

## **QUESTIONS & ANSWERS FROM REC PROGRAM MEETINGS HELD ON FEBRUARY 15 & 23, 2012**

### General Inactive Hazardous Sites Branch & REC Program Questions

1. What is the rule of thumb as to which program (REC or state lead) that a site is placed?

Answer: 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.

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

Answer: 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, Branch staff are obligated to work on higher priority sites.

3. If a site has multiple owners and potentially more than one environmental issue or release, can the cleanup focus on the original issue or release?

Answer: Yes, if a party not owning the site or property would like to cleanup a portion for which it is responsible, the AA can be limited to that area and anywhere the contamination from that area has migrated. Note that an entire site cannot obtain an NFA following such a cleanup as other issues on the property will remain unaddressed.

4. With 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)?

Answer: 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.

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

Answer: 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.

6. Should Brownfield agreements address land use restrictions (LURs) for vapor intrusion?

Answer: Yes, all parties should understand and agree to the maintenance of LURs.

7. 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?

Answer: As soon as access delays are noted (not just before a deadline), parties should contact the Branch. Copies of all attempts and failures with gaining property access should be maintained. This information will need to be submitted to the Branch for documentation regarding the problem so the Branch can provide assistance. The Branch 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. Parties should contact the REC Program to discuss the options and best certification procedure for the situation.

8. Has DENR ever been successful with getting property access for remedial investigations?

Answer: Yes.

#### Questions Regarding House Bill 45 (NCGS 130A-310.65-77)

1. Does a site need to be in the REC Program to seek a risk-based closure using HB 45? If so, what is the citation in the law that requires this?

Answer: Not all sites have to be in the REC Program because DENR has many programs that are covered by HB 45 [see 130A-310.67]. Within the Branch, the decision on whether a site must conduct cleanup

through the REC Program versus through state oversight is independent of eligibility for a risk-based cleanup. Higher priority sites are necessarily handled by staff. Lower priority sites must enter the REC Program to perform an approved cleanup, whether eligible for risk-based cleanup levels or not.

*Note: If a RP does not undertake remedial action voluntarily and is ordered to perform a cleanup by the Branch, the site will not be a candidate for the REC Program.*

2. What is the incentive to enter the REC Program and implement a remedy using HB 45 when an approved CAP allows just periodic monitoring for a groundwater remedy?

Answer: There is no “incentive” to use HB 45. For several years, remedial goals for a restricted-use scenario have been an acceptable alternative for soil contamination on properties. With the passage of HB 45, the remediator now has the ability to 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: For sites under the authority of the Inactive Hazardous Sites Response Act, on-going remedial actions are not approved without execution of an administrative agreement with the Branch. Furthermore, a RP must ensure the remedy is making reasonable progress. DENR may withdraw approvals of remedies shown to be ineffective, dangerous, or not addressing all of the COCs or media that is affected.*

3. How can someone determine what is considered a “contaminated industrial site” or “site” under the definitions of 130A-310.65(4)?

Answer: Most of the definition is fairly self-explanatory. A remediating party must be conducting cleanup under one of the programs listed. Also, no contamination can be off-property above unrestricted use levels at the time of application and no contamination can exceed unrestricted use levels off-property in the future. Lastly, the property must have been primarily used for manufacturing or other industrial activities for the production of a commercial product. In other words, during its developed history, most of the time the property must have been used as industrial/commercial property making a product for sale. So, storage of products and parking lots, for example, would not be eligible.

4. What is the rationale behind the March 1, 2011 cutoff date [see 310.67(c)] for implementing a remedy using HB 45?

Answer: The date reflects the time the bill was proceeding through the legislative process. The legislation meant to cutoff future releases from eligibility. The intent was so that business would not be encouraged to be less rigorous in their proper handling of chemicals and wastes by not having to clean them up.

5. Regarding the deadline of March 1, 2011, could a newly discovered release, located on the same property where a historic release is under an approved cleanup or has already been remediated, qualify for risk-based remediation?

Answer: A new release is not eligible under law. If it is completely comingled with an existing release that is eligible, DENR would have to look at the circumstances to consider if eligible.

6. How many eligibility packages have been received?

Answer: Although several projects have been discussed as possible candidates using HB 45, no eligibility packages have been received by the Branch or REC Program. It is believed that none have been received by the DWM.

7. Can facilities undergoing remediation under a required permit qualify for risk-based remediation using HB 45?

Answer: Yes

8. What is the purpose of the \$4,500 per acre fee [see 310.76(a)]? Will the fee be refunded if eligibility for risk-based remediation is denied?

