



Elaine Dousky

IOWA UNDERGROUND STORAGE TANK

Financial Responsibility Program

Susan E. Voss, *Chairperson*

Scott M. Scheidel, *Administrator*

Board Members: Michael L. Fitzgerald Jeff W. Robinson Jacqueline A. Johnson James M. Holcomb
Richard A. Leopold Nancy A. Lincoln Douglas M. Beech

NOTICE OF PUBLIC MEETING

A public meeting of the Iowa Comprehensive Petroleum Underground Storage Tank Fund Board has been scheduled for 10:00 a.m., Wednesday, September 26, 2007. **The meeting will be held at the Iowa Insurance Division located at 330 E Maple St, Des Moines, Iowa.**

The tentative agenda for the meeting is as follows:

10:00 a.m. Call to Order

1. Approval of Prior Board Minutes
2. Closed Session – Discussion of Pending and Imminent Litigation (To adjourn by 10:30 a.m.)
3. Public Comment Period
4. Board Issues
 - A. Potential RBCA Changes
 - B. DNR Update
 - C. Loss Portfolio Transfer Discussion
5. Approval of Program Billings
6. Monthly Activity Report and Financials Reviewed
7. Attorney General's Report
8. Claim Payment Approval
9. Contracts Entered Into Since August 23, 2007 Board Meeting
10. Other Issues as Presented
11. Correspondence and Attachments

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Approval of Prior Board Minutes



IOWA UNDERGROUND STORAGE TANK FUND

Susan E. Voss, Chairperson

Scott M. Scheidel, Administrator

Board Members:

Michael L. Fitzgerald ❖ Jeff W. Robinson ❖ Jacqueline A. Johnson ❖ James M. Holcomb
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MINUTES IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND PROGRAM

August 23, 2007

COMMISSIONER'S CONFERENCE ROOM IOWA INSURANCE DIVISION, 330 EAST MAPLE STREET DES MOINES, IOWA

Susan Voss, Chairperson, called the Iowa UST Board meeting to order at 10:03 A.M. A quorum was present. Roll call was taken with the following Board members present:

Jim Holcomb
Jacqueline Johnson (via telephone)
Nancy Lincoln (via telephone)
Doug Beech
Stephen Larson (for Michael Fitzgerald)

Also present were:

David Steward, Attorney General's Office
Scott Scheidel, Program Administrator
Lacey Skalicky, Program Administrator's Office
James Gastineau, Program Administrator's Office
Elaine Douskey, Iowa Department of Natural Resources

APPROVAL OF PRIOR BOARD MINUTES

The minutes from the July 19, 2007 Annual Strategic Planning Session were reviewed. Mr. Beech moved to approve the minutes, Mr. Holcomb seconded the motion, and by a vote of 5-0, the minutes were approved.

CLOSED SESSION

Ms. Voss noted there were no matters dealing with litigation for discussion in closed session pursuant to Iowa Code Chapter 21. Therefore no closed session convened.

PUBLIC COMMENT

Ms. Voss requested any comments from the public present. There were no comments at this time.

BOARD ISSUES

A. Fiscal Year 2008 Goals

Mr. Scheidel presented a memo to the Board summarizing the goals for fiscal year 2008, as discussed at the July Board meeting. He included a table to provide quarterly updates regarding the progress of each goal throughout the year. Goals listed included:

1. Close 165 claims by 6/30/08
2. Hold 100 corrective action meetings by 6/30/08
3. Evaluate Loss Portfolio Transfer (LPT) opportunity presented by PMMIC, as well as, review Board's LPT strategy in general
4. Coordinate with the Department of Natural Resources (DNR) to implement a plastic water line (PWL) policy that reflects the experience in Iowa and other states and the ISU study, hopefully resulting in a cost savings by 6/30/08
5. Coordinate with DNR to put formal guidelines on recent water well closure orders from DNR legal staff by 12/31/07
6. Follow through on the update of Tier 2 model with DNR
7. Enter into no further action (NFA) funding agreement with DNR and evaluate risk transfer mechanism for benefit to Board's liability under the agreement

Because so many of the goals involved DNR cooperation, Ms. Voss inquired if the DNR had reviewed the Board's goals with their staff. Elaine Douskey, UST and LUST Section Supervisor at DNR, explained that she and Tim Hall, Bureau Chief, had discussed the Tier 2 software issue and the NFA funding agreement. Mr. Scheidel stated that monthly meetings between DNR and the Administrator's Office were scheduled through the end of the year to discuss the progression of those goals that required Board and DNR coordination.

B. Rules for RBCA Changes Update

Mr. Scheidel reported to the Board that there was nothing new to report regarding the RBCA changes from the Administrator's Office; however he thought Ms. Douskey might have an update to report during the DNR Update.

C. Loss Portfolio Transfer Review

It was noted that Tom Norris from Petroleum Marketers Management Insurance Company (PMMIC), had inquired about the Board's interest in considering another LPT of UST Fund claims to PMMIC for UST Fund claim sites which currently hold PMMIC insurance on their active UST's. The Board had decided to review their LPT strategy. Mr. Scheidel presented the Board with copies of documents from the LPT completed in late fiscal year 2007 for 10 UST sites. Included in the documentation in the Board packets were the proposal, the agreement, the claimant agreement including a waiver and general release of the Board, and a pros and cons worksheet developed during the negotiation of the transfer last Spring. Also, Mr. Scheidel included a copy of the Board's LPT rules from the Administrative Code and various marketing materials regarding the general use of LPT transactions in various insurance-related situations. Mr. Scheidel explained to the Board a few examples of the regular usage of LPT's within the

insurance industry, including workers compensation, general liability, large fleet auto liability, etc., often associated with a merger of businesses. He explained that the point of a LPT was to put a fixed amount on a loss creating a known liability rather than maintaining an unknown amount of liability. He stated the downside included the fact that the known amount was generally higher than the projected reserves on a specific set of claims due to the nature of the risk. Another benefit to the Board by completing an LPT would be the cessation of operations with regard to those transferred claims, as the liability would be removed from the Board upon transfer. Mr. Scheidel explained that a LPT would be one way to end the UST Program in its entirety, in theory, because the liabilities would be extinguished from the Board's duties if all claims under the current program were transferred to another entity. Mr. Steward opined that such a transfer should include agreements and waivers signed by all UST Fund claimants.

Ms. Voss inquired from Mr. Norris if the Board should anticipate a formal proposal from PMMIC within the next 6 months or so. Mr. Norris responded that PMMIC was currently interested in the Board's reception of the concept initially; however a formal proposal could follow in short order, if the Board was open to the idea.

Additionally, Mr. Norris had provided for the Board a snapshot of expenses from the 10 claims previously transferred from the Board to PMMIC to track their expenses compared to the Board's transfer amount to see how close or far off the agreed transfer amount was, although the discrepancy would not be known until all 10 claims were closed and received NFA certificates from the DNR.

Mr. Scheidel explained that he wanted to give the Board as much documentation regarding LPT's to incite any questions the Board members might have about the intent or the process of a LPT. Ms. Voss voiced that she would like more time to look over the documents and develop questions about it. Mr. Beech stated he was concerned that the calculations for the potential transfer sites could not be accurately projected until the rules regarding the RBCA software changes were written and the issue of plastic water lines was resolved. Also, he felt the set of claims proposed for transfer should be reviewed to evaluate whether or not the Fund would be left with an unfortunate set of more costly claims – and millions of dollars fewer remaining to cover them. He suggested that any future LPT should include some representation of more difficult claims in addition to those claims more easily projected and resolved. Mr. Norris acknowledged Mr. Beech's concerns about a package of claims, and he stated that with regard to non-PMMIC insured sites, PMMIC would be open to submitting a proposal for all UST claims. He noted that the current PMMIC proposal in concept was for PMMIC-insured sites because of the current relationship between PMMIC and those site owners, as clients.

Mr. Steward noted that the open records laws stated that any proposal submitted by PMMIC would be discussed in open session, unless PMMIC requested in writing that the proposal be discussed in closed session due to the fact that the release of the proposal to the public would provide an advantage to competitors and serve no public purpose. If the Board found those two conditions to be satisfied, then the Board could make a finding to go into closed session to discuss the proposal. However, he explained the Board would also have to discuss the practicability of seeking bids for any set of claims to be transferred, and that discussion would have to be held in open session.

Responding to a question from Mr. Beech, Mr. Steward stated that under the current law, the Board was allowed to initiate a LPT by packaging a set of claims of selected sites, as well as, to respond to a proposal for claims selected by a third party. Mr. Holcomb inquired whether the Board had access to experts who could effectively evaluate a larger LPT on the Board's behalf. Mr. Scheidel and Mr. Steward both responded that Aon could provide expertise depending on the scope of the assistance needed.

Mr. Scheidel next explained that he included a copy of the rules governing the Board in the Board packets, and he stated the rules did not require a waiver and release from UST Fund claimants for their claims to be transferred via a LPT. Mr. Steward stated he included the waiver and release in the mini-LPT from last Spring, as documentation which confirms that claimants understand what they're agreeing to. Mr. Scheidel explained the rules did say the Board would have to evaluate the impact of a transfer on the rights of claimants. However, based on the fact that it would be impractical to assume that all claimants would sign a waiver and release of the Board, the rules allowed for the Board to complete a transfer in the absence of signed releases. Mr. Steward stated he would advise the Board against entering into a transfer without full disclosure and acceptance from claimants.

Ms. Voss suggested Board members formulate questions to submit to Mr. Scheidel for discussion at the next Board meeting.

D. DNR Update

Ms. Douskey stated that the DNR had scheduled two more RBCA training courses for December and January. Registration information was listed on the DNR webpage. Regarding the new legal position at the DNR, as discussed at previous meetings, the DNR had submitted a 28E draft agreement to the Attorney General's Office for review and discussion to finalize the language and present to the Board at a future Board meeting. Also, she stated the DNR had been focusing on sending out letters to site owners who had overdue RBCA Tier 1 and Tier 2 reports. Under the UST Section, the field offices met to review the UST inspection database, and an additional training course was held for inspectors in July.

Next Ms. Douskey reported the Environmental Protection Agency (EPA) had finalized the owner/operator training guidelines in August, and a provision of the federal Energy Policy Act required that states have an owner/operator training program in place by 2009. Also, she stated the rules regarding secondary containment and delivery prohibition were previously filed with the Environmental Protection Commission (EPC), and were in the public comment phase currently.

Ms. Douskey discussed the position of the LUST Section with regard to the plastic water line debate, stating that Rochelle Cardinale had been researching the issue for the LUST Section, and Ms. Douskey needed to obtain direction from DNR management regarding DNR staff involvement in this debate. Also, she discussed the abandoned well issue as discussed in August stating that the DNR had changed their process some by involving their legal department in communicating with owners of water wells to resolve those receptor problems. She expected the

DNR to become aware of water wells of concern through the documentation of site assessment upon receipt of RBCA reports.

