is spelled out in the regulations

IA Plan [-5(j)]	IA Report [-5(k)]
<ul style="list-style-type: none">Propose schedule for achieve an IA transition point or cleanup standardProvide information required by the specific IAs	<ul style="list-style-type: none">Identify IA transition point or cleanup standard achievedProvide sufficient supporting characterization and/or confirmatory sampling detailsIdentify any remaining characterization necessary to satisfy Section 4 of the RBCRs (characterization section)Identify any remaining remediation required to achieve cleanup standards

Road map to first year

Upon discovery
of a release,
what happens
in the first year?



* Emergent Reportable Release; Significant Existing Release

Flowchart shapes



KNOWLEDGE CHECK



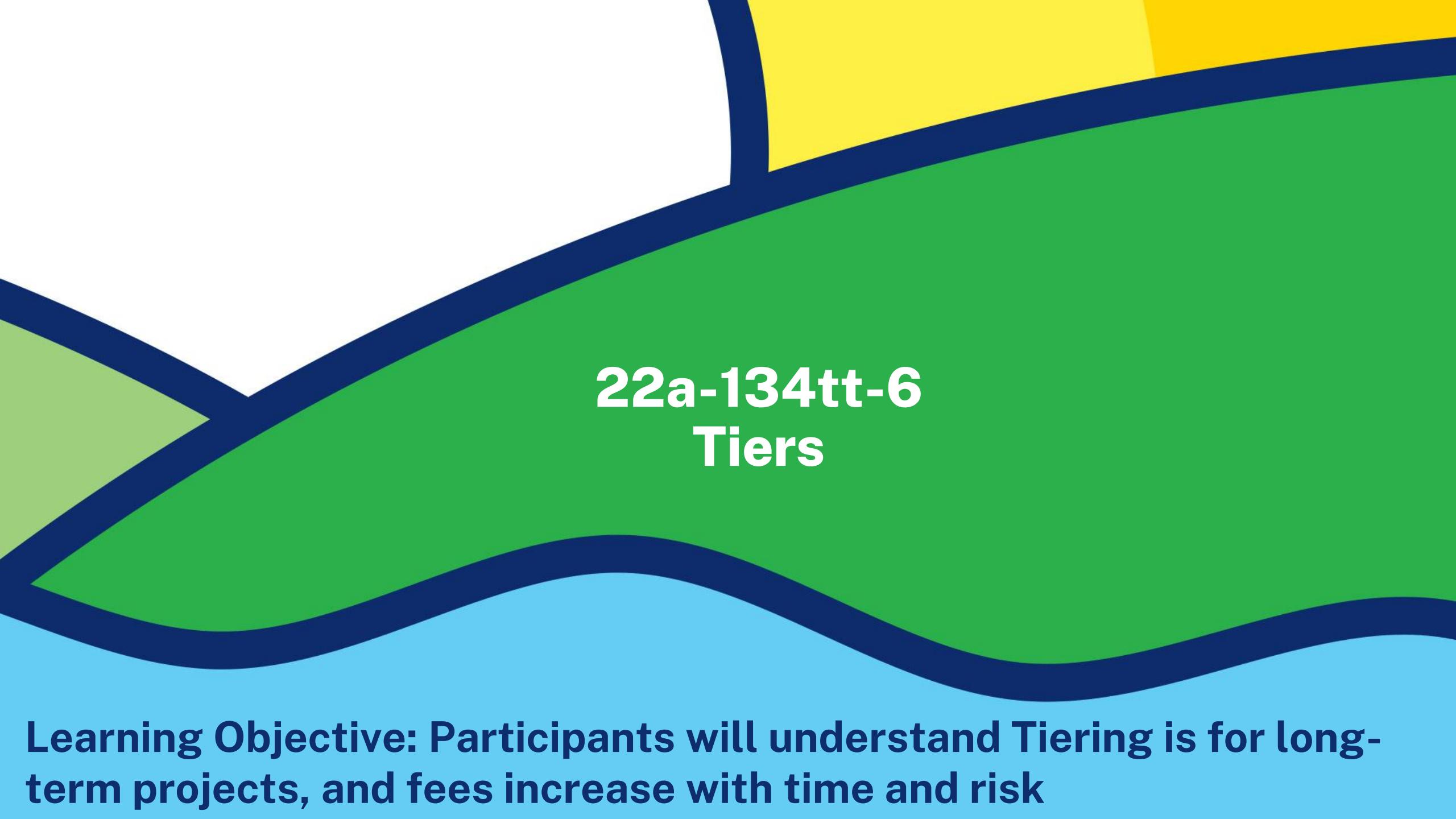
Review of Section 5

1. What is the expected timeline to begin immediate actions for ERRs? (a) not later than 2 days; (b) not later than 2 months; (c) not later than 2 hours; (d) not later than 2 years
 - Answer: option (c)
2. When is an IA plan required for an ERR? (a) volatile substances in GW near a building (b)drinking water is impacted; (c) impact to surface water; (d) an IA plan is always required for ERRs
 - Answer: option (a)
3. Which of the following includes a proposed timeline of action(s) to be taken? (a) IA plan; (b) IA report
 - Answer: option (a)
4. Which of the following does not constitute a SER? (select all that apply) (a) public drinking water well contamination; (b) Groundwater plume within 500ft from a drinking water well; (c) contaminated soil at trace levels screened from 5-8 ft from the ground surface; (d) groundwater plume within 1200 ft from surface water.
 - Answer: options (c) and (d)

