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**Investigation and Remediation of Contaminated Properties Rule (IRule)
Responsiveness Summary
December 8, 2023**

The public comment period for the updated Investigation and Remediation of Contaminated Properties Rule (IRule) began on October 25, 2023 and ended on December 4, 2023. During that period, the Vermont Department of Environmental Conservation (VTDEC), Sites Management Section (SMS) held a public meeting on November 27, 2023 to review changes to the IRule since the pre-rulemaking public meeting on March 27, 2023. Written comments were received through email. The SMS' responses are provided below:

Comments received by VHB:

- Appendix A – VIS – PCBs – It might be helpful to clarify that the use of the RAL for res and non-residential releases are specifically related to releases to the environment (i.e. scenario when a transformer blows up in or adjacent to a building and that release generates a potential risk to indoor air, it's not driven by in-use building materials in non-school buildings).
VTDEC response: *The current table in Appendix A includes a footnote which states, "Regulatory Action Level (RAL) for residential and non-residential releases and reporting with respect to PCBs in indoor air. This RAL does not apply to a corrective action taking place in a school pursuant to the School Action Levels issued by the Vermont Department of Health and adopted by the Agency of Natural Resources."*
Additional language will be added in Subchapter 4. Data Evaluation §401(b)(7) as follows: Data Eval #7:
(7) Indoor air sample analytical results. All indoor air sample results attributable to a release shall be compared to the applicable Vermont Indoor Air Standards found in Appendix A. Risk to public health must also be determined via applicable methods discussed in §35-401(d).
 - (A) *Regulatory Action Level (RAL): Cleanup value to be used when a release is detected from a source not associated with a school or building materials (a release to the environment has occurred, such as a transformer release, and is impacting indoor air.)*
 - (B) *School Action Levels (SAL): Cleanup values to be used when a release is detected as part of an investigation taking place at public schools and approved and recognized independent schools.*
- Please provide link to the CRA calculator that should be used.
VTDEC response: *Links to the CRA Calculator are located on the SMS webpage: [Rules, Guidance Documents, & Procedures | Department of Environmental Conservation \(vermont.gov\)](#)*
- Please provide link to TEFs or continue to include the TEFs for the BaP TEQ calculation that should be used.
VTDEC response: *The SMS is currently revising the Environmental Media Sampling and Analysis document to include links to the TEFs which must be used. A direct link will also be included on our website.*



- 6-inch impervious cap could be clarified (please see comments/suggestion in red)
 - (B) An engineered soil cap shall be installed to eliminate contact risk. The engineered soil cap shall be:
 - (i) If not covered by an impervious surface, a minimum of 18” thick; or
 - (ii) If covered by an impervious surface, 6” thick of fill or sub-base material under the impervious surface.

Comment: Most construction (i.e. parking lots) do not require 6-inches of asphalt. Please confirm that the 6-inch impervious cap is a 6-inch thick combination of asphalt/concrete and sub-base, or is it 6-inches of sub-base and any thickness of asphalt /concrete.

VTDEC response: *The language does not specify a required thickness of the impervious surface; only the thickness of the material underneath the impervious surface.*
 - (iii) Alternate cap thicknesses may be utilized, provided additional institutional controls are placed on the property to ensure protection of human health and the environment, and approval is granted by the Secretary.
 - (iv) Clearly marked with a material that distinguishes the divide between or alternative that is approved by the secretary

Comment: in some cases the indicator marker is not practical as it thwarts root growth and/or vegetation, or is not really necessary as the impervious surface itself provides a clear distinction between the impacted soil below and the surface completion that serves as the barrier.... By adding the ability to present an alternative that is approvable by secretary provides a little flexibility for those unique situations.

VTDEC response: *The language currently in the IRule does not specify the material to be used as an indicator marker. Flexibility is already included to allow for unique situations and alternative indicator layers which would not inhibit root growth.*
- Please clarify how a detection that is equivalent to a standard is to be treated. Is it treated like an exceedance or not? Matt Moran referenced a few documents during the meeting last week that explicitly just said exceedance, not equivalent. I’m not a risk assessor but my understanding is the standards are developed such that any concentration in excess of a particular value is what generates the unacceptable level of risk. It comes up very infrequently – but when it does it would be good to have it clarified in the IRule.

VTDEC response: *In §35-401 (b) added language: “Analytical results which are equal to or greater than the applicable standard shall be considered an exceedance of the standard.”*

Comments received by Champlain Housing Trust:

Champlain Housing Trust (CHT) is concerned that some of the proposed changes will add cost and possibly inhibit housing projects for historic buildings or in urban settings, designated downtowns, and village centers. This is worrisome when there is such a serious and immediate need for new housing, particularly for moderate- and low-income households across the state. We are concerned the changes may meaningfully slow down or reduce the creation of sorely needed affordable housing in the state.