Ms. Douskey reported that she had presented the recommendations of the Software Investigation Committee (SIC) to management at DNR, and the legal department advised that the implementation of the recommendations would require rule changes, for which she had senior staff working on the draft. Also, she had requested LaDon Jones write up a summary of the changes for understanding by laypersons. She expected the draft to be completed by the end of September, and she expected comment from stakeholders and subsequent discussion, therefore they may be presented to the Board at the October or November Board meeting.

Next Ms. Douskey discussed the 28E between the Board and the DNR drafted by the Administrator's and Attorney General's Offices regarding reopening sites which had previously received No Further Action certificates. She stated they were still trying to define what would constitute unreasonable risk to public health, and she said she was creating a document to outline the steps that DNR staff would take to evaluate the risk before requesting that a NFA site be reopened. Lastly, she reported that the LUST section had closed 167 sites during federal fiscal year 2007 to date, and the EPA goal set had been 130. She noted that two newly-hired staff had managed to review and catch up the backlog of approximately 160-170 monitoring reports for reclassification since June, and she was very pleased with their progress. However, she explained that their "bank" of potential sites to close for next year was now gone, and although the Board had listed an ambitious goal to close claims for fiscal year 2008, she pointed out that the appropriate closure of sites would require cooperation from all parties.

Mr. Scheidel inquired if she knew what the effective date of the RBCA rules would be, and she expected the process to last until January or February. Ms. Voss inquired about plastic water line discussion, and Ms. Douskey repeated that she needed to confirm with management how the LUST section would proceed on the issue. Mr. Gastineau offered additional information about the plastic water line issue from the State of Missouri, as studied by a technical advisory committee since March. This committee had already drafted recommended target levels for plastic water line receptors, as a result of investigating research papers and discussing the subject with representatives from the Iowa State University study. Additionally, Mr. Gastineau explained to the Board how the Iowa DNR had developed their target levels for plastic water lines several years ago. He stated the State had a technical advisory committee established in 1995, as a result of the newly-established RBCA program. The DNR was not part of the committee, and the group was broken down into subcommittees. One subcommittee set the standard target levels for certain receptors, and the numbers recommended were not agreed upon by the full committee. The first draft of rules for RBCA was met with significant public comment, and the revised rules were written over a very short period of time. Therefore, very little research was completed at that time, and as a result, the plastic water line receptor target levels were the same as that of another pathway. He stated the standard had come into question over the years since. Also, he stated that the committee working on behalf of the State of Missouri, included representatives from utilities, plastic water line industry, State DNR, the Hazardous Waste Section, etc., who had come up with draft numbers for the plastic water line pathway that were reasonable. He felt the Iowa DNR should consider their research as valid enough to consider adopting certain target levels, rather than repeating the efforts of their

Missouri counterparts. Mr. Gastineau also said he could draft a comparison of Iowa standards and Missouri standards and, possibly, South Dakota standards for the next meeting. He explained that no other states used numerical standards.

Mr. Beech inquired about the new RBCA rules, and how quickly could UST Fund claim reserves be reevaluated. Mr. Scheidel stated that based on the set of claims evaluated and the approach taken claims could be re-evaluated between 30 to 90 days.

E. Administrator's Contract Renewal

Mr. Scheidel included in the Board packet a copy of the Administrator's contract with Aon from 2004, as well as, the 1st agreement extension for one year. Mr. Steward previously had electronically mailed a draft of the 2nd agreement extension to Board members for review. Ms. Voss reported that Ms. Christiansen of the DNR had suggested the Board's annual goals set at the Strategic Planning Session be incorporated into the Administrator's contract. Mr. Steward explained to the Board that something of that nature would constitute an amendment to the original agreement, which would be separate from this currently drafted extension to the agreement. Additionally, he stated that proposal would have to be submitted to Aon for negotiation; also he explained that some goals developed at the annual meeting were not in the control of Aon, although to consider those goals, Aon could be evaluated over the next year to see that they cooperated fully to reach those goals. Mr. Scheidel stated that Aon negotiated similar terms with many of their clients, as a general practice, but would have to analyze what control Aon has over reaching goals and what are the benefits for exceeding or consequences of not meeting those goals. Mr. Steward pointed out that the current contract only required a performance review of Aon after the first two years of the contract, which was completed in the Fall of 2006. However, he also stated that Aon's performance may be evaluated by the Board at any time. He stated the amendment adding the goals would be an amendment to the 2004 agreement; however he explained that the extension needed to be approved or not approved as soon as possible to provide Aon with 60 days notice of renewal or non-renewal.

Mr. Beech entered a motion to extend the Administrator's contract with Aon for one year [ending December 31, 2008]. Mr. Larson seconded the motion, which was approved by a vote of 5-0.

PROGRAM BILLINGS

Mr. Scheidel presented the current monthly billings to the Board for approval.

1. Aon Risk Services(\$1,102.00)
Consulting Services – August 2007 Credit for Licensing Program transferred

2. Aon Risk Services\$118,222.00
Consulting Services – September 2007 (\$65,638.00)
Claims Processing Services – September 2007 (\$52,584.00)

3. Aon Risk Services(\$1,102.00)
Consulting Services – September 2007 Credit for Licensing Program transferred
4. Aon Risk Services\$107.94
Reimbursement for HyVee lunch for Annual Strategic Planning Session
July 19, 2007
5. Iowa Department of Inspections & Appeals.....\$1,002.00
Administrative Hearings on behalf of the Iowa UST Program
April – June 2007
6. Jackie Johnson.....\$122.40
Mileage reimbursement for travel to Annual Strategic Planning Session
At DMACC in Ankeny on July 19, 2007
7. Nancy Lincoln\$110.16
Mileage reimbursement for travel to Annual Strategic Planning Session
At DMACC in Ankeny on July 19, 2007

No additional billings for outside cost recovery counsel were presented by the Attorney General's office for this meeting. On a motion by Mr. Larson and a second by Mr. Holcomb, the billings were approved by a vote of 5-0.

MONTHLY ACTIVITY REPORT

Mr. Scheidel noted that the July activity report, financial reports and opt-in report were in the Board packets. He noted changes to the activity report included the AST claims – all closed – were no longer reported and were replaced by unassigned revenue project claims, including tank closure contract claims and plastic water line contract claims. Also, he noted that he didn't receive corrective action meeting numbers for the meeting, so he would report totals next month.

ATTORNEY GENERAL'S REPORT

Mr. Steward stated he had nothing further to report. Mr. Scheidel stated that he and Tim Benton of the Attorney General's Office had been working on old appeal files as a new Administrative Law Judge had recently taken over those cases and wanted to clear the backlog. He reported that the process was working well.

CLAIM AUTHORITY

Mr. Gastineau presented the following claim authority requests:

1. **Site Registration 8600894 – Casey's Marketing Co., Clarence**

This site was classified as high risk for the groundwater to plastic water line pathway. There were no low risk pathways. An investigation was to be completed to confirm the existence and

quantity of plastic water line within the actual and modeled plumes. The replacement of PVC within the modeled plume would allow for the reclassification of the site to no further action (NFA). Previous authority to \$75,000 had been granted, and \$76,962.95 was incurred to date. Additional authority to \$200,000 was requested for a site monitoring report (SMR) and replacement of the PVC water line.

A motion to approve the claim authority was submitted by Mr. Holcomb and seconded by Mr. Larson. Approved 4-0. Mr. Beech abstained from the discussion and the vote.

2. Site Registration 9016721 – Kutcher Welding, Oxford

This site was classified high risk, however the groundwater professional had recommended reclassification to low risk, and the request is pending DNR review. If accepted, the site would be low risk for the groundwater to protected groundwater source pathway and low risk for the potential vapor pathways. Annual monitoring would continue until the target levels and exit criteria were met. Previous approval to \$75,000 had been granted, and \$88,190.73 was incurred to date. Additional authority to \$120,000 was requested for a site monitoring report (SMR) and implementation of the excavation including concrete and well replacement. Mr. Holcomb submitted a motion to approve the claim authority, and Mr. Larson seconded the motion. Approved 5-0.

3. Site Registration 8604079 – Bluff Service Center, Clinton

This site was classified high risk for the groundwater vapor pathway for three residential sewers. Vapor sampling had failed, and the DNR was requiring corrective action. A soil vapor extraction (SVE) system was recommended. Previous authority to \$75,000 had been granted, and \$74,356.54 was incurred to date. Additional authority to \$210,000 was requested for implementation of the SVE and a SMR.

Mr. Holcomb submitted a motion to approve the claim authority, and Mr. Beech seconded the motion. Approved 5-0.

4. Site Registration 8607462 – Daniel Grothus, Bettendorf

This Board report was for a non-granular bedrock, low risk site with free product. Another drinking water well was identified in the 2006 monitoring report. It was less than 1,000 feet away and will result in a reclassification to high risk after DNR reviews the report. A Tier III may be possible as the next step. Previous authority to \$75,000 had been granted, and \$84,481.28 was incurred to date. Additional authority to \$150,000 was requested for free product recovery (FPR), a possible corrective action design report (CADR), a possible excavation, and another SMR.

Mr. Holcomb submitted a motion to approve the claim authority, and Mr. Larson seconded the motion. The Board requested additional information about the site's history to be discussed at the September meeting. Approved 5-0.

5. Site Registration 8603249 – Al's Corner Oil Co., Bayard

This site was classified no further action, however additional Board authority was needed to close the monitoring wells. Previous authority to \$75,000 had been granted, and \$82,812.66 was incurred to date. Additional authority to \$75,500 was requested for monitoring well closure.

Mr. Larson submitted a motion to approve the claim authority, and Mr. Holcomb seconded the motion. Approved 5-0.

6. Site Registration 8607406 – Messer Oil Co., Lone Tree

This site was classified low risk with free product. Previous authority to \$75,000 had been granted, and \$82,762.63 was incurred to date. Additional authority to \$130,000 was requested for FPR.

Mr. Beech submitted a motion to approve the claim authority, and Mr. Larson seconded the motion. Approved 5-0.

7. Site Registration 8608909 – Jerry Roney, Huxley

This site was classified high risk for groundwater vapors and low risk for groundwater ingestion to a potential groundwater source. Previous authority to \$75,000 had been granted, and \$83,068.33 was incurred to date. Additional authority to \$225,000 was requested for a possible CADR and implementation of the CADR, as well as, a SMR and FPR.

Mr. Holcomb submitted a motion to approve the claim authority, and Mr. Larson seconded the motion. Approved 5-0.

8. Site Registration 8609364 – Iowa Dept of Transportation, Waukon

This was the second Board report for this site that was classified as high-risk monitor-only following the Tier III, when the last Board report was submitted. In the most recent SMR, a down gradient well that had been previously non-detect had a hit. After additional source drilling to see if contamination was moving, they did find additional soil contamination. Because this was a non-granular bedrock site, an excavation was necessary. Deep city drinking water wells were located across the street, and one of those was failing due to age, and therefore higher costs were possible in the future, if that well should be replaced. Previous authority to \$175,000 had been granted, and \$116,935.68 was incurred to date. Additional authority to \$350,000 was requested for a possible CADR, a soil excavation, and a SMR.