Q&A from Chat



**Break;
Please Return by 1 PM**

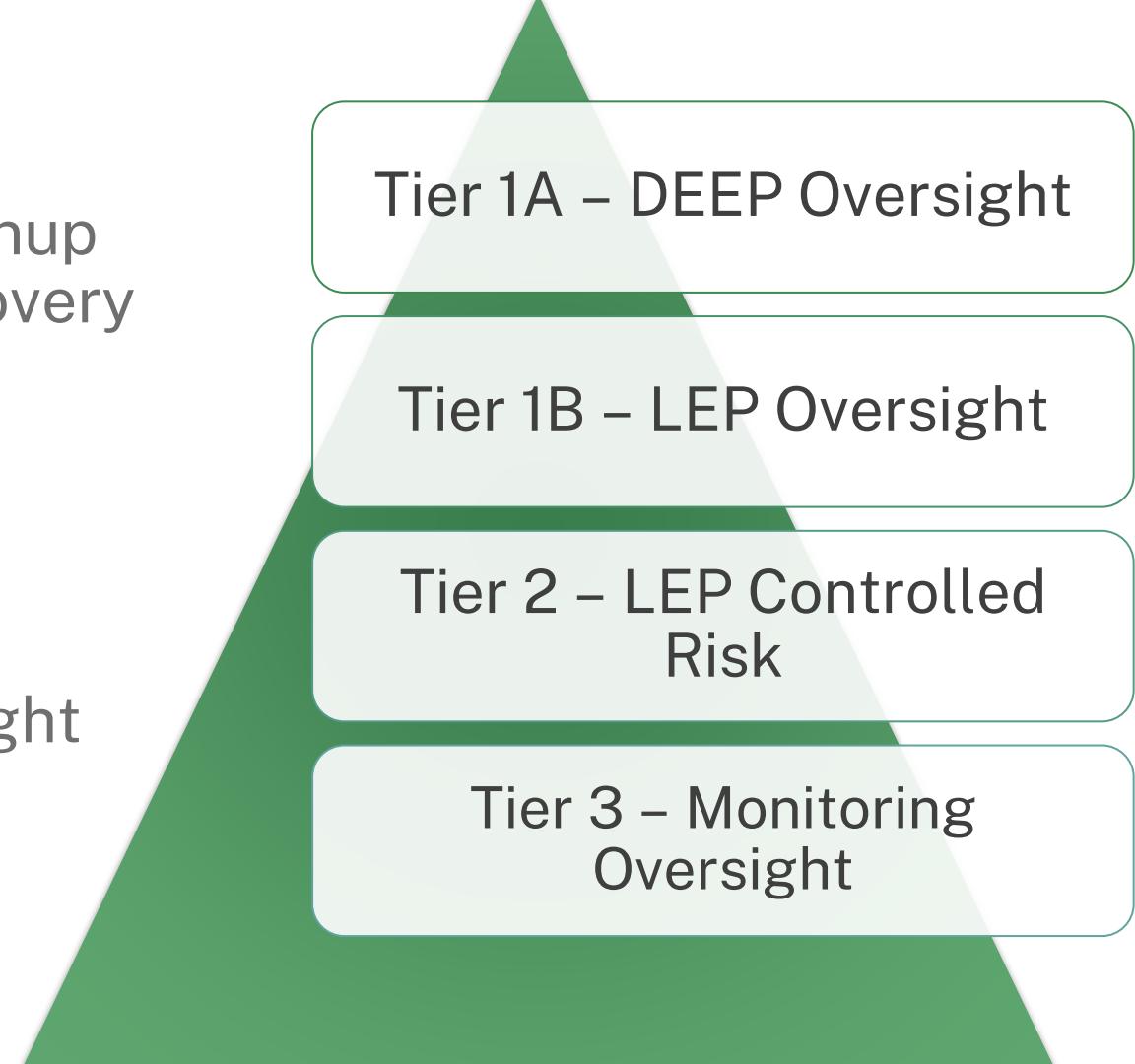


22a-134tt-6 Tiers

Learning Objective: Participants will understand Tiering is for long-term projects, and fees increase with time and risk

TIERS

- For releases not in compliance with Cleanup Standards Sections within 1-year of discovery
- Goal is to incentivize cleanup
- DEEP/LEP oversight increases with risk
- Tiering by an LEP
- Different costs and fees based on oversight required; fees continue because of the continued need to track



Tier 1A – DEEP Oversight

Tier 1B – LEP Oversight

Tier 2 – LEP Controlled Risk

Tier 3 – Monitoring Oversight

TIER DETERMINATION

Tier Checklist

Site Address, City/Town

Part III: Tier Determination

Tier 1A

Answer the following questions. Any box checked in the Tier 1A Indicator column at right designates the release as Tier 1A.

1. Receptors are known and documented

1a. A scoping level ecological risk assessment has been completed.

1b. A drinking water receptor survey has been completed.

1c. A vapor intrusion receptor survey has been completed.

2. Does/did the release require Immediate Action under [ref. TBD]

2a. Immediate Action requirements have been met

3. Tier characterization is complete.

	Tier 1A Indicator
1a. A scoping level ecological risk assessment has been completed.	<input type="checkbox"/> Yes
1b. A drinking water receptor survey has been completed.	<input type="checkbox"/> Yes
1c. A vapor intrusion receptor survey has been completed.	<input type="checkbox"/> Yes
2a. Immediate Action requirements have been met	<input type="checkbox"/> No (Skip to line 3) <input type="checkbox"/> Yes (Proceed to 2a)
3. Tier characterization is complete.	<input type="checkbox"/> Yes

If any boxes in this column are checked, stop here. This release is Tier 1A. Otherwise proceed to Tier 1B determination.

Tier Determination is performed by an LEP completing a form with yes/no questions within the REACT portal

Future training planned



REACT training begins on February 5th

TIER ASSIGNMENT

Releases must be either **CLOSED** through cleanup (Release Remediation Closure Report)

OR

be assigned to a **CLEANUP TIER** (within 1 year from the date of discovery)

"Date of Tier Assignment" = day a tier assignment is first submitted to DEEP. This date remains unchanged throughout the remainder of the life of the release.

- NOTE: this "defined term" is not found in the definition section, it is in Tiers section: 22a-134tt-6(c)(5)

To assign a release to a tier:

- Complete a Tier Checklist in REACT (verified by an LEP)
- Upload characterization information documentation
- Pay fee (online, using e-payment portal linked in REACT)

TIER ASSIGNMENT (CONT.)

A release:

Can be assigned/re-assigned to a **lower risk tier at any time** if the risk has been reduced

Must be assigned to a higher risk tier **within 30 days** of determining that previously unaccounted for risks to human health or the environment exist

Can be assigned to Tier 3, provided that:

- Soil has been cleaned up to standards (and any supporting documentation has been provided)
- GW plume documented to be in diminishing state with no need for further remediation
- CSM supported by sufficient characterization data
- GW monitoring schedule (and name/contact info for who will be conducting) is provided to the Commissioner

TIERING SYSTEM

Increased Risk



Tier 1A. DEEP Oversight

- Highest-risk releases. DEEP lead.
- Unknown risks to receptors; programmatic noncompliance.
- Complete closure or re-tier 1 year after Date of Tier Assignment.

Tier 1B. LEP Oversight Receptor Risk

- Known risk to receptors (drinking water, vapor) must still be addressed or scoping/screening eco not completed
- RAP not completed
- Complete closure or re-tier 2 years after Date of Tier Assignment

Tier 2. LEP Oversight Controlled Risk

- Controlled risk, no receptor pathways
- Complete closure or re-tier 4 years after Date of Tier Assignment

Tier 3. LEP/other EP Oversight

- Monitored Natural Attenuation (MNA) only
- Complete closure or re-evaluate effectiveness of MNA 5 years after Date of Tier Assignment

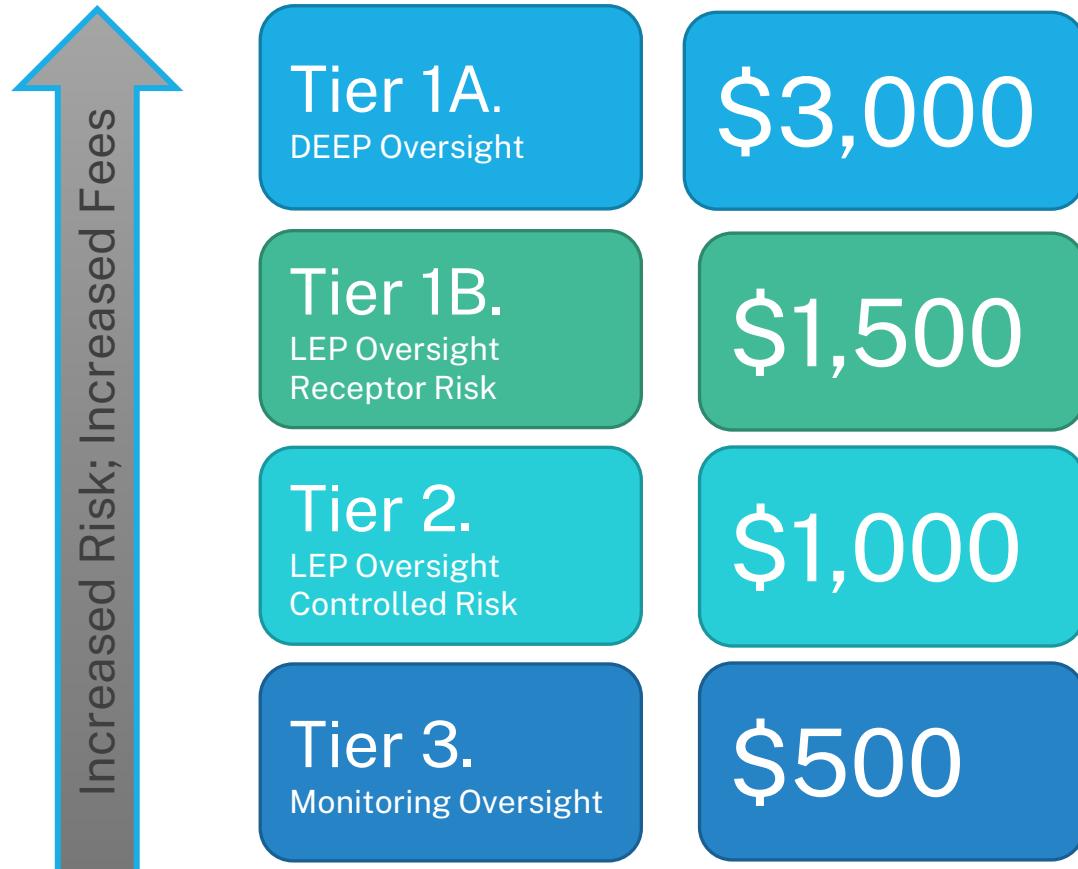
TIERS SCHEDULE EXTENSION

Creator/maintainers may submit an extension request for tier deadlines

- Request/self-implemented notice must be received at least 30 days before deadline
- Must pay fee equal to the annual fee.
- LEP gets 1 approval (self-implemented with notice, avoiding need to request Commissioner approval) per case when the release is assigned to either Tier 1B or Tier 2.
- Commissioner approval for 1A and after LEP implemented for 1B and 2
- Tier 3 : no fee for a 5-year extension of time approved ; provided groundwater plume demonstrated to continue to be in a diminishing state and is naturally attenuating at a rate consistent with the conceptual site model

TIERS FEES

Fees due at time of tier assignment*



*These are also the base fees

Annual Fees are due on the anniversary of the Date of Tier Assignment annually until the release is closed; may continue if conducting long-term monitoring

Annual Fee =
$$[\text{Base Fee}] + (0.1 * [\text{Base Fee}] * [\text{\# years since Date of Tier Assignment}])$$

TIER FEE REDUCTIONS

Certain entities are entitled to a fee reduction.

