

Leaking Underground Storage Tank Forum

February 29, 2012

Wallace State Office Bldg., 502 East 9th Street, Des Moines, IA

Auditorium (east side of 2nd floor lobby area)

10:00am - 12:00pm

Topics (in alpha order)

Bedrock
Classification
Institutional control, including environmental covenants
Insurance and Claims
Loss Portfolio Transfer
Low Risk with Corrective Action
Reporting and Submitting Reports
Soil Gas
Tank Closure
Water lines

Bedrock

Q. Why does DNR require hydraulic conductivity testing for bedrock sites, where there is no modeling and protected groundwater source is assumed?

A. DNR: Hydraulic conductivity variation between monitoring wells is used to help determine the type of bedrock at the site. In some cases, the hydraulic conductivity parameter is needed for modeling purposes (granular bedrock). In other cases (nongranular) it is acceptable to use the default hydraulic conductivity of 5 m/day as the input parameter.

Q. For a bedrock site, if groundwater contamination is low or nonexistent, and an ordinance preventing well installation is in place, can a Tier 3 argument be made to leave contaminated soil in place?

A. DNR: The rule requires soil remediation for bedrock sites [see IAC 135.10(3)d]. The intent was to address the soil impact so as to prevent contamination of groundwater in vulnerable bedrock aquifers. In some site-specific cases, however, the DNR has accepted ordinances that prohibit installation of wells as a means of closing the SL:GWI pathway e.g. when significant groundwater contamination was not found to be present. If a reasoned justification is presented, the DNR will consider such a proposal. Please keep in mind there may be other soil or soil leaching risk conditions associated with the water line receptor pathways, which have more stringent toluene and xylenes soil target levels than soil leaching to groundwater ingestion.

Classification

Q. Seems like both DNR & consultants are interested more in job security rather than closing a site. How do you get a NFA?

A. DNR: The framework and criteria for assessing petroleum UST releases and corresponding corrective action response are set forth in Chapter 135 of Iowa Administrative Code. Chapter 135 describes a risk-based corrective action (RBCA) process which is required by Iowa statute [455B.474]. The goal of the statute, rule and RBCA is to assess the risk caused by the petroleum release to public health and safety or to the environment, and take commensurate measures to reduce or alleviate those risks. Once all risks at a site are adequately eliminated (per regulatory criteria), the site qualifies for ‘no action required’ (NAR) classification, and then a ‘no further action’ (NFA) certificate can be issued.

The DNR’s role is to provide regulatory oversight including review of RBCA reports to ensure they meet the requirements set forth in the administrative rules and guidance, and to assist in keeping the site moving toward closure (i.e., ‘NAR’). If the actions taken by the responsible party (RP) and/or the Certified Groundwater Professional (CGP), or the reports submitted do not comply with the administrative rules or guidance, it is the DNR employee’s duty to comment and guide the RP/CGP through the regulatory process, or in severe cases take enforcement actions to compel compliance.

The DNR strongly encourages the responsible party (RP) to actively participate in the planning of assessment/ monitoring/remediation activities at their site. To do this the RP should become familiar with the RBCA process and perhaps get a general knowledge of corrective action options & treatment technologies. The RP can request the groundwater professional to explain what risk factors are present at the site and the options available for addressing each one. If the site is classified high risk, the RP may request a meeting with representatives of the DNR, the funding agency, and groundwater professional to formalize a plan for implementing corrective actions designed to bring the site to closure.

Q. We need a flowchart to know who the players are and how to get to NFA.

A. DNR: Please see the flowchart from the LUST Forum presentation entitled “Contacts & Resources” (slide #8), which is a simple depiction of the steps in assessing, monitoring, taking corrective actions, and bringing a site to closure. The Resource Sheet (an attachment on this web page) describes the common ‘players’ and their roles in managing LUST sites.

