ILLINOIS POLLUTION CONTROL BOARD
January 5, 2006

IN THE MATTER OF:	)	
	)	
PROPOSED AMENDMENTS TO:	)	R04-22(B)
REGULATION OF PETROLEUM LEAKING	)	(UST Rulemaking)
UNDERGROUND STORAGE TANKS (35	)	
ILL. ADM. CODE 732)	)	

IN THE MATTER OF:	)	
	)	
PROPOSED AMENDMENTS TO:	)	R04-23(B)
REGULATION OF PETROLEUM LEAKING	)	(UST Rulemaking)
UNDERGROUND STORAGE TANKS (35	)	Consolidated
ILL. ADM. CODE 734)	)	

Proposed Rule. Proposal For Public Comment.

OPINION AND ORDER OF THE BOARD (by G.T. Girard):

This rulemaking began in January 2004, when the Illinois Environmental Protection Agency (Agency) filed two proposals for rulemaking, which amend the Board's regulations governing the underground storage tank (UST) program. On January 22, 2004, the Board accepted and consolidated the proposals for hearing. The Board proceeded to first notice on February 17, 2005. On December 1, 2005, the Board adopted a proposal for second notice and opened this Subdocket B. As stated in the Board's December 1, 2005 opinion, the Board will address the issues pertaining to the professional consulting services provisions in this subdocket. Specifically, the Board will address issues concerning the scope of work associated with lump sum payments as well as the lump sum payment amounts proposed at first notice in Subdocket A. The Board has received alternate proposals addressing these issues from American Consulting Engineers Council of Illinois (ACECI), Professionals of Illinois for the Protection of the Environment (PIPE), CW^3M Company (CW^3M), and United Science Industries (USI). Exh. 74, Attach. B; PC 6; PC 63; and Exh. 109. In this opinion the Board provides a brief summary of the alternate proposals addressing each issue and a discussion of the Board's proposal for public comments.

SCOPE OF WORK

The regulated community expressed serious concern regarding the exclusion of scope of work associated with the proposed maximum lump sum payments from the initial hearings on the Agency's proposal. While ACECI and PIPE submitted alternate proposals addressing the inclusion of scope of work in the rules prior to first notice, the Board received similar proposals from CW^3M and USI during the first-notice comment period. In addition, CSD Environmental Services, Inc. (CSD) submitted recommendations concerning scope of work. In the following

paragraphs, the Board summarizes these proposals followed by a discussion and the Board's findings.

ACECI's Proposal

ACECI urges the Board to adopt the scope of work developed by an *Ad Hoc* Work Group on LUST Reimbursement Reform (*Ad Hoc* Group) that was formed by ACECI and Illinois Petroleum Marketer's Association at the request of the Agency. The *Ad Hoc* Group was comprised of member firms from the two organizations having substantial working experience with the UST program, including reimbursement, as the UST program has actually been implemented over the last ten years. Exh. 74 at 3. The *Ad Hoc* Group provided the Agency with a series of very detailed recommendations, including the scope of work for professional consulting services. The *Ad Hoc* Group's task list specifies the scope of work for each task to be performed by the consultants, and provides an estimate of time required to complete the task.

The *Ad Hoc* Group task list prescribes scope of work and time requirements for the following tasks: early action UST removal and excavation; 20-day certification and 45-day report preparation; free product recovery report preparation; low priority corrective action including preparation of groundwater monitoring plan and monitoring report preparation; high priority corrective action using conventional technology, including oversight, preparation of plan and completion report; and reimbursement request preparation. However, the *Ad Hoc* Group task list does not address the scope of work associated with site classification under Part 732 or site investigation pursuant to Part 734.

The Agency testified that it coordinated with ACECI to develop the various activities conducted by a consultant in order to complete each step of the UST remediation process and the estimated personnel time (hours) required for completing each activity within a task. Exh. 11 at 5-6. While the Agency used the hours estimated for various activities by the *Ad Hoc* Work Group to calculate the lump sum payment amounts in Section 734.845, the Agency did not propose the *Ad Hoc* Work Group's task list associated with the personnel time estimates. Instead the Agency proposed significantly broader language of "include, but not limited to" various tasks at Section 734.845.

Mr. Dan Goodwin, Vice President of ACECI, testified that while the general structure of the reimbursement limitations in the Agency's proposed Subpart H is consistent with the recommendations of the *Ad Hoc* Group, the most important problem with the Agency's proposal from the viewpoint of the professional consulting firms is the lack of clear delineation of the scope of services that may be included in each of the phases of the project for which reimbursement limits are set forth in Proposed Sections 732.845 and 734.845. Tr.6 at 7; Exh. 74 at 3-4. He urged that the Board incorporate the scope of work into the regulations for the purpose of better delineating the various tasks that may legitimately be a part of a given phase of the project.

PIPE's Proposal

PIPE maintains that the first-notice regulations are fatally flawed because it fails to include "scope of work" associated with the proposed lump sum payments. PC 70 at 4. PIPE urges the Board to revise the proposed rules by utilizing the alternative proposals submitted by PIPE and other participants. *Id*. While PIPE did not propose any specific language changes to the first notice regulations, PIPE's alternative proposal submitted prior to first notice included scope of work for each item for which the Agency proposed a lump sum payment under Sections 732.845 and 734.845. PC 6, Attach. D.

PIPE's proposal builds on the scope of work originally developed by the *Ad Hoc* Work Group. PIPE updated the *Ad Hoc* Work Group's task list to match the regulations, as proposed by the Agency, and developed scope of work for those tasks for which the *Ad Hoc* Work Group did not have a scope of work. PC 6, Attach. C. PIPE used methods similar to those used by the *Ad Hoc* Work Group to develop the scope of work for additional tasks. In addition to the scope of work developed by the *Ad Hoc* Work Group, PIPE's proposal defines scope of work for: (i) site classification, including physical soil classification, groundwater investigation, and classification by exposure pathway exclusion; and (ii) stage 1 and stage 2 site investigation.

CW^{3}M's Proposal

CW^{3}M submitted a modified alternate proposal along with its first notice comments. PC 63. The alternate proposal addresses language changes to the proposed regulations under Part 734. While the proposal includes task list and associated scopes of work, CW^{3}M states that it would be appropriate to develop the final task lists and scopes of work jointly by the Agency and the LUST Advisory committee outside the confines of the rules. PC 63 at 8. The scope of work proposed by CW^{3}M is essentially the same as the PIPE proposal discussed above.

USI's Proposal.

USI submitted revisions to the proposed first notice regulations at hearing and in public comments. Exh. 109; PC 60; and 67. USI asserts that these revisions would result in cost-containment rule that governs time and materials billing for professional consulting services. Exh. 109 at 67. USI addresses the issue of scope of work by creating a standardized task list, which explicitly references the regulations themselves, and a schedule of standard product and services along with the scope of services and reasonable quantity guidance. USI's proposal addresses all the tasks involved with the UST remediation under Parts 732 and 734, including tasks related to professional consulting services. Since this docket is limited to issues concerning payment of professional consultant services, USI's proposal pertaining to such services will be discussed in this section.

USI's proposed task list under Section 732/734 Appendix D includes the tasks for which the Agency proposed lump sum payments. The standard product and services provision at Section 732/734 Appendix E sets forth hourly rates for various professional consulting personnel and daily rates for professional consulting equipment and instrumentation. Finally, USI proposes scope of service for professional consulting service under Section 732/734 Appendix F as follows.

> Professional products and services include all labor, equipment, materials, supplies and subcontractors necessary and associated with the design, oversight, analysis, management, administration and documentation of investigative and remedial activities during a corrective action project as well as the professional consulting and associated services necessary to perform all Agency required planning, budgeting, certification, reporting and correspondence. Professional consulting services also include all necessary services and costs associated with requesting payment from the fund. PC 60 at 136 and PC 67 at 170.

USI's approach to addressing scope of work deviates significantly from the approach taken by ACECI, PIPE and CW^{3}M. While proposals from ACECI, PIPE and CW^{3}M prescribe detailed scope of work for each task for which lump sum payments are specified under Sections 732.845 and 734.845, USI's proposal takes a broader approach of defining scope of service as including all labor, equipment, materials, supplies and subcontractors necessary and associated remedial activities during a corrective action project.

CSD's Recommendations

CSD recommends that the Board define the scope of work involved in remediation at a typical site to provide a benchmark for consultants making demonstrations as to what is atypical and therefore unusual or extraordinary circumstances pursuant to Section 734.860. PC 64 at 3. CSD suggests that the Board combine Appendix D of USI's proposal that lists Standard Tasks with CW^{3}M's Appendix G, which sets forth Scope of Work for Lump Sum Payments. *Id*. CSD asserts that the combined Appendix would include a generic task such as Prepare and Submit a 45-Day Report and under the generic task, the details of what is included in a 45-Day Report.

Discussion

As noted in the December 1, 2005 second-notice opinion, the Board believes that inclusion of scope of work for tasks to be performed by professional consulting services pursuant Sections 732/734.845 would be helpful in addressing participants' concerns regarding lump sum payment for professional consulting services. In this regard, the Board has reviewed the alternate proposals summarized above. The participants have presented two different approaches to incorporate scope of work for specific tasks under Sections 732/734.845. The first approach, proposed by ACECI, PIPE and CW^{3}M, identifies the specific task for which the rules propose a lump sum payment amount and sets forth the work involved in completion of that task. The *Ad Hoc* Work Group used this approach to develop the scope of work for a number of tasks under Section 732.845/734.845 and PIPE's proposal adds scope of work for those tasks for which the *Ad Hoc* Work Group did not prepare one. PC 6, Attach. C.

The second approach, proposed by USI, prescribes a task list, but specifies scope of work broadly as all products and services necessary and associated with investigative and remedial activities during a corrective action project. Although USI has proposed the inclusion of a task list which tracks the regulations under Parts 732/734 Subparts B, C, & D, the list does not provide any details about the work involved in completion of the tasks. While the Board recognizes that USI's proposal as a whole is conceptually different from the one proposed by the

Agency, the scope of work in USI's proposal is similar to the one proposed by the Agency and adopted by the Board for first notice, *i.e.* the scope of work includes all work necessary to comply with the requirements of the regulations.

As noted in the Board's second-notice opinion, the record clearly indicates that the regulated community is seeking more specificity regarding the actual work involved in completing tasks for which the Agency has proposed maximum lump sum payments for professional consulting services. They argue that lump sum payments for professional consulting services must include scopes of work, so that any work performed beyond the specified the scope of work would be reimbursed in accordance with Sections 732.850, 732.860, 734.850, and 734.860. In this regard, the Board finds that USI's proposal, which defines scope of work associated with professional consulting services in broad terms, does not address the participants' concerns. In light of this, the Board will consider the approach used by the *Ad Hoc* Work Group, PIPE and CW^3M to revise the provisions of Sections 732.845/734.845. Moreover, the Board finds this approach to be appropriate since the Agency relied on the *Ad Hoc* Work Group's scope of work to determine the proposed maximum payment amounts for a number of tasks originally proposed under Sections 732.845/734.845.