Mr. Holcomb submitted a motion to approve the claim authority, and Mr. Larson seconded the motion. Approved 5-0.

CONTRACTS ENTERED INTO SINCE THE JULY 19, 2007 BOARD MEETING

Mr. Scheidel noted that the Board had entered into seven new contracts or agreements since the last Board meeting.

1. Reimbursement agreement with Attorney General's Office for FY08.
2. 28E agreement addendum with DNR for UST closure contracts for one year
3. Contract addendum with MSA Professionals for east region UST closures for one year
4. Contract addendum with GeoTek Engineering for west region UST closures for one year
5. Contract addendum with Apex Companies LLC for Rose Hill CRP for one year
6. Contract addendum with GeoTek Engineering for Walnut CRP for one year
7. Contract addendum with Seneca Environmental for Akron CRP for one year

OTHER ISSUES

Mr. Scheidel noted that the next Board meeting was scheduled for Thursday, September 27, 2007. Due to conflicts, alternative dates would be considered.

At the September meeting, the Board would discuss loss portfolio transfer questions, and Mr. Scheidel offered to bring in an Aon representative to discuss examples of LPT's and considerations of such at a later Board meeting, possibly in October. Mr. Beech suggested the Board discuss public policy concerns regarding the completion of a large LPT, as well.

CORRESPONDENCE AND ATTACHMENTS

Ms. Voss asked if there was any further business, and there being none, Mr. Holcomb moved to adjourn, and Mr. Beech seconded the motion. By a vote of 5-0, the Board adjourned at 11:24 A.M.

Respectfully Submitted,



Scott M. Scheidel
Administrator

Closed Session

Discussion of Pending and Imminent Litigation

Public Comment

Board Issues

A. Potential RBCA Rule Changes

1. SIC Recommendation (March 2007)

RECOMMENDATION FROM THE RBCA SOFTWARE INVESTIGATION COMMITTEE TO DNR FOR CHANGES TO CURRENT TIER-2 SOFTWARE

As a result of DNR's Business Process Improvement meetings held in 2006, an advisory committee including DNR staff and stakeholders was formed to examine the current RBCA T-2 software and investigate the possibility of making it more representative of actual risk posed by the existence of contamination at LUST sites. The modification of the current software was the highest priority item to come out of the BPI meetings.

The committee formed included Elaine Douskey and Tammy VanderBloemen-DNR, Scott Schiedel and James Gastineau-Aon/UST Fund, Tom Norris-PMMIC, Jeff Hove-PMCI, Tristan Grover and Ray Widder -EPI, Tom Draur-Barker-Lemar, Jill Reams-Widder-Casey's General Stores, La Don Jones-ISU, Mike Gannon-DNR. Various DNR LUST staff also sat in on the meetings. These committee meetings commenced in September of 2006 and met 8 times in all with the last meeting held Friday 6/15/07.

LaDon Jones of ISU, the original author of the Tier-2 software, was asked to come and present to the group his thoughts about the current version of the software. He explained that the current software was quite conservative in modeling groundwater plumes. In conjunction with joint funding from PMMIC and the UST Fund, LaDon agreed to do further analysis of the model and bring those findings to the group.

LaDon made various modifications to the model's variables over the course of the meetings and discussion ensued about possible impacts of the various iterations of the software he tested. The sample size of data LaDon used included over 110 sites for benzene and 60 sites for diesel which was a much larger sampling than what was utilized in testing the original T-2 software before it was rolled out.

The current version of the T-2 software is roughly 8 times over-predictive of actual contamination at the 5 PPB benzene level and the model is approximately 17 times over-predictive at the 1200 PPB diesel contamination level. Various issues were examined including the length of plumes with new software models, how SSTL's (either going up or down) would change, how many sites would change risk classifications etc. An issue with the current T-2 model seems to be that it is most over-predictive at the lower contamination levels while it is not so over-predictive at the higher levels of contamination.

After examining various incarnations of modified software, the group decided to recommend LaDon's model #'s 17 for benzene, #4 for diesel, #6 for toluene, and #3 for ethylbenzene. No changes were necessary for xylene and he will utilize the same model for waste oil that is used for diesel. The proposed benzene model is approximately 2.6

times over-predictive and the diesel model approximately 3 times over-predictive of actual plumes and in both cases the model would under-predict (compared to actual) 9% or less of the time. The model would actually be more conservative in some cases at higher levels of contamination and have less chances under-predicting than the current software version.

LaDon explained that no user training or updates would be needed to implement the new software version. The software would operate in the exact same manner as the current version, just different results would be obtained at some contamination levels. Copies of the software could be made and sent to CGP's for use to commence at a day certain. It was discussed that at least one or two educational meetings be held for CGP's prior to any rollout to explain the changes and what they should expect from a results standpoint. The software version to be utilized are virtually done at this point and it would take little time for LaDon to be prepared to print and ship the software to the CGP's.

DNR counsel indicates that it would be necessary to undertake a rule change to utilize the new software as the equation being altered is actually contained in the existing rule. DNR staff at the meeting indicated that there would need to be some policy changes to be made to accommodate the new software usage. Stakeholders from PMMIC and the UST Fund among others indicated they would be willing to assist and provide input as it relates to both of these issues.

It is the recommendation of this committee to undertake and move forward with the implementation of the revisions to the software proposed above as soon as possible.

2. DNR Process Summary (September 2007)



"Vander Bloemen,
Tammy [DNR]"
<Tammy.Vander_Bloem
en@dnr.iowa.gov>

09/13/2007 10:17 AM

To: "Alt, Dennis [DNR]" <Dennis.Alt@dnr.iowa.gov>, "Cardinale, Rochelle
[DNR]" <Rochelle.Cardinale@dnr.iowa.gov>, "Douskey, Elaine [DNR]"
<Elaine.Douskey@dnr.iowa.gov>, "Gannon, Mike [DNR]"
cc:
Subject: Amendments to Chapter 135 [Virus Checked]

Proposed Rule – Amendments to Chapter 135, Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks

The Department of Natural Resources proposes amendments to revise the current Tier 2 software model, the evaluation of public water supply wells, and implementation of corrective action at high risk leaking underground storage tank sites.

Based on observations during the first decade's use of the existing model, there was a perception that the length of contaminant plumes generated by the model, in many cases, significantly over-estimated the extent of contaminant migration. Changes were made to recalibrate the Tier 2 software model to make the modeled groundwater plumes more closely match the actual groundwater plumes.

The last decade of experience also showed that the Tier 2 software model, which is a two dimensional fate and transport model, was not always sufficiently predictive of risk to pumping wells. Of particular concern are public water supply wells which may have a large radius of influence caused by their greater water withdrawal rates. In order to better assess the risk to these public water supply wells, the amendments establish additional criteria for their risk evaluation.

As a result of a business process improvement event held by the department in 2004, a modified approach to processing and planning activities for high risk LUST sites was implemented. The proposed rules incorporate these changes in the processing of high risk sites.

Attached is the Summary of Process for Examination and Modification of the Tier 2 Groundwater Model and the Notice of Intended Action For Information for your review. Please send written comments Tammy Vander Bloemen (tammy.vander_bloemen@dnr.iowa.gov) by 09/28/07.

There are informational (question and answer) meetings scheduled for Friday 09/21/07 from 8:00 AM to 10:00 AM in Conference Room 4W of the Wallace Building and Friday 09/28/07 from 1:00 PM to 3:00 PM in Conference Room 5W of the Wallace Building. If you attend one of these meeting please bring a written copy of your comments for the DNR. Three public hearings will tentatively be held in Iowa City, Des Moines and Denison at a later date.



Final UST NQIA_infoT2model.doc Final SIC_Process Summary 09-06-07.doc

For the following lists of parameters, one of three is required: site-specific measurements, defaults or the option of either (which means the default may be used or replaced with a site-specific measurement).

Soil parameters

Parameter		Default Value	Required
ρ_s	soil bulk density	1.86 g/cm ³	option
f_{oc}	fraction organic carbon in the soil	0.01 kg-C/kg-soil	option
θ_T	total soil porosity	0.3 cm ³ -voids/cm ³ -soil	option
θ_{as}	volumetric air content in vadose zone	0.2 cm ³ -air/cm ³ -soil	default
θ_{ws}	volumetric water content in vadose zone	0.1 cm ³ -H ₂ O/cm ³ -soil	default
θ_{acrack}	volumetric air content in foundation/wall cracks	0.2 cm ³ -air/cm ³ -soil	default
θ_{wcrack}	volumetric water content in foundation/wall cracks	0.1 cm ³ -H ₂ O/cm ³ -soil	default
I	infiltration rate of water through soil	7 cm/year	default

If the total porosity is measured, assume 1/3 is air filled and 2/3 is water filled for determining the water and air fraction in the vadose zone soil and floor cracks.

Groundwater Transport Modeling Parameters

Parameter		Default Value	Required
K	hydraulic conductivity	16060 cm/year	site-specific
i	groundwater head gradient	0.01 cm/cm	site-specific
S_w	width of the source	use procedure specified in 135.10(2)	site-specific
S_d	vertical thickness of the source	3 m	default
α_x	dispersivity in the x direction	0.1x	default
α_y	dispersivity in the y direction	0.33 α_x	default
α_z	dispersivity in the z direction	0.05 α_x	default
θ_e	effective porosity	0.1	default

where $u=Ki/\theta_e$

Groundwater Transport Modeling Parameters (continued) First-order Decay Coefficients

Chemical	Default Value λ (d ⁻¹)	Required
Benzene	0.0005-0.000127441	default
Toluene	0.0007-0.0000208066	default
Ethylbenzene	0.00013-0.0	default
Xylenes	0.0005	default
Naphthalene	0.00013	default
Benzo(a)pyrene-TEH-Diesel	0.0000554955	default
Benz(a)anthracene-TEH-Waste Oil	0.0000554955	default
Chrysene	0	default

Other Parameters for Groundwater Vapor to Enclosed Space

Parameter		Default Value	Required
L_{gw}	depth to groundwater from the enclosed space foundation	1 cm	option
LB	enclosed space volume/infiltration area ratio	200 cm	option
ER (s ⁻¹)	enclosed space air exchange rate	0.00014	default
Lcrack	enclosed space foundation or wall thickness	15 cm	default
η	areal fraction of cracks in foundation/wall	0.01	default

Other Parameters for Soil Vapor to Enclosed Space

Parameter		Default Value	Required
L_s	depth to subsurface soil sources from the enclosed space foundation	1 cm	option
LB	enclosed space volume/infiltration area ratio	250 cm *	option
ER (s ⁻¹)	enclosed space air exchange rate	0.000185 *	default
Lcrack	enclosed space foundation or wall thickness	15 cm	default
η	areal fraction of cracks in foundation/wall	0.01	default

*These values are an average of residential and nonresidential factors.

