Common Questions and Answers

Inactive Hazardous Sites Branch
Registered Environmental Consultant Program

This document is provided to help clarify some common questions and misunderstandings of the Registered Environmental (REC) Program within the Inactive Hazardous Sites Branch (IHSB). Included near the end of the document are some additional general questions and answers related to the IHSB and REC Program, including questions related to remedial goals as well as risk-based remedies. At any time, interested parties can contact our office using the contact information on our website to get additional questions answered.

1. **As a remediating party, before I volunteer to clean up my site through the REC Program, I have several questions and want to understand my role along with the role of the REC and the Department of Environmental Quality (DEQ). Can I first discuss these important issues before I proceed?**

Yes. Before, REC-directed Administrative Agreements (AA) for voluntary remedial actions are executed, we request a meeting or conference call with the remediating party and REC to discuss the content of the agreement and expectations. It is a good time for parties to ask questions regarding any of the REC Rules and procedures and discuss the guidelines and tools that the IHSB provides for conducting an REC-directed cleanup. Remediating parties and RECs are encouraged to discuss any important site-specific situations, such as using risk-based remedial goals as cleanup standards.

2. **Does the REC Rule 15A NCAC 13C .0306(e), which states "The REC shall plan and implement the remedial investigation so that to the extent practicable the location and identity of all hazardous substances discharged to the environment at a site have been established. All areas known, suspected, or having reasonable probability of being contaminated by hazardous substances shall be investigated", mean that, if I volunteer to conduct a cleanup, I will be required to conduct a full environmental audit of the property?**

No. For the site covered by the remediation agreement, you will be required to investigate each area that has evidence of a release. Evidence would include things like visible staining, records or employee information on spills or tank leaks, and existing laboratory data indicating contamination detected in the environment. It would not necessarily include the presence of chemical storage areas or vessels unless there was evidence of a release at these locations. In an ASTM environmental audit for a property transaction, you may have to investigate these storage areas, but not for remedial actions under the REC Rules unless there is evidence of a release.

For example, let's assume two source areas exist on a property: an above ground storage tank (AST) and a drum storage area. For the drum storage area, review of the site history indicates

strong solvent odors were encountered during installation of utility lines adjacent to the concrete pad beneath the drums and solvent compounds were subsequently detected above remedial standards in several soil samples. This evidence indicates the drum storage area needs to be further investigated. For the AST, there has never been any evidence of a release (e.g., no reported spills, no stains on the ground, no missing product inventory, etc.) to indicate contamination exists. Therefore, the AST would not be a site and require investigation.

3. **I would like to clean up only a certain Area of Concern (AOC) for a site that is on the IHSB inventory. Is this possible?**

Yes. We recognize that former operators of a facility may not be responsible for all areas of concern. When those parties would like to address their portion of the site, we have an agreement that will specify this option using REC-directed remedial action. Note, however, at completion of the work, only the area of concern will be closed and not the entire site. The site will remain on the Inactive Hazardous Sites Inventory until all known or suspected areas of concern on the property have been cleaned up to standards. If there are no other areas of known or suspected contaminant releases that require work, the entire site will receive No Further Action status.

4. **My Site has an extensive history of investigation and remedial action conducted under the direction of a different DEQ program. When I enter the REC Program, do I have to start over and reproduce the work?**

No. None of the previous remedial activities that were performed under the direction of another DEQ program have to be repeated as long as the same remedial goals were achieved. The REC should review the previous remedial activities and confirm the work and report content meet the requirements of the REC Rules. The REC must ensure all known or suspected contaminants of concern (including their degradation products) for each area with evidence of contamination have been addressed. The REC will need to document where the various components of the investigation work plans and reports required by the REC Rules can be found. A table indicating the location of each required component can be included in a summary letter report to document work already completed. Any remedial documents not already in the State's electronic files need to be attached as an appendix. The prior work does not need to be repeated, but does require a compliance check by the REC to determine if the previous investigative and remedial activities meet current standards of environmental practice, including any rule requirements. Note also, that you do not have to repeat work if a different USEPA analytical method was used other than those described in program guidance if that method had adequate or best available detection limits.

5. **REC Program guidance specifies analytical methods that need to be used. Do I always have to conduct full analytical scans using all the methods listed?**

No. The REC Rules specify that analytical methods used must be those approved by the agencies listed in 15A NCAC 13C .0306(c)(2). The guidance outlines the methods that will achieve the assessment requirements. For example, if a property has been used for multiple purposes and multiple chemicals have been present on a site, a full analytical scan is appropriate and necessary. However, if a property was only used for dumping of batteries, metals and pH may be the only needed analyses.