The Board will use the *Ad Hoc* Work Group's proposal as a starting point for developing scope of work for professional consulting services. In case of the tasks for which the *Ad Hoc* Work Group did not have a scope of work, the Board will rely on PIPE's proposal. As noted earlier, PIPE's proposal updates the *Ad Hoc* Work group's scope of work. The professional consulting services provisions proposed at first notice in Sections 732.845/734.845 specify lump sum payment amounts for various tasks. These tasks fall under three main stages of remediation: Early Action, Site Classification/ Investigation and Corrective Action. The following is a list of tasks which fall into the stages and included is the group which recommended the task:

Early Action and Free Product Removal. (Section 732.845(a)/734.845(a))

1) Preparation for the abandonment or removal. (*Ad Hoc* Work Group)
2) Preparation and submission of 20-day and 45-day reports. (*Ad Hoc* Work Group)
3) Preparation and submission of free product removal report. (*Ad Hoc* Work Group)
4) Preparation and submission of reports submitted pursuant to Section 734.210(h)(3).

Site Evaluation and Classification. (Section 732.307(b))

1) Preparation of site classification plans. (PIPE)
2) Preparation of site classification completion report. (PIPE)

Site Investigation. (Section 734.845 (b))

1) Stage 1 site investigation preparation. (PIPE)

2) Preparation and submission of Stage 2 site investigation plans. (PIPE)
3) Well surveys conducted pursuant to Section 734.445(b).
4) Preparation and submission of site investigation completion reports. (PIPE)

Low Priority Corrective Action. (Section 732.845(c))

1) Preparation and submission of low priority groundwater monitoring plans. (*Ad Hoc* Work Group)
2) Preparation and submission of the groundwater monitoring report annually over a three year period. (*Ad Hoc* Work Group)

High priority Corrective Action /Corrective Action. (Section 732.845(d)/734.845(c))

1) Conventional technology - Preparation and submission of corrective action plans. (*Ad Hoc* Work Group)
2) Environmental Land Use Controls and Highway Authority Agreements used as institutional controls pursuant to 35 Ill. Adm. Code 742.
3) Preparation and submission of corrective action completion report. (*Ad Hoc* Work Group)
4) Development of Tier 2 or Tier 3 remediation objectives.
5) Amendment of Corrective action plan.

In today's order, the Board proposes the inclusion of scopes of work for all the tasks for which the *Ad Hoc* Work Group or PIPE have developed scope of work. In doing so, the Board notes that the main purpose of the proposed revisions is to seek additional comments and testimony from all the participants, including the Agency to develop a workable rule. In this regard, the Board notes that a few issues concerning scope of work still need to be resolved before the Board the can finalize the revisions. These issues, which are discussed below, include adequacy of the proposed scope of work and whether scope of work should be part of the Board rules or the Agency's implementation rules.

Adequacy of the Proposed Scope of Work

The Board notes that while the participants have proposed scope of work for most of the major tasks listed above, scope of work has not been developed for a number of tasks such as preparation and submission of reports pursuant to Section 734.210(h)(3), preparation of ELUCs and Highway Authority Agreements, Well surveys, and development of Tier 2 or Tier 3. In this regard, the Board invites the participants to comment on whether scope of work needs to be defined for these tasks.

Regarding the tasks for which the participants have developed scopes of work, the Board's review indicates that a number of work items listed under each task were derived from the Agency's Leaking Underground Storage Tank Program Forms. In this regard, the Board

notes that the scope of work proposed for site classification and low priority groundwater monitoring is essentially the same as items listed in Agency forms (LPC 505, 506, 510 and 512). In addition, the scope of work for a number of tasks under early action, site investigation and corrective action are also derived from the Agency's forms (LPC 503, 504, 513 and 514). The Board directs the participants to review the proposed scopes of work to see if they adequately address the specific tasks or if revisions are necessary.

Where Scope of Work Should be Set Forth

The Board notes that CW^3M and CSD raised this issue of whether the task list and scope of work should be developed outside the confines of the Board rulemaking. In this regard, CW^3M states that ideally the final task lists and scope of work should be developed by the Agency and the LUST Advisory Committee and published periodically outside the confines of the Board rules. PC 63. 8. By doing so, CW^3M asserts that the task list or scope of work may be revised without going through a costly and time-consuming rulemaking. *Id*. CSD also asks that the Board direct the LUST Advisory Committee to develop the scope of work and make it available on the Agency's website. PC 64 at 3.

At hearing, CSD noted that the Board's rules at Section 732.110(a)/734.135(a) require that "All plans, budgets, and reports must be submitted to the Agency on forms prescribed and provided by the Agency." CSD suggests that the Board require the Agency to revise the forms to provide a comprehensive list on each form of the tasks to be completed, including the expected minimum number of maps, cross sections, etc. to be included in each report. Exh. 99 at 3. CSD also requests that at anytime the Agency modifies the form, Subpart H maximum payments be adjusted accordingly. *Id.*

The Board notes that the Agency routinely adopts its own implementation rules and policy papers to administer Board regulations. Regarding the UST regulations, the Agency has developed extensive implementation guidance such as fact sheets, forms and model documents, answers to FAQs, and other guidance documents. In light of this, the Board believes that the Agency could develop scopes of work for the various professional consulting services tasks set forth in the Board regulations. As noted above, some of the Agency's UST forms already include extensive information contained in the participants' proposals. However, the Board believes that it is important to address the issue of scope of work in this rulemaking to ensure that the maximum lump sum payment for each task reflect the scope of work for that task and the time required to perform the work. Upon the resolution of issues concerning the maximum lump sum payments, the Board will decide the appropriate vehicle for specifying the scope of work. In this regard, the Board welcomes additional comments and testimony from the participants and the Agency.

MAXIMUM LUMP SUM PAYMENTS

The participants raised significant issues concerning the maximum lump sum payment amounts proposed at first notice. Based on the evidence provided by USI's review of 69 randomly selected sites and comments from other participants, the Board found that the proposed lump sum payment amounts need to be adjusted to reflect the actual scope of work, personnel

time required to complete the work, and current market rates for professional services. While the Board appreciates the significant efforts of the regulated community in preparing alternate proposals and recommendations, the Board believes that additional substantive input from the Agency would be helpful in building a complete record upon which the Board can craft a proposal that addresses the regulated community's concerns and meets the Agency's objectives. In light of this and given that certain issues associated with the scope of work is yet to be resolved, the Board will not propose any revisions to the Agency's lump sum payment rates at this time. Instead, the Board will identify issues associated with the proposed lump sum payment amounts for further discussion in this proceeding.

Should Professional Consulting Services be Reimbursed on a Time and Material Basis

The Board is asking this question mainly because of the significant concerns raised by the participants regarding the Agency's proposal and supporting information. While the Board recognizes that proposed lump sum payments are intended to result in a more efficient utilization of Agency's resources and streamline the reimbursement process, the Board would like to hear from the participants and the Agency as to whether adequate information is available in the Agency's database to determine lump sum payments for the various professional consulting tasks that reflect reasonable cost incurred in performing the necessary work. Additionally, if reimbursement data is not available in the form necessary to determine lump sum payment amounts, the Board would like the Agency to comment on whether such information could be collected over a period of time as suggested by USI and CW^3M.

Personnel Time Required to Complete Lump Sum Payment Tasks

The *Ad Hoc* Work Group estimated the personnel time required to complete the work under each task. Exh. 74. The Agency used the *Ad Hoc* Work Group's personnel time estimate to calculate the lump sum payment amounts for a number of professional consulting tasks. PIPE also submitted personnel hours associated with its scope of work proposal that are higher than those estimated by the *Ad Hoc* Work Group. PC6, Attach D. In addition, USI proposed reasonable quantity guidance for personnel hours based on each phase of remediation. Exh 109. The personnel time estimates proposed by the participants for various tasks are summarized in the table below.

Proposed Personnel Time Requirements

Professional Consulting Services - Remediation Tasks under Sections 732.845/734.845	Personnel Time Requirement (hours)		
	Ad Hoc Work Group	PIPE	USI
Early Action and Free Product Removal			220
1) Preparation for the abandonment or removal	12	19	
2) Preparation and submission of 20-day and 45-day reports	60	74	
3) Preparation and submission of free product removal report.	32	-	
4) Preparation and submission of reports submitted pursuant to Section 734.210(h)(3).	-	-	
Site Evaluation and Classification under Section			-
1) Preparation site classification plans.	-	-	
2) Preparation of site classification completion report.	-	-	
Site Investigation.			460
1) Stage 1 site investigation preparation.	-	28	
2) Preparation and submission of Stage 2 site investigation plans.	-	49	
3) Well surveys conducted pursuant to Section 734.445(b).	-	-	
4) Preparation and submission of site investigation completion reports.	-	67	
Low Priority Corrective Action.			-
1) Preparation and submission of low priority groundwater monitoring plans.	40	-	
2) Preparation and submission of the groundwater monitoring report annually over a three year period.	32	-	
High priority Corrective Action /Corrective Action.			560
1) Preparation and submission of corrective action plans	64	110	
2) ELUCs and Highway Authority Agreements	-	-	
3) Preparation and submission of corrective action completion report.	64	102	
4) Tier 2 or Tier 3 remediation objectives.	-	-	
5) Amendment of Corrective action plan.	-	-	
Reimbursement Request Preparation	32	31	-

The Board notes that while the participants have estimated the personnel time required to complete a number of major professional consulting tasks, there are quite a few tasks without a

time estimate. In addition, the Board notes that the participants' personnel time estimates differ significantly for some of the same tasks. While the Board recognizes that USI's reasonable guidance estimate includes personnel time for field oversight and is based on an evaluation of 69 remediation sites, according to the Agency, the average cost of professional consulting services based on USI's estimate would be significantly higher than the average total amount paid for sites closed during 1997 through 2001. In light of this, the Board believes that additional information and clarification is necessary to establish personnel time requirement to determine lump sum payments for professional consulting services. In this regard, the Board directs the participants and the Agency to address this issue further. Specifically, the Board would like the participants to provide reasonable personnel time estimates for all the tasks for which scope of work has been proposed in today's order. Additionally, the Board invites the Agency and participants to comment on the implications of "one size fits all" maximum lump sum payments for all UST sites.