PCB

The PCB regulatory action levels for residential and non-residential releases in Appendix A Section 53-APX-A3 seem to exempt residential and commercial properties. If this is the intent, please clarify. This should also be clarified in the definition of a release that it is only applicable to school buildings. Also, what if any impact might these action levels have on non-school properties enrolled in the BRELLA program?

VTDEC response: *Additional language was added in §401(b)(7) to clarify when to use either the RAL or SALs. The current definition of “release” states (in part), “the intentional or unintentional action or omission resulting in the spilling, leaking emission, or disposal of polychlorinated biphenyls (PCBs) from building materials in public schools and approved and*

recognized independent schools that were constructed or renovated before 1980.”, which is clarification that this portion of the definition only applies to school buildings. Currently, the SMS does not regulate PCBs in building materials. For all sites, including properties enrolled in the BRELLA Program, we strongly recommend that mitigation efforts are implemented if a property is impacted by a release of PCBs from building materials, but we do not require it.

Lead

The lead soil standards have substantially decreased since 2019 from 400mg/kg to 41mg/kg. Please clarify the rationale for the change to the residential standard (41mg/kg) and the urban background standard (111 mg/kg). How are these changes to be applied to residential projects in an Urban Background area? Many of our projects involve new construction often on tight urban sites that create excess soil that cannot remain on site. If the residential standard were to be reduced to 41mg/kg these soils may now have to go to a landfill as hazardous waste. In nonurban sites the decrease in residential soil standards for lead will likely increase management of more soils, increase costs and fill landfills.

VTDEC response: *The 2017 Soil Background Study determined that the non-urban background concentration for lead was 41 mg/kg, and the urban background concentration was 111 mg/kg. The Vermont Department of Health (VDH), which calculates risk-based cleanup values used in the IRule and the Groundwater Protection Rule and Strategy, have indicated that any risk-based cleanup value for lead would be below the VTDEC’s background values. Therefore the VTDEC is using the background values as cleanup standards in this instance.*

It is our understanding that the EPA is developing a new residential lead soil guidance lowering screening values that have not been released yet and there is no date for this to be published in the Federal Register for public comment. We feel it makes sense to wait to alter the lead soil standards until EPA has completed its work and issued the new guidance. Instead of the I Rule setting values, it could reference following the EPA guidance for lead

VTDEC response: *The VTDEC and the VDH will evaluate any new data from EPA regarding lead, or any other contaminant, when it is final and becomes available for review.*

Urban Soils

Properties that are begin redeveloped and adjacent properties in urban areas where PAH and lead contamination are not from a release but are from atmospheric deposition will likely share the same level of contamination. Will removing soil to meet the new standard have the anticipated public health impact? Also, will these properties be re-impacted above the proposed standards through ongoing atmospheric deposition?

VTDEC response: *Remediating soil contaminated with PAHs and lead will result in eliminating exposure to known carcinogens. Determining whether these properties will be re-impacted in the future due to atmospheric deposition is not possible at this time.*

We have a project that has just started construction with PAH and lead in the soil that is to be disposed. The contracted hauler has informed us that for 2023 “This landfill is not accepting any new material this year as they have exceeded their quota.” This raises concerns about not being able to locate appropriate places for disposal of soil locally/regionally and that we may have to take them further away, increasing costs.

VTDEC response: *We agree that this is a concern to be anticipated and planned for while determining disposal locations for contaminated soils.*

Corrective Action Plans & Soil Management

All our affordable housing projects have specific funding requirements and deadlines. We appreciate the need for proper review by DEC and DOH staff and advocate for sufficient staffing to ensure timely review.

An example: If the site requires a Corrective Action Plan (CAP), currently our experience is that the CAP process can take ~9 months or more. Then if there is HUD funding for that project, we are unable to complete HUD review until the CAP is received. Until the HUD review is complete, we cannot undertake the purchase of the site or enter a construction contract which places the project at greater risk for a longer period. The length of time to achieve an approved CAP, followed by HUD environmental review release is extending project pre-development timelines by a year or more, adding risk and cost, and delaying production of critically needed homes.

VTDEC response: *We agree that the entire CAP process can be lengthy due to many factors, beyond just the VTDEC’s 30 day public comment period. In the November 27, 2023 public meeting, it was suggested that a focus group be developed*

to identify methods of streamlining the process which would need to include developers, VTDEC, HUD, and other stakeholders involved in the process.

Comments received by Evernorth:

Evernorth and their partners work with environmental professionals to remediate those sites in accordance with this rule. Evernorth and the greater affordable housing community are committed to ensuring those who reside in our properties are safe from the releases from hazardous materials, but we are concerned that the proposed changes will require a corrective action plan on more projects, slowing development and increasing construction costs. Evernorth and our partners currently have two downtown affordable housing projects where the costs of soil remediation are \$27,000 to \$30,000 per unit under the existing I-Rule, with the lead standard at 400 mg/kg. The proposed changes to the iRule and corrective action plans will present additional significant hurdles for affordable housing development at a time when there is a critical need for affordable housing options for low-income households.

