

Good afternoon,

We look forward to seeing everyone at the Working Group's Special Meeting tomorrow at 1 PM. The purpose of the meeting is to finalize the Working Group's Phase II Subcommittee Advice and Recommendations.

I am very appreciative of your representatives – the Review and Drafting Team – who have put the attached report together for your consideration. Thank you George, Sally, Matt, Sam, and Emilee!

We hope to see folks tomorrow.

Best and be well,
Graham

Phase II Drafting Team Report

June 29, 2022

I. INTRODUCTION

The Drafting Team has prepared this summary of the second phase of Topical Subcommittee Concept papers released for public comment on April 8, 2022.

This document provides our overall comments to the three concept papers as follows (links provided to posted papers):

- [Topical Subcommittee 6: Modification of Clean-up Standards for Lower-Risk Releases Concept Paper](#)
- [Topical Subcommittee 7: LEP-Implemented, Risk-Based Alternative Cleanup Standards](#)
- [Topical Subcommittee 8: Clean-up Completion Documentation, Verifications, and Audit Frequency and Timeframes](#)

The Drafting Team reviewed the five Subcommittee Concept Papers to identify:

- Where there are consensus recommendations
- Open Issues that need to be addressed by the overall Working Group
- Issues that require other Statutory/Regulatory Changes

The Drafting Team consists of:

- George Gurney, LEP – Weston Solutions
- Sally Kropp – Kropp Environmental
- Matthew Hackman, LEP – Matthew E. Hackman, P.E., CHMM, Inc.
- Samuel Haydock, LEP – BL Companies
- Emilee Scott, Esq. – Robinson + Cole

We recognize and applaud the efforts of all the subcommittee members who worked on these papers over the past several months. We acknowledge the difficult task each workgroup undertook in a brief period to address the multitude of complex issues that must be evaluated as we embark on a transition to the proposed Release-based Cleanup Program for Connecticut. In summary, the Drafting Team agrees with the conclusions and recommendations from each report and offers the following more specific comments on the topics we find most pertinent and challenging for the development of this new program.

II. OVERALL FRAMEWORK FOR RELEASE-BASED PROGRAM

Over the last year and a half of discussion by the Working Group and its subcommittees and ad hoc teams, a cohesive framework has emerged to cover releases from discovery or occurrence through clean-up and closure.

Occurrence/Discovery: The newly promulgated regulations under Conn. Gen. Stat. sec. 22a-450 (“Spill Regs”) address the occurrence of contemporaneous releases. For historic releases, the presence of certain constituents in environmental media above specified thresholds will lead to a conclusion that a release occurred at some time in the past (i.e., a historic release has been discovered). Under some circumstances, the presence of certain constituents will not support a conclusion that a “release” has been discovered, for example if the constituents are present at background levels or under circumstances consistent with an exemption from the definition of release (e.g., use of fertilizer/pesticides consistent with labeling). Subcommittee 1 also indicated that there may be other lines of evidence (short or numeric criteria) supporting the conclusion that a historic release had occurred.

Reporting: Reporting of contemporaneous releases is addressed by the Spill Regs. For historic releases, there may be an obligation to report some releases but not others. Depending on the severity of the release, different reporting deadlines might be applicable (Subcommittee 2 suggested the two-hour, 72-hour and 120-day reporting structure used by Massachusetts as a potential model). Releases that trigger an obligation to report might not trigger an obligation to remediate (e.g., when the release is related to an upgradient source). Similarly, releases that must be remediated would not necessarily trigger a reporting requirement (for example, if the release is closed out before the reporting deadline elapses).

Characterization: Whether the release is contemporaneous or historic, it will need to be characterized (i.e., the nature and extent of the release will need to be evaluated). Characterization is likely to be an iterative process and will rely on tools ranging from the ordinary five senses to laboratory analysis. Some level of characterization will be required to identify the severity of the release (e.g., whether it is impacting drinking water, whether it is eligible for one of the streamlined closure pathways). Additional characterization work may be warranted as remedial plans are developed, as remediation is initiated, and/or when closure is pursued.