Soil Leaching to Groundwater

Parameter		Default Value	Required
δ	groundwater mixing zone	2 m	default

Building Parameters for lowa Tier 2

Parameter		Residential	Nonresidential
ER (s-1)	enclosed space air exchange rate	0.00014	0.00023
Lb	enclosed space volume/infiltration area ratio	200 cm	300 cm

Other Parameters

For Tier 2, the following are the same as Tier 1 values (refer to Appendix A): chemical-specific parameters, slope factors and reference doses, and exposure factors (except for those listed below).

Exposure Factors for Tier 2 Groundwater Vapor to Enclosed Space Modeling:

Potential Residential: use residential exposure and residential building parameters.

Potential Nonresidential: use nonresidential exposure and nonresidential building parameters.

09/06/2007

Summary of Process for Examination and Modification of the Tier 2 Groundwater Model

LaDon Jones

There has been a perception that the length of plumes generated by the Tier 2 groundwater model may significantly over-estimate the length of actual groundwater contamination plumes.

Some of the goals of the investigation included:

Comparison of actual groundwater plume data from Tier 2 sites to Tier 2 groundwater modeling results. This comparison will help determine how the Tier 2 groundwater model has been performing in practice.

If the comparison shows the Tier 2 groundwater model significantly over-estimates actual groundwater plumes, looking at changes to the Tier 2 groundwater model that would produce modeled plumes that are closer to actual results, while still maintaining a factor of safety.

Tier 2 Modeled Versus Actual Plumes

To look at a comparison of modeled versus actual plumes, groundwater data from over 100 Tier 2 sites was examined. The Tier 2 model is a steady state model (predicts the maximum extent of the plume) and for comparison sites with at least 5 years of groundwater sampling data where the actual groundwater plume appeared to have reached its maximum extent were selected for comparison.

For the Tier 2 test sites the modeled or predicted distance downgradient to a chemical target level was compared to the measured distance downgradient to the target level (the measured distance was estimated by contouring actual measured groundwater data).

An example of the results for Benzene are shown below:

Benzene

Target Level (ppb)	# of Tier 2 Sites	Mean Tier 2 Modeled Distance(ft)	Mean Contoured Distance (ft)	Ratio of Modeled to Contoured	% of Contoured > Modeled
5	113	1171	136	8.6	0.0
290	105	273	99	2.8	6.7
1540	94	136	71	1.9	11.7
3080	85	94	53	1.8	14.1
4780	75	74	41	1.8	13.3
9950	45	56	32	1.7	13.3

Using a target level of 5 ppb for Benzene for explanation, the results show that for 113 Tier 2 sites, the average modeled distance downgradient to 5 ppb was 1171 feet, while the actual measured distance based on actual groundwater data ("Mean Contoured Distance") was 136 feet. The average modeled distance was 8.6 times larger than the average measured distance ("Ratio of Modeled to Contoured"). The column "% of Contoured > Modeled" shows the percentage of the tested sites where the contoured distance to the target level was greater than the measured.

It was noted that the results of comparing the Tier 2 model to measured data depended on the target level. For higher target levels, the "Ratio of Modeled to Contoured" is smaller.

The results were similar for other measures of plume distance. For example, looking at the 95% plume distance (the distance where 95% of the plumes are smaller), the ratio between the measured and modeled plumes were larger than that shown for the average distances above (for the 95% distance for a benzene target level of 5 ppb, the ratio of modeled to contoured plume distance was 11.3 times).

The results for Diesel are:

Diesel

Target Level (ppb)	# of Tier 2 Sites	Mean Tier 2 Modeled Distance(ft)	Mean Contoured Distance (ft)	Ratio of Modeled to Contoured	% of Contoured > Modeled
1200	63	1633	95	17.2	0.0
75000	31	347	50	7.0	0.0
2200000	7	185	52	3.6	0.0
4400000	5	153	54	2.9	0.0
5700000	4	153	60	2.6	0.0
11400000	3	114	57	2.0	0.0

Note that for Diesel the average modeled distance for 1200 ppb is 1633 feet while the average measured distance is 95 feet, with the average model distance being 17.2 times greater than the average measured distance.

The same types of comparison were made for Toluene, Xylenes, and Ethylbenzene. There were not sufficient sites to do a comparison for Waste Oil.

Tier 2 Model Modification

The goal of the Tier 2 model modification was to determine if changes could be made to the Tier 2 model so that modeled results would be more reflective of actual plume sizes, while still maintaining a factor of safety.

The current Tier 2 model is:

$$C(x) = C_s \exp\left(\frac{x}{2\alpha_x} \left[1 - \sqrt{1 + \frac{4\lambda\alpha_x}{u}}\right]\right) \operatorname{erf}\left(\frac{aS_w}{4\sqrt{\alpha_y x}}\right) \operatorname{erf}\left(\frac{S_d}{4\sqrt{\alpha_z x}}\right) \quad (1)$$

The values for first order decay are:

Chemical	λ (1/day)
Benzene	0.0005
Toluene	0.0007
Ethylbenzene	0.00013
Xylenes	0.0005
TEH-Diesel	0.0
TEH-Waste Oil	0.0
Naphthalene	0.00013

Further details on the Tier 2 model can be found in the Appendix B of the Tier 2 guidance.

The proposed Tier 2 model is:

$$C(x) = C_s \exp\left(\frac{x_m}{2\alpha_x} \left[1 - \sqrt{1 + \frac{4\lambda\alpha_x}{u}}\right]\right) \operatorname{erf}\left(\frac{aS_w}{4\sqrt{\alpha_y x_m}}\right) \operatorname{erf}\left(\frac{S_d}{4\sqrt{\alpha_z x_m}}\right) \quad (2)$$

$$\text{Where } x_m = ax + bx^c \quad (3)$$

Note that the difference in equation (1) and (2) is the use of X_m in equation (2) in place of x in equation (1).

The value of X_m is computed from equation (3), where the values for a , b and c in equation (6) are given in Table 1.

Table 1. Parameter values for equation (3)

Chemical	a	b	c
Benzene	1	0.000000227987	3.929438689
Toluene	1	0.000030701	3.133842393
Ethylbenzene	1	0.0001	2.8
Xylenes	1	0.0	0.0
TEH-Diesel	1	0.000000565	3.625804634
TEH-Waste Oil	1	0.000000565	3.625804634
Naphthalene	1	0	0

The proposed values for first order decay are:

Chemical	λ (1/day)
Benzene	0.000127441
Toluene	0.0000208066
Ethylbenzene	0.0
Xylenes	0.0005
TEH-Diesel	0.0000554955
TEH-Waste Oil	0.0000554955
Naphthalene	0.00013

Note that all other factors remain the same between the current Tier 2 model and the proposed Tier 2 model.

Calibration of the Proposed Model

A number of changes in the Tier 2 model were tested. The parameters for the proposed model (a,b,c, λ) were found by calibrating the proposed model against groundwater data from actual Tier 2 sites. A number of different calibration results were found. The results varied in the ratio of average model to measured distances and the % of contoured distances exceeding simulated distances.

The proposed model results for Benzene are summarized below:

Benzene

Model	Target Level (ppb)	# of Tier 2 Sites	Mean Tier 2 Modeled Distance(ft)	Mean Contoured Distance (ft)	Ratio of Modeled to Contoured	% of Contoured > Modeled
Current	5	113	1171	136	8.6	0.0
New	5	113	359	136	2.6	2.7
Current	290	105	273	99	2.8	6.7
New	290	105	190	99	1.9	8.6
Current	1540	94	136	71	1.9	11.7
New	1540	94	123	71	1.7	7.4
Current	3080	85	94	53	1.8	14.1
New	3080	85	94	53	1.8	7.1
Current	4780	75	74	41	1.8	13.3
New	4780	75	77	41	1.9	5.3
Current	9950	45	56	32	1.7	13.3
New	9950	45	61	32	1.9	6.7

The table shows the results for the Current Model and the New Model for each target level. Note that for a benzene target level of 5 ppb the average contoured distance is 136 feet, the average Tier 2 modeled distance is 1171 feet and the average modeled distance for the proposed model is 359 feet. The ratio of modeled to contoured results has been reduced from 8.6 times to 2.6 times.

It was found during calibration that there was a tradeoff between reducing the average modeled distance and increasing the % of time the contoured distance exceeded the modeled distance. Selecting parameters that decreased the average modeled distance increased the % of test sites where the measured plume size exceeded the modeled plume size. The parameters selected were felt by the software evaluation committee to represent the best tradeoff between the two results.

It should be emphasized that the proposed model still contains a significant factor of safety. For example, for a Benzene target level of 5 ppb the average model distance is still 2.6 times larger than the average measured plume size.

A practical aspect is for a target level of 5 ppb for 2.7% of the 113 test sites the measured plume exceeded the modeled plume size. It should be noted that in practice when this occurs a receptor specific modification is made in the modeled parameters such that the modeled plume meets or equals the measured plume size.

It should be emphasized the results presented are from running the current and proposed Tier 2 model against measured plume data from actual Tier 2 LUST sites.

Appendix A contains the results comparing the current Tier 2 model to the proposed Tier 2 model.

Conclusions

The software investigation committee concluded that the proposed model provides more realistic estimates of plume size, when compared to the current Tier 2 model, while still maintaining a suitable factor of safety.

Appendix A:

Summary results for the current and Proposed Tier 2 groundwater simulation model.