- **100% reduction for the owner of an owner-occupied single-family home**
- **50% reduction for:**
 - An owner of residential properties with 4 or fewer dwelling units
 - The state or any of its political subdivisions
 - Any 501(c)(3) - federal tax exemption of nonprofit organizations
 - Any municipal economic development agency under chapter 130 or 132 of CGS
 - Any person receiving federal, state, or municipal brownfields fundings for investigation/remediation

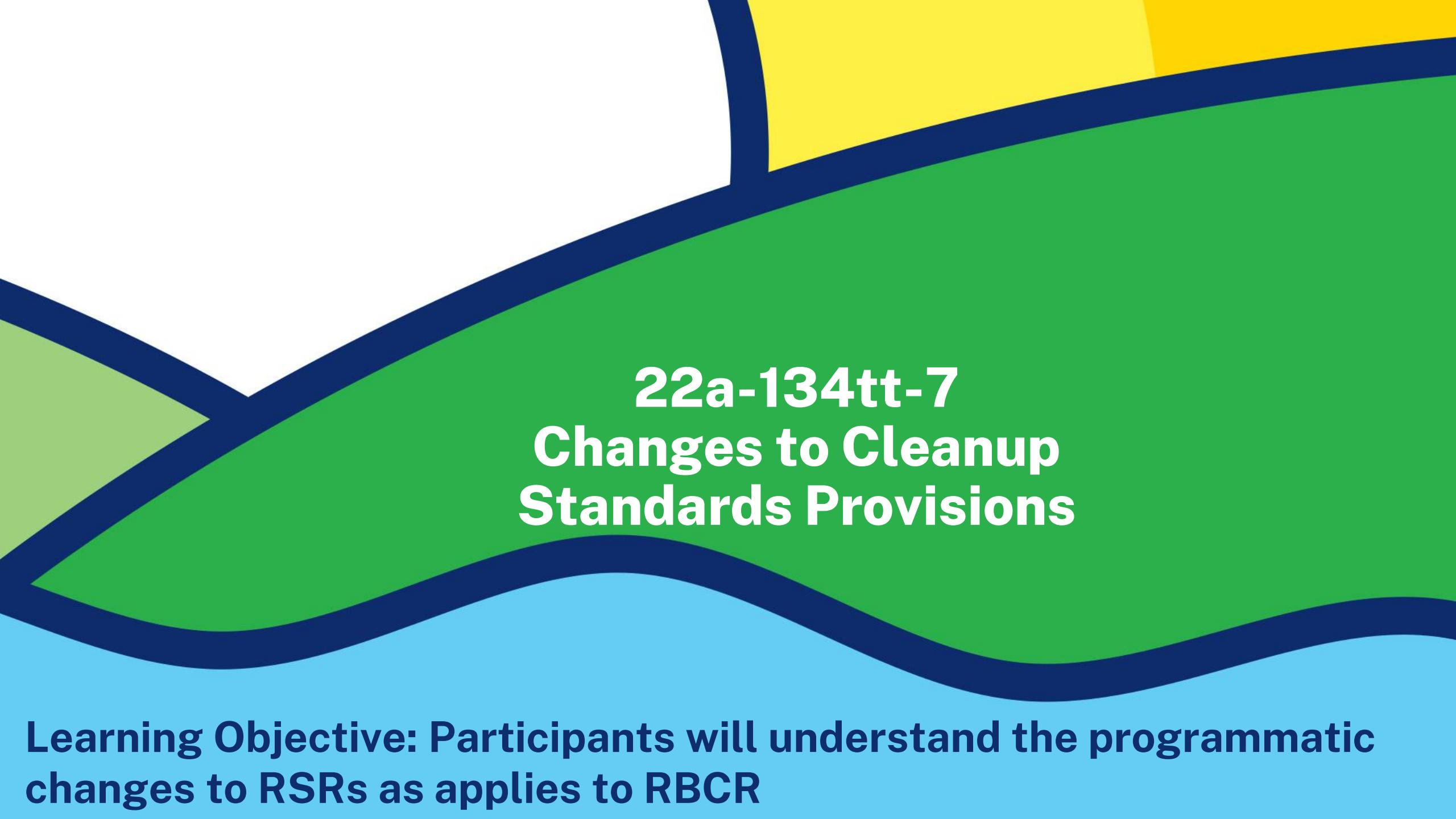


KNOWLEDGE CHECK

Review of Section 6



1. Which Tier is DEEP oversight? (a) Tier 1A; (b) Tier 1B; (c) Tier 2; (d) Tier 3
 - Answer: option (a)
2. What is the definition of “date of tier assignment”? (a) date of discovery of a release; (b) day a release is characterized; (c) day a tier assignment is first submitted to DEEP; (d) day the IA report was submitted to DEEP
 - Answer: option (c)
3. True or False: An LEP can only move to a lower Tier on the anniversary of date of Tier assignment, even if the risk has lowered. (a) True; (b) False
 - Answer: option (b)
4. Which Tier allows for LEP-implemented schedule extension requests? (a) Tier 1A and Tier 1B; (b) Tier 1B and 2; (c) Tier 1B and 3; (d) Tier 2 and 3.
 - Answer: option (b) Tier 1B and 2



22a-134tt-7

Changes to Cleanup Standards Provisions

Learning Objective: Participants will understand the programmatic changes to RSRs as applies to RBCR

ENVIRONMENTAL USE RESTRICTION CHANGES



Sec. 22a-134tt-9 (b)(2) - Adds two new Direct Exposure Criteria EURs

Both exclude PCBs

Both can be implemented under an ELUR or NAUL

***A conservation easement can be used in place of an EUR; for local, state or federal government**

Please go to the web for all EUR related documents – most will have updates for RBCR references

MANAGED MULTIFAMILY RESIDENTIAL RESTRICTION

Residential activity in subject area is limited to managed multifamily residential activity;

Parcel is managed by an association or professional property management company;

Governing documents enforceable by the association or professional property management company:

Prohibit residents from digging in soil; and

Only allow active recreation on areas with impervious surface.

Please go to the web for all EUR related documents – most will have updates for RBCR references

PASSIVE RECREATION RESIDENTIAL RESTRICTION



Residential activity in *subject area* is limited to passive recreation activity; and

Entire *parcel* is restricted by a:

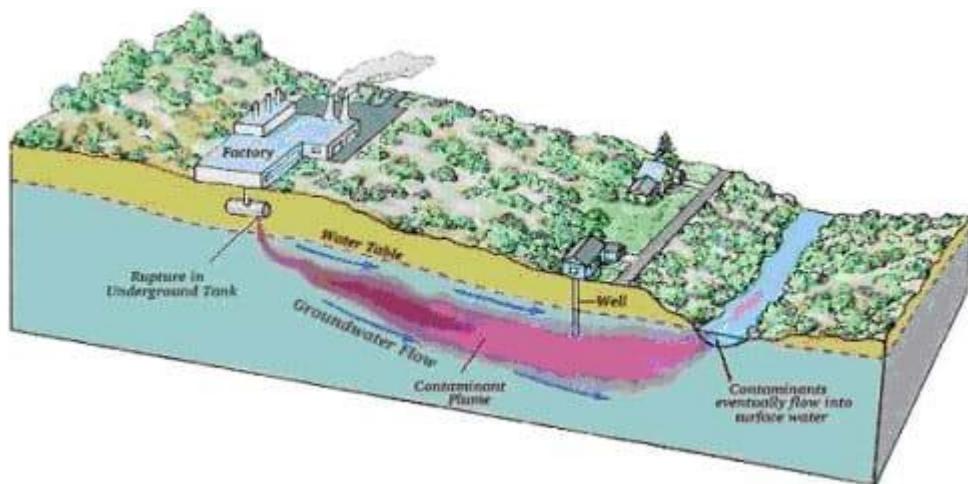
- Passive Recreation Subject Area; or
- Passive Recreation Subject Area and Residential Activity Subject Area.