Cleanup: Various subcommittees have discussed specific cleanup requirements and strategies. Subcommittee 4 discussed immediate removal action (IRAs) when releases pose risks so significant that they must be cleaned up urgently, as well as releases are so simple that they can be cleaned up quickly as non-mandated IRAs. Subcommittee 5 discussed the need for tiering releases that cannot be cleaned up within a year of the release and pose differing degrees of risk and requiring differing levels of involvement from DEEP. Subcommittee 6 (as discussed further below) proposed categories of releases that could be cleaned up (and closed) quickly with little or no sampling and comparison to numeric standards. Subcommittee 7 (discussed further below) discussed cleanup tools that could be implemented by an LEP with little to no DEEP involvement.

Closure Documentation and Verification: Subcommittee 8 (discussed below) discussed specific closure documentation and credentials required to close out different types of releases. There is a need for a user-friendly reporting tracking, and closure system to be created,

preferably online. It is important that this on-line system be simple and efficient for the lowest risk releases so the documentation can be completed by anyone responding to and mitigating the release.

III. OVERVIEW OF PHASE II SUBCOMMITTEE REPORTS

A. Topical Subcommittee 6: Modification of Clean-up Standards for Lower-Risk Releases

The Drafting Team understands that Subcommittee 6 did not find consensus on defining “low-risk” releases. We believe that for the program to be successful, it is imperative that some releases be defined and documented as low risk, so that they can achieve an early exit from the program. This will relieve the burden on the program and the unnecessary use of resources and associated costs to implement the program. Low risk should be defined based on the amount of information known about the release, its nature, extent and magnitude and its potential to impact receptors.

The second challenge addressed by this Subcommittee is addressing who can ultimately sign off on the closure of low-risk releases once they are defined. LEPs have the training and expertise to complete this task, but consensus has not been reached on whether this task should be limited to CT DEEP staff and LEPs or if another class of professionals should be considered.

While DEEP has signaled a reluctance to develop a new class of licensed professionals, the Drafting Team notes that there are existing regulatory programs that authorize non-LEP environmental professionals to perform certain tasks. Existing definitions for classes of professionals could be leveraged by the new release-based program. For example, EPA defines an “Environmental Professional” as someone who has one of these qualifications: (i) a state- or tribal-issued certification or license and three years of relevant, full-time work experience; (ii) a bachelor’s degree or higher in science or engineering and five years of relevant, full-time work experience; or (iii) ten years of relevant, full-time work experience. By leveraging an existing regulatory definition, DEEP could avoid the administrative burden of creating and managing a new class of professionals while facilitating market acceptance based on existing familiarity with the relevant class.

Subcommittee 6 has laid out a framework for closing low-risk releases in some cases with no sampling or confirmatory laboratory analysis, and in other cases with limited sampling and analysis. The ability to close low-risk releases quickly and cost-effectively will be critical to the success of the future regulations and we wish to emphasize the importance of development of additional details and protocols for closing the lowest risk releases.

B. Topical Subcommittee 7: LEP-Implemented, Risk-Based Alternative Cleanup Standards

The Drafting Team believes expanding the existing self-implementing options for LEPs with regards to risk-based cleanups, as proposed by Subcommittee 7, is imperative to implement a successful program.