Benzene

Model	Target Level (ppb)	# of Tier 2 Sites	Mean Tier 2 Modeled Distance(ft)	Mean Contoured Distance (ft)	Ratio of Modeled to Contoured	% of Contoured > Modeled
Current	5	113	1171	136	8.6	0.0
New	5	113	359	136	2.6	2.7
Current	290	105	273	99	2.8	6.7
New	290	105	190	99	1.9	8.6
Current	1540	94	136	71	1.9	11.7
New	1540	94	123	71	1.7	7.4
Current	3080	85	94	53	1.8	14.1
New	3080	85	94	53	1.8	7.1
Current	4780	75	74	41	1.8	13.3

New	4780	75	77	41	1.9	5.3
Current	9950	45	56	32	1.7	13.3
New	9950	45	61	32	1.9	6.7

Toluene

Model	Target Level (ppb)	# of Tier 2 Sites	Mean Tier 2 Modeled Distance(ft)	Mean Contoured Distance (ft)	Ratio of Modeled to Contoured	% of Contoured > Modeled
Current	1000	86	196	71	2.8	3.5
New	1000	86	150	71	2.1	2.3
Current	7300	60	81	40	2.0	10.0
New	7300	60	81	40	2.0	3.3
Current	20190	32	48	23	2.1	9.4
New	20190	32	53	23	2.4	0.0
Current	40390	7	44	15	2.9	0.0
New	40390	7	46	15	3.0	0.0
Current	52280	4	42	10	4.1	0.0
New	52280	4	43	10	4.2	0.0

Ethylbenzene

Model	Target Level (ppb)	# of Tier 2 Sites	Mean Tier 2 Modeled Distance(ft)	Mean Contoured Distance (ft)	Ratio of Modeled to Contoured	% of Contoured > Modeled
Current	700	99	141	58	2.4	5.1
New	700	99	115	58	2.0	4.0
Current	3700	42	66	23	2.9	0.0
New	3700	42	61	23	2.7	0.0
Current	46000	2	67	33	2.0	0.0
New	46000	2	63	33	1.9	0.0
Current	91930	1	49	25	2.0	0.0
New	91930	1	50	25	2.0	0.0
Current	118970	1	33	11	3.0	0.0
New	118970	1	34	11	3.1	0.0

Xylenes (no changes in xylenes modeling is proposed)

Model	Target Level (ppb)	# of Tier 2 Sites	Mean Tier 2 Modeled Distance(ft)	Mean Contoured Distance (ft)	Ratio of Modeled to Contoured	% of Contoured > Modeled
Current	10000	58	70	33	2.1	5.2
Current	73000	3	72	33	2.2	0.0

Diesel

Model	Target Level (ppb)	# of Tier 2 Sites	Mean Tier 2 Modeled Distance(ft)	Mean Contoured Distance (ft)	Ratio of Modeled to Contoured	% of Contoured > Modeled
Current	1200	63	1633	95	17.2	0.0
New	1200	63	330	95	3.5	1.6
Current	75000	31	347	50	7.0	0.0
New	75000	31	160	50	3.2	0.0
Current	2200000	7	185	52	3.6	0.0
New	2200000	7	133	52	2.6	0.0
Current	4400000	5	153	54	2.9	0.0
New	4400000	5	121	54	2.3	0.0
Current	5700000	4	153	60	2.6	0.0
New	5700000	4	126	60	2.1	0.0
Current	11400000	3	114	57	2.0	0.0
New	11400000	3	103	57	1.8	0.0

Waste Oil – There were no sufficient Tier 2 site data for Waste Oil. It is proposed to use the same model for Diesel and Waste Oil.

**3. Notice of Intended Action for Information
(Not yet filed)**

**ENVIRONMENTAL PROTECTION
COMMISSION[567]**

Notice of Intended Action For Information

Pursuant to the authority of Iowa Code section 455B.474, the Environmental Protection Commission proposes to amend Chapter 135, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks," Iowa Administrative Code.

The amendments propose to revise the current Tier 2 software model based on observations during the first decade of use. There was a perception that the length of plumes generated by the Tier 2 groundwater model may significantly over-estimate the length of actual groundwater contamination plumes. Changes were made to recalibrate the Tier 2 software model to make the modeled groundwater plumes more closely match the actual groundwater plumes.

The last decade of experience also showed that the Tier 2 software model, which is a two dimensional fate and transport model, was not always sufficiently predictive of risk to pumping wells particularly public water supply wells. Public water supply wells may have a larger radius of influence caused by their greater water withdrawal rates. In order to better assess the risk to these public water supply wells, the amendments establish a more stringent criteria for their risk evaluation. This includes sampling of the public water supply wells for indicator contaminants if the well is within 1000 feet of the site or if the site is located within a documented capture zone or radius of influence for a public water supply well. The purpose of testing for the indicator contaminants is to evaluate if there is a hydraulic connection between the shallow/contaminated aquifer and public water supply wells. In addition, public water supply wells will be evaluated with a Tier 3 assessment. For non- public water supply wells, the amendments require sampling of water wells as part of the receptor survey and their evaluation.

The amendments also establish a procedure to implement corrective action at high risk sites either through a collaborative meeting process resulting in a memorandum of agreement between the interested parties and the department or submittal of a corrective action design report.

Three public hearings will be held at the following locations:

Iowa City Public Library

123 S Linn Street

Iowa City, Iowa

Community Meeting Room

Denison City Hall Clerk's Office

111 N Main St

Denison, Iowa

Wallace State Office Building

502 East Ninth Street

Des Moines, Iowa

These amendments are intended to implement Iowa Code section 455B.474. A fiscal impact summary prepared by the Legislative Services Agency pursuant to Iowa Code § 17A.4(3) will be available at <http://www.legis.state.ia.us/IAC.html> or at (515) 281-5279 prior to the Administrative Rules Review Committee's review of this rule making.

The following amendments are proposed.

ITEM 1. Amend 567—135.2(455B) by adding following definitions:

"Corrective action meeting" A collaborative meeting for high risk sites between all interested parties to select a corrective action or reclassification activity and set a schedule for implementation. Upon resolution of the corrective action meeting, the responsible party will all sign a memorandum of agreement with the department outlining the activities that will take place and when they will occur.

"Indicator contaminants" means oxygenated compounds, methyl-tertiary butyl ether (MTBE), tertiary-butyl alcohol (TBA), ethyl-tertiary butyl ether (ETBE), and tertiary-amyl methyl ether (TAME) and lead scavengers 1,2-dichloroethane (1,2-DCA) and

ethylene dibromide (EDB), or other compounds specified by the department as critical in the assessment of risk to the site.

"Public water supply system" means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. The term includes (1) any collection, treatment, storage, and distribution facilities under control of the supplier of water and used primarily in connection with the system, and (2) any collection (including wells) or pretreatment storage facilities not under the control which are used primarily in connection with the system.

ITEM 2. Amend paragraphs 135.10(4)"a", "b" and "f" as follows:

a. Pathway completeness. Unless cleared at Tier 1, this pathway is complete and must be evaluated under any of the following conditions: (1) the first encountered groundwater is a protected groundwater source; or (2) there is a drinking water well or a non-drinking water well within the modeled groundwater plume or the actual plume as provided in 135.10(2)"j" and 135.10(2)"k"; or (3) there is a drinking water well or a non-drinking water well within 1000 feet of the site.

b. Receptor evaluation. At a minimum, all drinking water and non-drinking water wells located within 1000 feet of the site must be identified. If a public water supply well is located within 1000 feet of the site or if the site is located within a designated capture zone or radius of influence for a public water supply well as projected or as otherwise documented by the department, it must be tested for chemicals of concern, indicator contaminants, or other compounds which may be required by the department. All other drinking or non-drinking water wells located within 300 feet of the site (or within an actual or modeled plume) must be tested, at a minimum, for chemicals of concern and MTBE as part of the receptor evaluation.

If a public water supply well is located within 1000 feet of the site or if the site is located within a designated capture zone or radius of influence for a public water supply well as projected or as otherwise documented by the department, it must be evaluated and

a risk classification assigned with a Tier 3 assessment. Prior to conducting a Tier 3 assessment, a groundwater professional must submit a Tier 3 work plan to the department for approval in accordance with 135.10(4)e. All other existing drinking water wells and non-drinking water wells within the modeled plume or the actual plume as provided in paragraph “a” must be evaluated as actual receptors. Potential receptors only exist if the groundwater is a protected groundwater source. Potential receptor points of exposure are those points within the modeled plume or actual plume that exceed the potential point of exposure target level. The point(s) of compliance for actual receptor(s) is the receptor. The point(s) of compliance for potential receptor(s) is the potential receptor point of exposure as provided in 135.10(2) “j” and 135.10(2) “k.”

f. Plume definition. The groundwater plume shall be defined to the applicable Tier 1 level for actual receptors except, where there are no actual receptors and the groundwater is a protected groundwater source, the plume shall be defined to the Tier 1 level for potential receptors. Groundwater from identified well receptors shall be sampled and analyzed in accordance with 135.10 (4) b.

ITEM 3 Amend paragraphs 135.10 (11) “a” and “d” as follows:.

a. Owners and operators must submit a Tier 2 site cleanup report and a Tier 3 work plan for the public water supply wells within 180 days of the date the department approves or is deemed to approve a Tier 1 assessment report under 135.9(12). If the owner or operator has elected to conduct a Tier 2 assessment instead of a Tier 1, or a Tier 2 assessment is required due to the presence of free product under 135.7(5), the Tier 2 site cleanup report and the Tier 3 work plan for the public water supply wells must be submitted within 180 days of the date the release was confirmed. The department may establish an alternative schedule for submittal.

d. Review. Unless the report proposes to classify the site as low risk or no action required, the department must approve the report within 60 days for purposes of completeness or disapprove the report upon a finding of incompleteness, inaccuracy or noncompliance with these rules. If no decision is made within this 60-day period, the report is deemed to be approved for purposes of completeness. The department retains the

authority to review the report at any time a no action required site classification is proposed.

ITEM 4 Amend paragraphs 135.12 (3) “d” and “e” as follows:

d. A corrective action design report (CADR) must be submitted by a certified groundwater professional for all high risk sites unless the terms of a corrective action plan are formalized in a memorandum of agreement within a reasonable time frame specified by the department. The CADR must be submitted on a form provided by the department and in accordance with department CADR guidance within 60 days of site classification approval as provided in 135.10(11). The CADR must identify at least two principally applicable corrective action options designed to meet the objectives in 135.12(3), an outline of the projected timetable and critical performance benchmarks, a specific monitoring proposal designed to verify its effectiveness and provide sufficient supporting documentation consistent with industry standards that the technology is effective to accomplish site-specific objectives. The CADR must contain an analysis of its cost effectiveness in relation to other options. The department will review the CADR in accordance with 135.12(9).

e. Interim monitoring. From the time a Tier 2 site cleanup report is submitted and until the department determines a site is classified as no action required, interim monitoring is required at least annually for all sites classified as high risk. Groundwater samples must be taken: (1) from a monitoring well at the maximum source concentration; (2) a transition well meaning a monitoring well with detected levels of contamination closest to the leading edge of the groundwater plume as defined to the pathway-specific target level, and between the source(s) and the point(s) of exposure; and (3) a guard well meaning a monitoring well between the source(s) and the point(s) of exposure with concentrations below the SSTL line. If concentrations at the point of exposure already exceed the SSTL, the point of exposure must be monitored. Monitoring conducted as part of remediation or as a condition of establishing a no action required classification may be used to the extent it meets this criteria. Soil monitoring is required at least annually for all applicable pathways in accordance with 135.12(5)“d.” All existing plastic water lines, drinking water wells and non-drinking water wells within 100 feet of the largest actual

plume (defined to the appropriate target level for the receptor type) must be tested annually for chemicals of concern. Actual plumes refer to groundwater plumes for all chemicals of concern. Untreated, or raw water should be collected for analysis.