- It is unclear how the PCB air standards for schools will impact non-school buildings especially non-school BRELLA projects looking to get a certificate of completion. PCB air standards for non-school buildings would create a significant barrier in the renovation of Vermont's older housing stock and may prevent such renovation projects from being able to be completed. Appendix A §35-APX-A3 specifically calls out a regulatory action level for "residential and non-residential releases". It appears that the intent of the PCB air standard testing is to exempt residential and commercial properties, and we would request language clarifying as such.

VTDEC response: *Additional language has been added to §401(b)(7) to clarify when the RAL or SAL is applicable. Currently, the VTDEC does not regulate releases of PCBs from building materials. For all sites, including properties enrolled in the BRELLA Program, we strongly recommend that mitigation efforts are implemented if a property is impacted by a release of PCBs from building materials, but we do not require it. The intent of the RAL is to provide an indoor air standard for PCBs for all non-school buildings, which does include residential and non-residential buildings. It is not intended to exempt these buildings.*

- The I-Rule calls out specific timelines for environmental professionals and PRP's to provide information to the state, but there are not timelines assigned to the state reviews of submitted information. There is concern that some of the proposed changes to the I-Rule will result in longer review times by the State. In particular, §35-306(b)(13) states that SSRA's will have to undergo Vermont DOH review. Evernorth understands that the State needs adequate time for review, but without specified timelines for these reviews, projects are put at risk of significant schedule delays. This has significant implications for funding deadlines that are critical to affordable housing projects.

VTDEC response: *The VTDEC does not anticipate that the changes in the iRule will result in longer review times. While there are not timelines included in the iRule for VTDEC to adhere to, project managers make every effort to meet project deadlines when we are informed of those deadlines. We encourage all stakeholders to include VTDEC project managers in discussions regarding scheduling and deadlines so that project delays can be prevented. Regarding site specific risk assessments (SSRAs), it has been the VTDEC's longstanding practice to include VDH review of those SSRAs. The Sites Management Section (SMS) does not have a trained risk assessor on our staff to review SSRAs.*

- §35-604.(d)(3) Specifies that "...the resiliency of alternatives must be evaluated in light of reasonably foreseeable changing climate conditions...". It is unclear how this evaluation will be reviewed by the state. Are there specific standards that the alternatives will be measured against, such as FEMA floodplain data on the ANR atlas?

VTDEC response: *There are significant resources available online which address greener remediation. The VTDEC will include additional resources for environmental consultants to reference in our Environmental Media Sampling and Analysis guidance document.*

The residential soil standards for lead have decreased from the 400mg/kg (the 2019 levels, as well as the current EPA residential screening level) to 41mg/kg. The new proposed standard would require that nearly every project

undergo a corrective action plan and more soil management on redevelopment projects where all the soil cannot be reused on site.

There is also concern regarding the discrepancy between the proposed urban background standard (111 mg/kg) and the proposed residential standard (41mg/kg). Most of our projects in urban areas are on tight sites and require soil removal as a part of the sitework. If the soil in these urban sites fall below the urban background standard but above the residential standard it will mean that the soil does not require remediation or capping, but as soon as it is removed and transported outside the urban area it will be treated as hazardous and need to be disposed of at a certified location. This will incur significant project costs, reducing the feasibility on many urban sites. Please clarify the rationale for the changes to the residential and urban background standards.

VTDEC response: *The urban background standard for lead applies to all properties which are located within a designated urban background location. Beyond those locations, 111 mg/kg is no longer the “background” value, so the applicable standard is the non-urban background value of 41 mg/kg. Additional clarity will be provided in the SMS’ updated Development Soils factsheet.*

It is Evernorth’s understanding that the EPA is developing a new residential lead soil guidance lowering screening values, but that these values have not been released yet and there is no date for this to be published in the federal register for public comment. We feel it makes sense to wait to alter the lead soil standards until EPA has completed its work and issued the new guidance. Instead of the iRule setting values, Evernorth suggests the iRule reference following the EPA guidance for lead in soils.

VTDEC response: *The VTDEC and the VDH will evaluate any new data from EPA regarding lead, or any other contaminant, when it is final and becomes available for review.*

- More projects requiring a full corrective action plan leads to significant costs and delays in developing affordable housing. To avoid delays, Evernorth would like to suggest there be a more streamlined process not requiring a full corrective action plan for soil contamination up to a certain threshold, or for parcels where the remediation is straightforward. The soils management plan is a good middle ground to ensure the safety of residents and the general public, but as currently written it is restricted to a select few scenarios that rarely come into play. Evernorth suggests either broadening the soil management plan option to allow for its use on more sites, or the development of a tiered CAP that allows for a more streamlined process for straight-forward sites.

VTDEC response: *In the November 27, 2023 public meeting, it was suggested that a focus group be developed to identify methods of streamlining the process which would need to include developers, VTDEC, HUD, and other stakeholders involved in the process. We remain supportive of development of such a group to identify ways to streamline the process.*