Q. When is a site NFA, upon classification or upon certificate issuance?

A. DNR: A site can be classified ‘No Action Required’ (NAR) when conditions for NAR risk classification have been met and approved by the DNR (or if DNR does not comment within 90 days of report submittal, NAR classification is approved by ‘default’). NFA (no further action) describes the certificate that is issued by the DNR once MWs/borings are properly plugged and a legal description for the NAR site is submitted. Note that all LUST site requirements must be

met before issuance of an NFA certificate. A site where the risk classification is NAR, but free product recovery and/or monitoring is still required would not be eligible for an NFA certificate.

Q. Sites, concentrations, and source locations change over time. The Tier 2 model is static. How can we make a change to the monitoring process so the site can be reevaluated at Tier 2 at the CGP's discretion to speed reclassification?

A. DNR: The Tier 2 model is a tool designated by administrative rule for evaluating risk at LUST sites. The model not only predicts concentrations at receptors, but also back calculates target levels to specific monitoring wells that, when met, are deemed 'protective' of the receptor. These site-specific target levels (SSTLs) are the baseline by which corrective actions or monitoring plans are built, and should not be a 'moving target' (i.e., reset with every sampling event).

Most changes in concentrations can be evaluated in the annual Site Monitoring Report (SMR). However, in some cases it may make sense to remodel (e.g., when additional releases or sources are identified, when concentrations increase significantly at the source or concentrations are increasing at monitoring locations between the source and the receptor, when active remediation such as excavation is performed to remove the source), but in general the DNR believes remodeling and reassessing with each sampling creates delays and is counter productive to the goal of reducing risks.

Q. Will the least expensive path to closure always be acted upon, despite length of time to closure or likelihood of success?

A. DNR: The DNR's primary concern is that a site meets the *technical requirements* for reclassification from high or low risk to no action required (NAR). While we want to cooperate with partners in creating a plan with economical, practical, and expeditious approaches, the DNR does not dictate actions based on costs.

A. PMMIC: From PMMIC's perspective the immediate cost is not the prime reason an approach is approved or not approved but the overall cost and likely effectiveness of the approach are key to any approval decisions.

A. UST Fund: The UST Fund will evaluate a myriad of factors in determining approach to addressing risk at a site including from what the level of risk is (potential future exposure to actual receptor impact) what the available options to manage the risk are, with what degree of certainty any proposed action will eliminate risk, impact on business or neighbors and the projected costs of each possible action. Having an exchange of information that explores all the alternatives and their relative impacts and costs helps arrive at the ultimate plan of action.

Institutional controls, including environmental covenants

Q. Is a City Ordinance or other paper control, worthy of contamination that will most likely remain far beyond limits of controls?

A. DNR: This question was submitted on a note card at the Forum event. We're not entirely sure we understand the question; however, we believe it is similar to questions toward the end of this subsection. Please see DNR responses below.

Q. What do we do about county agents who are unwilling to sign certification letters when a DNR accepted ordinance exists?

A. DNR: The DNR should be notified on a case-by-case basis if this occurs.

Q. Why is a signed letter required for sites in an area with an accepted ordinance?

A. DNR: The signed letter serves as an acknowledgement that the administrating authority of the ordinance has received documentation about the LUST site, has had the opportunity to review the materials and verify that the site is within the jurisdiction of the ordinance and their oversight authority, and that it is their intent to exercise that authority.

Q. Does DNR support the funding sources' requirement on using environmental covenants [ECs] as the lowest cost option to address risk?

A. DNR: The DNR is concerned with addressing all risks posed at a site. An environmental covenant is allowed under state law and administrative rules to address risk(s).

Q. Is it OK with DNR if a funding source cuts funding for all actions other than environmental covenants at sites in lieu of monitoring?

A. DNR: The DNR is very concerned about delays in completing required monitoring or corrective actions (due to, for example, funding disputes). The responsible party is responsible for ensuring site activities move forward.

Q. Environmental covenants have no lasting effectiveness; why is that considered a reclassification tool? How will DNR police covenants?

A. DNR: The Iowa General Assembly passed the "Uniform Environmental Covenants Act" (UECA) in 2005. See Iowa Acts SF375, later codified under Iowa Code 455I. Unless an exception exists, an environmental covenant is perpetual. See Iowa Code 455I.9. Environmental covenants place a use or activity restriction on a property, limiting or eliminating human exposure to chemicals of concern which exceed applicable target levels.