*A conservation easement can be used in place of an EUR.

Please go to the web for all EUR related documents – most will have updates for RBCR references



CONDITIONAL EXEMPTION FOR EXISTING RELEASES THAT MIGRATED 7(e)



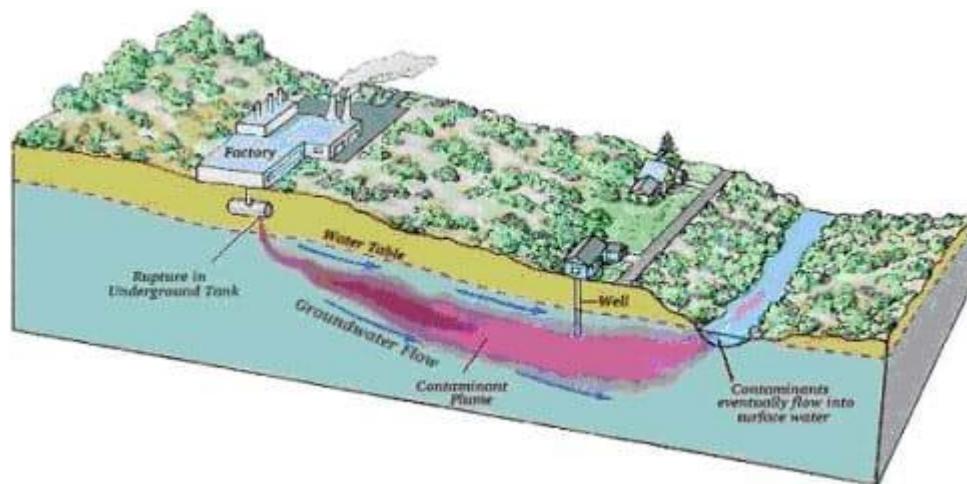
Release Solely from Off-site / Upgradient Source

Discovery of a release solely from an upgradient source requires:

- Protection of on-site receptors
- Reporting of discovered release
- Preparation of a release remediation closure report (demonstrating only from off-site and documenting protection of on-site receptors)
- Providing reasonable access to the source owner

CONDITIONAL EXEMPTION FOR EXISTING RELEASES THAT MIGRATED 7(e)

CONTINUED



Co-mingled Release from On-site & Off-site / Upgradient Sources

Discovery of a co-mingled release from both on-site and upgradient sources requires:

- **Protection of on-site receptors**
- **Preparation of a release remediation closure report for on-site release (remediated to concentrations coming onto the site and documenting receptor protection)**
- **Providing reasonable access to the off-site / upgradient source owner**

APPLICABILITY OF REMEDIATION TO VOLC 7(g)

This sections refers to VolC compliance criteria which expires February 16, 2026.

Criteria for VolC compliance not fitting this small carve out can be found in Appendix 6

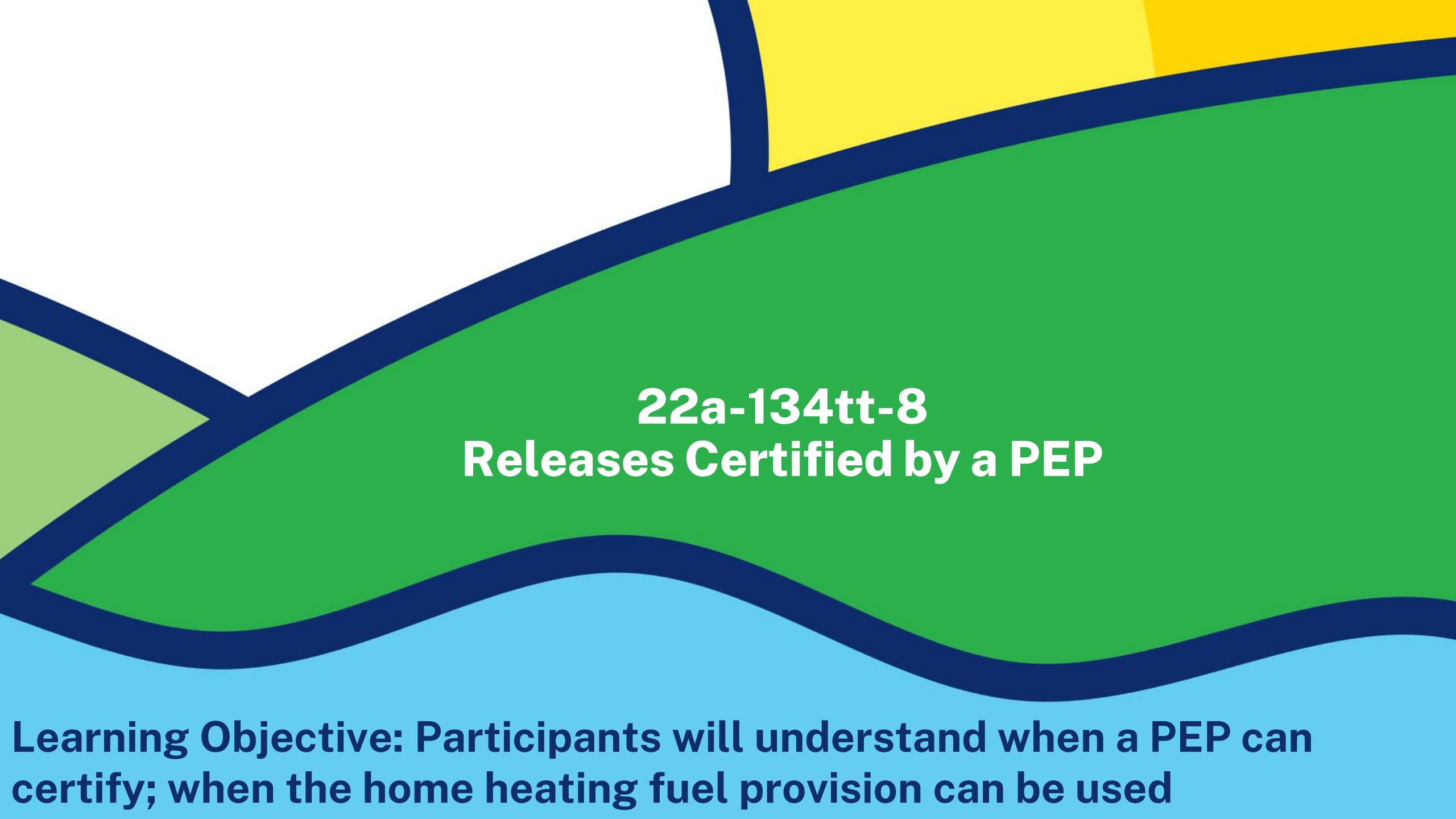
Volatile Substance	Residential Volatilization Criteria for Groundwater in µg/L (ppb)	Industrial/Commercial Volatilization Criteria for Groundwater in µg/L (ppb)
Acetone	50,000	50,000
Benzene	215	530
Bromoform	920	3,800
2-Butanone (MEK)	50,000	50,000
Carbon Tetrachloride	16	40
Chlorobenzene	1,800	6,150
Chloroform	287	710
1,2-Dichlorobenzene	30,500	50,000
1,3-Dichlorobenzene	24,200	50,000
1,4-Dichlorobenzene	50,000	50,000
1,1-Dichloroethane	34,600	50,000
1,2-Dichloroethane	21	90
1,1-Dichloroethylene	1	6
1,2-Dichloropropane	14	60
1,3-Dichloropropane	6	25