Average Hourly Rates for Professional Consulting Services

As noted previously in the first notice opinion, the Agency developed an average hourly rate of $80 per hour for professional consulting services by averaging the maximum hourly rate for each title listed in Appendix E of the first notice regulations. The regulated community has expressed serious concern regarding the proposed average hourly rate. PIPE contends that the average rate is heavily weighted towards clerical staff rather than professional staff. PIPE suggests that the hourly rate be broken down into 5 groups instead of a single average hourly rate. USI has proposed a different approach where professional services are billed on a time and material basis.

The Board believes that in order to consider any revisions of the proposed average hourly rate in terms of administrative and professional staff, the scope of work for each task must be categorized in terms of professional or clerical staff along with the appropriate time estimate. In this regard, the Board invites comments from the participants as to whether it is feasible to take the multiple rate approach. If so, the Board would like the participants provide additional information concerning the scope of work to break down the time estimates in terms of professional and clerical staff. The Board also invites comments to move forward on revising the Agency's single average hourly rate to appropriately reflect the staff

CONCLUSION

The Board today proposes for public comment language establishing a scope of work for activities associated with professional consulting services in the remediation of UST sites in Illinois. The Board emphasizes that the language proposed is for the purpose of discussion and does not in any way signal the Board's unerring support for the proposed language. The Board is attempting to clarify the positions of the parties and narrow the issues for further hearings in this proceeding. The Board invites comments on all portions of the proposal for public comments. In addition the Board directs the hearing officer to expeditiously schedule a least one additional hearing in this proceeding.

ORDER

The Board proposes the following language for purposes of public comment:

Part 732.Subpart H

Section 732.845 Professional Consulting Services

Payment for costs associated with professional consulting services must not exceed the amounts set forth in this Section. Such costs shall include, but not be limited to, those associated with project planning and oversight; field work; field oversight; travel; per diem; mileage; transportation; vehicle charges; lodging; meals; and the preparation, review, certification, and submission of all plans, budget plans, reports, applications for payment, and other documentation. The maximum payment amounts set forth in this section are not subject to the provisions of Section 732.855.

a) Early Action and Free Product Removal. Payment of costs for professional consulting services associated with early action and free product removal activities conducted pursuant to Subpart B of this Part shall not exceed the following amounts:

1) Payment for costs associated with preparation for the abandonment or removal of USTs including the tasks listed in Appendix F of this Part shall not exceed a total of $960.00.

2) Payment for costs associated with early action field work and field oversight shall not exceed a total of $390.00 per half-day, plus travel costs in accordance with subsection (e) of this Section. The number of half-days shall not exceed the following:

A) If one or more USTs are removed, one half-day for each leaking UST that is removed, not to exceed a total of ten half-days, plus one half-day for each 225 cubic yards, or fraction thereof, of visibly contaminated fill material removed and disposed of in accordance with Section 732.202(f) of this Part;

B) If one or more USTs remain in place, one half-day for every four soil borings, or fraction thereof, drilled pursuant to Section 732.202(h)(2) of this Part; and

C) One half-day if a UST line release is repaired.

3) Payment for costs associated with the preparation and submission of 20-day and 45-day reports, including the tasks listed in Appendix F of this Part and, ~~but not limited to,~~ field work not covered by subsection (a)(2) of this Section, shall not exceed a total of $4,800.00.

4) Payment for costs associated with the preparation and submission of free product removal plans and the installation of free product removal systems shall be determined on a time and materials basis and shall not exceed the amounts set forth in Section 732.850 of this Part.

5) Payment for costs associated with the field work and field oversight for free product removal shall not exceed a total of $390.00 per half-day, plus travel costs in accordance with subsection (e) of this Section. The Agency shall determine the reasonable number of half-days on a site-specific basis.

6) Payment for costs associated with the preparation and submission of free product removal reports including the tasks listed in Appendix F of this Part shall not exceed a total of $1,600.00 per report.

7) Payment for costs associated with the preparation and submission of reports submitted pursuant to Section 732.202(h)(3) including the tasks listed in Appendix F of this Part of this Part shall not exceed a total of $500.00.

b) Site Evaluation and Classification. Payment of costs for professional consulting services associated with site evaluation and classification activities conducted pursuant to Subpart C of this Part shall not exceed the following amounts:

1) For site evaluation and classifications conducted pursuant to Section 732.307 of this Part, payment for costs associated with the preparation and submission of site classification plans, site classification preparation, field work, field oversight, and the preparation and submission of the site classification completion report including the tasks listed in Appendix F of this Part shall not exceed a total of $9,870.00.

2) For site evaluation and classifications conducted pursuant to Section 732.312 of this Part, payment for costs shall be determined on a time and materials basis and shall not exceed the amounts set forth in Section 732.850 of this Part. For owners and operators that elect to proceed in accordance with 35 Ill. Adm. Code 734, costs incurred after the notification of election shall be payable from the Fund in accordance with that Part.

c) Low Priority Corrective Action. Payment of costs for professional consulting services associated with low priority corrective action activities conducted pursuant to Subpart D of this Part shall not exceed the following amounts:

1) Payment for costs associated with the preparation and submission of low priority groundwater monitoring plans including the tasks listed in Appendix F of this Part shall not exceed a total of $3,200.00.

2) Payment for costs associated with low priority groundwater monitoring field work and field oversight shall not exceed a total of $390.00 per half-day, up to a maximum of seven half-days, plus travel costs in accordance with subsection (e) of this Section.

3) Payment for costs associated with the preparation and submission of the first year groundwater monitoring report including the tasks listed in Appendix F of this Part shall not exceed a total of $2,560.00.

4) Payment for costs associated with the preparation and submission of the second year groundwater monitoring report including the tasks listed in Appendix F of this Part shall not exceed a total of $2,560.00.

5) Payment for costs associated with the preparation and submission of low priority groundwater monitoring completion report including the tasks listed in Appendix F of this Part shall not exceed a total of $2,560.00.

d) High Priority Corrective Action. Payment of costs for professional consulting services associated with high priority corrective action activities conducted pursuant to Subpart D of this Part shall not exceed the following amounts:

1) Payment for costs associated with the preparation and submission of investigation plans for sites classified pursuant to Section 732.307 of this Part shall not exceed the following:

A) A total of $3,200.00 for plans to investigate on-site contamination including the tasks listed in Appendix F of this Part.

B) A total of $3,200.00 for plans to investigate off-site contamination including the tasks listed in Appendix F of this Part.

2) Payment for costs associated with field work and field oversight to define the extent of contamination resulting from the release shall not exceed a total of $390.00 per half-day, plus travel costs in accordance with subsection (e) of this Section. The number of half-days shall not exceed the following:

A) One half-day for every four soil borings, or fraction thereof, drilled as part of the investigation but not used for the installation of monitoring wells. Borings in which monitoring wells are installed shall be included in subsection (d)(2)(B) of this Section instead of this subsection (d)(2)(A); and

B) One half-day for each monitoring well installed as part of the investigation.

3) Payment for costs associated with well surveys conducted pursuant to Section 732.404(e)(1) of this Part including the tasks listed in Appendix F of this Part shall not exceed a total of $160.00. Payment for costs associated with well surveys conducted pursuant to Section 732.404(e)(2) of this Part shall be determined on a time and materials basis and shall not exceed the amounts set forth in Section 732.850 of this Part.

4) For conventional technology, payment for costs associated with the preparation and submission of corrective action plans including the tasks listed in Appendix F of this Part shall not exceed a total of $5,120.00. For alternative technologies, payment for costs shall be determined on a time and materials basis and shall not exceed the amounts set forth in Section 732.850 of this Part.

5) Payment for costs associated with high priority corrective action fieldwork and field oversight shall not exceed the following amounts:

A) For conventional technology, a total of $390.00 per half-day, not to exceed one half-day for each 225 cubic yards, or fraction thereof, of soil removed and disposed, plus travel costs in accordance with subsection (e) of this Section.

B) For alternative technologies, payment for costs shall be determined on a time and materials basis and shall not exceed the amounts set forth in Section 732.850 of this Part.

6) Development of Tier 2 and Tier 3 Remediation Objectives. Payment of costs for professional consulting services associated with the development of Tier 2 and Tier 3 remediation objectives in accordance with 35 Ill. Adm. Code 742 shall not exceed the following amounts:

A) Payment for costs associated with field work and field oversight for the development of remediation objectives shall not exceed a total of $390.00 per half-day, plus travel costs in accordance with subsection (e) of this Section. The number of half-days shall not exceed the following:

i) One half-day for every four soil borings, or fraction thereof, drilled solely for the purpose of developing remediation objectives. Borings in which monitoring wells are installed shall be included in subsection (d)(6)(A)(ii) of this Section instead of this subsection (d)(6)(A)(i); and

ii) One half-day for each monitoring well installed solely for the purpose of developing remediation objectives.

B) Excluding costs set forth in subsection (d)(6)(A) of this Section, payment for costs associated with the development of Tier 2 or Tier 3 remediation objectives including the tasks listed in Appendix F of this Part shall not exceed a total of $800.00.

7) Payment for costs associated with Environmental Land Use Controls and Highway Authority Agreements used as institutional controls pursuant to 35 Ill. Adm. Code 742 including the tasks listed in Appendix F of this Part shall not exceed a total of $800.00 per Environmental Land Use Control or Highway Authority Agreement.

8) Payment for costs associated with the preparation and submission of high priority corrective action completion reports including the tasks listed in Appendix F of this Part shall not exceed a total of $5,120.00.

e) Payment for costs associated with travel, including, but not limited to, travel time, per diem, mileage, transportation, vehicle charges, lodging, and meals, shall not exceed the following amounts. Costs for travel shall be allowed only when specified elsewhere in this Part.

Distance to site (land miles)	Maximum total amount per calendar day
0 to 29	$140.00
30 to 59	$220.00
60 or more	$300.00

Distances shall be measured in ground miles and rounded to the nearest mile. If a consultant maintains more than one office, distance to the site shall be measured from the consultant's office that is closest to the site.

f) If a plan must be amended due to unforeseen circumstances, costs associated with the amendment of the plan including the tasks listed in Appendix F of this Part and its associated budget plan shall not exceed a total of $640.00.

Section 732.APPENDIX F Scope of Work For Professional Consulting Services

Section 732.845(a)(1) Preparation for the abandonment or removal of USTs

1. Project Management

2. Correspondence
   a. Office of the Illinois State Fire Marshal (OSFM)
      1. Prepare and submit initial Notification Form for Underground Storage Tanks.
      2. Prepare Application for Permit for Removal/Abandonment of Underground Storage Tanks and submit to owner/operator for signature.
      3. Submit Application for Permit for Removal/Abandonment to OSFM.
      4. Prepare and submit LUST Fund Eligibility and Deductibility Application.
      5. Prepare and submit amended Notification Form.
   b. Illinois Environmental Protection Agency (IEPA)
      1. Prepare and submit early action extension.
      2. Follow up.
   c. Correspond with and update client.