ITEM 5 Amend paragraphs 135.12 (9) "a" and "d" as follows:

a. Owners and operators must participate in a corrective action meeting and enter into a memorandum of agreement with the department or if otherwise specified, a corrective action design report (CADR) or a Tier 3 report may be submitted or expedited corrective action performed. In the event the department has accepted submittal of the CADR in lieu of the meeting, a CADR shall be submitted ~~submit a corrective action design report (CADR)~~ within 60 days of the date the department approves or is deemed to approve a Tier 2 assessment report under 135.10(11) or a Tier 3 assessment is to be conducted. The department may establish an alternative schedule for submittal. Owners and operators who fail to timely submit a CADR or enter into a memorandum of agreement may be subject to legal action.

d. Review. Unless the report proposes to classify the site as no action required, the department must approve the report within 60 days for purposes of completeness or disapprove the report upon a finding of incompleteness, inaccuracy or noncompliance with these rules. If no decision is made within this 60-day period, the report is deemed to be approved for purposes of completeness. The department retains the authority to review the report at any time a no action required site classification is proposed. Owners and operators who fail to implement actions or meet the activity schedule in a memorandum of agreement resulting from a corrective action meeting or who fail to implement the actions or schedule outlined in an approved CADR are subject to legal action.

ITEM 6 Amend Appendix B as follows:

Appendix B - Tier 2 Equations and Parameter Values

All Tier 1 equations and parameters apply at Tier 2 except as specified below.

Equation for Tier 2 Groundwater Contaminant Transport Model

$$C(x) = C_s \exp\left(\frac{x}{2\alpha_x} \left[1 - \sqrt{1 + \frac{4\lambda\alpha_x}{u}}\right]\right) \operatorname{erf}\left(\frac{aS_w}{4\sqrt{\alpha_y x}}\right) \operatorname{erf}\left(\frac{S_d}{4\sqrt{\alpha_z x}}\right)$$

$$C(x) = C_s \exp\left(\frac{x_m}{2\alpha_x} \left[1 - \sqrt{1 + \frac{4\lambda\alpha_x}{u}}\right]\right) \operatorname{erf}\left(\frac{aS_w}{4\sqrt{\alpha_y x_m}}\right) \operatorname{erf}\left(\frac{S_d}{4\sqrt{\alpha_z x_m}}\right)$$

(1)

Where $x_m = ax + bx^c$ (2)

The value of X_m is computed from equation (2), where the values for a, b and c in equation (2) are given in Table 1.

Table 1. Parameter values for equation (2)

<u>Chemical</u>	<u>a</u>	<u>b</u>	<u>c</u>
<u>Benzene</u>	<u>1</u>	<u>0.000000227987</u>	<u>3.929438689</u>
<u>Toluene</u>	<u>1</u>	<u>0.000030701</u>	<u>3.133842393</u>
<u>Ethylbenzene</u>	<u>1</u>	<u>0.0001</u>	<u>2.8</u>
<u>Xylenes</u>	<u>1</u>	<u>0.0</u>	<u>0.0</u>
<u>TEH-Diesel</u>	<u>1</u>	<u>0.000000565</u>	<u>3.625804634</u>
<u>TEH-Waste Oil</u>	<u>1</u>	<u>0.000000565</u>	<u>3.625804634</u>
<u>Naphthalene</u>	<u>1</u>	<u>0</u>	<u>0</u>

Variable definitions

x: distance in the x direction downgradient from the source

erf(): the error function

C(x): chemical concentration in groundwater at x

Cs: Source concentration in groundwater (groundwater concentration at x=0)

Sw: width of the source (perpendicular to x)

Sd: vertical thickness of the source

u: groundwater velocity (pore water velocity); $u=Ki/\theta e$

K: hydraulic conductivity

i: groundwater head gradient

θe : effective porosity

λ : first order decay coefficient, chemical specific

$\alpha_x, \alpha_y, \alpha_z$: dispersivities in the x, y and z directions, respectively

B. DNR Update



IOWA UNDERGROUND STORAGE TANK Financial Responsibility Program

Susan E. Voss, Chairperson

Scott M. Scheidel, Administrator

Board Members: Michael L. Fitzgerald Jeff W. Robinson Jacqueline A. Johnson James M. Holcomb Richard A. Leopold
Douglas M. Beech Nancy A. Lincoln

TO: UST Board

FROM: James Gastineau

SUBJECT: Plastic Water Lines Update

DATE: September 18, 2007

Background

In September 2005, the attached document was presented to the Board for information in response to questions raised over the risk to plastic water lines. Since that time, the research study at Iowa State University has been completed and a final report has been submitted for review to the funding agency. In addition, the Department of Natural Resources (DNR) has conducted a survey to determine how other states view this same issue. The survey information obtained in 2006 continues to show that Iowa's standards are the most restrictive by far and that only a few states manage the issue in a similar fashion to Iowa.

Results of the DNR survey show 13 States have had documented cases where plastic (PVC, PE, or PB) water lines have been impacted, with 7 States showing a known impact to PVC water lines. Most of the impacts have occurred where gross contamination, involving petroleum hydrocarbons or chlorinated solvents, is in direct contact with the water lines, particularly service lines which can allow water to stagnate over time.

Risk Evaluation

There is evidence to show that a risk to plastic water lines does exist where petroleum contamination is present. The issue however is not whether a risk exists, but rather to what extent the standards used in the Iowa RBCA process are applicable to evaluate that risk.

Following the RBCA approach, plastic water lines are considered at risk if they are in direct contact with soil or groundwater contamination, are within ten feet of the soil contaminant plume, or are located within the projected groundwater contaminant plume, as defined to the RBCA standards. The numerical standard used in the groundwater evaluation is the basis of the concern. The current standard was not the result of a scientific study or industry standard but instead was arbitrarily selected to be same as that used for the groundwater ingestion limit for a protected groundwater source.

Numerical standards are difficult to develop usually involving multiple studies and lengthy investigations. The ISU Study is one example of this process, and while the final results of that study are not available, it is unlikely to provide a conclusive standard that can be applied to assess risks to all plastic pipes already in place.

Based on the DNR survey responses from other States, only Iowa and South Dakota currently use numerical standards to evaluate risk; Missouri is currently in the process of developing such standards. Both the South Dakota and Missouri standards are based on their reviews of available literature and studies, and what they consider to be appropriate criteria to evaluate risk. Their standards are as follows:

RBCA GROUNDWATER CONTAMINANT TARGET LEVELS

Contaminant (reported in ug/L)	Iowa (PVC, Pe, Pb)	South Dakota (PVC)	<i>(Proposed)</i> Missouri (PVC)	<i>(Proposed)</i> Missouri (Pe/Pb)
Benzene	290	3,200	1,750	1,450
Toluene	7,300	6,300	26,300	526
Ethylbenzene	3,700	--	84,500	1,690
Xylenes	73,000	--	8,050	140
TEH' as Diesel	75,000	--	75,000	75,000

- Missouri would also require sampling of other volatile and chlorinated compounds, which if present, could work in a synergistic manner to accelerate permeation of the plastic pipe.
- Based on several studies, both polyethylene (PE) and polybutylene (Pb) pipes are readily permeated by volatile hydrocarbons and solvents. In Iowa, PB pipes are already not allowed to be used as service lines in underground settings.

Future

We would encourage the Department to consider the studies that have been completed to date and to determine if the numerical standard used in the Iowa RBCA evaluation process is appropriate to properly evaluate the risk to water lines.



IOWA UNDERGROUND STORAGE TANK Financial Responsibility Program

Susan E. Voss, Chairperson

Scott M. Scheidel, Administrator

Board Members:

Michael L. Fitzgerald

Jeff W. Robinson
Douglas M. Beech

Cathy A. Rottinghaus

James M. Holcomb
Delia A. Meier

Jeffrey R. Vonk

TO: UST Board

FROM: James Gastineau

SUBJECT: Plastic Water Lines Update

DATE: September 21, 2005

The consideration of plastic water lines as a specific receptor has been an issue in Iowa since the early 1990's. Plastic water lines were considered a receptor under the site cleanup report (SCR) process and were retained as a receptor type in the development of the Iowa Risk Based Corrective Action (RBCA) evaluation process.

To identify how other states address this same pathway, a request for information was made to other states through the Association of State and Territorial Solid Waste Management Officials. Based on responses, the evaluation of plastic water lines as a receptor appears to be almost unique to Iowa. Only two other states, Montana and South Dakota, have established numerical limits to determine when water lines must be considered impacted.

However several other states, including Missouri, Nebraska, South Carolina, Utah, and Vermont, have encountered the problem and determine a response on a case-by-case basis. The policy in most cases is to replace impacted plastic water lines for the entire length of the plastic water pipe in contact with soil contamination, plus an additional amount as a buffer zone for safety.

Iowa RBCA Program

Under the RBCA program, a site is assessed using a DNR computer model. The model interpolates data to generate a projection of the "actual" contaminant plume and to generate a receptor identification (RID) plume to estimate the extent that contamination might impact. If a receptor is within a RID plume, whether or not in the actual plume, it is considered a receptor of concern.

Plastic water lines in the RID plume are considered high risk. To abate the risk, the choices are to remove the contamination or to re-route, remove, or replace the water lines. In some instances, DNR has allowed replacement to be limited to that segment of pipe within the actual contaminant plume plus the addition of a buffer zone for safety. The water lines left within the RID plume however remain as high-risk receptors and must be addressed using other methods. If water lines exist solely in the RID plume, i.e. not within actual contaminant plumes, the Iowa DNR guidance says that risk still exists and must be addressed accordingly. In most cases, replacement is still pursued as the most expedient method to eliminate the designated risk.

Is it a Risk?

Morris Preston's comments during the August 2005 UST Board meeting on whether or not the risk to plastic water lines is realistic has been a point of contention since the SCR evaluation process and through the development of the RBCA program. During the RBCA rule development stage, several individuals presented comments and documents suggesting the risk to plastic water lines may be overstated, at least in regard to plastic water lines made from polyvinylchloride (PVC). Water lines made from other plastic materials, such as polyethylene (PE) and polybutylene (PB), are acknowledged by almost all researchers to be highly permeable to organic contaminants. In fact in Iowa and other states, permeation incidents are known to have occurred, with most occurring in PE and PB lines.

An internet search and information from other sources show that research regarding the impact of contamination on plastic water lines has been sporadic throughout the past 20 years. However investigators at Iowa State University, through funding provided by the AWWA Research Foundation, are currently conducting research. The ISU study, titled "Impact Of Petroleum Based Hydrocarbons On PE / PVC Pipes And Pipe Gaskets." is a 3-year study that began in 2004. The goal of the study is to advance the understanding of the factors that influence permeation of plastic pipes under conditions that are typically encountered in the field. Upon completion of the study, the results may be able to shed some light on the question posed by Mr. Preston, that is are plastic water lines (PVC and PE) at risk?

The question in the interim is whether the Board should pursue change in policy with regard to PE/PB versus PVC lines and/or RID versus actual plumes?

Future

The best method to address future impact to plastic water lines is prevention.

The RBCA protocol requires a responsible party provide notification to the local water system in regard to the presence of contamination near the site, i.e. defined by the RID plume. The intent of the notification is to prevent a water supplier from inadvertently installing plastic water lines where contamination has been identified. The notification system however is not fail-proof, as there have been instances in which plastic water lines have been installed even after notification.