The DNR does not police environmental covenants. The signatories, who have a proprietary interest in the property, including subsequent owners, transferees, or leasees, have a duty to ensure the environmental covenant is being implemented effectively. The statute allows the DNR to seek enforcement against a violator who does not comply with an environmental covenant. See Iowa Code 455I.11.

Q. How does DNR believe environmental covenants address future risk?

A. DNR: An environmental covenant imposes use restrictions and limits certain activity (specified within) from taking place on a specific area of property (described within). Activity and use limitations may include restriction of installation of water wells, construction of surface and subsurface structures and other receptors, and land use classifications such as residential, nonresidential and industrial. Iowa Code 455I.2 identifies other use restrictions and limitations applicable to various environmental circumstances.

Q. If a person has knowledge about an NFA site and redevelopment is noted to be occurring, is there a duty to report changing conditions to DNR?

A. DNR: Yes for those who signed the environmental covenant. Pursuant to 567—14.5, an environmental covenant must contain a provision requiring any signatory to the environmental covenant notify the DNR of conditions which would constitute a breach of the activity and use limitations contained in the environmental covenant.

Insurance and Claims

Q. Why does our Fund have a ‘Sunset’ date while other State funds do not?

A. UST Fund: The Iowa Comprehensive Petroleum Underground Storage Tank Fund was created by a legislative measure in 1989 as an ‘interim measure’ to assist owners and operators of USTs to comply with State and Federal environmental regulations. Of the three major programs originally established, only one remains – the remedial program. Iowa’s program, like several other states, was not intended to be a permanent measure.

Q. I am an Owner/Operator of an active site. The previous owner/operator – responsible party has an open claim with no real interest in moving the site to closure. What will be my responsibility when/if The Fund goes away? DNR response? PMMIC response? Fund response?

A. DNR: The owner / operator of the UST system at the time the release was discovered is responsible for assessment, and any necessary corrective actions.

A. PMMIC: As stated at the forum by PMMIC if an LPT were to occur and the particular site is transferred to PMMIC, it doesn’t matter if the IUST Fund goes away or not, the funding for that site will remain with PMMIC until it meets DNR requirements to achieve No Further Action (NFA) status. This is a key advantage to an owner-operator for transferring their claim to PMMIC in an LPT versus leaving their claim with the IUST Fund.

A. UST Fund: The Iowa UST Fund program provides benefits to eligible claimants. If the prior owner is an eligible claimant, you have the option to take a transfer of the claim benefits so as to complete the necessary work. It should be noted that the Iowa DNR, in a written memo, noted that a party who takes a transfer of UST Fund benefits would NOT be considered a

responsible party if they did not own or operate the tanks from which the release occurred. A copy of the memo may be obtained from the Iowa DNR or from the Iowa UST Fund program.

Q. If GAB makes all the decisions on site proposal, what does The Board really do? What expertise on sites is on the Board? Should GWP be on?

A. UST Fund: The Iowa legislature stipulated who is to represent the Board that oversees the Iowa UST Fund program. The Board members represent various stakeholders who have an interest in the program and include several members associated with State agencies, two public members who have experience, knowledge, and expertise of the subject matter embraced by the program and are familiar with financial markets and/or insurance, and two members who are directly involved in the subject matter including one is who is a self-insured tank owner and one who a member of the petroleum marketers and convenience stores of Iowa or its designee. Currently, none of the Board members are Iowa groundwater professionals, however if qualified and selected, a GWP could be nominated for such a position to the extent that he or she does not have a conflict of interest in that position.

Q. Regarding Eligible Costs: What are the instructions the IUST Board have given to GAB/Cunningham Lindsey regarding the approval of budgets and payments of claims? We have had numerous GWP tell us that it is impossible to get approval for work necessary to get our site to closure. We have had to make in-person pleas to get approval.