KNOWLEDGE CHECK



Review of Section 7

1. Is a release from an off-site source reportable? (a) Yes; (b) No; (c) maybe?
 - Answer: option (a)
2. Which of the following are required after reporting an off-site release? (a) none; (b) closure report; (c) protect on-site receptors; (d) provide access to source owner
 - Answer: options (b), (c), (d)
3. True or False: Volatilization criteria in groundwater remains the same as RSRs. (a) True; (b) False
 - Answer: option (b)



22a-134tt-8 **Releases Certified by a PEP**

Learning Objective: Participants will understand when a PEP can certify; when the home heating fuel provision can be used

22a-134tt-8

**RELEASES CERTIFIED AS CLOSED BY A
PERMITTED ENVIRONMENTAL PROFESSIONAL (PEP)**

PEPs can Certify 2 types of releases as closed:

- 1. Subset of Emergent Reportable Releases (ERRs)**
- 2. Releases of Home Heating Fuel on Residential Properties**



PEPs CAN CERTIFY A SUBSET OF ERRs UNDER THESE CONDITIONS

- The approximate location and volume of such release was known at the time remediation commenced
- The released substance or substances are known
- Remediation is commenced within the time specified by 22a-134tt-5, and all immediate actions required are completed in time frame specified in that section
- Soil impacted by the release is removed and properly disposed, and
- A PEP who responded to and directed the cleanup of such release certifies that each of the requirements has been satisfied

WAS SOIL IMPACTED BY THE RELEASE?

- A PEP can certify if the following conditions are met:
- Soil impacted by the release has been completely removed and properly disposed



WAS THE RELEASE TO AN IMPROVED SURFACE?

A PEP can certify if the following conditions are met:

- The release is removed to the extent necessary to prevent migration from the improved surface; **-or-**
- If the substance is a material of special concern (Sec 22a-450-6), the release is removed until such substance is not detected
 - Could require removal of the improved surface



WAS THE RELEASE TO A SECONDARY CONTAINMENT SYSTEM?

A PEP can certify if the following conditions are met:

- The volume of the release is less than the volume the system was designed to contain, and the system did contain it; **-and-**
- The system was assessed, and no damage was observed. Damage includes cracks, voids, gaps in the system, or in any epoxy/other coating.



DID THE RELEASE REACH SURFACE WATER?

A PEP can certify if the following conditions are met:

- Each substance released is soluble in water; - **or-**
- Has a specific gravity of less than 1



HAS A RELEASE CONTACTED GROUNDWATER?

A release shall be determined to have contacted groundwater if:

- Groundwater is encountered during excavation;
- The substance is detected in a groundwater well immediately downgradient of the approximate location of the release and not more than 5 feet from the edge of the excavation; **-or-**
- A substance(s) released is determined to be present in the groundwater using a method specified by the Commissioner

If the above are true and the release is anything other than oil or petroleum, or is within 500 ft of a drinking water well, a PEP cannot certify.



HAS A RELEASE OF OIL OR PETROLEUM CAUSED PERSISTENT IMPACT TO GROUNDWATER?

A release shall be determined to have caused a persistent impact to groundwater if:

- A visible sheen remains on groundwater after three attempts within 24 hours at removing the sheen;
- One or more of the substances released is detected in a monitoring well immediately downgradient of the release and not more than 5 feet from the edge of the area of excavation 24 or more hours after completion of excavation of impacted soil; **-or-**
- A substance(s) released is determined to be present in the groundwater using a method specified by the Commissioner

If the above are true, groundwater has been persistently impacted and a PEP cannot certify.



Releases of Home Heating Fuel on Residential Properties



An emergent reportable release or an existing release of home heating fuel at a residential property (not more than 4 living units)

Applicability

- release consists entirely of home heating fuel;
- the heating fuel is being used, or stored for future use on the parcel at which it is being stored; and
- The release was created by the owner or occupant of the parcel on which the home heating fuel is being used or stored for future use

Cleanup Standard

An LEP verifies or a PEP certifies that all soil impacted by the release has been removed, except soil removal that may undermine the structural integrity of the residence and that soil left in place is not impacting groundwater or indoor air.

Documentation

A release remediation closure report has been prepared.

Releases of Home Heating Fuel on Residential Properties



Documentation

The Release Remediation Closure Report should:

- Identify the nature and extent of any remaining impacted soil
- Demonstrate that remediation resulted in removal of impacted soil to the maximum extent prudent
- Indicate that groundwater was
 - not impacted, **or**
 - was impacted, but an LEP has verified that groundwater has been remediated pursuant to RCSA 22a-134tt-10

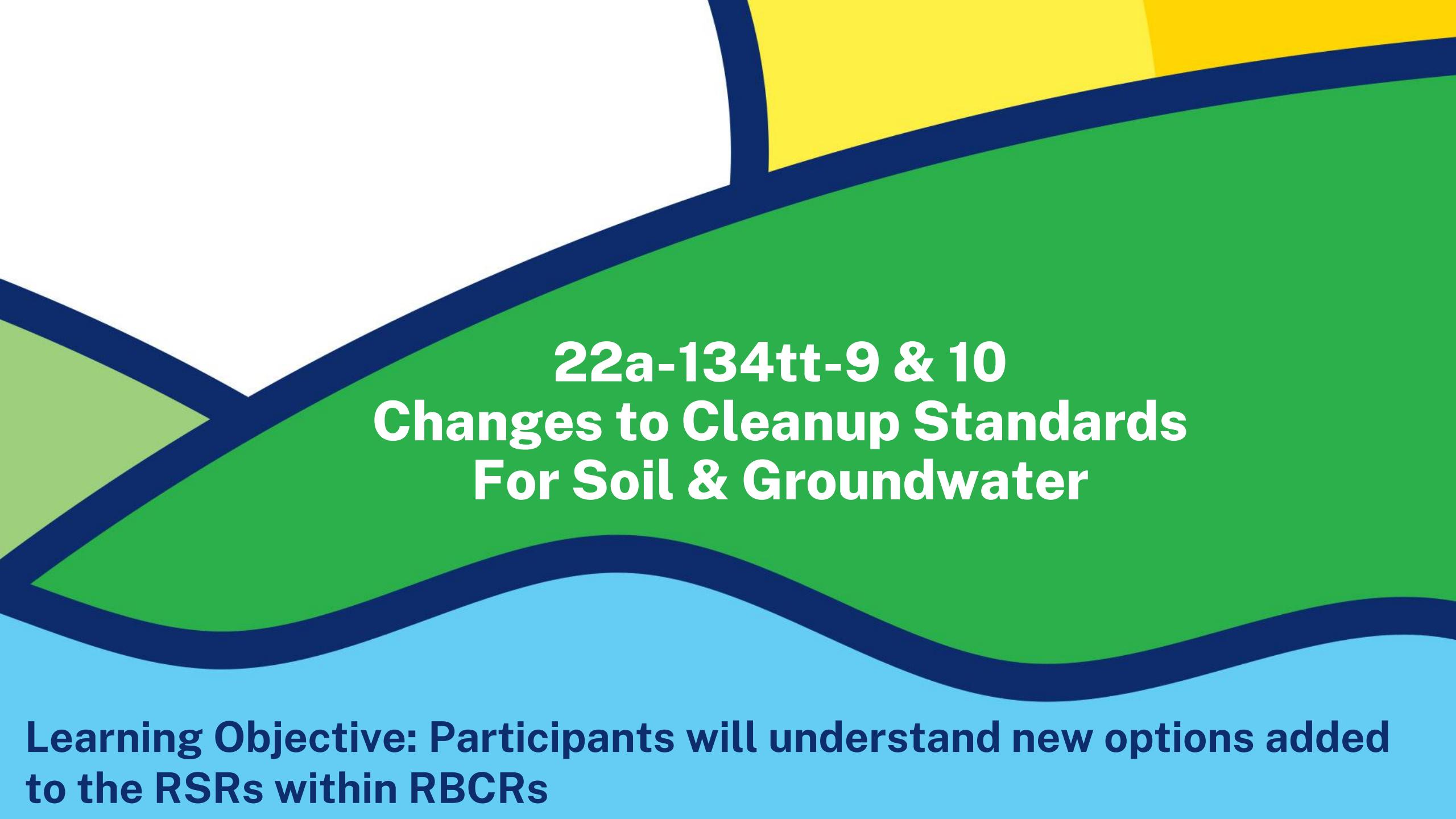
KNOWLEDGE CHECK



Review of Section 8

1. Which types of releases can be certified as closed by a PEP? (a) ERRs; (b) a subset of ERRs and releases of home heating fuel on residential properties; (c) SERs and ERRs.
 - Answer: option (b)