The Drafting Team agrees with Subcommittee 7 and supports the creation of a new subcommittee within the Released-based Working Group to evaluate the use of self-implementing comprehensive risk assessment that relies on time tested US EPA risk assessment guidance under certain circumstances. Such a risk assessment option is an important foundational tool for understanding, evaluating, and advancing often complex environmental sites toward closure. This option requires the development of a rigorous site-specific human health and/or ecological risk assessment that incorporates an intensive examination of all levels of risk and potential existing and future exposure scenarios at a site. This level of risk assessment incorporates the use of the most current scientific and toxicological information, which is then applied to actual site-specific conditions. As a result, this risk assessment creates a focusing lens which identifies what elements of a site pose significant real-world risks, and where remedial efforts need to be directed. Similarly, it also identifies those aspects of a site where options such as institutional controls, long-term monitoring, and/or land use restrictions are most appropriate, or alternatively, where no actions are needed. Since this level of risk assessment entails a comprehensive evaluation process, it can be a lengthy and costly option. However, when completed, this type of risk characterization yields both a rigorous and defensible examination of complex sites and identifies a pathway to closure which is both practicable and protective of human health and the environment. Utilization of this type of risk assessment in Connecticut will provide a very important tool to move currently implacable environmental sites toward closure.

We agree with the assertion that LEPs are qualified to direct the development of risk-based alternative cleanup criteria in certain situations due to their qualifications, experience, and oversight, and/or their ability to incorporate the work of other professionals with specific risk assessment expertise.

We agree with the recommendation that sufficient continuing education on topics related to risk characterization be expected of LEPs who intend to submit verifications or other closure documents that rely on a risk-based alternative that involves those risk characterization elements that are addressed following identification of receptors and exposure point concentrations.

C. Topical Subcommittee 8: Clean-up Completion Documentation, Verifications, and Audit Frequency and Timeframes

Subcommittee 8 discussed specific closure documentation and credentials required to close out different types of releases.

With regards to Credentials/Qualifications for Individuals with Sign-Off Authority (preparation of closure documentation), LEPs are qualified by their education, experience, and licensure, and are accountable for their work by the audit process and oversight by the LEP Board with their capacity to issue disciplinary actions. If another class of trained professionals is granted authority to close low-risk releases, similar criteria must be established to insure proper closure

of low-risk releases and acceptance of such closures in the marketplace. This also needs to recognize that for the lowest-risk releases, a non-environmental professional may respond to and mitigate the release and provide the closure documentation.

With regards to establishing a Public Facing Database, we believe this is a critical component to the program and should be in place and operational by the effective date of any new release-based regulations. There is a need for a user-friendly reporting tracking, and closure system to be created, preferably online. It is important that this on-line system be simple and efficient for the lowest-risk releases so the documentation can be completed by the person (potentially with or without any training) responding to and mitigating the release. It is also important that standard naming conventions be established for uniformity and confidence in the marketplace. This is critical to allow for transparent sharing of environmental data and to allow for business transactions to occur in an efficient manner.

Subcommittee 8 also focused on the audit process and associated document retention and identified the need for a system that provides for timely (within 120 days) audits on a reasonable number (frequency) of release closure documents.

IV. SYNTHESIS OF PHASE II CONCEPTS

The various subcommittees in both discussion phases have assigned releases into categories, classes or tiers. Additional work will be required to harmonize and integrate the classifications proposed by the subcommittees into a cohesive regulatory scheme. That said, the Drafting Team believes that the concepts advanced by the Phase II subcommittees can be integrated into a cohesive “roadmap” setting forth closure pathways for various types of release, including the credentials required to close them out. The flow chart attached as Figure 1 provides such a roadmap. Table 1 is also provided and identifies additional concepts related to the proposed release response process.

The release-based regulations should permit the simplest releases to be closed out by the person responding to and mitigating the release. There should be an intermediate level of releases that can be closed out by an intermediate level of non-LEP professionals. Finally, the releases that do not qualify for closure by the two non-LEP groups should be closed by an LEP, with varying levels of supervision by DEEP depending on the specific risk profile (see Tiers paper).

The first and most important consideration is whether the release was historic or contemporaneous. For contemporaneous releases, critical details regarding the identity and quantity of the substance released may be readily apparent. This will naturally simplify the level of characterization required to fully understand the nature and extent of the release. For contemporaneous releases that do not trigger reporting to DEEP and do not impact environmental media, a non-environmental professional should be able to respond to and

mitigate the release in a manner that closes out all regulatory obligations.¹ More significant contemporaneous releases may need to be closed out by an environmental professional (or even an LEP) if they involve reportable quantities, impact environmental media, and are not closed out within 14 days. The 14-day timeframe is open to discussion and symbolizes the need for quick response and closure of Category 1 releases.