A. UST Fund: The Board, through the Fund Administrator, has mandated staff analyze and review proposals submitted in response to DNR required actions on a LUST site to ensure that costs for what is proposed are within the range of usual and customary rates for similar or equivalent services and that the services are necessary for the owner or operator to comply with regulatory standards. Staff also reviews proposals to ensure that what is proposed is most likely a cost and technically effective solution to address risks presented at a site accounting for certainty of pathway closure, overall cost, opportunity cost of alternatives, impact on the business and/or neighbors and the level of risk associated with the receptors of concern.

An “in-person plea” shouldn’t be necessary to have the exchange of information to fully explore the feasible planned scopes, costs, and outcomes. However, if the claimant and/or CGP prefers to meet in person to cover the alternative, impacts, risks and costs staff is readily available to meet. If usual and customary costs can’t be agreed upon the claimant may be asked to secure alternate bids, that occurring is the exception however as agreeable rates are usually reached.

Q. When is a claim closed, upon NFA classification, or upon certificate issuance?

A. PMMIC: From PMMIC’s perspective when the site reaches NFA, the wells are closed, and the final invoice is paid. However if a situation were to arise later in which DNR would require additional work on that site, PMMIC would reopen that claim and get it to NFA status again, just as we do now. The parties that had their claims transferred in an LPT would also not have to be concerned if the reopening of their claim met the definition to be eligible for funding

under the current DNR-IUST Fund NFA contract. This is a key advantage for an owner-operator and why they would consider an LPT with PMMIC for their site.

A. UST Fund: A claim with the UST Fund program is closed upon meeting the requirements of the DNR for closure of the LUST release for which the claim was opened. The issuance of a NFA certificate releases the RP from further regulatory requirements unless that certificate was issued based upon fraud.

Q. Can time spent searching for monitoring wells during sampling or abandonment tasks be reimbursed?

A. PMMIC: The initial response to this is if you are the incumbent consultant on a case, you should be able to find your own monitor wells and not be paid specifically in addition to that. If it is a site that the groundwater professional has taken over from another consultant and they themselves did not install the wells we would assume you would take some of that into account before bidding on taking the site over. Otherwise we suppose some nominal time allowance could be made for such an undertaking.

A. UST Fund: The owner or operator or other responsible party of a facility should be aware of the location of all monitoring wells at their facility and should be consulted for this information.

Q. Will consultants be compensated for delays in budget discussions with Cunningham Lindsey?

A. UST Fund: UST Fund staff are given latitude in their review of budgets to discuss and/or negotiate terms to ensure costs are within the range of usual and customary for proposed work. If an agreement to the terms cannot be made, staff may approve a budget for what is believed to be customary and reasonable without competitive bids or may request a claimant obtain multiple bids. No reimbursement for time spent beyond the development of corrective action meeting alternatives is authorized.

Q. Is it possible to have discussion prior to the budget being issued?

A. UST Fund: UST Fund staff are given latitude in their review of budgets to discuss and/or negotiate terms to ensure costs are within the range or usual and customary for proposed work. Discussions are at times necessary and if desired, a consultant should make contact with Fund staff following the submittal of his or her budget. Such discussions are encouraged to ensure all the alternatives are explored in making the most effective and cost effective plan to address risk.

Q. On larger scope jobs such as tank pulls, over-excavations, and remediation system installations, can a small contingency (2-5%) be pre-approved on a line item for small scope changes?

A. PMMIC: PMMIC approves budgets that are submitted in advance of activities undertaken and we assume that the groundwater professional will take small contingencies into account either via their labor or materials rate, or by other means in their proposals since they have

been working in this industry for some time. PMMIC also will consider necessary change orders for additional or unforeseen situations. We will not allow a specific line item for contingencies.

A. UST Fund: State law requires all budgets have prior budget approval for any costs contemplated for reimbursement. Inclusion of a contingency fee is not acceptable measure however in the event of anticipated cost overruns during the performance of a task a consultant is encouraged to contact Cunningham Lindsey staff to seek consideration of the additional costs while in the field.

Loss Portfolio Transfers

Q. If Iowa does an LPT to an insurance company, and that insurer later experiences financial failure, what would happen to the tank owners? Would they be protected by other means? Or would the LPT be considered an at risk investment and receive no protections?