6. **I have heard from various sources that REC-lead sites require more time and work and are, therefore, more expensive than IHSB-lead sites. Is this true?**

There is no difference in the work conducted for sites with REC oversight versus IHSB oversight. The REC Rules include the minimum standard information to address during a remedial action, but it is up to the RSM to complete site investigations and choose proper remedial technologies. Guidance is provided to aid in determining sampling strategy. However, the REC is expected to make decisions using professional judgment.

7. **I am both a licensed geologist and a professional engineer. The REC Rules require that I certify various work phase activities and documents. Why isn't my professional license sufficient?**

The REC certifications are notarized statements that certain minimum elements have been met and cleanup standards achieved. Professional engineering and geology licenses only address the portion of the work that is the practice of engineering or geology. Attainment of cleanup standards among other requirements is not covered by these professional certifications. There are administrative requirements that ensure the safety of the public and the availability of the site records that also would not be covered by professional certification. Thus, many of the rule-required activities and decisions do not relate to the practice of geology or engineering. Note, however, that if there is a component of engineering or geology in a document, that document should also have the relevant professional certification.

8. **I just became an RSM and understand my role in the REC Program and making important independent decisions regarding the cleanup activities. What resources are available to assist my client and me during the course of the site cleanup?**

Resources to help with REC Program compliance can be found on the IHSB website. The website includes links to the REC Rules, an REC Program Implementation Guidance (Guidance) document, and other useful materials such as document content checklists. These checklists provide a summary of the applicable rule requirements for each phase of work and can be used as tool to guide the RSM through the REC Program planning and documentation requirements. REC Program staff within the IHSB are also available to assist remediating parties and RECs. We offer REC training sessions in small group settings for Registered Site Managers (RSMs) and their company staff, as well as remediating parties and other interested parties, at various times during the year or upon special request. In addition, we would be happy to arrange a

conference call or meeting in order to discuss unusual technical situations that sometimes arise during the course of a remedial action. We encourage the use of these available resources. We would like to see remediating parties and their RECs succeed in a safe, compliant, and cost-efficient manner.

9. **The REC Rules and the *REC Implementation Guidance* discuss various phases of work and certain documents that must be completed and submitted over the course of an investigation and cleanup activities. Do all of the documents have to be submitted separately or can I combine documents for submission?**

Depending on the situation of a particular site, significant time and money can be saved if certain work phases can be documented together. As discussed in the Guidance, many of the documents can be combined, as needed. For example, if at the time the Site enters the REC Program, no sensitive receptors are identified during work plan preparation and no field activities for a remedial investigation are needed, a combined remedial investigation work plan and remedial investigation report can be submitted as long as deadlines for both are met. For cleanup proposals, the remedial action plan (RAP) and Preconstruction Report may be combined for simple remedies. The Construction Completion Report may also be combined with the first quarterly progress monitoring report. In general, any certified report submission during the quarter may serve as the quarterly update status report needed to satisfy the administrative agreement. Regardless of which documents are combined, the appropriate work phase completion forms must be completed and submitted at the completion of each phase of work. RECs should contact the REC Program staff for questions regarding combining documents and which work phase completion forms to include.

10. **My site has some unique circumstances pertaining to defining the extent of contamination, evaluating vapor intrusion potential, and determining the best remedial alternatives including possibly using risk-based remedial goals. I would like to discuss these important issues with DEQ, but since the project is in the REC Program without IHSB oversight, I assume that I cannot schedule a meeting or a teleconference to go over the details. Are my client and I on our own or is there someone that can go over the situation with us?**

REC Program staff are available to discuss projects, answer questions about newer risk-based options, and clarify any confusion with any of the Rule requirements. We also periodically hold REC training sessions and general information meetings with RSMs and other parties to discuss specific issues and disseminate new information. REC Program staff project managers can be contacted any time to schedule a meeting or conference call.

11. **My site has some extenuating circumstances which may cause us to miss a milestone required by the REC Rules. Can an extension be granted?**

Remediating parties should be ready to implement work when an agreement for remediation is initiated. The milestones in the REC Rules are to ensure progress is made on these independently approved cleanups. The IHSB does not have the authority to grant extensions to the milestones as these deadlines are set by rule. If the remediating party/REC realizes compliance with a deadline is in jeopardy and due to circumstances outside of the remediating party/REC's control (e.g. permitting delays, property access issues, a complex remedy with phased implementations, etc.), they should notify REC Program Staff in writing with documented details of why the deadline will be missed. They should also provide a revised schedule for getting the project back on track, including dates for future submittals. Delays that are outside the remediating party/REC's control are not deemed enforcement priorities if self-reported. The remediating party can also opt to cancel the administrative agreement, complete some work outside of an agreement with the intent of re-entering the program at a later date for an approved cleanup in order not to miss deadlines. Re-entering an agreement does not re-set the clock on deadlines. We understand that issues arise and encourage those involved to contact us immediately upon discovering a problem involving a milestone.

