

Post Tier 2 SCR Evaluation Worksheet (Revised 9/11)

Site Name _____ LUST # _____
Location _____ Registration # _____
Corrective Action Conference Date _____ Time _____ Location _____
Submittal Date of Worksheet to All Conference Participants _____

INSTRUCTIONS:

This worksheet must be completed by the selected groundwater professional and submitted to all parties at least 10 days prior to the planned teleconference to discuss Post Tier 2 Options. This is a checklist only; the Groundwater Professional (GWP) is expected to formulate a detailed response, evaluating the best options to address the applicable high-risk conditions associated with the site. It is anticipated that a complete review will take 10 or more hours of a GWP's time to assess the site conditions, detail and justify a recommended approach, and discuss viable alternatives.

The goal of this Worksheet is to provide relevant data necessary to make an informed decision. If you are recommending a remediation technology, include site information that relates to the applicability of the technology to the site cleanup.

If you are recommending a Tier 3, investigate and supply information to demonstrate that this could be a viable approach. In some cases, permission could be granted to proceed to a Tier 3 Report without submittal and approval of a Tier 3 Work Plan.

PART I. CONFERENCE AND CONTACT DATA

GWP _____ GWP # _____ Phone _____

DNR Project Manager _____ Phone _____

Current Property Owner _____ Mtg Participant? Y/N _____

Phone _____ Email _____

Current Business Operator _____ Mtg Participant? Y/N _____

Phone _____ Email _____

RP/ Contractor's Client _____ Mtg Participant? Y/N _____

Phone _____ Email _____

Other Parties to include in conference (city? renter? attorney?) and contact information: _____

Funding Mechanism (IUST, PMMIC, Self, Other, None) _____

Is the site in the Global Settlement (Opt-In)? _____ Has it been discussed with RP? _____

Funding status: _____

PART 2: GENERAL DATA

Tier 2 Deficiencies: Be prepared to discuss how Tier 2 SCR, SMR, and/or CADR deficiencies will be addressed. Generally, minor deficiencies will be dealt with in the next reporting event.

Site Conditions

Active USTs? (Y / N): _____ Removed USTs? (Y / N): _____ Date / # Removed: _____
Closed In Place USTs: _____ Date / #Closed In place: _____
Active ASTs: _____ Removed ASTs: _____
Current Use of Site: _____
Financial Responsibility Mechanism for active UST system: _____

Geology/Hydrogeology

K min. at MW-? _____ K max. at MW-? _____
Bedrock site (Y/N) _____ Type: _____
Depth(s) to bedrock: _____
Range of soil contamination (depth - based on field screening readings): _____
Depth to water at soil source: _____ (range based on all data)
Depth to water at GW source: _____ (range based on all data)
Depth to water across plumes: _____ (range based on all data)
Groundwater flow direction and variations: _____
Stratigraphy/geology (describe): _____

High Risk Issues

Are there any past or present known, actual impacts to receptors such as contaminants in drinking water wells or water lines, petroleum odors in basements, or sheen on surface waters? If yes, identify the receptor and its current status and risk classification.

Drinking Water Wells: _____
Water Lines: _____
Vapor Receptors: _____
Surface Water: _____

Has over-excavation or other remediation/corrective action been implemented at the site? Describe.

Possible Site Restrictions:

Are you aware of any restrictions or obstacles which could hinder or prevent some corrective actions, such as buildings, roads, utilities, access issues, business restrictions, future uses, off-site or contributing sources, old / new release issues, cost-share with other LUST sites, etc?

Contaminant Concentrations and High Risk Receptors/Pathways

Free Product:

Free Product present now? (Y/N): _____ Date of most recent FP report: _____

Which wells had FP in the last year and maximum thickness: _____

What kind of FP recovery is or was conducted? _____

Are there any water lines within the area of free product? (see IAC 135.12(3)b) _____

Source Concentrations: Provide the maximum concentrations from the latest approved Tier 2.

GROUNDWATER				SOIL				
Chemical	Location (MW)	Date	Conc. (ug/L)	Location (BH, MW)	Date	Conc. (mg/kg)	Depth	Soil source re-sampled?
B								
T								
E								
X								
TEH-d								
TEH-wo								

High Risk Pathways and Receptors: Use the data from the latest approved Tier 2 or approved SMR. If there are multiple high risk receptors in the same pathway, list the number of receptors and only the lowest SSTL.