3. Waste Disposal
   a. Determine early action excavation limits.
   b. Prepare waste profile and arrange for landfill approval.
   c. Prepare waste manifests or tracking forms.

4. Plan and Report Preparation
   a. Prepare site health and safety plan.

5. Resource Coordination
   a. Arrange for subcontractors (e.g., excavator, tank removal contractor, backfill, landfill).
   b. Schedule project.
   c. Call J.U.L.I.E. and/or municipality to locate utilities.

Section 732.845(a)(3) Preparation and submission of 20-day and 45-day reports

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Records Gathering
   a. Obtain and review IEPA and/or OSFM records.
   b. Obtain and review well records from ISGS and ISWS.
   c. Obtain and review local information (e.g. Sanborn maps, aerial overlays).

4. Waste Disposal
    a. Review disposal documentation.

5. Technical Evaluation
    a. Prepare well location map (<25 records within 2500 feet).
    b. Determine expected local site geology (subsurface soil conditions).

6. Plan and Report Preparation
    a. Prepare 20-Day Certification
    b. Prepare or revise site health and safety plan
    c. Prepare 45-Day Report
        1. Provide information pertaining to:
            A. Site Identification
            B. Release Information
            C. Early Action
            D. Site Information
                1. Nature and estimated quantity of release
                2. Data concerning:
                    a. Surrounding populations
                    b. Water quality
                    c. Use and approximate locations of wells potentially affected by the release
                    d. Subsurface soil conditions
                    e. Location of subsurface sewers
                    f. Climatological conditions
                    g. Land use
                3. A discussion of what was done to measure for the presence of a release
                4. Action taken to prevent further release of the regulated substance into the environment
                5. A discussion of the action taken to monitor and mitigate fire and safety hazards posed by vapors or free product that has migrated from the UST excavation zone and entered subsurface structures

            E. Supporting Documentation
                1. Site map to scale and oriented north showing:
                    a. UST systems(s) and excavation limits;
                    b. Product and dispenser lines;
                    c. Pumps and islands;
                    d. Underground utilities (sewer, gas, water, etc.);
                    e. Nearby structures (buildings, roads, etc.)
                    f. Soil borings(s) (if present);
                    g. Monitoring well(s) and/or sumps (if present);
                    h. Property boundaries;

i. Sample location points.

2. Area map showing the site in relation to surrounding properties. This map should identify the facilities on the surrounding properties;
3. Cross-section, to scale, showing the UST(s) and the excavation;
4. Analytical / screening results in tabular format, including the results of soil samples required pursuant to 35 Ill. Adm. Code 732.202(h) or 45 ILCS 5/57-57.17;
5. UST information in a tabular format, including:
   a. Total number of UST(s) on site;
   b. Volume of the UST(s) (in gallons);
   c. The material stored in the UST(s);
   d. Identification of UST systems(s) that had a release; and
   e. Identification of UST system(s) that were repaired, removed, or abandoned-in-place;
6. Copy of OSFM Permits or notifications;
7. Narrative of tank removal and cleaning operations; describe how wastes generated during the tank removal were managed, treated, and disposed of;
8. Photographs of UST removal activities and the excavation; and
9. Copies of waste manifests for soil and groundwater transported off-site.

d. Review 20-Day Certification and 45-Day report by project manager or other senior staff.

7. Resource Coordination
   a. Call J.U.L.I.E. and/or municipality to locate utilities.

8. Distribution
   a. Deliver draft 20-Day Certification and 45-Day Report to owner/operator for review and signature.
   b. Make copies of final 20-Day Certification and 45-Day Report for distribution.
   c. Deliver completed 20-Day Certification and 45-Day Report to IEPA and owner/operator.

732.845(a)(6) Preparation and submission of free product removal reports

1. Project Management

2. Correspondence
   a. Correspond with and update Illinois Environmental Protection Agency (IEPA)
   b. Correspond with and update Client.

3. Waste Disposal
    a. Review disposal documentation.

4. Plan and Report Preparation
    a. Prepare Free Product Removal Report
        1. Provide information pertaining to:
            A. Site Identification
            B. Free Product Information
                1. Name(s) of person(s) responsible for implementing the free product removal measures;
                2. Estimated quantity, type, and thickness of free product observed or measured in boreholes, wells, excavation, etc.;
                3. The type of free product recovery system used and technical justification for the method of recovery chosen;
                4. Whether any discharge will take place on- or off-site during the recovery operation and where this discharge (point) will be located;
                5. Type of treatment applied to (the free product), and the effluent quality expected from any discharge;
                6. Steps that have been taken or that are being taken to obtain necessary permits for any discharge; and
                7. The disposition of the recovered free product.
            C. Supporting Documentation
                1. Site map to scale and oriented north showing:
                    a. UST systems(s) and excavation limits;
                    b. Product and dispenser lines;
                    c. Pumps and islands;
                    d. Underground utilities (sewer, gas, water, etc.);
                    e. Nearby structures (buildings, roads, etc.);
                    f. Soil boring(s) (if present);
                    g. Monitoring well(s) and/or sumps (if present);
                    h. Locations where free product was encountered including its estimated thickness;
                    i. Location of recovery points;
                    j. Location of the treatment unit;
                    k. Location of discharge points;
                    l. Property boundaries.
                2. Table showing the dates that free product recovery was conducted and the amount of free product recovered on each date; and
                3. Copies of waste manifests.

5. Distribution
    a. Deliver draft free product removal report to owner/operator for review and signature.

b. Make copies of final free product removal report for distribution.
c. Deliver completed report to IEPA and owner/operator.

Section 732.845(a)(7) Preparation and submission of reports submitted pursuant to Section 734.210(h)(3)

(Reserved)

Section 732.845(b)(1) Preparation and submission of site classification plans, site classification preparation, fieldwork, field oversight, and the preparation and submission of the site classification completion report

SITE CLASSIFICATION WORK PLAN

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Technical Evaluation
   a. Conduct fieldwork.
   b. Provide field oversight.

4. Plan and Report Preparation
   a. Prepare Site Classification Work Plan
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
         C. Site Classification
            1. Method of Physical Soil Classification
            2. Number of soil borings to be advanced on-site
            3. Whether soil borings are proposed to be advanced for reasons other than Physical Soil Classification or investigation of migration pathways
            4. Whether monitoring wells are proposed on-site
            5. Physical Soil Classification
               a. Scientific publications/geologic maps that will be reviewed to determine consistency with Plate 1 of the Illinois State Geological Survey Circular 532;
               b. Drilling methods, auger types, sampling procedures and sampling devices that will be used;
               c. Basis for determining the location (include number and spacing) of soil borings;
               d. How the proposed final soil boring configuration and boring depths will provide the greatest

likelihood of determining the geologic characteristics of the site;

e. What will be done if auger refusal occurs or bedrock is encountered during drilling;

f. What will be done if anomalies are encountered during drilling;

g. What will be done to prevent cross-contamination between water-bearing units that may be encountered during drilling;

6. Groundwater Investigation

a. Drilling methods that will be used;

b. Basis for determining the location and number of monitoring wells placed at the site;

c. Monitoring well installation procedures;

d. Activities that will be taken to prevent cross-contamination during well installation;

e. Basis for determining well construction materials;

f. Basis for determining the monitoring well-screen depth and screened interval;

g. Monitoring well development procedures;

h. Monitoring well sampling procedures;

i. Activities that will be taken to prevent cross-contamination between groundwater samples;

j. How the proposed final monitoring well configuration will provide the greatest likelihood of detecting the migrations of groundwater contamination; and

k. Steps that will be taken to determine groundwater elevation and flow direction.

7. How the Licensed Professional Engineer will verify whether Class III Special Resource Groundwater exists within 200 feet of the UST system.

8. How the Licensed Professional Engineer will identify and locate all community water supply wells within 2,500 feet of the UST system and all potable water supply wells within 200 feet of the UST system, and determine if the UST system is within the regulated recharge area of any community water supply well or potable water supply well.

9. Classification by Exposure Pathway Exclusion

a. Discussion of the activities to determine the full extent and concentrations of contaminants in soil and/or groundwater exceeding the Tier 1 remediation objectives;

b. Discussion of the tests to be performed to determine whether or not the following requirements will be met:
   1. Attenuation capacity of the soil will not be exceeded for any of the organic contaminants;
   2. Soil saturation limit will not be exceeded for any of the organic contaminants;
   3. Contaminated soils do not exhibit any of the reactivity characteristics of hazardous waste per 35 Ill. Adm. Code 721.123;
   4. Contaminated soils do no exhibit a pH $2.0 \leq$ or ≥ 12.5; and
   5. Contaminated soils which contain arsenic, barium, cadmium, chromium, lead, mercury, selenium or silver (or their associated salts) do not exhibit any of the toxicity characteristics of hazardous waste per 35 Ill. Adm. Code 721.124.

c. Discussion of how the inhalation exposure route will be evaluated to determine that:
   1. An institutional control is in place that requires safety precautions for construction worker populations and compliance with #2 below;
   2. Any contaminant of concern within ten (10) feet of land surface or within ten (10) feet of any man-made pathway does not exceed Tier 1 remediation objectives; OR and Agency approved engineered barrier is in place.

d. Discussion of how the soil ingestion exposure route will be evaluated to determine that:
   1. An institutional control is in place that requires safety precautions for construction worker populations and compliance with #2 below;
   2. Any contaminant of concern within three (3) feet of land surface does not exceed Tier 1 remediation objectives; OR and Agency-approved engineered barrier is in place.

e. Discussion of how the groundwater ingestion exposure route will be evaluated to determine the following:
   1. The source of the release is no located within the minimum/maximum setback zone or regulated recharge area of a potable water supply well;
   2. Any area within 2500 feet from the source of the release is restricted under a local ordinance which prohibits the use of groundwater as a potable supply;
   3. The concentration of any contaminant of concern in groundwater within the minimum/maximum setback zone of a potable water supply well meets the applicable Tier 1 remediation objective; and
   4. The concentration of any contaminant of concern in groundwater discharging into a surface water will meet the applicable surface water quality standard per 35 Ill. Adm. Code 302.

10. Site map to scale and oriented north showing:
   a. UST system(s) and excavation limits;
   b. Product and dispenser lines;
   c. Pumps and islands;
   d. Underground utilities (sewer, gas, water, etc.);
   e. Nearby structures (buildings, roads, etc.);
   f. Location of the proposed soil borings(s);
   g. Location of the proposed monitoring wells (if required);
   h. Property boundaries; and
   i. 200-foot radius from the UST system.
11. Chart indicating the following:
   a. Boring identification;
   b. Depth of boring (in feet);
   c. Number of samples from each boring that will be submitted for geotechnical analysis; and
   d. Identification of geotechnical tests that will be performed on samples.

b. Prepare budget for site classification work plan.
c. Review site classification work plan and budget by project manager or other senior staff.
d. Prepare LPE/LPG certification.