12. **As a professional and RSM, I believe it is very important to conduct a proper pilot test for our proposed groundwater remedy so we can make sure it is the best technology to use and can be budgeted appropriately. However, the length of time for us to complete the pilot test may cause us to miss the deadline for initiating the *full* groundwater remedy. How is this handled?**

The IHSB understands that obtaining permits for certain technologies can involve multiple agencies and take a substantial amount of time. We also understand that some pilot tests for certain technologies (e.g., injection cleanups) may require several months to evaluate their effectiveness before full-scale implementation. In these cases, during the remedial design the REC needs to include the anticipated time for permits and pilot tests in the project schedule for full implementation, which becomes part of the certified RAP. The pilot test needs to be implemented prior to the milestone for initiating the groundwater remedy. In subsequent progress reports, the IHSB would expect the full-scale remedy to be implemented in accordance with the schedule in the REC-certified RAP and progress made toward achieving remedial goals. The REC should document the implementation status of the remedy and any delays in subsequent quarterly progress reports.

13. **I have performed a receptor survey as part of my remedial investigation work plan and have identified several sensitive receptors, including a previously unidentified active drinking water supply well that is in the direct path of the groundwater contamination. I discussed the details of the survey and water supply well in my certified work plan that was sent to REC Program staff, so do I need to do anything further?**

Yes. Since the IHSB's REC Program staff do not review documents submitted for the public record unless performing an audit, staff are not aware of any receptors and imminent hazards near these sites that may be identified in the REC's reports. The RSM's certification replaces state oversight and approval of cleanup activities. RECs have specific standards of conduct to

follow [15A NCAC 13C .0305] whereby the REC's primary obligation is to protect public health, safety and welfare, which would include evaluating and keeping track of a potentially threatened water supply or sensitive environment. The REC must also ensure within 24 hours of discover that REC Program staff are aware of the identified imminent hazard. To fulfill these obligations, the REC should contact our office to notify us of any specific concerns and not rely on a notation within a document submitted.

14. **I am an RSM and have several junior staff that assist with my project work. It is my understanding that, in addition to my normal project oversight duties, I cannot depend on the work of my staff and have to do all of the field work and document preparation for a project in the REC Program myself. Is this true?**

No. Similar to the work as a licensed professional overseeing the work of others in the practice of engineering or practice of geology, the RSM is responsible for directly reviewing the work to ascertain whether the completed work complies with the REC Rules. The IHSB knows various personnel are needed to complete remedial investigations and cleanups of sites. Accordingly, to further assist RSMs with their role, the IHSB offers training to any staff working for an REC that may be assisting the RSM. Note also, the RSM's certification that REC Rules have been met is not a substitute for any professional engineering or geology certification if those components exist in the document.

15. **Previous work on my site was completed by another environmental consulting firm. Does my certification of the completion of those previous work phases imply I assure the quality of that work?**

No. We acknowledge that since the current RSM was not present when the previous work was conducted, they cannot assure the quality of the prior activities. However, if the RSM finds data gaps, reporting gaps, or sees a problem with interpretation of the previous findings, they should plan to correct any issues they deem necessary before certifying completion of a work phase.

<u>Other General Questions Related to the Inactive Hazardous Sites Branch and REC Program</u>

1. **What is the rule of thumb as to which program (REC or state lead) a site is placed for an approved cleanup?**

Typically, if there is a water supply well (or any other sensitive receptor) that is threatened or impacted or vapor intrusion issues exist, the site would be considered as a higher priority and receive state oversight. Otherwise, the site can be cleaned up through the REC Program. If a sensitive receptor is discovered after a site enters the REC Program, REC Program staff will provide assistance until the issue is resolved, or, if necessary, the site may be removed from the REC Program and placed under state lead oversight depending on the site-specific situation and conditions.

2. **How can sites with low priorities due to minimal impacts get closure?**

That's the function of the REC Program. Executing an Administrative Agreement (AA) with the REC Program assures that the site can move toward closure or no further action (NFA) status with an approved remedial action. Outside the REC Program, IHSB staff are obligated to work on higher priority sites.