2. Which of these release clean ups would a PEP be able to certify as closed? (a) the PEP reviews documentation of the cleanup but did not direct the cleanup; (b) the release is from an unlabeled container and the substance cannot be identified; (c) groundwater is observed to have a sheen during excavation of a petroleum release; (d) remediation is completed 13 months after the release was discovered
 - Answer: option (c)- a petroleum sheen alone does not disqualify- would need to determine if there was persistent impact



22a-134tt-9 & 10 **Changes to Cleanup Standards** **For Soil & Groundwater**

Learning Objective: Participants will understand new options added to the RSRs within RBCRs

ADDITIONS TO THE SOIL CLEANUP STANDARDS

■ **Managed Multifamily Residential DEC**

A release may qualify if the parcel has more than 4 residential units and the parcel and residential units are managed by an association or professional property management company

Will require an EUR prohibiting the disturbance of soil by residents and active recreation in areas without impervious cover

■ **Passive Recreation Residential DEC**

Can be cleaned up to the passive recreation DEC if it is:

- (1) subjected to an EUR or
- 2) has a passive recreation conservation easement (local, state and federal governments)

Examples of passive recreation include: hiking trails, bike paths, horse trails

■ **“Walk away” background numbers for certain common, naturally-occurring metals**

PERMIT BY RULE – HISTORICALLY IMPACTED MATERIAL

Applicability

- Industrial/commercial sites only; with confirmed presence of historically impacted material

Notification

- A form prescribed by the Commissioner to notify the Department an owner is seeking permission to use the regulatory provision

Requirements

- Maintain Industrial/Commercial use
- Cannot relocate historically impacted material parcel except as allowed by cleanup standards
- Notify any new owner or interest holder of the permit by rule
- Record an Affidavit of Facts on the land records
- Submit a Release Remediation Closure Report
- Conduct and submit inspection reports every 5 years to demonstrate compliance
- tracked in REACT



REGULATIONS PERMIT ONSITE MANAGEMENT OF HISTORICALLY IMPACTED MATERIAL AT INDUSTRIAL/ COMMERCIAL SITES



Affidavit of facts must be recorded on land records by parcel owner



Every 5 years parcel owner must certify to DEEP that polluted fill has not been relocated and what the current land use is



Parcel owner must notify DEEP if land use changes to residential activity and **is responsible** for cleanup to residential criteria



Permission transferable to new owners

PERMIT BY RULE - MANAGING SOIL BENEATH PARKING LOTS, ROADS AND BUILDINGS

Inaccessible soil at a release area is not required to be remediated to the direct exposure criteria if the soil is located beneath concrete or bituminous concrete used for parking or vehicle travel or below a building foundation.

Similar administrative requirements as the historically impacted material permit by rule

- submit document to Commissioner that verifies compliance,
- record an Affidavit of Facts on the land records,
- inspect every 5 years and report to the Commissioner on condition of concrete

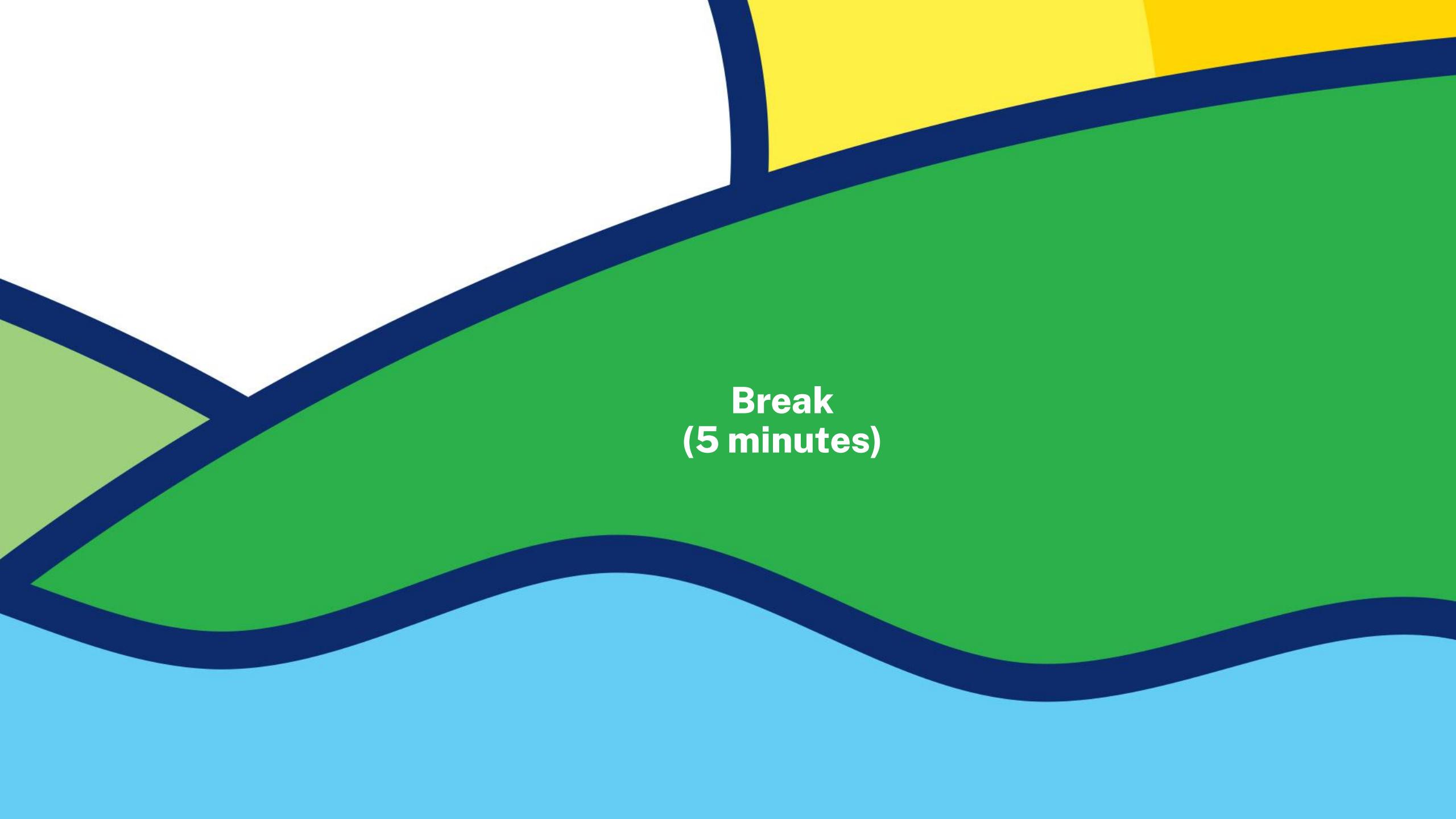


KNOWLEDGE CHECK



Review of Section 9/10

1. What are the new additions to the soil direct exposure criteria? Select all that apply: (a) apartments and recreational criteria; (b) outdoor electrical substation criteria; (c) Managed Multifamily criteria; (d) Passive Recreation criteria; (e) Temporary workers criteria
 - Answer: options (c) and (d)
2. What is the frequency of inspections under a permit by rule? (a) 1 year; (b) 3 years; (c) 5 years; (d) 8 years
 - Answer: option (c)



**Break
(5 minutes)**



22a-134tt-11

Certification And Verification

Learning Objective: Participants will understand certification and verification carry the same weight; where they are used

CERTIFICATION AND VERIFICATION

Sec. 22a-134pp Definition (9) **“Verification”** means the written opinion of a licensed environmental professional on a form prescribed by the commissioner that the remediation of a release satisfies the standards established in regulations adopted pursuant to section 22a-134tt.