It is our recommendation that the DNR develop a written policy to provide a requirement that water systems complete a due diligence investigation to verify that no environmental concerns are present along the proposed path of a water line or other utility. The policy should also identify DNR requirements on how to address contamination that may be encountered during the installation along the right of way.

The proposed DNR policy would assist in the Board's implementation of Iowa Code 455G.9(10), which provides that the Board may reimburse a governmental subdivision for reasonable expenses incurred for treating, handling, or disposing of petroleum-contaminated soil and groundwater, as required by the department, encountered in a public right-of-way.

C. Loss Portfolio Transfer Discussion

Approval of Program Billings



IOWA UNDERGROUND STORAGE TANK

Financial Responsibility Program

Susan E. Voss, Chairperson

Scott M. Scheidel, Administrator

Board Members: Michael L. Fitzgerald Jeff W. Robinson Jacqueline A. Johnson James M. Holcomb Richard A. Leopold
Nancy A. Lincoln Douglas M. Beech

MEMORANDUM

TO: UST Board Members
FROM: Scott Scheidel
DATE: September 19, 2007
SUBJECT: Summary of Bills for Payment

NOTICE

The following is a summary of UST bills requiring Board approval for payment:

1. Aon Risk Services\$117,120.00
Consulting Services October 2007 - \$64,536.00
Claim Processing Services October 2007 - \$52,584.00
2. Attorney General's Office\$17,482.70
Services provided for the Iowa Underground Storage Tank Program
July & August 2007

Iowa Comprehensive Petroleum

Invoice No. 9500000058509

Iowa Comprehensive Petroleum
Underground Storage Tank Fund
2700 Westown Pkwy, #320
West Des Moines IA 50266

Aon Risk Services, Inc. of Nebraska
Insurance Services CA License No OE16975
2700 Westown Parkway
Suite 320
West Des Moines IA 50266
(515) 267-9101 FAX (515) 267-9045

Client Account No.	Invoice Date	Currency	Relationship Manager
10756349	Sep-04-2007	US DOLLAR	Scott Scheidel

Named Insured	Service Term	Trans. Eff. Date	Description	Amount
Iowa Comprehensive Petroleum	Jan-01-2007 - Jan-01-2008	Oct-01-2007	Renewal - Service Fee	
			Service Fee	60,638.00
Comments: Installment 10 of 12			Consulting Expense	5,000.00
TOTAL INVOICE AMOUNT DUE				65,638.00

TO AVOID POTENTIAL DISRUPTION IN COVERAGE, PLEASE PAY IMMEDIATELY.
For Wire instructions, contact your Relationship Manager.

Please see reverse side for statement regarding Aon compensation.

Please detach here. Top portion is for your records, bottom portion to be returned with your payment.

Client Account No.	Invoice No.	Invoice Date	Currency	Amount Due
10756349	9500000058509	Sep-04-2007	US DOLLAR	65,638.00

Iowa Comprehensive Petroleum
Underground Storage Tank Fund
2700 Westown Pkwy, #320
West Des Moines IA 50266

Send remittance to:
Aon Risk Services, Inc. of Nebraska
Aon Risk Services Companies, Inc.
75 Remittance Drive - Suite 1943
Chicago IL 60675-1943

Iowa Comprehensive Petroleum

Invoice No. 9500000058510

Iowa Comprehensive Petroleum
Underground Storage Tank Fund
2700 Westown Pkwy, #320
West Des Moines IA 50266

Aon Risk Services, Inc. of Nebraska
Insurance Services CA License No OE16975
2700 Westown Parkway
Suite 320
West Des Moines IA 50266
(515) 267-9101 FAX (515) 267-9045

Client Account No.	Invoice Date	Currency	Relationship Manager
10756349	Sep-04-2007	US DOLLAR	Scott Scheidel

Named Insured	Service Term	Trans Eff Date	Description	Amount
Iowa Comprehensive Petroleum	Jan-01-2007 - Jan-01-2008	Oct-01-2007	Renewal - Service Fee	
Comments			Service Fee	0.00
Installment 10 of 12 GAB Robins Monthly Claims Service Payment due within 20 days of Transaction Effective Date			Consulting Expense	52,584.00
TOTAL INVOICE AMOUNT DUE				52,584.00

TO AVOID POTENTIAL DISRUPTION IN COVERAGE, PLEASE PAY IMMEDIATELY.
For Wire instructions, contact your Relationship Manager.

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Page 1 of 1

Please detach here. Top portion is for your records, bottom portion to be returned with your payment.

Client Account No.	Invoice No.	Invoice Date	Currency	Amount Due
10756349	9500000058510	Sep-04-2007	US DOLLAR	52,584.00

Iowa Comprehensive Petroleum
Underground Storage Tank Fund
2700 Westown Pkwy, #320
West Des Moines IA 50266

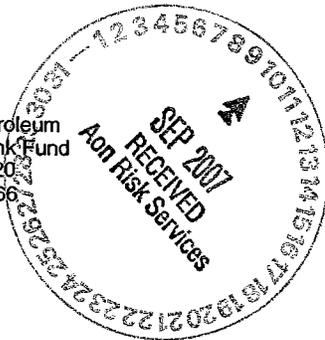
Send remittance to:

Aon Risk Services, Inc. of Nebraska
Aon Risk Services Companies, Inc.
75 Remittance Drive - Suite 1943
Chicago IL 60675-1943

Iowa Comprehensive Petroleum

Invoice No. 9500000058654

Iowa Comprehensive Petroleum
Underground Storage Tank Fund
2700 Westown Pkwy, #320
West Des Moines IA 50266



Aon Risk Services, Inc. of Nebraska
Insurance Services CA License No OE16975
2700 Westown Parkway
Suite 320
West Des Moines IA 50266
(515) 267-9101 FAX (515) 267-9045

Client Account No.	Invoice Date	Currency	Relationship Manager
10756349	Sep-04-2007	US DOLLAR	Scott Scheidel

Named Insured	Service Term	Trans Eff. Date	Description	Amount
Iowa Comprehensive Petroleum	Jan-01-2007 - Jan-01-2008	Oct-01-2007	Renewal - Service Fee	
Comments Installment 3 of 5			Service Fee	(1,102.00)
TOTAL INVOICE AMOUNT DUE				(1,102.00)

Please see reverse side for statement regarding Aon compensation.

Page 1 of 1

Please detach here. Top portion is for your records, bottom portion to be returned with your payment.

Client Account No.	Invoice No.	Invoice Date	Currency	Amount Due
10756349	9500000058654	Sep-04-2007	US DOLLAR	(1,102.00)

Iowa Comprehensive Petroleum
Underground Storage Tank Fund
2700 Westown Pkwy, #320
West Des Moines IA 50266

Send remittance to:

Aon Risk Services, Inc. of Nebraska
Aon Risk Services Companies, Inc.
75 Remittance Drive - Suite 1943
Chicago IL 60675-1943

IOWA ATTORNEY GENERAL'S OFFICE
Hoover State Office Bldg - 2nd Floor
Des Moines, Iowa 50319-0141

Invoice Date: 09/05/07

Buyer: Aon Risk Services
2700 Westown Pkwy, Ste 320
West Des Moines, IA 50266
Attn: Scott Scheidel



Seller: Iowa Attorney General's Office
Hoover State Office Bldg - 2nd Floor
Des Moines, IA 50319-0141

Services For: Assistant Attorneys General
Period of Service: July and August

Please use the following accounting information for (II) transfer/payment:

Document Number	Account Coding					Description	Amount
	Fund	Agency	Org	Sub Org	Rev Source		
112AG250027	0001	112	2301		0285		\$ 17,482.70

Please direct billing questions to Karen Redmond at (515)281-6362.

**Iowa Attorney General's Office
Invoiced Services**

Billing Period:	July
Billing Total:	\$9,183.70
DSS @ 33%	\$1,299.39
TDB @ 25%	\$975.95
RCH @25%	\$584.57
CLJ @50%	\$898.12
Payroll 7/12/07	\$3,758.03
DSS @ 33%	\$1,740.16
TDB @ 25%	\$1,251.79
RCH @25%	\$879.93
CLJ @50%	\$1,456.17
Payroll 7/26/07	\$5,328.05
Thomsen West Info Charges (Westlaw)	\$0.00
Travel Payment - Rich Heathcote	\$97.62
	\$97.62
	\$9,183.70

Billing Period:	August
Billing Total:	\$8,299.00
DSS @ 33%	\$1,443.71
TDB @ 25%	\$1,084.34
RCH @25%	\$649.49
CLJ @50%	\$997.89
Payroll 8/9/07	\$4,175.43
DSS @ 33%	\$1,425.77
TDB @ 25%	\$1,080.12
RCH @25%	\$645.33
CLJ @50%	\$972.35
Payroll 8/23/07	\$4,123.57
Thomsen West Info Charges (Westlaw)	\$0.00
Travel Payment - David Steward	\$0.00
	\$0.00
	\$8,299.00

**Total:
\$17,482.70**

DSS = David Steward 33%

Dave is our Asst Attorney General who provides the Board with legal counsel, drafts agreements and settlements with other State agencies and claimants.

TDB = Timothy Benton 25%

Tim is our other Asst Attorney General who provides the Board with the coordination of administrative hearings on UST Fund claim denial appeals, as well as the negotiation of any settlements.

RCH = Richard Heathcote 25%

Rich is a PhD hydrogeologist who consults for the Board by reviewing claim files and DNR records to assist in the determination of technologies used at sites. Rich reviews site files for the usage of RBCA Tier 3 reports; he also reviews proposals for CRP's or special projects.

CLJ = Cindy Jacobs 50%

Cindy is a legal secretary for the Environmental/UST Division of the Attorney General's Office located in the Lucas Building. Cindy completes status reports and maintains appeal files for UST claimants with regard to their UST Fund benefits' eligibility.