For historic releases, critical details like the identity and quantity of the substance released, as well as timing and other circumstances related to the release, may not be readily apparent. As a result, more characterization would be required to fully understand the nature and extent of the release. For releases that have the potential to have reached groundwater, closure would need to be verified by an LEP. For releases of both petroleum and hazardous substances without the potential for groundwater impacts, however that is determined, non-LEP environmental professionals should be empowered to close the release. The deadlines shown in the attached roadmap are illustrative and may require further study.

The pathway ending in LEP verification could be the subject of its own complex flow chart and requires further study. As Subcommittee 7 made clear, LEPs should be empowered with a number of streamlined options that they can implement themselves without DEEP approval, including those currently available under the current RSRs as well as additional self-implementing options developed for the new program. Furthermore, the level of DEEP oversight (or control) should vary by risk level associated with the release, as discussed by Subcommittee 5 (Tiers).

V. CONCLUSIONS

A. Summary of Consensus Items

1. **A Cohesive Framework**: A cohesive framework has emerged that traces a release from occurrence/discovery through reporting, characterization, cleanup and closure.
2. **Leverage Online Tools**: There is a need for a user-friendly reporting, tracking, and closure system to be created, preferably online. The Subcommittee 8 paper discussed this issue in detail, but the concept was endorsed by Subcommittee 6 as well.
3. **Non-Professionals and Non-LEP Professionals**: A number of subcommittees have agreed that the new regulations should permit some releases to be closed without an LEP, and in some cases without an environmental professional. Some minor releases could be managed by average citizens with no particular training. Some intermediate releases will need to be managed and closed by non-LEP professionals but would not require the expertise of an LEP. While there has been widespread support for the

¹ The Drafting Team recognizes that the recently promulgated Spill Regs address reporting of contemporaneous releases but notes that the Spill Regs do not address regulatory closure.

identification of non-LEP professionals (without identifying a new licensing program) additional detail is required. The specific role and credentials for non-LEP professionals have not yet been identified.

→ **RECOMMENDATION:** A Phase III subcommittee should be convened to flesh out discussion of non-LEP professionals and non-professionals.

4. **Flexible and Streamlined Options:** There is a need for flexible and streamlined options to efficiently bring releases to regulatory closure. LEPs should be empowered with a number of streamlined options that they can implement themselves without DEEP approval, including those currently available under the current RSRs as well as additional self-implementing options developed for the new program. This theme has emerged in several of the subcommittees:
 - a. Subcommittee 3 (characterization needs will vary by complexity of release);
 - b. Subcommittee 4 (immediate removal actions should be available for releases that can be closed quickly);
 - c. Subcommittee 5 (releases closed within a year should avoid tiering);
 - d. Subcommittee 6 (low-risk releases should have streamlined closure pathways);
 - e. Subcommittee 7 (LEP's should be able to implement some tools without DEEP involvement);
 - f. Subcommittee 8 (closure documentation will vary by complexity of release).

5. **Timing and Deadlines:** Several of the subcommittees have raised issues of timing, and there is consensus that timing and deadlines will play a key role in the success of the new program. Examples of timing elements and deadlines that have been raised thus far include:
 - a. a 14-day deadline to close a release with no sampling requirement
 - b. a 120-day deadline to complete limited removal actions
 - c. a one-year deadline to complete cleanup in order to avoid tier classification of the release and the cleanup effort
 - d. Additional deadlines for tiered releases could include deadlines similar to those in-place today under the current RSRs. Subcommittee 5 (Tiers) made specific recommendations regarding timeframes.

Fine tuning is still required to finalize the various deadlines that have been proposed to date. There is agreement that the first year is critical and the one-year mark has emerged as a significant milestone. While selection of deadlines is inherently somewhat arbitrary, there is value in encouraging quick clean-ups both from a technical perspective (less time for contamination to spread) and a policy perspective (more certainty in the marketplace).