Answer: The fee is not sufficient (nor was calculated) to support project manager positions in DENR to oversee cleanups. The fee is a one-time payment and was meant to provide funds for the special reviews newly required by the bill over and beyond normal project management by staff. That is, review of financial assurance packages, contaminant fate and transport demonstrations to show no contamination will leave the property, and for additional site-specific risk assessments. DENR will use the fee to pay for those reviews to determine eligibility. If a site is ineligible, the fee will not be refunded as it is used to pay for the eligibility review.

9. One of the eligibility requirements of HB 45 is that the contamination cannot be off-property. Can a downgradient property be purchased so risk-based remediation can be implemented?

Answer: Yes, as long as there is one owner of both properties. In addition, the off-property portion of the contamination can be remediated to the RGs with an approved remedial action plan (RAP) and the remainder of the contamination that is present on-property can be remediated later to a risk-based remedial goal utilizing a RAP Addendum.

10. Would a groundwater plume migrating beneath an adjacent highway or right-of-way/easement be considered on-property?

Answer: No. The property line is the designation of the property boundary. A road/highway or right-of-way/easement is not property ownership.

11. Why are the RI requirements different for HB 45 and the REC Rules?

Answer: In general, the RI requirements are the same. HB 45 is applicable to sites in multiple DENR programs, some of which do not have specific RI requirements like the REC Program.

12. Can risk exceed 1 in 10,000 if there's no exposure?

Answer: If there is no exposure, there is no risk. But the barriers to the contamination must be considered adequate by DENR.

13. Will there be any guidance on fate and transport modeling and risk assessment?

Answer: After some projects are received and eligibility packages reviewed, the current guidance document (Eligibility Requirements and Procedures for Risk-based Remediation of Industrial Sites) prepared by the Division of Waste Management (DWM) will be updated accordingly. The guidance can be found on the DWM web portal under Quick Links. Having some relatively standard format for eligibility packages would make preparation & review easier for all parties. DENR will also eventually issue more guidance in relation to fate and transport modeling after DENR's contract with a company expert in fate and transport modeling development has been established. That contract should be established by the summer of 2012. Fees will also have to be collected to pay the contract services. Thus far, no parties have applied.

14. How long will groundwater monitoring be required for remedial actions using HB 45?

Answer: Groundwater monitoring, if necessary to demonstrate the proposed containment remedy is working, will depend on the site specific conditions and the fate and transport modeling. In some cases, little to no groundwater monitoring may be necessary.

15. If groundwater has a risk-based RG, can a soil RG be back-calculated through the leaching model?

Answer: Yes. But soils must also meet a direct contact remediation goal. That goal can also be based on site-specific risk.

16. Can the public notice required by HB 45 be combined with the public notice for a remedial action plan (RAP)?

Answer: The public notice for HB 45 comes after the remedial investigation is completed and is necessary in determining eligibility. A RAP could be prepared at the same time or after the notice runs. Any other public notice requirements will depend on the specific program overseeing the site cleanup.

17. Determining site eligibility is steep in terms of time and cost. What if a site does not qualify?

Answer: An eligibility application and proposal does not come until the remedial investigation is complete. Before preparing and submitting the eligibility package, remediating parties should have a strong understanding based on site conditions that the site will qualify. The additional costs in making an eligibility application are in preparing a demonstration that the contamination will not migrate off-property, calculating alternate groundwater targets, and preparing a financial assurance proposal. Off-

setting this, there would be cost savings in less remediation being required. In any case, the remediating party should make sure the eligibility package is complete before the package is submitted.

18. Given the wording in HB 45 to consider a closure proposal denied if there is no response from DENR within 120 days of receiving an application [130A-310.71(d)] or within 180 days of receiving a No Further Action (NFA) review request [130A-310.73(d)], what assurance does the RP have that the submittal will be reviewed?

Answer: In the past, some permits have taken a significant amount of time to receive and industry did not want delays with DENR review of a risk-based cleanup. Therefore, DENR was given a deadline (120 days) to respond once a complete package is received and 180 days for a NFA review. According to the law, the RP can now take other legal actions if it is denied. Industry wanted assurance that they had a means of requiring DENR action on review. Industry requested the legislature put the deadlines in the bill so that they could also add the language that gave them a new right to sue DENR if it fails to review within the deadlines or if it denies approval [see language in 130A-310.73(d)]. For the Branch, the policy is to review submittals of any kind generally within 30 days.