A. PMMIC: As outlined by PMMIC at the forum, PMMIC is covered by the Iowa Insurance Guarantee Fund and if PMMIC were to go bankrupt the Iowa Insurance Guarantee Fund would reimburse policyholders the amount of money owed to the policyholders for their insurance claims with PMMIC at the time of the failure but not the amount of liability transferred from the IUST Fund over to PMMIC in an LPT. The IUST Fund is also not guaranteed by the Guarantee Fund or any other “safety net” so at the end of the day there would be no difference to a tank owner as far as total payment is concerned in an LPT to PMMIC. PMMIC is an A- rated insurance company by A.M. Best Company who is the firm that rates insurers throughout the U.S.A. As far as any other insurer’s status relating to the Guarantee Fund that would be depend if they were an admitted company in Iowa or not. Admitted companies like PMMIC are covered by the Guarantee Fund, non-admitted and/or excess and surplus lines companies are not. No other insurance companies or other entities besides PMMIC have approached the IUST Fund about a LPT and the IUST Fund has not sought bids or interest from other insurance companies or entities since the specific legislation providing for an LPT with the IUST Fund was passed in 2003 almost 10 years ago.

Q. In previous LPT transfers, LPT sites lost their NFA Fund benefits – how will this be handled with the current LPT?

A. PMMIC: We are not aware of any sites that lost NFA benefits with the fund after the one LPT that has occurred to date. Any current or potential benefits that does or may exist would be taken into consideration in a future LPT where EITHER the benefits for the claimant remain with the IUST FUND or they are transferred to PMMIC.

A. UST Fund: The group of 10 sites that were transferred to PMMIC for an agreed upon amount did not lose “NFA benefits”. In fact there aren’t NFA benefits that err to any claimant. If there is a high risk condition that still exists due to a release for which an NFA certificate has been issued (assuming the certificate was not issued based upon a fraudulent report) the DNR may not require any additional work from the responsible party. The Board and DNR have an

agreement which lays out terms that allow the Board to investigate and mitigate that high risk condition from a release for which an NFA certificate has been issued regardless of what funding (self, UST Fund or insurer) source was involved to achieve NAR status and receive the NFA certificate.

Q. How does LPT affect remedial benefit claims?

A. PMMIC: It doesn't if a claim is transferred to PMMIC in an LPT in fact, it would assure that funding for the claim would continue after the sunset of the IUST Fund.

A. UST Fund: How any LPT affects any claims would be specific to the terms of the agreement for transfer between the Fund Board and the party agreeing to accept the risk. The Fund Board has so far indicated that any partial LPT would require consent of the claimant to be included. That consent would also include applicable acknowledgements and releases from the claimant to the Board.

Q. Are there any differences or reductions, if any, regarding benefits for sites that go through an LPT?

A. PMMIC: The difference would be that if a site transfers in an LPT to PMMIC that PMMIC would be there if the claim reopens later and pay for what it takes to get the site to NFA. The IUST Fund may not be able to say that since funding is set to expire in 2016 and that all sites that are reopened do not necessarily meet further funding requirements from the IUST Fund or under the NFA contract.

A. UST Fund: How any LPT affects any claims would be specific to the terms of the agreement for transfer between the Fund Board and the party agreeing to accept the risk. The Board's interest in any individual LPT negotiation is to ensure that their liability for the transferred claim is terminated and that the benefits afforded to existing claimants are at least equal to those provided for in statute at the time of transfer.

Q. In previous LPT transfers, LPT sites were not eligible for tank closure benefits – will this still be the case or since tank closure benefits are now available for any registered tanks this issue has been resolved?

A. PMMIC: We are aware of one site that transferred ownership after the mini-lpt took place, where the IUST Fund indicated it would not pay tank closure benefits. As stated in an earlier response to a question, any current or potential benefits that does or may exist would be taken into consideration in a future LPT where EITHER the benefits for the claimant remain with the IUST FUND or they are transferred to PMMIC.

