



**Connecticut Department of
Energy & Environmental Protection**
Bureau of Water Protection & Land Reuse
Remediation Division

The Department of Energy and Environmental Protection (DEEP) posted notice on DEEP's website on July 26, 2011 regarding DEEP's proposed Targeted Brownfield Remedy (TBR) Draft Concept. The comment period closed on September 30, 2011. DEEP received many comments that have helped DEEP to better shape and refine this approach to site remediation. Listed below are the comments grouped by general subject matter and information on how the comment has been factored into the Targeted Brownfield Remedy concept.

Response to comments regarding the TBR Draft Concept:

ELIGIBILITY REQUIREMENTS

Summary of Comment

Many commenters expressed concern that there was no clear reason for the exclusion of GA sites from the TBR. They noted that regardless of participation in TBR, all sites are required to be in compliance with the RSRs, which contain specific requirements for GA areas. In particular, commenters asked, "If soil is rendered environmentally isolated under a building or an engineered cap, why is this restriction necessary?"

Response to Comment

The cap required under a TBR addresses polluted soil in the unsaturated zone. It does not specifically address residual sources below the water table. The TBR characterization approach departs from the conventional characterization approach typically used to demonstrate a three-dimensional understanding of a release. The TBR is providing flexibility in the approach to investigating a site but potentially decreases the level of certainty concerning the nature and extent of releases. Therefore, at this initial stage of the TBR program, limiting the self-implementing use of this approach to a GB area is reasonable and protective of human health.

Proposed Change to TBR Concept

No change.

Summary of Comment

Requiring that the party undertaking the remediation is not subject to an enforcement action should not be a restriction, because the term "enforcement action" is vague.

Response to Comment

In this eligibility requirement, DEEP specifically means that if a party is the subject of an order issued pursuant to Sections 22a-432, 22a-433 or 22a-134 of the Connecticut General Statutes and requiring investigation and remediation of a property, that party is not eligible to utilize the TBR approach.

Proposed Change to TBR Concept

Identify specific types of enforcement actions that would prohibit a party from being eligible.

Summary of Comment

One commenter suggested that the TBR should be used only in GB areas with no drinking water wells in use on or near the site.

Response to Comment

Because the TBR approach will be limited to GB areas, there is a much lower probability that drinking water wells will be in use at or near a TBR site. If there were to be a potable well identified as being impacted by a site (regardless of the distance from the site) it would be addressed as part of a monitoring program, reported under the Significant Environmental Hazard Program and addressed as part of a remedial action plan.

Proposed Change to TBR Concept

No change.

Summary of Comment

A request to add GAA and public water supply watersheds to the GA restriction was submitted.

Response to Comment

This clarification will be made. Note that public water supply watersheds are by definition in GAA class areas.

Proposed Change to TBR Concept

Add GAA areas to the requirement that the site is not in a GA groundwater classification area or an aquifer protection area.

Summary of Comment

The eligibility checklist requirements are impossible to achieve for those parties who do not yet own a site.

Proposed Change to TBR Concept

Language in the checklist has been modified to make it clear that this is an option.

Summary of Comment

Many of the limitations in the eligibility requirements seem to provide no additional protection of human health and environment.

Response to Comment

Since the TBR is providing flexibility in the approach to investigating a site, the decreased level of certainty concerning the nature and extent of releases and whether it extends into the watertable to serve as an ongoing secondary source would require a greater level of certainty regarding the absence of sensitive receptors. Therefore, at this initial stage of the TBR program, limiting the self-implementing use of this approach to GB area is reasonable and protective of human health.

Proposed Change to TBR Concept

No change.

CAP REQUIREMENT**Summary of Comment**

Several commenters requested that either the requirement for soil to be environmentally isolated if there are not exceedances of the Pollutant Mobility Criteria (PMC) be removed, or that an option for “engineered control lite” if no migration issues are identified be included.

Response to Comment

The TBR Concept document and the TBR Checklist have been revised to make it more clear that performing supplemental characterization to support an engineered control which addresses only DEC does not affect the eligibility of a site to participate in the TBR approach. The more that is known about conditions at the site, the more flexibility there will be in implementing the engineered control. If there are no PMC issues, a PMC cap would be unnecessary. (The same would be true for a volatilization cap.) The gathering of data necessary to make such a determination would not affect the ability to remain within the TBR program.

Proposed Change to TBR Concept

The documents have been changed to reflect these clarifications.

Summary of Comment

One commenter expressed they would like to choose "development" as remedy, possibly without an official engineered control.