5. Distribution

a. Deliver draft site classification work plan and budget to owner/operator for review and signature.
b. Make copies of final site classification work plan and budget for distribution.
c. Deliver completed report to IEPA and owner/operator.

SITE CLASSIFICATION COMPLETION REPORT

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Technical Evaluation
   a. Conduct field work.
   b. Provide field oversight.

4. Plan and Report Preparation
   a. Prepare Site Classification Completion Report
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
         C. Site Classification Summary
         D. Site Classification by Methods One or Two
         E. Site Evaluation
            1. Physical Soil Classification
               a. Soil borings
                  1. A list of publications reviewed and preliminary conclusions concerning the site geology;
                  2. Soil boring logs;
                  3. Site map to scale and oriented north showing:
                     i. Soil boring locations;
                     ii. UST system(s);
                     iii. 200-foot radius from UST system; and
                     iv. Property boundaries.

               b. Method One soil properties test results (include calculations, methodologies, and complete laboratory reports)
                  1. Soil particle analysis;
                  2. Soil moisture content;
                  3. Soil classification;
                  4. Unconfined compression test;

5. In-situ hydraulic conductivity; OR
6. Ex-situ hydraulic conductivity.

c. Method Two soil properties test results (include calculations, methodologies, and complete laboratory reports)
   1. Soil particle analysis;
   2. Ex-situ hydraulic conductivity; and calculated yield of geologic material; OR
   3. In-situ hydraulic conductivity and yield of geologic material.

2. Groundwater Investigation
   a. If groundwater investigation was required, provide the following:
      1. Discussion of how the monitoring well configuration provides the greatest likelihood of detecting migration of groundwater contamination;
      2. Monitoring well construction diagrams;
      3. Table showing static water elevations;
      4. Sample collection shipment and preservation information;
      5. Completed chain-of-custody form(s);
      6. Copies of laboratory reports (include field and lab blanks);
      7. Analytical results in tabular format; and
      8. Site map to scale and oriented north showing:
         i. Monitoring well locations;
         ii. Potentiometric surface map:
         iii. Groundwater flow direction;
         iv. 200-foot radius from UST system; and
         v. Property boundaries;

   b. If no groundwater investigation was performed, provide the following:
      1. Demonstrate whether groundwater is present within the depth of boring used to perform physical soil classification under the selected method (Method One under subsection (c) or Method Tow under subsection (d));

2. Demonstrate whether groundwater is withdrawn for potable use within 1000 feet of the UST system and at what depths; and
3. Demonstrate whether seasonal fluctuation in groundwater could results in groundwater contacting contaminated soil (e.g., historical records).

F. Water Well Survey

1. Results of the survey conducted to identify all community water supply wells within 2,500 feet of the UST system and all potable water supply wells within 200 feet of the UST system (include copies of well logs and all correspondence to and from the Illinois State Water Survey and the Illinois State Geological Survey).
2. Local units of government contacted to determine if there is a local ordinance or policy regulating the usage of potable water supply wells.
3. Site map to scale showing all of the community water supply wells within 2,500 feet of the UST system and all potable water supply wells within 200 feet of the UST system (radii of 200, 400, 1,000 and 2,500 feet from the UST system should be marked on the map).
4. Table indicating the setback zone for each community or potable water supply well and the distance from the UST system to the well (the location of each well must be identified on the map by numbers corresponding to information provided in the table).
5. The sources consulted in determining whether the UST system is within the regulated recharge area of any community or potable water supply well.

G. Migration Pathways

1. Discussion of the investigation conducted to identify all potential natural and man-made migrations pathways that are on the site, rights-of-way attached to the site, or in any area surrounding the site that may be adversely affected as a result of a release of petroleum form the UST system.
2. Discussion of further investigations conducted to determine if there is evidence that migration of petroleum or vapors along such pathways threatens human health or the environment or may cause explosions in basements, crawl spaces, utility conduits, storm or sanitary sewers, vaults or other confined spaces.

3. Discussion of the findings based on the investigations performed.
4. Site map to scale and oriented north showing:
    a. The UST system(s) and excavation;
    b. Product and dispenser lines;
    c. Potential natural and man-made pathways on-site, in rights-of-way attached to the site or in areas that may be adversely affected by the release;
    d. Soil boring locations; and
    e. Property boundaries.

H. Class III Special Resource Groundwater
1. Discussion of the steps taken to determine if Class III groundwater exists within 200 feet of the site.
2. Site map to scale and oriented north showing:
    a. Location of Class III groundwater; and
    b. Radius of 200 feet from the UST system(s).

I. Surface Bodies of Water
1. Discussion of the steps taken to locate all surface bodies of water on site and within 100 feet of the site, and one located, the steps taken to determine if they have been adversely affected by the presence of a sheen or free product layer resulting form a release of petroleum from the UST system.
2. Site map to sale and oriented north showing the locations of the surface bodies of water on site and within 100 feet of the site.

J. Classification by Exposure Pathway Exclusion
1. Extent of contamination exceeding Tier 1 remediation objectives
    a. Table showing the analytical results and depth of samples;
    b. Site map showing the soil sample location points and groundwater monitoring well locations;
    c. Site map showing the extent of soil and/or groundwater contamination exceeding Tier 1 remediation objectives; and
    d. Cross-section of the site showing the areas of soil contamination exceeding Tier 1 remediation objectives.
2. Physical soil characteristics
    a. Whether or not the concentration of any organic contaminants exceeded the attenuation capacity of the soil.

b. Whether or not the organic contaminants exceeded the soil saturation limit.
c. Whether or not the soils exhibited any characteristics of reactivity for hazardous waste.
d. pH of the soils
e. Whether or not contaminated soils exhibited any characteristics of toxicity for hazardous waste.

3. Inhalation exposure route
Demonstrate the following:
a. An Agency-approved engineered barrier is in place.
b. Safety precautions for construction workers will be taken if Tier 1 remediation objectives for construction workers are exceeded.

4. Ingestion exposure route
Demonstrate the following:
a. An Agency-approved engineered barrier is in place.
b. Safety precautions for construction workers will be take in Tier 1 remediation objectives for construction workers are exceeded.

5. Groundwater ingestion exposure route
Demonstrate the following:
a. Source of the release is not located within the minimum or maximum setback zone or regulated recharge area of a potable water supply well.
b. Any area within 2,500 feet from the source of the release is restricted under a local ordinance which prohibits the use of groundwater as a potable supply.
c. The concentration of any contaminant of concern in groundwater within the minimum or maximum setback zone of a potable water supply well will meet the applicable Tier 1 remediation objective.
d. Concentration of any contaminant of concern in groundwater discharging into a surface water will meet the applicable surface water quality standard per 35 Ill. Adm. Code 302.

K. Supporting Documentation
1. Site map to scale oriented north showing:
a. UST system(s) (former and existing);
b. Excavation limits (former and existing):
c. Product and dispenser lines;
d. Pumps and islands;

e. Underground utilities (sewer, gas, water, etc.);
f. Nearby structures (buildings, roads, etc.);
g. Location of the soil boring(s);
h. Location of the monitoring wells;
i. Property boundaries; and
j. 200-foot radius from the UST system(s).

2. Horizontal cross section showing the various geologic units and the depth to groundwater.
3. Laboratory certification(s).

b. Review site classification completion report by project manager or other senior staff.

5. Distribution
   a. Deliver draft site classification completion report to owner/operator for review and signature.
   b. Make copies of final site classification completion report for distribution.
   c. Deliver completed report to IEPA and owner/operator.

Section 732.845(c)(1) Preparation and submission of low priority groundwater monitoring plans

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Waste Disposal
   a. Determine treatment type to be applied to any discharge and effluent quality expected.
   b. Obtain necessary permits for discharge.
   c. Determine final disposition of recovered free product.

4. Technical Evaluation

5. Plan and Report Preparation
   a. Prepare groundwater monitoring plan
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
         C. Supporting Documentation
            1. Proposed time table for well installation, all sampling events and report submittal;
            2. Discussion of:
               a. Monitoring well development procedures;
               b. Monitoring well sampling procedures; and

c. Activities that will be taken to prevent cross-contamination between groundwater samples.

3. Site map to scale and oriented north showing:
   a. UST system(s) and excavation;
   b. Product and dispenser lines;
   c. Pumps and islands;
   d. Underground utilities (sewer, gas, water, etc.);
   e. Nearby structures (buildings, roads, etc.);
   f. Location of the soil borings;
   g. Location of the existing monitoring wells;
   h. Property boundaries; and
   i. Radius of 200 feet from the excavation.
4. Discussion of the adequacy of the final monitoring well configuration to detect the migration of groundwater contamination.

b. Prepare budget for groundwater monitoring plan.
c. Review groundwater monitoring plan and budget by project manager or other senior staff.

6. Distribution
   a. Deliver draft groundwater monitoring plan and budget to owner/operator for review and signature.
   b. Make copies of groundwater monitoring plan and budget for distribution.
   c. Deliver completed plan and budget to IEPA and owner/operator.

Sections 732.845(c)(3) and (c)(4) Preparation and submission of first and second year groundwater monitoring reports

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Technical Evaluation

4. Plan and Report Preparation
   a. Prepare groundwater monitoring report
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
         C. Supporting Documentation
            1. Description of the implementation and completion of all elements of the groundwater monitoring plan;

2. Description of well development procedures, sample collection, preservation, and analysis;
3. Analytical results in tabular format;
4. Copies of laboratory reports;
5. Laboratory Certification
6. Groundwater elevations in a tabular format;
7. Monitoring well logs;
8. Completed chain-of-custody form(s);
9. Owner/Operator Summary form; and
10. Site map to scale and oriented north showing:
    a. UST system(s) and excavation;
    b. Underground utility lines (sewer, gas, water, etc.);
    c. Nearby structures (buildings, roads, etc.);
    d. Location of groundwater monitoring wells;
    e. Direction of groundwater flow;
    f. Property boundaries; and
    g. 200-foot radius from the UST system.

b. Review groundwater monitoring report by project manager or other senior staff.

5. Distribution
   a. Deliver draft groundwater monitoring report to owner/operator for review and signature.
   b. Make copies of groundwater monitoring report for distribution.
   c. Deliver completed report to IEPA and owner/operator.