6. **Early Exits:** It appears that all stakeholders agree that early exits will be a critical component of the new program in order to encourage quick and complete cleanup of lower risk releases.

→ **RECOMMENDATION:** Details around early exits (and avoiding tiering) need to be fleshed out and integrated.

B. Additional Items Requiring Further Review

1. **Harmonizing Categories of Releases:** Several groups have attempted to impose order on a varied spectrum of releases by grouping the releases into categories (e.g., reportable versus not reportable; tiers; lower-risk releases eligible for streamlined closure; level of closure documentation and credentials required to close various categories of releases). All of these different categories will need to be integrated/harmonized into a cohesive system.
 - **RECOMMENDATION:** It will not be necessary to retain all of the category labels used by subcommittees as the regulations are actually drafted. That said, once draft regulatory text is available, the Working Group will need to carefully review to make sure that all of the interrelated concepts have been captured as intended.
2. **Method 3:** Subcommittee 7 (and to a lesser extent Subcommittee 6) suggest including a risk assessment option like the Massachusetts Method 3 into the new regs. The Department has indicated that the Department of Public Health (DPH) has the statutory authority to engage in human health risk assessment, and any examination of Method 3 would need to include DPH.
 - **RECOMMENDATION:** The Department has agreed to revisit the Method 3 concept with a larger group of stakeholders, including DPH. The Department should reach out to its DPH counterparts immediately (if it has not already done so) and convene a subcommittee including members of the Working Group and representatives from DPH to further discuss Method 3.
3. **Existing Law:** The new program will need to be integrated with existing programs, particularly the federal programs that would control (e.g. PCBs under TSCA). The Transition Advisory Group (TAG) has already begun examining these issues.
 - **RECOMMENDATION:** Once regulatory text is released in draft, leverage the work of the TAG to permit the Working Group to suggest legislative tweaks needed to facilitate integration.
4. **Special Circumstances:** Between the Phase I and Phase II subcommittee processes, ad hoc committees were convened to discuss residential property and historic fill. At the time, the ad hoc committees could offer only conceptual recommendations because the overall contours of the new program were not yet clear.
 - **RECOMMENDATION:** Once draft regulatory text is available, the ad hoc committees should be reconstituted or reconvened to examine residential property, historic fill, and other special circumstances in light of the program as it is taking shape. A second round of discussion on these topics would permit

more targeted recommendations, and it would be most useful when there is draft regulatory text that the ad hoc committees can react to.

C. Closing Remarks

In conclusion, The Drafting Team believes that the topics for the eight subcommittees that have been established to date lay out the framework for the new regulatory scheme from discovery of contemporaneous and historic releases through reporting, investigation, remediation, and preparation of appropriate closure documentation. As noted with the comments provided above and as noted frequently during the Working Group meetings, there are a large number of important issues that remain to be thought through including but not limited to whether there will be a second class of licensed or trained professionals, specific requirements for historic fill, applicability to releases at residential properties, the ability to close releases with site-specific risk assessment tools, and the need to revise or eliminate other statutes and regulations. In addition, there are many details that need to be added to the framework to create implementable regulations.