Response to Comment

If the full extent of the contamination is located beneath buildings to render soil environmentally isolated and inaccessible, then an engineered control would not be necessary. However, contaminated soil located outside of the building footprint that is not

subject to a permanent remedy will still need an administrative means under the RSRs to render soil environmentally isolated and inaccessible. The TBR approach does not create an ability to waive the requirement to seek an approval for using an engineered control when capping polluted soil.

Proposed Change to TBR Concept

No change.

Summary of Comment

It is not clear how to “opt-out” of the requirement that all sites must have sub-slab vapor control when there is a demonstration that there is no existing or potential volatilization issue.

Response to Comment

The more that is known about conditions at the site, the more flexibility there will be in implementing the engineered control. If it can be demonstrated through investigation that there are no volatilization issues, then there would be no need for sub-slab vapor controls. Modifications to the default components of the TBR remedy resulting from the findings of additional characterization will not alter the initial assumption of eligibility in the TBR program.

Proposed Change to TBR Concept

The documents have been changed to reflect these clarifications.

Summary of Comment

Several commenters expressed concern that currently participating in TBR is more difficult than not - several parts are more stringent than RSRs.

Response to Comment

Because there is more flexibility in the data quality objectives (DQOs) within the TBR, the ability to use alternative investigative approaches in characterizing a site is expanded. For example, in a TBR investigation increased use of on-site field screening techniques would be allowed, which can save both time and money in the characterization of the TBR area by focusing the scope of investigation to support the remedy.

Proposed Change to TBR Concept

No change.

Summary of Comment

One commenter expressed concern that regulatory requirements regarding risks associated with volatile organic contamination in soil (e.g., addressing volatiles migrating to water from shallow soil) would not be addressed when vapor intrusion mitigation is installed under buildings.

Response to Comment

The potential for an incremental impact from such a contaminant pathway will be addressed through compliance monitoring and plume remediation, as appropriate. This fact reinforces the concept that receptor surveys will be needed in association with the TBR approach.

Proposed Change to TBR Concept

No change.

SECTION 17**Summary of Comment**

“Those properties and persons who are eligible for participation in the CT DECD Brownfield remediation and revitalization program created pursuant to Section 17 of Public Act No. 11-141 should not be foreclosed from use of the TBR.” Especially since, the “Section 17 program requires that action be taken to address the continuation of off-site migration of pre-existing contamination.”

Response to Comment

Section 17 of Public Act 11-141 allows for relief from the requirement to investigate or remediate the impacts of on-site releases to off-site properties. The TBR allows for less thoroughness in the characterization of releases when the remedy for a site will be an engineered cap. This approach to site characterization is new, and DEEP anticipated that data collection from off-site properties, if necessary, would provide valuable information regarding the effectiveness of both this limited characterization approach as well as the capping remedy.

DEEP has reevaluated how the TBR might work synergistically with sites eligible for relief under Section 17 of Public Act 11-141 and believes that the initial concerns identified can be addressed through on-site monitoring.

Proposed Change to TBR Concept

TBR concept has been expanded to allow for “Section 17” sites to use the TBR approach.

DEEP APPROVAL**Summary of Comment**

“The value of a presumptive remedy, at least to the extent it is intended to provide an incentive to investigate and remediate the property, is curtailed significantly when its availability cannot be reasonably relied upon at the outset.” Because there is no approval, eligibility could change as investigation progresses.

Response to Comment

Eligibility would be understood at the front end. Conditions that may be identified in the TBR investigation phase which indicate the TBR cap is not sufficient to protect human health and the environment would require supplemental remediation. The need for such supplemental remediation would not affect the initial assumption of eligibility or the suitability of the TBR cap as a component of the remedy. Furthermore, the Checklist serves to inform the party implementing the TBR, if such an approach is appropriate.

Proposed Change to TBR Concept

The documents have been clarified to reflect the discussion above.

Summary of Comment

Eligibility should not “require the completion of a ‘redevelopment plan’ (a phrase which is not defined in the draft documents).”

Response to Comment

Eligibility is not tied to the availability of a redevelopment plan. The Fact Sheet was simply pointing out that the extent to which a redevelopment concept has been developed enhances the ability to better focus a remedy and so better focus the investigation necessary to support the remedy.

Proposed Change to TBR Concept

No changes.

Summary of Comment

It is unclear whether the TBR requires DEEP approval or not - checklist says no, but fact sheet discusses approval.

Response to Comment

No application or formal approval is envisioned for use of the TBR program. References to approvals in the fact sheet relate to variance requests under the RSRs, such as the specific design of the engineered control and the ELUR, as required under the RSRs.