HR Pathway	HR Receptor	Chemical	Lowest SSTL	Proposed Corrective Action
Ex: GW-WL	WL-1	B	8,400 ug/l	WL replacement

If new sampling data has been collected since the submission of the Tier 2, SMR, or CADR (i.e., current contaminant data, receptor surveys, boring logs), provide the data as an attachment to the checklist.

PART 3. OPTIONS EVALUATION

The questions/options listed are not intended to be a comprehensive list, but are provided as a starting point for the evaluation. Your knowledge and experience as a GWP are essential in the evaluation and to the overall process.

The following questions/options should be considered for each pathway/receptor identified as high risk. Indicate if the option listed is feasible; if so, include projected costs, method for estimating costs, and source of information. If not feasible, explain why. Provide your evaluation as an attachment with the appropriate section headings.

Unless a site is in active remediation or post remediation monitoring, it should be evaluated using the version 3.0 software for Tier 2 and SMRs. Check with the DNR project manager before submitting a revised Tier 2.

Section I. Water Wells (Drinking and Non-Drinking Water Wells)

- Tier 3 an option? (pumping test, stratigraphy, non-expanding plume) _____
- Is the water well currently used? _____
- Can the well be re-cased or plugged? _____
- Is public water available? _____
- Is an alternate water source available? _____
- Has the owner of well been contacted regarding risk or replacement? _____
- Technological control possible? (i.e., point of use treatment) _____
- Possible to relocate a water well outside of actual or simulated plume? _____
- Has source control been used to remove soil/gw sources? _____
- Other alternatives? _____
- Active remediation options? _____

Section 2. Protected Groundwater Source

- Is public water available? _____
- Does an environmental covenant (EC) exist regarding well placement? _____
- Can an EC be obtained? _____
- Identify any known prior attempts to secure an IC. _____
- Has the soil source/maximum been re-sampled? _____
- Is Tier 3 an option? (i.e., aquifer characterization, pumping test) _____
- Has source control been used to remove soil/gw sources? _____
- Active remediation options? _____
- Other alternatives? _____

Section 3. Water Lines (WLs) (Evaluate WLs using the postings on the Groundwater Professional Bulletin Board dated 10/8/10 and 9/8/11.)

- Can a 3 ft. separation be documented between water levels & WLs? _____
- Could the WL be relocated outside the plume? _____
- Length of WL in simulated plume. _____
- Length of WL in actual plume. + 50 ft _____
- Total length of WL in actual & simulated plumes. _____
- Is replacement with non-gasketed or other pipe possible? _____
- Has the owner of WL been contacted regarding risk or replacement? _____
- Is Tier 3 an option? (i.e., plume stability, >10 ft separation between soil plume and WL, or other) _____
- Source control been used to remove soil / gw sources? _____
- Active remediation options? _____
- Other alternatives? _____

Section 4. Vapor Receptors

- Has soil gas been conducted at the soil source? _____
- Has soil gas been conducted at the groundwater source? _____
- Has SG been conducted at alternate points of compliance? _____
- Can the receptor be moved or eliminated? _____
- Is it possible to prove receptor submergence? _____
- Is a zoning change possible? Verify current zoning. _____
- Can the property be purchased? _____
- Has the owner been contacted regarding risk or replacement? _____
- Is venting possible at the point of exposure? _____
- Is the soil plume submerged? _____
- Has the soil source been re-sampled? _____
- Is Tier 3 an option? (non-expanding plume, etc.) _____
- Active remediation options? _____
- Other alternatives? _____

Section 5. Surface Water Receptors (Please note some watercourses may no longer be classified General Use but may now be Designated Use. This could result in a different risk classification for a given surface water body. Check with Matt Dvorak at 515-281-7503 in Water Resources Section.)

- Is Tier 3 an option? (i.e., non-expanding plume) _____
- Active remediation options? _____
- Other alternatives? _____

Section 6. Recommended Approach

Choose an approach and at least one alternative, explain them, and provide justification for your selections. If selection of alternatives depends upon collection of additional data or other issues, describe the alternative approaches and discuss technologies in detail.

Provide a cost estimate for the chosen approach and for at least one alternative. These cost estimates must be sufficiently detailed and formatted such that the alternative technologies can be compared.

If an active remediation system is recommended, estimate time required to reach SSTLs.

CERTIFICATION:

I, _____, Iowa Certified Groundwater Professional No. _____, certify that the above information is true based on my knowledge of the site and the most recent RBCA evaluation completed and accepted by the Department for the referenced site:

(signature)

(date)