Section 732.845(c)(5) Preparation and submission of low priority groundwater monitoring completion report

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Technical Evaluation

4. Plan and Report Preparation
   a. Prepare groundwater monitoring completion report
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
         C. Supporting Documentation
            1. Description of the implementation and completion of all elements of the groundwater monitoring plan;

2. Description of well development procedures, sample collection, preservation, and analysis;
3. Analytical results in tabular format;
4. Copies of laboratory reports;
5. Laboratory Certification
6. Groundwater elevations in a tabular format;
7. Monitoring well logs;
8. Completed chain-of-custody form(s);
9. Owner/Operator Summary form; and
10. Site map to scale and oriented north showing:
    a. UST system(s) and excavation;
    b. Underground utility lines (sewer, gas, water, etc.);
    c. Nearby structures (buildings, roads, etc.);
    d. Location of groundwater monitoring wells;
    e. Direction of groundwater flow;
    f. Property boundaries; and
    g. 200-foot radius from the UST system.

b. Review groundwater monitoring completion report by project manager or other senior staff.

5. Distribution
   a. Deliver draft groundwater monitoring completion report to owner/operator for review and signature.
   b. Make copies of groundwater monitoring completion report for distribution.
   c. Deliver completed report to IEPA and owner/operator.

Section 732.845(d)(1)(A) Preparation and submission of investigation plans for on-site contamination for sites classified pursuant to Section 732.307

(Reserved.)

Section 732.845(d)(1)(B) Preparation and submission of investigation plans for off-site contamination for sites classified pursuant to Section 732.307

(Reserved.)

Section 732.845(d)(3) Well surveys conducted pursuant to Sections 732.404(e)(1) and 734.445(b)

(Reserved.)

Section 732.845(d)(4) Preparation and submission of corrective actions plans (Conventional)

1. Project Management

2. Correspondence

a. Correspond with Agency.
b. Correspond with and update client.

3. Waste Disposal
   a. Prepare waste profile (arrange for landfill approval).
   b. Determine limits of excavation.
   c. Estimate quantity of contaminated soil to be disposed of.
   d. Mail waste profile to owner/operator for review and signature.
   e. Prepare waste manifests or tracking forms.

4. Technical Evaluation
   a. Estimate quantity of “clean” overburden to be stockpiled (if any).
   b. Prepare or finalize field notes.
   c. Prepare and describe remediation photos.

5. Plan and Report Preparation
   a. Prepare or revise site health and safety plan.
   b. Prepare Corrective Action Plan
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
         C. Proposed Methods of Remediation
         D. Soil and Groundwater Investigation Results
            1. Description of investigation activities performed to define the extent of soil and/or groundwater contamination;
            2. Analytical results and cleanup objectives in tabular format;
            3. Laboratory reports;
            4. Boring logs;
            5. Monitoring well logs; and
            6. Site maps to scale and oriented north showing:
               a. Soil sample locations;
               b. Monitoring well locations; and
               c. Plumes of soil and groundwater contamination.
         E. Technical Information – Corrective Action Plan
            1. Discussion of how the corrective action plan shall remediate the release;
            2. List of sampling parameters and corresponding remediation objectives;
            3. Basis for determining sampling parameters and remediation objectives;
            4. Media sampling plan to verify completion of remediation;
            5. Current and future use of the property;
            6. Proposed preventive, engineering and institutional controls;
            7. Schedule for implementation and projected completion of the plan;

8. Engineering design specifications, diagrams, calculations, manufacturers' specifications, systems analyses, site maps, etc.;

c. Prepare budget for corrective action plan.
d. Review corrective action plan and budget by project manager or other senior staff.
e. Prepare LPE/LPG certification.

6. Resource Coordination
   a. Schedule project.
   b. Arrange for excavator.
   c. Arrange for hauling.
   d. Arrange for backfill.
   e. Call J.U.L.I.E. and/or municipality to locate utilities.

7. Distribution
   a. Deliver draft corrective action plan and budget to owner/operator for review and signature.
   b. Make copies of final corrective action plan and budget for distribution.
   c. Deliver completed corrective action plan and budget to IEPA and owner/operator.

Section 732.845(d)(6)(B) Development of Tier 2 or Tier 3 remediation objectives

(Reserved)

Section 732.845(d)(7) Environmental Land Use Controls and Highway Authority Agreements

(Reserved.)

Section 732.845(d)(8) Preparation and submission of corrective action completion reports (Conventional)

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Records Gathering
   a. Obtain legal description of property.
   b. Obtain property tax identification number.

4. Technical Evaluation
   a. Address items in 35 IAC 734.345(a).
   b. Prepare and describe photos.
   c. Prepare or finalize field notes.

5. Plan and Report Preparation
    a. Prepare Corrective Action Completion Report following items in 35 IAC 734.345(a).
        1. Provide information concerning:
            A. Site Identification
            B. Site Information
            C. Completion Information
                1. Chronological narrative of corrective action activities;
                2. Explanation of how the corrective action activities remediated the release;
                3. Discussion of how the remediation objectives were determined;
                4. Media sampling and analytical procedures to verify completion of remediation;
                5. Analytical results and remediation objectives in tabular format;
                6. Laboratory reports;
                7. Soil boring logs;
                8. Monitoring well logs;
                9. Laboratory Certification;
                10. Applicable Professional Engineer Certification;
                11. Site maps to scale and oriented north showing:
                    a. Final soil sample locations demonstrating completion of remediation;
                    b. Groundwater monitoring well locations;
                    c. Groundwater recovery/discharge points;
                    d. Plume of contamination as defined by laboratory analyses; and
                    e. Area remediated.
                12. Property Owner Summary; and
                13. Photographs documenting corrective action activities.

    b. Review corrective action completion report by project manager or other senior staff
    c. Prepare LPE certification

6. Resource Coordination
    a. Record NFR letter

7. Distribution
    a. Deliver draft corrective action completion report to owner/operator for review and signature.
    b. Make copies of final corrective action completion report for distribution.
    c. Deliver completed corrective action completion report to IEPA and owner/operator.
    d. Make copies of recorded NFR letter for distribution.

e. Deliver recorded NFR letter to IEPA and owner/operator.

732.845(f) and 734.845(f) Amendment of plan and its associated budget

(Reserved)

PART 734.SUBPART H

Section 734.845 Professional Consulting Services

Payment for costs associated with professional consulting services must not exceed the amounts set forth in this Section. Such costs must include, but not be limited to, those associated with project planning and oversight; field work; field oversight; travel; per diem; mileage; transportation; vehicle charges; lodging; meals; and the preparation, review, certification, and submission of all plans, budgets, reports, applications for payment, and other documentation. The maximum payment amounts set forth in this section are not subject to the provisions of Section 732.855.

a) Early Action and Free Product Removal. Payment of costs for professional consulting services associated with early action and free product removal activities conducted pursuant to Subpart B of this Part must not exceed the following amounts:

1) Payment for costs associated with preparation for the abandonment or removal of USTs including the tasks listed in Appendix F of this Part must not exceed a total of $960.00.

2) Payment for costs associated with early action field work and field oversight must not exceed a total of $390.00 per half-day, plus travel costs in accordance with subsection (e) of this Section. The number of half-days must not exceed the following:

A) If one or more USTs are removed, one half-day for each leaking UST that is removed, not to exceed a total of ten half-days, plus one half-day for each 225 cubic yards, or fraction thereof, of visibly contaminated fill material removed and disposed of in accordance with Section 734.210(f) of this Part;

B) If one or more USTs remain in place, one half-day for every four soil borings, or fraction thereof, drilled pursuant to Section 734.210(h)(2) of this Part; and

C) One half-day if a UST line release is repaired.

3) Payment for costs associated with the preparation and submission of 20-day and 45-day reports, including the tasks listed in Appendix F of this

Part and ~~, but not limited to,~~ field work not covered by subsection (a)(2) of this Section, must not exceed a total of $4,800.00.

4) Payment for costs associated with the preparation and submission of free product removal plans and the installation of free product removal systems must be determined on a time and materials basis and must not exceed the amounts set forth in Section 734.850 of this Part.

5) Payment for costs associated with the fieldwork and field oversight for free product removal shall not exceed a total of $ 500.00 per half-day. The Agency shall determine the reasonable number of half-days on a site-specific basis. ~~Stage 3 site investigations will be reimbursed pursuant to Section 734.850.~~

6) Payment for costs associated with the preparation and submission of free product removal reports including the tasks listed in Appendix F of this Part shall not exceed a total of $1600.00 per report.

7) Payment for costs associated with the preparation and submission of reports including the tasks listed in Appendix F of this Part submitted pursuant to Section 734.210(h)(3) of this Part must not exceed a total of $500.00. (Note. Scope of work not developed for this task)

b) Site Investigation. Payment of costs for professional consulting services associated with site investigation activities conducted pursuant to Subpart C of this Part must not exceed the following amounts:

1) Payment for costs associated with Stage 1 site investigation preparation and submission including the tasks listed in Appendix F of this Part must not exceed a total of $1,600.00.

2) Payment for costs associated with Stage 1 field work and field oversight must not exceed a total of $390.00 per half-day, plus travel costs in accordance with subsection (e) of this Section. The number of half-days must not exceed the following:

A) One half-day for every four soil borings, or fraction thereof, drilled as part of the Stage 1 site investigation but not used for the installation of monitoring wells. Borings in which monitoring wells are installed must be included in subsection (b)(2)(B) of this Section instead of this subsection (b)(2)(A); and

B) One half-day for each monitoring well installed as part of the Stage 1 site investigation.

3) Payment for costs associated with the preparation and submission of Stage 2 site investigation plans including the tasks listed in Appendix F of this Part must not exceed a total of $3,200.00.

4) Payment for costs associated with Stage 2 field work and field oversight must not exceed a total of $390.00 per half-day, plus travel costs in accordance with subsection (e) of this Section. The number of half-days must not exceed the following:

   A) One half-day for every four soil borings, or fraction thereof, drilled as part of the Stage 2 site investigation but not used for the installation of monitoring wells. Borings in which monitoring wells are installed must be included in subsection (b)(4)(B) of this Section instead of this subsection (b)(4)(A); and

   B) One half-day for each monitoring well installed as part of the Stage 2 site investigation.

5) Payment for costs associated with Stage 3 site investigations will be reimbursed pursuant to Section 734.850. ~~Payment for costs associated with the preparation and submission of Stage 3 site investigation plans must not exceed a total of $3,200.00.~~

6) Payment for costs associated with Stage 3 field work and field oversight must not exceed a total of $390.00 per half-day, plus travel costs in accordance with subsection (e) of this Section. The number of half-days must not exceed the following:

   A) One half-day for every four soil borings, or fraction thereof, drilled as part of the Stage 3 site investigation but not used for the installation of monitoring wells. Borings in which monitoring wells are installed must be included in subsection (b)(6)(B) of this Section instead of this subsection (b)(6)(A); and

   B) One half-day for each monitoring well installed as part of the Stage 3 site investigation.