3. **With remedial goals (RGs) and vapor intrusion screening levels being adjusted twice per year, will vapor intrusion evaluations need to be revisited? At what point in the project timeline will the numbers be "locked in" as remedial goals (RGs)?**

All of the numbers are not regularly changing. At each edition of the screening numbers, only about 2 to 3 on average have a change. For soil direct contact RGs, only about 6 to 8 change each time. So, an individual contaminant does not change each time.

Our policy is different for soil RGs than it is for groundwater RGs and vapor intrusion screening. Soil RGs can be considered final, if the remedial design is complete and there is no significant delay in implementing the remedial action plan. The remedial investigation will not need to be revisited. The only exception is if nationally a level significantly changes due to new strong evidence of greater toxicity. To date, sites have not had to be re-opened under the Inactive Hazardous Sites Program for this reason. For groundwater RGs and vapor intrusion issues, if the screening levels/cleanup levels change during the course of long-term cleanup, a remediating party must meet those numbers.

4. **How are compounds that are detected in indoor air samples and come from non-soil and groundwater chemicals of concern (COCs) handled?**

Our vapor intrusion guidance on the web site outlines how this is handled. Vapor intrusion screening should proceed stepwise and the samples should only be analyzed for the COCs and any associated daughter products that are known to exist in contaminated media at the site. First, screen against groundwater concentrations. If that fails, then perform soil gas sampling, followed by sub-slab or crawlspace samples, and finally indoor air sampling, if necessary. Exterior background samples should be collected when crawlspace or indoor samples are collected. Also, we recommend that a companion sub-slab/crawlspace sample be collected anytime an indoor air sample is collected. The structure should be inspected prior to sampling for potential sources that could be removed. For commercial structures, any indoor detections that do not appear to be from the COCs may become OSHA issues.

5. **What are the procedures when off-property access is denied and causes delays with the remedial investigation (RI)? How is the RI report certified as complete in the REC Program if off-property access is not granted and prevents completion of the RI?**

As soon as access delays are noted (not just before a deadline), parties should contact the IHSB. Copies of all attempts and failures with gaining property access should be maintained. This information will need to be submitted to the IHSB for documentation regarding the problem so the IHSB can provide assistance. The IHSB may contact the property owner regarding the access problem or may seek an administrative warrant. Samples can also be collected at accessible locations further downgradient than typical, if necessary, in order to document the extent of the contamination. Additional samples can later be collected closer to the source area to better define the extent of contamination as necessary for remediation. For REC Sites, parties should contact REC Program staff to discuss the options and best certification procedure for the situation.

6. **Has the IHSB ever been successful with getting property access for remedial investigations?**

Yes.

7. **Does a DEQ site need to be in the REC Program to seek a risk-based closure?**

Not all sites have to be in the REC Program because DEQ has many programs with sites conducting risk-based remedies. Within the IHSB, the decision on whether a site must conduct cleanup utilizing the REC Program versus state oversight is independent of eligibility for a risk-based cleanup. Higher priority sites are necessarily handled by IHSB staff. Lower priority sites must enter the REC Program to perform an approved cleanup, whether eligible for a risk-based cleanup or not.

Note: Most cleanups utilizing a risk-based remedy are probably lower-risk and would be cleaned up as REC-lead unless a remediating party is already conducting a cleanup under state-lead oversight. Also, if a remediating party does not undertake remedial action voluntarily and is ordered to perform a cleanup by the IHSB, the site will not be a candidate for the REC Program.

8. **What is the incentive to enter the REC Program for cleanup of an inactive hazardous site and implement a risk-based remedy when a Corrective Action Plan (CAP) that was previously approved by another agency allows just periodic monitoring for a groundwater remedy?**

There is no "incentive" to use a risk-based remedy. For numerous years, remedial goals for a restricted-use scenario have been an acceptable alternative for soil contamination on properties. Since 2011 (and after subsequent law revisions in 2015 regarding risk-based remedies), the remediator can use alternate RGs for all media, including groundwater. With an executed REC-Administrative Agreement for an approved remedial action, a remediating party may not need to do any monitoring at all and may be able get their site closed and removed from the Inactive Hazardous Sites Inventory.

Note: Sites under the authority of the Inactive Hazardous Sites Response Act and undergoing independent remedial actions are <u>not approved</u> by the IHSB without an administrative agreement. Furthermore, a remediating party must ensure a remedy is making reasonable progress toward achieving remedial goals. DEQ may withdraw approvals of any remedies shown to be ineffective, dangerous, or not addressing all of the COCs or media that is affected.

Questions regarding the REC Program should be directed to the contacts listed on the REC Program website.