A. UST Fund: How any LPT affects any claims would be specific to the terms of the agreement for transfer between the Fund Board and the party agreeing to accept the risk. The Board's interest in any individual LPT negotiation is to ensure that their liability for the transferred claim is terminated and that the benefits afforded to existing claimants are at least equal to those provided for in statute at the time of transfer. Current "tank pull" statute does not tie reimbursement to open eligible claims as they previously were.

Q. Are owner/operators required to enter into LPT or is there an opt-out option? What is the process to opt in/out?

A. PMMIC: As stated at the forum, there would be a simple opt-out function with a post card to return to complete the opt-out for any party that did not wish to have their claim transferred.

A. UST Fund: The Fund Board has so far indicated that any partial LPT would require consent of the claimant to be included. That consent would also include applicable acknowledgements and releases from the claimant to the Board.

Q. How will LPT sites with multiple responsible parties (3 or more) be addressed and/or sites where the responsible party pays for a portion of the work out-of-pocket? What happens to these sites if one party opts out of the LPT?

A. PMMIC: Either they will all be transferred to one claimant, likely the current PMMIC policyholder, or they would not be transferred in an LPT.

A. UST Fund: The Fund Board has so far indicated that any partial LPT would require consent of the claimant to be included. From the Board's perspective if the Fund claimant consents to have the UST Fund portion transferred to a third party and an agreeable valuation can be arrived at, that can occur.

Q. Will funding sources pay for paper production and delivery of physical reports?

A. PMMIC: We don't know the context of the question but would generally answer yes if it is necessary for the continued project management of the case. PMMIC encourages all vendors working with our policyholders to utilize e-mail and scanning as much as possible to minimize time, postage, labor and last but not least, unnecessary paper use and waste.

A. UST Fund: The UST Fund records are held in a paper file format. It is expected that costs for the production of reports will be included in a consultant's budgets for a particular scope of work. Vendors may, if they choose to do so, submit reports in an electronic and paper format.

Low Risk with Corrective Action

Q. Will PMMIC pay for low risk corrective action to speed closure?

A. PMMIC: Yes, answered specifically in another question.

Q. What low risk sites are good candidates for corrective action?

A. DNR: The DNR believes treatment of the source area can have positive long-term effects for any site. Good candidates include sites where the corrective action has a good chance of being effective in reducing contaminant levels in a relatively short period. E.g., where high soil concentrations remain, and are easily accessible for completing an excavation; where groundwater concentrations are high, sandy subsurface may be easier and quicker to treat vs.

clays; sites reclassified low risk by an alternate point of compliance and the source concentrations remain elevated; sites with continually failing soil gas at the source(s).

A. PMMIC: All are and always have been from PMMIC's perspective as long as the proposed activities make financial sense. For example if the site would likely be in monitoring for 10 more years at \$2500 per year for monitoring costs (\$25,000 in SMR costs) and the groundwater professional is proposing a \$100,000 over excavation then PMMIC probably would not approve that approach, but if the over excavation costs were more in the \$30,000 range then PMMIC would consider it. Otherwise PMMIC leaves it up to the groundwater professional on if a particular site is a good candidate or not.

A. UST Fund: The UST Fund, as authorized by the 2010 legislation, may consider paying for corrective action on low risk sites, only if funding is approved by the Board and the proposal is considered cost-effective relative to the department accepted monitoring plan or relative to the repeal date specified in section 424.19 (i.e., presently June 30, 2016). Evaluation of cost effectiveness involves the same consideration of factors (overall cost, certainty of outcome, relative risk, impacts, etc.) with the exception that there is always one alternative—monitoring—as the minimum required activity by DNR. Any low risk site is a candidate, and the CGP should discuss the most cost effective methods for moving to closure in lieu of monitoring for consideration.

Q. Is the Fund & PMMIC willing to pay for consultant's time to propose a low risk corrective action program? Issue – consultants are paid for their 'brain power'.