7) Payment for costs associated with well surveys conducted pursuant to Section 734.445(b) of this Part including the tasks listed in Appendix F of this Part must not exceed a total of $160.00. Payment for costs associated with well surveys conducted pursuant to Section 734.445(c) of this Part must be determined on a time and materials basis and must not exceed the amounts set forth in Section 734.850 of this Part. (Note. Scope of work not developed for this task)

8) Payment for costs associated with the preparation and submission of site investigation completion reports including the tasks listed in Appendix F of this Part must not exceed a total of $1,600.00.

c) Corrective Action. Payment of costs for professional consulting services associated with corrective action activities conducted pursuant to Subpart C of this Part must not exceed the following amounts:

1) For conventional technology, payment for costs associated with the preparation and submission of corrective action plans including the tasks listed in Appendix F of this Part must not exceed a total of $5,120.00. For alternative technologies, payment for costs must be determined on a time and materials basis and must not exceed the amounts set forth in Section 734.850 of this Part.

2) Payment for costs associated with corrective action field work and field oversight must not exceed the following amounts:

A) For conventional technology, a total of $390.00 per half-day, not to exceed one half-day for each 225 cubic yards, or fraction thereof, of soil removed and disposed, plus travel costs in accordance with subsection (e) of this Section.

B) For alternative technologies, payment for costs must be determined on a time and materials basis and must not exceed the amounts set forth in Section 734.850 of this Part.

3) Payment for costs associated with Environmental Land Use Controls and Highway Authority Agreements used as institutional controls pursuant to 35 Ill. Adm. Code 742 including the tasks listed in Appendix F of this Part must not exceed a total of $800.00 per Environmental Land Use Control or Highway Authority Agreement. (Note. Scope of work not developed for this task)

4) Payment for costs associated with the preparation and submission of corrective action completion reports including the tasks listed in Appendix F of this Part must not exceed a total of $5,120.00.

d) Development of Tier 2 and Tier 3 Remediation Objectives. Payment of costs for professional consulting services associated with the development of Tier 2 and Tier 3 remediation objectives in accordance with 35 Ill. Adm. Code 742 must not exceed the following amounts:

1) Payment for costs associated with fieldwork and field oversight for the development of remediation objectives must not exceed a total of $390.00

per half-day, plus travel costs in accordance with subsection (e) of this Section. The number of half-days must not exceed the following:

A) One half-day for every four soil borings, or fraction thereof, drilled solely for the purpose of developing remediation objectives. Borings in which monitoring wells are installed must be included in subsection (d)(1)(B) of this Section instead of this subsection (d)(1)(A); and

B) One half-day for each monitoring well installed solely for the purpose of developing remediation objectives.

2) Excluding costs set forth in subsection (d)(1) of this Section, payment for costs associated with the development of Tier 2 or Tier 3 remediation objectives including the tasks listed in Appendix F of this Part must not exceed a total of $800.00. (Note. Scope of work not developed for this task)

e) Payment for costs associated with travel, including, but not limited to, travel time, per diem, mileage, transportation, vehicle charges, lodging, and meals, must not exceed the following amounts. Costs for travel must be allowed only when specified elsewhere in this Part.

Distance to site (land miles)	Maximum total amount per calendar day
0 to 29	$140.00
30 to 59	$220.00
60 or more	$300.00

Distances must be measured in ground miles and rounded to the nearest mile. If a consultant maintains more than one office, distance to the site must be measured from the consultant's office that is closest to the site.

f) If a plan must be amended due to unforeseen circumstances, costs associated with the amendment of the plan and its associated budget must not exceed a total of $640.00.

Section 734.APPENDIX F Scope of Work For Professional Consulting Services

Section 734.845(a)(1) Preparation for the abandonment or removal of USTs

1. Project Management

2. Correspondence
   a. Office of the Illinois State Fire Marshal (OSFM)
      1. Prepare and submit initial Notification Form for Underground Storage Tanks.
      2. Prepare Application for Permit for Removal/Abandonment of Underground Storage Tanks and submit to owner/operator for signature.
      3. Submit Application for Permit for Removal/Abandonment to OSFM.
      4. Prepare and submit LUST Fund Eligibility and Deductibility Application.
      5. Prepare and submit amended Notification Form.
   b. Illinois Environmental Protection Agency (IEPA)
      1. Prepare and submit early action extension.
      2. Follow up.
   c. Correspond with and update client.

3. Waste Disposal
   a. Determine early action excavation limits..
   b. Prepare waste profile and arrange for landfill approval.
   c. Prepare waste manifests or tracking forms.

4. Plan and Report Preparation
   a. Prepare site health and safety plan.

5. Resource Coordination
   a. Arrange for subcontractors (e.g., excavator, tank removal contractor, backfill, landfill).
   b. Schedule project.
   c. Call J.U.L.I.E. and/or municipality to locate utilities.

Section 734.845(a)(3) Preparation and submission of 20-day and 45-day reports

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Records Gathering
   a. Obtain and review IEPA and/or OSFM records.
   b. Obtain and review well records from ISGS and ISWS.
   c. Obtain and review local information (e.g. Sanborn maps, aerial overlays).

4. Waste Disposal
   a. Review disposal documentation.

5. Technical Evaluation
   a. Prepare well location map (<25 records within 2500 feet).
   b. Determine expected local site geology (subsurface soil conditions).

6. Plan and Report Preparation
   a. Prepare 20-Day Certification
   b. Prepare or revise site health and safety plan
   c. Prepare 45-Day Report
      1. Provide information pertaining to:
         A. Site Identification
         B. Release Information
         C. Early Action
         D. Site Information
            1. Nature and estimated quantity of release
            2. Data concerning:
               a. Surrounding populations
               b. Water quality
               c. Use and approximate locations of wells potentially affected by the release
               d. Subsurface soil conditions
               e. Location of subsurface sewers
               f. Climatological conditions
               g. Land use
            3. A discussion of what was done to measure for the presence of a release
            4. Action taken to prevent further release of the regulated substance into the environment
            5. A discussion of the action taken to monitor and mitigate fire and safety hazards posed by vapors or free product that has migrated from the UST excavation zone and entered subsurface structures

         E. Supporting Documentation
            1. Site map to scale and oriented north showing:
               a. UST systems(s) and excavation limits;
               b. Product and dispenser lines;
               c. Pumps and islands;
               d. Underground utilities (sewer, gas, water, etc.);
               e. Nearby structures (buildings, roads, etc.)
               f. Soil borings(s) (if present);
               g. Monitoring well(s) and/or sumps (if present);
               h. Property boundaries;

i. Sample location points.

2. Area map showing the site in relation to surrounding properties. This map should identify the facilities on the surrounding properties;
3. Cross-section, to scale, showing the UST(s) and the excavation;
4. Analytical / screening results in tabular format, including the results of soil samples required pursuant to 35 Ill. Adm. Code 732.202(h) or 45 ILCS 5/57-57.17;
5. UST information in a tabular format, including:
   a. Total number of UST(s) on site;
   b. Volume of the UST(s) (in gallons);
   c. The material stored in the UST(s);
   d. Identification of UST systems(s) that had a release; and
   e. Identification of UST system(s) that were repaired, removed, or abandoned-in-place;
6. Copy of OSFM Permits or notifications;
7. Narrative of tank removal and cleaning operations; describe how wastes generated during the tank removal were managed, treated, and disposed of;
8. Photographs of UST removal activities and the excavation; and
9. Copies of waste manifests for soil and groundwater transported off-site.

d. Review 20-Day Certification and 45-Day report by project manager or other senior staff.

7. Resource Coordination
   a. Call J.U.L.I.E. and/or municipality to locate utilities.

8. Distribution
   a. Deliver draft 20-Day Certification and 45-Day Report to owner/operator for review and signature.
   b. Make copies of final 20-Day Certification and 45-Day Report for distribution.
   c. Deliver completed 20-Day Certification and 45-Day Report to IEPA and owner/operator.

734.845(a)(6) Preparation and submission of free product removal reports

1. Project Management

2. Correspondence
   a. Correspond with and update Illinois Environmental Protection Agency (IEPA)
   b. Correspond with and update Client.

3. Waste Disposal
    a. Review disposal documentation.

4. Plan and Report Preparation
    a. Prepare Free Product Removal Report
        1. Provide information pertaining to:
            A. Site Identification
            B. Free Product Information
                1. Name(s) of person(s) responsible for implementing the free product removal measures;
                2. Estimated quantity, type, and thickness of free product observed or measured in boreholes, wells, excavation, etc.;
                3. The type of free product recovery system used and technical justification for the method of recovery chosen;
                4. Whether any discharge will take place on- or off-site during the recovery operation and where this discharge (point) will be located;
                5. Type of treatment applied to (the free product), and the effluent quality expected from any discharge;
                6. Steps that have been taken or that are being taken to obtain necessary permits for any discharge; and
                7. The disposition of the recovered free product.
            C. Supporting Documentation
                1. Site map to scale and oriented north showing:
                    a. UST systems(s) and excavation limits;
                    b. Product and dispenser lines;
                    c. Pumps and islands;
                    d. Underground utilities (sewer, gas, water, etc.);
                    e. Nearby structures (buildings, roads, etc.);
                    f. Soil boring(s) (if present);
                    g. Monitoring well(s) and/or sumps (if present);
                    h. Locations where free product was encountered including its estimated thickness;
                    i. Location of recovery points;
                    j. Location of the treatment unit;
                    k. Location of discharge points;
                    l. Property boundaries.
                2. Table showing the dates that free product recovery was conducted and the amount of free product recovered on each date; and
                3. Copies of waste manifests.

5. Distribution
    a. Deliver draft free product removal report to owner/operator for review and signature.

b. Make copies of final free product removal report for distribution.
c. Deliver completed report to IEPA and owner/operator.

734.845(a)(7) Preparation and submission of reports submitted pursuant to Section 734.210(h)(3)

(Reserved)

734.845(b)(1) Preparation and submission of Stage 1 site investigation plan

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Technical Evaluation
   a. Determine expected local site geology (subsurface soil conditions).
   b. Evaluate backfill/piping samples to Tier 1 remediation objectives.
   c. Determine drilling locations for soil samples and monitoring wells.
   d. Demonstrate if groundwater investigation is required (if applicable).
   e. Conduct initial water supply well survey per 734.315(a)(3).

4. Plan and Report Preparation
   a. Prepare Stage I Site Investigation Plan
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
            1. Will owner/operator seek reimbursement from the UST Fund?
            2. If yes, is budget attached?
            3. Is this an amended plan?
            4. Identify the material released.
            5. Describe the activities that will be performed to determine the following:
               a. Degree of soil contamination;
               b. Extent of soil contamination (as defined to Tier 1 Residential remediation objectives);
               c. The degree of groundwater contamination;
               d. Extent of groundwater contamination (as defined to Class 1 Remediation Objectives unless otherwise approved by the Illinois EPA)
               e. Direction of groundwater flow;
               f. Hydraulic conductivity of groundwater;
               g. Identification of Site features that may affect contaminant transport and risk to human health and the environment.