Proposed Change to TBR Concept

Modifications have been made to the fact sheet to clarify this issue.

CHARACTERIZATION REQUIREMENTS**Summary of Comment**

One commenter wished to encourage the use of on-site field screening techniques in investigation.

Response to Comment

Limitations for the use of screening methods in the Site Characterization Guidance Document (SCGD) are based on the ability to achieve compliance standards. Since the TBR is not

focused on documenting compliance, use of screening technique can be used much more liberally. This concept will be further highlighted in the guidance document.

Proposed Change to TBR Concept

No change.

Summary of Comment

A commenter requested the TBR documents to include a note that a presumptive remedy onsite may need to be revisited if off-site groundwater pollution is above criteria.

Response to Comment

Groundwater pollution which exceeds remedial criteria still must be addressed, independently of the use of a cap to limit infiltration through contaminated soil.

Proposed Change to TBR Concept

No change.

Summary of Comment

Several commenters mentioned requirements for characterization are unclear.

Response to Comment

DEEP has developed a guidance for TBR site characterization.

Proposed Change to TBR Concept

No change.

OTHER COMMENTS

Summary of Comment

One commenter proposed an additional requirement that sites have a history of manufacturing from the early 20th century.

Response to Comment

This restriction would be unnecessarily limiting without providing environmental benefit.

Proposed Change to TBR Concept

No change.

Summary of Comment

Is this affected by the new responsibility endpoint of a Phase II?

Response to Comment

The TBR approach would be available for eligible sites without regard to which party is responsible for performing the investigation and remediation of the site. If there are issues regarding responsibility to perform the investigation and remediation, it is anticipated that those issues will be resolved between parties prior to implementation of the TBR approach.

Proposed Change to TBR Concept

No change.

Summary of Comment

Instead of checklist for eligibility, include a statement that site will be remediated according to RSRs.

Response to Comment

The TBR will involve the use of an Engineered Control. The RSRs require the Commissioner to provide an approval of the use of an Engineered Control. The eligibility check list is intended to provide certainty regarding how DEEP will respond to the required submission of a Part 1 application for use of an Engineered Control with respect to the TBR. Therefore, simply accepting a statement regarding compliance according to the RSRs would not be compliant with the requirements of the RSRs for use of an Engineered Control. The Eligibility Checklist has been modified for clarity.

Proposed Change to TBR Concept

No change.

Summary of Comment

One commenter requested for the TBR to be available for all engineered controls.

Response to Comment

At this initial stage of the TBR program, limiting the self-implementing use of this approach to Brownfield sites in GB areas is reasonable and protective of human health and the environment.

Proposed Change to TBR Concept

No change.

Summary of Comment

Recommend "Brownfield" be replaced with "Presumptive" in TBR title since current structure does not limit to Brownfields.

Response to Comment

The comment is noted.

Proposed Change to TBR Concept

No change.

Summary of Comment

One commenter requests an analysis be done of alternatives before threatened wells are connected to public water.

Response to Comment

The requirement for drinking water receptors to be connected to an alternative water supply was meant to indicate that groundwater receptors need to be addressed. The Eligibility Checklist has been modified to clarify that the TBR does not favor any particular water supply alternative over another.

Proposed Change to TBR Concept

Modifications have been made to the Eligibility Checklist to clarify this issue.

Summary of Comment

One commenter requests more information regarding ELURs be added to the fact sheet.

Response to Comment

Comment is noted.

Proposed Change to TBR Concept

No change.

Summary of Comment

One commenter would like to expand the program to allow sites not currently in a program to apply (i.e., sites preparing for transfer).

Response to Comment /Proposed Change to TBR Concept

Language in the fact sheet and Checklist has been modified to make it clear that this is an option.

Summary of Comment

The requirement to demonstrate that the TBR is consistent with on and off-site land use is beyond what the RSRs require.

Response to Comment

The need for consistency with off-site land uses is related to the option to implement various types of engineered control capping options which are less protective than the default TBR cap if further characterization supports the protectiveness of that remedial approach.

Proposed Change to TBR Concept

This requirement is a design issue for the engineered control and does not need to be included in the Eligibility Checklist.

Summary of Comment

Requiring connection to "alternative water supply" for receptors that "may be potentially affected" is unnecessary and vague.

Response to Comment

To the extent that supplemental investigation can show that a water supply well does not have the potential to be affected by contamination related to a TBR, then providing an alternative water supply would not be required.

Proposed Change to TBR Concept

Modifications have been made to the Eligibility Checklist to provide additional flexibility.