A. PMMIC: PMMIC has always been, and continues to be, ready to pay, within reason, for design costs on any project that help move the site to NFA. Again some financial common sense needs to be applied on a case by case basis. Since most LUST sites have similar traits and issues through out the state, (we understand that Loess in the western counties, bedrock in the northeast and elsewhere, and sand/silt issues along waterways can vary these issues) we recognize that most of these sites have limited options to address the remaining open pathways. That being said, we will always entertain Tier-3 or innovative approaches to reduce/clear receptors if it makes sense to do so. For example; soil vitrification is not a plausible remedial alternative in most sites in Iowa so a groundwater professional that wanted to look at an approach like that for a site that had limited soil contamination would probably not get their budget for such approved by PMMIC, but a smaller over excavation on a low risk site with lingering open soil pathways would be considered.

A. UST Fund: The UST Fund may provide funding to eligible claimants, subject to Board approval, for the design and implementation of selected corrective actions designed to move a site to a NAR classification. Reimbursement is not provided solely for development or discussion of a proposal.

Records and Submitting Reports

Q. Can we move to electronic deliverable reports?

A. DNR: No, not at this time. There are a number of considerations to work through before allowing electronic submittal of documents (legal signatures, documenting receipt of legally enforceable documents, maintaining a paper file for public view, ease of review by program staff, etc.).

Q. When will LUST records be on DocDNA?

A. DNR: There are no immediate plans to convert LUST records to DocDNA within the DNR; nor are there currently funds and resources available for such a project.

Soil Gas

Q. Are soil gas wells required to be abandoned according to Chapter 39? i.e., are they considered a potential conduit to groundwater?

A. DNR: Yes.

Tank Closure

Q. What needs to be done to close an underground tank at farm site? The tank has a under 1,000 gal tank tag.

A. DNR: A farm tank that was installed on or after July 1, 1987, must adhere to the closure requirements in Chapter 135. Farm tanks installed prior to July 1, 1987 are required only to be registered with the DNR. Please see guidance on DNR's web page for tank closure procedures: <http://www.iowadnr.gov/InsideDNR/RegulatoryLand/UndergroundStorageTanks/USTOwnersOperators/TankClosureInformation.aspx>

Regulated USTs are required to follow these procedures; but in the interest of safety, the DNR recommends these procedures be followed for closing non-regulated USTs, as well.

Q. If tank closure is being conducted on an active remedial site, are the soil samples valid?

A. DNR: The validity of the sample results for the purpose of site risk classification/reclassification may be questioned based on the site specifics such as the type of remedial approach being implemented, the timing of the remediation event, and the proximity of the tank closure to the area being remediated. Collecting soil samples at the time of closure is required in administrative rule [see IAC 135.15(3)] and can provide some valuable information about conditions at the site, particularly in the area of the tank closure

Water lines

Q. How much water line is to be replaced under the new rules? The corrective action area specifically, or is there a buffer zone? How is the buffer determined?

A. DNR: There is no “buffer” zone. If replacement is undertaken as Corrective Action after completing the Tier 1, all water lines within 200 feet of the groundwater maximum location are to be replaced [see IAC 135.9(8)“d”].

If replacement is undertaken as Corrective Action after completing the Tier 2, replacement of all the water lines within RID plume, or, if the actual plume exceeds the RID plume, the actual plume plus 10 percent beyond the edge of the contaminant plume defined by the actual data. However, if a groundwater professional can present an adequate justification for replacing lines in an area less than the RID area, they may present such a proposal to the DNR project manager for consideration.

Factors to consider in the justification and in determining a proposed ‘buffer’ area may include, but not limited to: plume stability, concentrations of chemicals of concern, mobility of contaminant, depth to groundwater, and technological controls.

Q. Instead of replacing an at-risk water line, can Portland cement be poured around it?

A. DNR: No. However, DNR might consider use of concrete on a site specific basis. Justification must be provided for using concrete.

Q. Can current groundwater data be used in the model for water line pathway assessment as stated in the 1/20/12 Supplemental Guidance instead of historical Tier 2 data?

A. DNR: Yes. The January 20, 2012, supplement states current groundwater data are considered. However, one must recognize current data are not initially used for risk classification determination. Current data are ‘factored in/considered’ afterwards.

Sources:

~IDNR

~PMMIC

~UST Fund