6. Site map to scale and oriented north showing:
    a. UST system(s) and excavation;
    b. Product and dispenser lines;
    c. Pumps and islands;
    d. Underground utilities (sewer, gas, water, etc.);
    e. Nearby structures (buildings, road, etc.);
    f. Location of proposed/existing soil borings;
    g. Location of the proposed/existing monitoring wells; and
    h. Property boundaries.

b. Prepare or update site health and safety plan.
c. Prepare budget.
c. Review plan and budget by project manager or other senior staff.
d. Prepare LPE/LPG certification.

5. Resource Coordination
    a. Arrange for drilling.
    b. Call J.U.L.I.E. and/or municipality to locate utilities.

6. Distribution
    a. Deliver draft plan and budget to owner/operator for review and signature.
    b. Make copies of final plan and budget for distribution.
    c. Deliver completed plan and budget to Agency and owner/operator.

734.845(b)(3) Preparation and submission of Stage 2 site investigation plans

1. Project Management

2. Correspondence
    a. Correspond with Agency.
    b. Correspond with and update client.

3. Records Gathering
    a. Obtain local information (e.g., Sanborn maps, aerial overlays, etc.).
    b. Determine extent of property boundaries.

4. Technical Evaluation
    a. Address items in 35 IAC 734.320(b).
    b. Prepare or finalize field notes.
    c. Prepare and describe site investigation photos.
    d. Prepare contingency scope of work for boring/monitoring well locations.

5. Plan and Report Preparation
    a. Prepare Stage 2 Site Investigation Plan addressing items in 35 IAC 734.320(b).
        1. Provide information concerning:

A. Site Identification
B. Site Information
1. Will owner/operator seek reimbursement from the UST Fund?
2. If yes, is budget attached?
3. Is this an amended plan?
4. Identify the material released.
5. Describe the activities that will be performed to determine the following:
a. Degree of soil contamination;
b. Extent of soil contamination (as defined to Tier 1 Residential remediation objectives);
c. The degree of groundwater contamination;
d. Extent of groundwater contamination (as defined to Class 1 Remediation Objectives unless otherwise approved by the Illinois EPA)
e. Direction of groundwater flow;
f. Hydraulic conductivity of groundwater;
g. Identification of Site features that may affect contaminant transport and risk to human health and the environment.
6. Site map to scale and oriented north showing:
a. UST system(s) and excavation;
b. Product and dispenser lines;
c. Pumps and islands;
d. Underground utilities (sewer, gas, water, etc.);
e. Nearby structures (buildings, road, etc.);
f. Location of proposed/existing soil borings;
g. Location of the proposed/existing monitoring wells; and
h. Property boundaries.

b. Prepare budget.
c. Prepare or revise site health and safety plan.
d. Review plan and budget by project manager or other senior staff.
e. Prepare LPE/LPG certification.

6. Resource Coordination
a. Arrange for drilling.
b. Call J.U.L.I.E. and/or municipality to locate utilities.

7. Distribution
a. Deliver draft plan and budget to owner/operator for review and signature.
b. Make copies of final plan and budget for distribution.
c. Deliver completed plan and budget to IEPA and owner/operator.

Section 734.845(b)(7) Well surveys conducted pursuant to Section 734.445(b)

(Reserved.)

Section 734.845(b)(8) Preparation and submission of site investigation completion reports

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Records Gathering
   a. Obtain local information (e.g., Sanborn maps, aerial overlays, etc.).
   b. Obtain legal description of the site or reference plat of survey showing boundaries.

4. Technical Evaluation
   a. Address items in 35 IAC 734.330(a), (b), and (c).
   b. Describe methods for investigating site and surrounding areas.
   c. Describe observations made while investigating site and surrounding areas.
   d. Prepare or revise site maps per 35 IAC 734.330(b)(2)-(4) that also show:
      1. Distance of at least 1,000 feet around UST (scale > 1:200)
      2. Location of site with respect to section, township, and range
      3. On-site and off-site injection and withdrawal wells affected by release
   e. Evaluate existing and potential migration pathways and exposure routes.
   f. Compile information regarding site-specific sampling activities and methods, including:
      1. Sample collection information (date, time, method, location, sampler),
      2. Sample preservation and shipment information, including QA/QC,
      3 Field and lab blank documentation.
   g. Interpret the results of the site investigation.
   h. Describe the release and evaluation of exposure routes.
   i. Describe the nature, concentration and extent of indicator contaminants.
   j. Prepare or finalize field notes.
   k. Prepare and describe site investigation photos.
   l. Provide analysis of hydraulic conductivity test data from a single well.
      m. Provide description of physical features that may affect contaminant transport.

5. Plan and Report Preparation
   a. Prepare Site Investigation Completion Report addressing items in 35 IAC 734.330(a), (b), and (c).
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
         C. Site Investigation Results

1. Site History/Executive Summary;
2. Narrative of field activities including sampling methods;
3. Discussion of development of remediation objectives;
4. Analytical results and remediation objectives in tabular format;
5. Conclusions;
6. Site maps to scale and oriented north showing the:
   a. UST system(s) and excavation;
   b. Product and dispenser lines;
   c. Pumps and islands;
   d. Underground utilities (sewer, gas, water, etc.);
   e. Nearby structures (buildings, roads, etc.);
   f. Location of soil borings;
   g. Location of existing monitoring wells;
   h. Property boundaries.
7. Soil boring logs;
8. Well completion reports;
9. Laboratory Reports; and
10. Laboratory Certification.

b. Prepare appendices containing references and data sources, logs, lab reports, etc.
c. Review site investigation completion report by project manager or other senior staff.
d. Prepare LPE/LPG certification.

6. Distribution
   a. Deliver draft site investigation completion report to owner/operator for review and signature.
   b. Make copies of final site investigation completion report for distribution.
   c. Deliver completed report to IEPA and owner/operator.

Section 734.845(c)(1) Preparation and submission of corrective actions plans (Conventional)

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Waste Disposal
   a. Prepare waste profile (arrange for landfill approval).
   b. Determine limits of excavation.
   c. Estimate quantity of contaminated soil to be disposed of.
   d. Mail waste profile to owner/operator for review and signature.
   e. Prepare waste manifests or tracking forms.

4. Technical Evaluation
    a. Estimate quantity of “clean” overburden to be stockpiled (if any).
    b. Prepare or finalize field notes.
    c. Prepare and describe remediation photos.

5. Plan and Report Preparation
    a. Prepare or revise site health and safety plan.
    b. Prepare Corrective Action Plan
        1. Provide information concerning:
            A. Site Identification
            B. Site Information
            C. Proposed Methods of Remediation
            D. Soil and Groundwater Investigation Results
                1. Description of investigation activities performed to define the extent of soil and/or groundwater contamination;
                2. Analytical results and cleanup objectives in tabular format;
                3. Laboratory reports;
                4. Boring logs;
                5. Monitoring well logs; and
                6. Site maps to scale and oriented north showing:
                    a. Soil sample locations;
                    b. Monitoring well locations; and
                    c. Plumes of soil and groundwater contamination.
            E. Technical Information – Corrective Action Plan
                1. Discussion of how the corrective action plan shall remediate the release;
                2. List of sampling parameters and corresponding remediation objectives;
                3. Basis for determining sampling parameters and remediation objectives;
                4. Media sampling plan to verify completion of remediation;
                5. Current and future use of the property;
                6. Proposed preventive, engineering and institutional controls;
                7. Schedule for implementation and projected completion of the plan;
                8. Engineering design specifications, diagrams, calculations, manufacturers’ specifications, systems analyses, site maps, etc.;
    c. Prepare budget for corrective action plan.
    d. Review corrective action plan and budget by project manager or other senior staff.
    e. Prepare LPE/LPG certification.

6. Resource Coordination
    a. Schedule project.
    b. Arrange for excavator.
    c. Arrange for hauling.

d. Arrange for backfill.
e. Call J.U.L.I.E. and/or municipality to locate utilities.

7. Distribution
   a. Deliver draft corrective action plan and budget to owner/operator for review and signature.
   b. Make copies of final corrective action plan and budget for distribution.
   c. Deliver completed corrective action plan and budget to IEPA and owner/operator.

Section 734.845(c)(3) Environmental Land Use Controls and Highway Authority Agreements

(Reserved.)

Section 734.845(c)(4) Preparation and submission of corrective action completion reports (Conventional)

1. Project Management

2. Correspondence
   a. Correspond with Agency.
   b. Correspond with and update client.

3. Records Gathering
   a. Obtain legal description of property.
   b. Obtain property tax identification number.

4. Technical Evaluation
   a. Address items in 35 IAC 734.345(a).
   b. Prepare and describe photos.
   c. Prepare or finalize field notes.

5. Plan and Report Preparation
   a. Prepare Corrective Action Completion Report following items in 35 IAC 734.345(a).
      1. Provide information concerning:
         A. Site Identification
         B. Site Information
         C. Completion Information
            1. Chronological narrative of corrective action activities;
            2. Explanation of how the corrective action activities remediated the release;
            3. Discussion of how the remediation objectives were determined;
            4. Media sampling and analytical procedures to verify completion of remediation;

5. Analytical results and remediation objectives in tabular format;
6. Laboratory reports;
7. Soil boring logs;
8. Monitoring well logs;
9. Laboratory Certification;
10. Applicable Professional Engineer Certification;
11. Site maps to scale and oriented north showing:
    a. Final soil sample locations demonstrating completion of remediation;
    b. Groundwater monitoring well locations;
    c. Groundwater recovery/discharge points;
    d. Plume of contamination as defined by laboratory analyses; and
    e. Area remediated.
12. Property Owner Summary; and
13. Photographs documenting corrective action activities.

b. Review corrective action completion report by project manager or other senior staff
c. Prepare LPE certification

6. Resource Coordination
   a. Record NFR letter

7. Distribution
   a. Deliver draft corrective action completion report to owner/operator for review and signature.
   b. Make copies of final corrective action completion report for distribution.
   c. Deliver completed corrective action completion report to IEPA and owner/operator.
   d. Make copies of recorded NFR letter for distribution.
   e. Deliver recorded NFR letter to IEPA and owner/operator.

Section 734.845(d)(2) Development of Tier 2 or Tier 3 remediation objectives

(Reserved)

732.845(f) and 734.845(f) Amendment of plan and its associated budget

(Reserved)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on January 5, 2006, by a vote of _____.

_____

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board