Section 1

Sec. 22a-134tt-1 Definition (16) **“Certification”** means either:

- (A) An attestation on a form prescribed by the commissioner as to the accuracy of the information provided on such form; or
- (B) The written opinion of a permitted environmental professional on a form prescribed by the commissioner that the remediation of a release satisfies the standards established in the RBCRs;

Sec. 22a-134tt-1 Definition (129) **“Release record”** means a document certified by a PEP or verified by an LEP documenting compliance with a requirement or requirements of the RBCRs;

LEP may render a verification for:

- Immediate Action Report
- Tier Assignment
- Tier Re-assignment
- Release Remediation Closure Report

Signature and LEP's seal

PEP may provide a certification for:

- Immediate Action Report
- Release Remediation Closure Report

Signature,
Permit No. and Expiration date

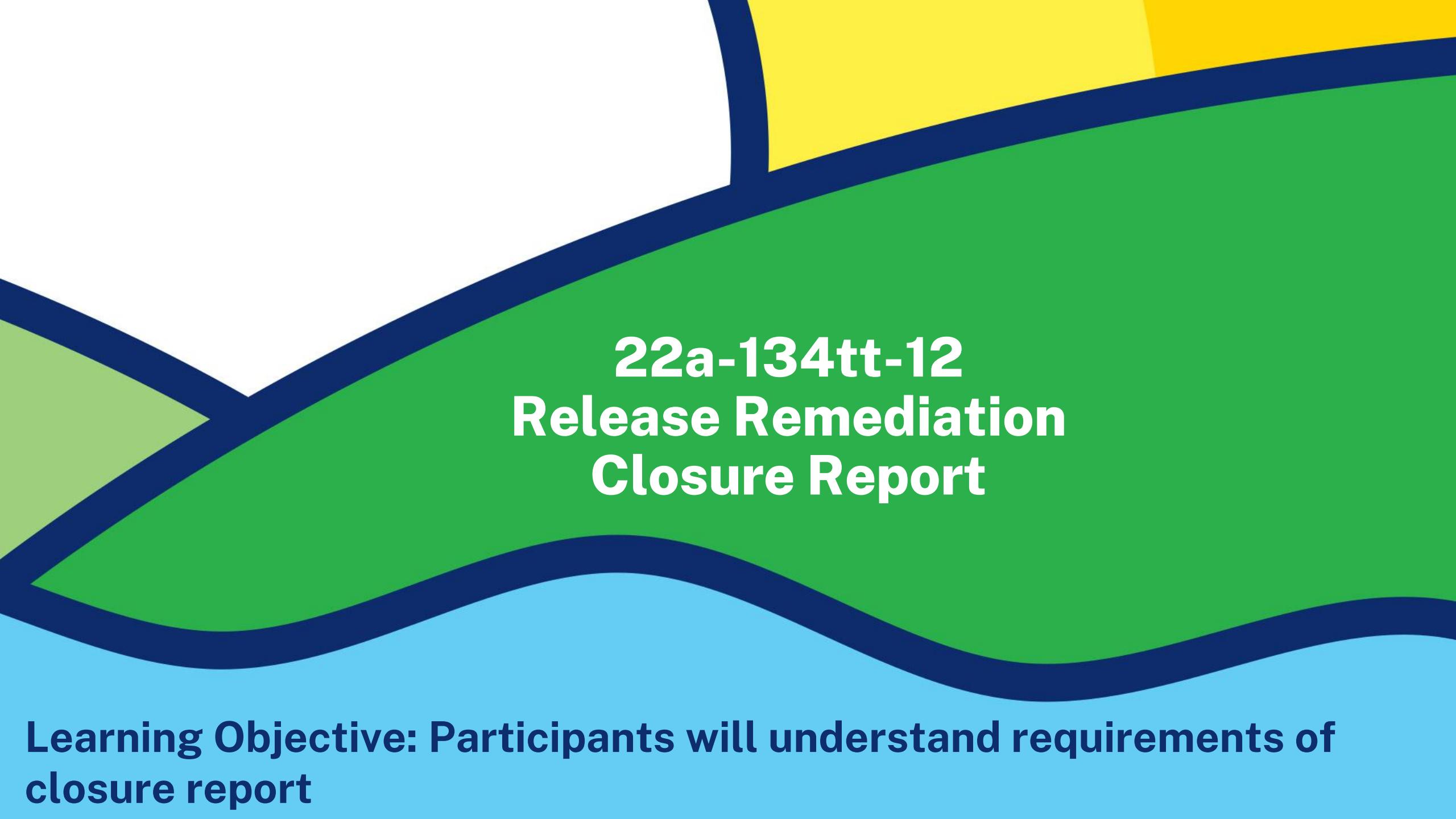
CERTIFICATION AND VERIFICATION

Both LEP verifications and PEP certifications are subject to audit

PEPs can certify in a small subset of closure scenarios, while

LEPs can verify in any closure scenario

Certification and verification carry the same weight, but certification is allowed in less complex scenarios



22a-134tt-12

Release Remediation

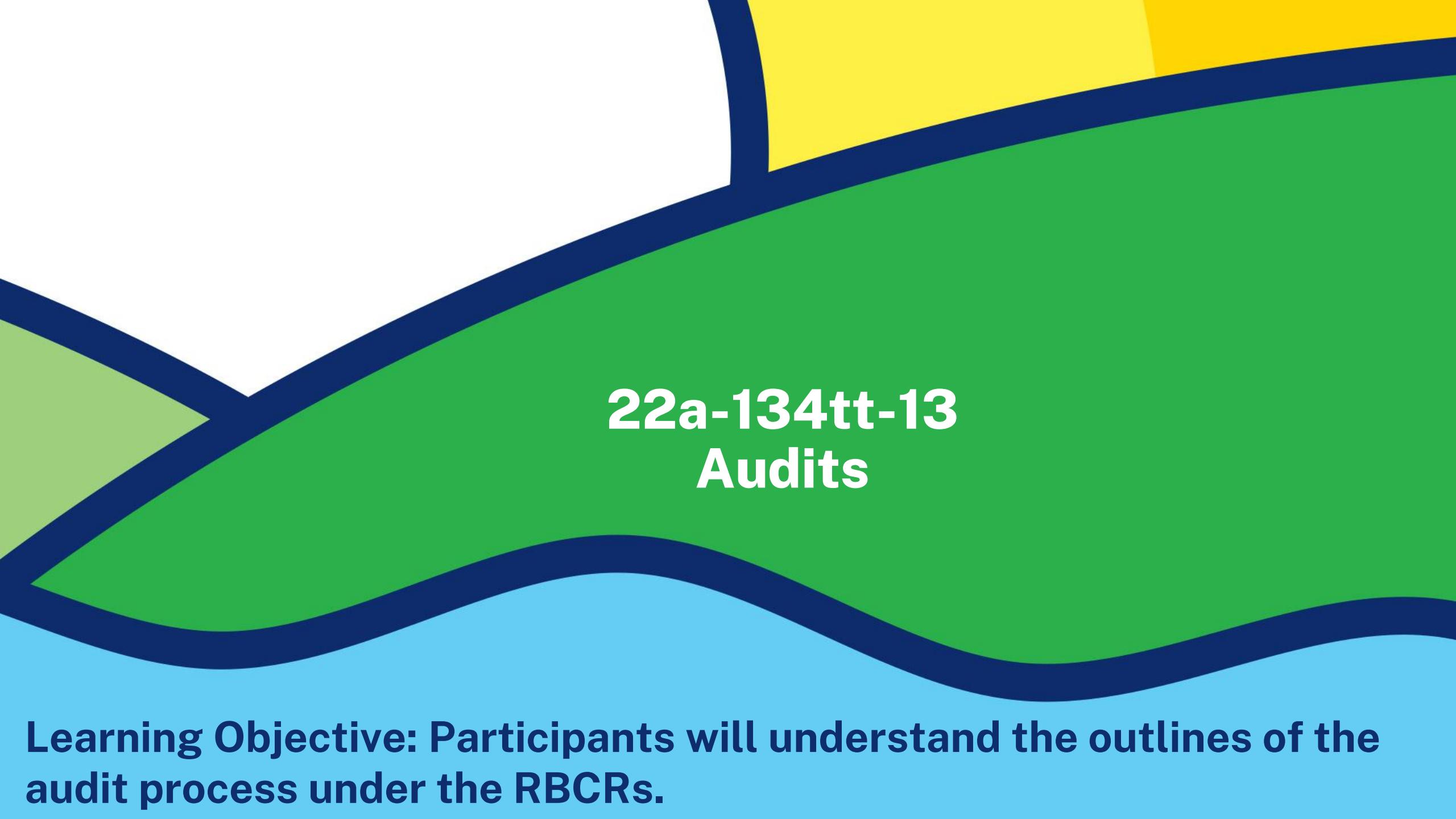
Closure Report

Learning Objective: Participants will understand requirements of closure report

RELEASE REMEDIATION CLOSURE REPORT

A Release Remediation Closure Report is expected to:

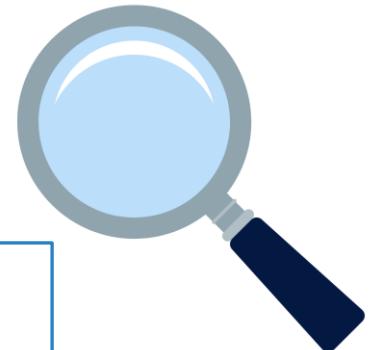
- ❖ **Include Creator or maintainer information - location/address of the release – date of discovery – date reported – date of Tier Assignment – release records/ supporting documentation.**
- ❖ **Demonstrate that the release has been remediated to standards, including details on institutional and engineered controls.**
- ❖ **A copy to be kept by Creator or Maintainer**



22a-134tt-13 Audits

Learning Objective: Participants will understand the outlines of the audit process under the RBCRs.

AUDITS



3 types of DEEP audits

- Screening
- Focused
- Full

Information and timing vary

- Residential vs. commercial

Documents can be audited

- Release records verified or certified by an LEP/PEP
- Tiering

SCREENING AUDIT



- ❖ Start: No Notice; Notice may happen later
- ❖ Duration: DEEP to decide on outcome **within 180 days** from date received of a release record
- ❖ Review: entire release record, or just portions
- ❖ Possible outcomes:
 - **Accepted.**
 - **Rejected:** Notification Letter, keep fees, request new submission, set new deadline.
 - **Escalate:** Notification Letter, start Focused or Full

FOCUSED AUDIT

"Focused audit" means

The department's **review of one release record**, including requesting additional supporting information regarding the remediation of a release

❖ Start:

- May start after Screening Audit.
- Notice Letter: **within 180 days** after date received of a release record ; reason why auditing (issue found during screening; random selection); request additional information, set new deadline.
- ❖ Duration: DEEP to decide on outcome **within 18 months** from date received of a release record
- ❖ Review: entire release record, limited to specific issues from Screening Audit, other specific issues
- ❖ Escalate: decide if escalating before deciding on Outcome; start Full Audit
- ❖ Outcome:
 - ❖ **Accepted** with Notification Letter
 - ❖ **Rejection** with Notification Letter, reasons why, keep fees, request new submission, set new deadline.

FULL AUDIT

*“Full audit” means the **thorough review** of many or all release records associated with a release initiated **after submission of a Release Remediation Closure Report**, including requesting additional supporting information regarding the remediation of a release*

❖ Start:

- **180 days** following the date received of a release remediation closure report, or
- before Focused audit reaches an outcome
- Notice Letter: states reasons for audit, requests additional information, sets response deadline
- May start without conducting a screening audit or focused audit

❖ Review: entire record, specific issues, require additional information, set deadline

❖ Outcome:

- **Not later than 2 years** after date received of a release remediation closure report.
- **Accepted** with Notification Letter
- **Rejected**, Notice Letter, reasons why, keep fee, timeline for new submission, requirements of RBCRs still in full force

NO FURTHER AUDIT LETTER REQUEST FOR RELEASE REMEDIATION CLOSURE REPORT

- An entity may request the department's review and determination that a *Release Remediation Closure Report will not be subject to a focused or a full audit* (if the commissioner determines that no such audit is necessary).
 - The request for a No Further Audit Letter prompts a non-refundable fee of **\$500**.
 - Submit request and fee payment via REACT and e-payment portal.
 - Such determination may be done with or without a screening audit.
 - If a No Further Audit letter is requested, then the commissioner has a goal of determining whether to conduct a focused or full audit of the subject release remediation closure report **not more than 90 days after the request is submitted**.
- 22a-134tt-13(e)(1)

NO FURTHER AUDIT LETTERS FOR SALE OF HOMES



If the release record has been prepared for the purposes of facilitating the purchase or sale of a single-family home that is subject to a signed purchase and sale agreement:

- ❖ DEEP has **up to 3 business days** from date received of such release record to determine whether to conduct a focused or full audit and notify the person of this audit determination in writing.
- ❖ If determination is to conduct an audit, then an **audit outcome should be made within 14 days** from date received of the release record. Otherwise, automatically accepted.

REOPENED VERIFICATIONS/CERTIFICATIONS

At any time, DEEP can conduct a focused or full audit. The reasons could be:

- ❖ Inaccurate or erroneous information, misleading, misrepresentations
- ❖ Verification for an Order under section 22a-134ss (Orders. Hearing. Violations. Action by Attorney General. Penalties. Cease and desist order)
- ❖ Any post-verification monitoring, or operations and maintenance, is required as part of a verification and which has not been completed;
- ❖ Environmental land use restriction was not recorded on the land records
- ❖ Violation of regulatory or statutory provisions
- ❖ Information indicates that the remediation may have failed to prevent a substantial threat to public health or the environment.
- ❖ Start: Notice of Audit Letter. Timeframes do not apply.

FREQUENCY OF AUDITS

Goal:

Based on Tier First Assignment

- **10 % of the releases assigned to tier 1A**
- **20% of the releases assigned to tier 1B**
- **10% of the releases assigned to tier 2**
- **5% of the releases assigned to tier 3**

KNOWLEDGE CHECK



Review of Section 11-13

1. What is the definition of “release record”? (a) document certified by a PEP or verified by an LEP documenting compliance with a requirement or requirements of the RBCRs; (b) an environmental report submitted to DEEP; (c) documents pertaining to emergency response; (d) a release report
 - Answer: option (a)
2. True or False: A LEP verification carries more weight than a PEP certification. (a) True; (b) False
 - Answer: option (b)
3. For how long is the creator or maintainer expected to keep a copy of the release remediation closure report? (a) maximum of 5 years; (b) minimum of 1 year; (c) maximum of 2 years; (d) minimum of 10 years
 - Answer: option (d)
4. Which type of audit may be commenced by DEEP without notice to person who verified or certified the release record or the person who created or maintained the release? (a) screening audit; (b) focused audit; (c) full audit
 - Answer: option (a)

22a-134tt-Appendices



Upcoming Trainings

UPCOMING TRAININGS

RBCRs Focused Sessions

January 28, 2026, 10:30 a.m. - 12:00 p.m.	Discovery and Reporting
February 11, 2026, 10:30 a.m. - 12:00 p.m.	Immediate Actions (ERRs and SERs)
February 18, 2026, 10:30 a.m. - 12:00 p.m.	Heating Oil Provisions and PEP Certifications
Wednesdays in February, March, April Dates and topic order subject to change	Transition from SEHs to SERs Bridge from Property Transfer Program... and process for the new Voluntary Parcel-Wide Cleanup Program Integration of other existing legacy programs And others!

UPCOMING TRAININGS

REACT Trainings

Thursdays 10:00 a.m. - 12:00 p.m.

(same session each week)

February 5, February 19, February 26,
March 5, March 19, March 26, 2026

Introduction to REACT online portal

Fridays 10:00 a.m. - 12:00 p.m.

February 6, February 20, February 27,
March 6, March 20, March 27, 2026

Help Session-Q&A on how to use REACT online portal

***Training registration and dates are on DEEP webpage
Additional topics and classes are planned.***

SUBMIT YOUR QUESTIONS WITH QUESTION TOOL

- 1. Select the category for your question.**
- 2. Describe your question.**
- 3. Provide your name and email to receive the response.**

- <https://forms.cloud.microsoft/g/jwcf2pa9dtshould>
(sorts out LUST, PCBs, Spills, and REACT)



Or email DEEP.RemediationDivision@ct.gov

Q&A From Chat