Figure 1

Basic Release Based Decision Tree

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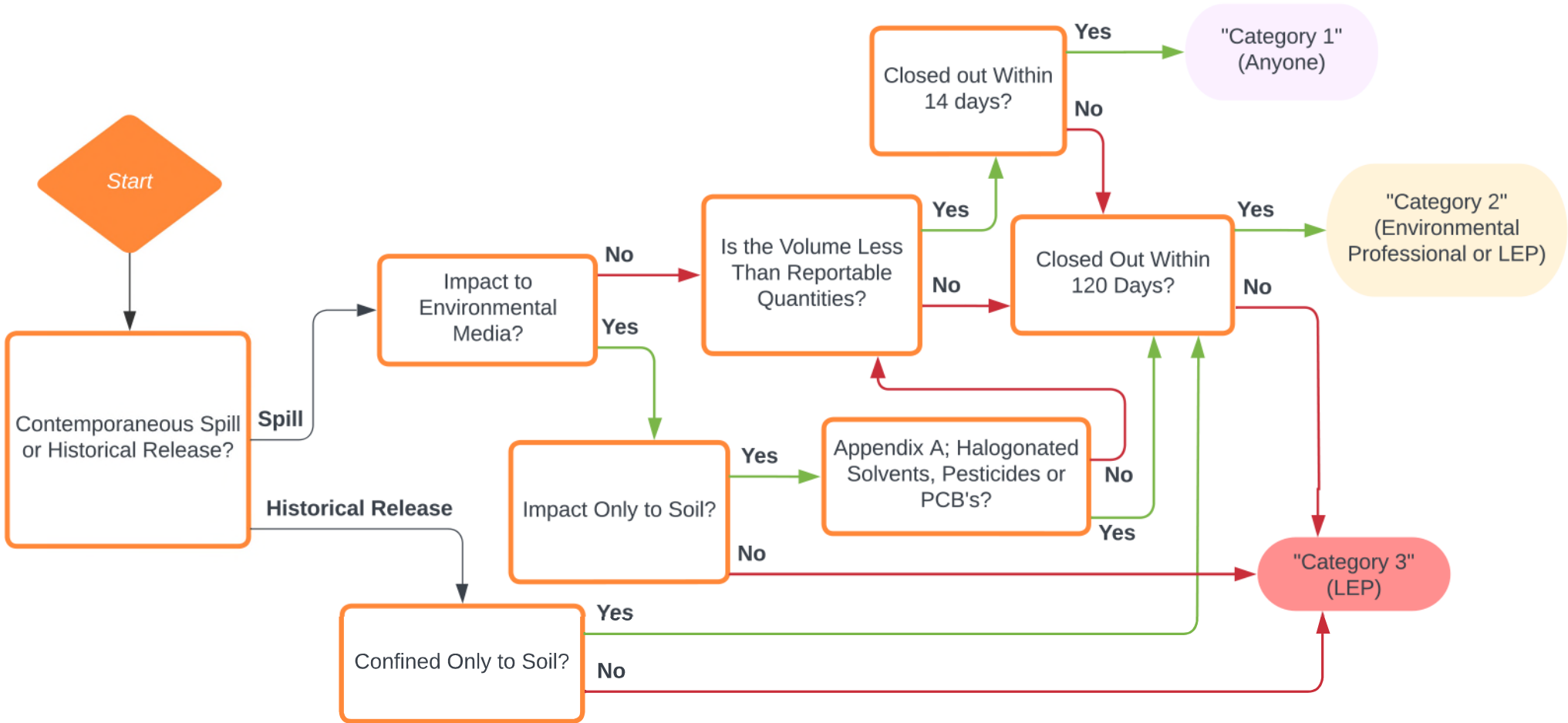


Table 1

	Category I	Category II	Category III
Spills/Historic Release	Contained / No Impacts to Soil/GW	Controlled / Impacts to Soil	Ongoing / Impacts to Soil and Groundwater
CT DEEP Reporting Requirements	24 hours via telephone if hazardous / 72 hours via telephone if non-hazardous	24 hours via telephone if hazardous / 72 hours via telephone if non-hazardous	72 hours via telephone if receptors / 14 days via telephone if no receptors
SEH Potentially Required (Significant Environmental Hazard)			X
ERU Closure	X		
TEP Closure	X	X	
LEP Closure	X	X	X
Historical releases		X	X
Contemporaneous releases (Spill)	X	X	X
Closure Timeframe Requirements	14 Days	120 Days	365 Days or Tier Classify
Closure Reporting Requirements	ERU Report Form	Simplified Verification Form	Verification

ERU - Emergency Response Unit
TEP - Technical Environmental Professional
LEP - Licensed Environmental Professional