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Monthly Activity Report and Financials Reviewed

A. August Activity Report

Iowa UST Fund
Monthly Activities Report

August 2007

	Open Claims	Open & Closed	Open Claims	Open & Closed
Claims	July Ending	Monthly Net Changes	August Ending	Totals since Inception

RETROACTIVE

number	74	0	74	443
reserve	\$4,000,196.59	(\$67,361.49)	\$3,932,835.10	\$3,932,835.10
paid	\$7,998,039.94	\$12,458.75	\$8,010,498.69	\$14,060,775.21
total	\$11,998,236.53	(\$54,902.74)	\$11,943,333.79	\$17,993,610.31

REMEDIAL

number	950	(10)	940	4,434
reserve	\$54,835,248.98	(\$645,680.17)	\$54,189,568.81	\$54,189,568.81
paid	\$93,082,350.56	(\$1,233,828.64)	\$91,848,521.92	\$175,694,327.03
total	\$147,917,599.54	(\$1,879,508.81)	\$146,038,090.73	\$229,883,895.84

INNOCENT LANDOWNER

number	252	(4)	248	1,037
reserve	\$9,631,626.34	\$16,426.87	\$9,648,053.21	\$9,648,053.21
paid	\$11,877,044.78	(\$212,362.98)	\$11,664,681.80	\$20,643,637.75
total	\$21,508,671.12	(\$195,936.11)	\$21,312,735.01	\$30,291,690.96

GLOBAL OPT-IN

number	268	(3)	265	1,250
reserve	\$1,643,863.63	(\$21,924.24)	\$1,621,939.39	\$1,621,939.39
paid	\$2,058,924.92	(\$4,771.51)	\$2,054,153.41	\$8,660,156.59
total	\$3,702,788.55	(\$26,695.75)	\$3,676,092.80	\$10,282,095.98

UNASSIGNED PROJECTS

number	20	0	20	176
reserve	\$242,215.10	\$0.00	\$242,215.10	\$242,215.10
paid	\$277,784.90	\$0.00	\$277,784.90	\$2,576,526.13
total	\$520,000.00	\$0.00	\$520,000.00	\$2,818,741.23

Corrective Action Meetings	
Scheduled:	94
Completed:	746
MOA's	377

RT Claims	#
New	0
Reopened	0
Closed	0

RM Claims	#
New	0
Reopened	2
Closed	12

ILO Claims	#
New	3
Reopened	1
Closed	8

GS Claims	#
New	5
Reopened	1
Closed	9

PROJ Cims	#
New	0
Reopened	0
Closed	0

Invoice Type Totals	August	FYTD	Program to Date
American Soils	\$0	\$0	\$5,678,423
AST Removal	\$0	\$0	\$2,121,490
AST Upgrade	\$0	\$0	\$5,460,479
CADR Charges	\$4,311	\$6,486	\$4,294,580
Corrective Action	\$146,845	\$174,685	\$48,738,922
Free Prod Recover	\$81,896	\$159,436	\$6,724,439
Monitoring	\$156,607	\$269,600	\$17,341,854
New UST Pull 2004	\$0	\$0	\$600,422
Operations/Maint	\$46,210	\$108,413	\$6,161,899
Over-excavation	\$118,445	\$367,278	\$20,168,485
Plastic Water Lines	\$7,078	\$27,262	\$1,363,491
Post RBCA Evals	\$1,410	\$3,932	\$105,561
RBCA	\$35,355	\$61,437	\$24,357,152
Remed Imp/Const.	\$21,894	\$112,661	\$21,909,160
SCR Charges	\$90	\$90	\$54,138,906
Site Check	\$0	\$0	\$121,816
Soil Disposal	\$0	\$0	\$607,332
Tank (UST) Pull	\$0	\$6,503	\$4,866,860
Tank (UST) Upgrade	\$0	\$0	\$5,883,408
Tier III	\$3,534	\$7,106	\$1,060,721
Utilities	\$19,466	\$42,731	\$603,986
Well Closure	\$27,645	\$43,854	\$2,242,441
Total Invoice Types	\$670,788	\$1,391,473	\$234,551,824

Budgets Approved to Date		
August	6	\$90,471
Trailing 12 mos	68	\$3,679,958
Prev Trail 12 mos	114	\$5,886,240
Total Since Jan 2003	870	\$31,597,688

Project Claims	Open	Closed	Pending
CRP's	30	63	0
Tank Closure	2	3	0
Plastic Water Line	2	0	0

B. August Financial Report

IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND

STATEMENT OF FUND BALANCES

FOR THE MONTH ENDING AUGUST 31, 2007

- UST REVENUE FUND (Bonding)

Balance of Fund, August 1, 2007 \$760,211.87

Receipts:

Tank Management Fees	\$0.00	
Motor Vehicle Use Tax	\$4,250,000.00	
Intra State Fund Transfers Received	\$104,457.49	
Interest Income	\$0.00	
Interest Income - Capital Reserve Fund	\$0.00	
	<hr/>	\$4,354,457.49

Disbursements:

Bond Interest Payment	\$0.00	
Bond Principal Payment	\$0.00	
Transfer to Unassigned Revenue Fund	\$760,211.87	
	<hr/>	\$760,211.87

Balance of Fund, August 31, 2007

\$4,354,457.49

0450 - UST UNASSIGNED REVENUE FUND (Non-Bonding)

Balance of Fund, August 1, 2007 \$17,471,877.32

Receipts:

Installer's License Fees	\$0.00	
Request for Proposal Fees	\$0.00	
Copying/Filing Fees	\$0.00	
Fines & Penalties	\$0.00	
Refund/Overpayment	\$0.00	
Transfer From UST Revenue Fund	\$760,211.87	
Intra State Fund Transfers Received - DNR	\$0.00	
Compensation for Pooled Money Investments	\$0.00	
Amort / Accretion	\$0.00	
Buys/ Sells	\$0.00	
Interest Income	\$46,108.88	
	<hr/>	\$806,320.75

Disbursements:

UST Administrator's Fees	\$236,444.00
Attorney General's Fees	\$14,205.31
Attorney's Fees: Cost-Recovery Administration	\$0.00
Cost Recovery Expense (Lien Filing)	\$0.00
Actuarial Fees	\$0.00
Auditor of the State Fees	\$4,786.13
Bond Trustee Fees - Bankers Trust	\$0.00
Custodial Fees - BONY	\$378.60
Department of Revenue EPC Collection Fees	\$1,526.07
Environmental Protection Charge Refunds	\$0.00
Inspection & Appeals Service Fees	\$1,002.00
Installers/Inspectors/ Testers Licensing Refunds	\$0.00

**IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND
STATEMENT OF FUND BALANCES
FOR THE MONTH ENDING AUGUST 31, 2007**

Legal and Professional Fees	\$0.00	
Postage / Printing / Miscellaneous	\$12.00	
Professional Administrative Services (Investments)	\$21,514.98	
Rebate	\$0.00	
Tank Closure Claims & Plastic Waterline Claims	\$0.00	
Travel Expenses-UST Board Members	\$227.12	
Warrant Float Expense	\$36,547.06	
Transfer to Remedial Non-Bonding Fund	\$0.00	
Transfer to Innocent Landowner Fund	\$0.00	
28E Agreement - RBCA (DNR Staff Training & Development)	\$0.00	
28E Agreement - DNR UST Section Funding - FY06	\$0.00	
28E Agreement - DNR 4 Temporary FTE's - FY06 & FY07		
28E Agreement - DNR UST Section Funding - FY07	\$100,000.00	
Statutory Transfer to DNR - FY07	\$0.00	
Statutory Transfer to DED - FY07	\$0.00	
		\$416,643.27

Balance of Fund, August 31, 2007		\$17,861,554.80
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0208 - UST REMEDIAL NON-BONDING FUND

Balance of Fund, August 1, 2007		\$6,126,164.49
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Receipts:

Remedial Refunds	\$0.00	
Misc. Income (i.e. eligibility settlements)	\$0.00	
Interest Income	\$0.00	
Transfer Received from Unassigned Revenue Fund	\$0.00	
		\$0.00

Disbursements:

Retroactive Claims	\$12,458.75	
Remedial Claims	\$543,760.48	
Balance of Outdated Warrants	\$4,679.68	
		\$560,898.91

Balance of Fund, August 31, 2007		\$5,565,265.58
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0478 - UST MARKETABILITY FUND

Balance of Fund, August 1, 2007		\$2,424,570.54
--	--	----------------

Receipts:

Interest	\$127,727.22	
Use Tax	\$0.00	
		\$127,727.22

Disbursements:

Transfer to Aboveground Storage Tank Fund	\$0.00	
		\$0.00

Balance of Fund, August 31, 2007		\$2,552,297.76
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**IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND
STATEMENT OF FUND BALANCES
FOR THE MONTH ENDING AUGUST 31, 2007**

0485 - UST INNOCENT LANDOWNERS FUND

Balance of Fund, August 1, 2007		\$21,272,357.71
Receipts:		
Cost Recovery (i.e. lien settlements)	\$0.00	
ILO Refunds	\$0.00	
Intra State Fund Transfers Received	\$0.00	
Miscellaneous Income	\$0.00	
		\$0.00
Disbursements:		
Other Contractual Services	\$0.00	
Global Settlement Claims	\$51,946.77	
Innocent Landowner Claims	\$57,768.37	
Balance of Outdated Warrants	\$0.00	
		\$109,715.14
Balance of Fund, August 31, 2007		\$21,162,642.57

0455 - ABOVEGROUND STORAGE TANK FUND

Balance of Fund August 1, 2007		\$103,183.90
Receipts:		
Interest Income	\$1,273.59	
Canceled Warrants/ Corrected Warrants	\$0.00	
Transfer from Marketability Fund	\$0.00	
Transfer from Unassigned Revenue Fund	\$0.00	
		\$1,273.59
Disbursements:		
Transfer to Revenue Fund (0471)	\$104,457.49	
		\$104,457.49
Balance of Fund on August 31, 2007		\$0.00

0238 - UST LOAN GUARANTEE FUND (Non-Bonding)

Balance of Fund, August 1, 2007		\$1,237,406.40
Receipts:		
Interest Income	\$6,501.48	
		\$6,501.48
Disbursements:		
Payments on Loan Losses	\$0.00	
		\$0.00
Balance of Fund, August 31, 2007		\$1,243,907.88

IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND

STATEMENT OF FUND BALANCES

FOR THE MONTH ENDING AUGUST 31, 2007

BOND FUND (Bonding)

Series 1997 A Revenue Refunding Bonds

Balance of Fund, August 1, 2007 \$0.00

Receipts:

Transfer From/(To) UST Revenue Fund	\$0.00
Transfer From/(To) UST Unassigned Revenue Fund	\$0.00
Accrued Interest From Bonds	\$0.00
Interest Income	\$0.00
	<hr/>

\$0.00

Disbursements:

Principal Payments to Bondholders	\$0.00
Interest Payments to Bondholders	\$0.00
Trustee Fee to Bankers Trust	\$0.00
	<hr/>

\$0.00

Balance of Fund, August 31, 2007

\$0.00

Series 2004 Cost of Issuance Bonds

Balance of Fund, August 1, 2007 \$0.00

Receipts:

Transfer From/(To) UST Revenue Fund	\$0.00
Transfer From/(To) UST Unassigned Revenue Fund	\$0.00
Accrued Interest From Bonds	\$0.00
Interest Income	\$0.00
	<hr/>

\$0.00

Disbursements:

Principal Payments to Bondholders	\$0.00
Interest Payments to Bondholders	\$0.00
Trustee Fee to Bankers Trust	\$0.00
	<hr/>

\$0.00

Balance of Fund, August 31, 2007

\$0.00

Series 2004 A Revenue Refunding Bonds

Balance of Fund, August 1, 2007 \$0.00

Receipts:

Transfer From/(To) UST Revenue Fund	\$0.00
Transfer From/(To) UST Unassigned Revenue Fund	\$0.00
Accrued Interest From Bonds	\$0.00
Interest Income	\$0.00
	<hr/>

\$0.00

Disbursements:

Principal Payments to Bondholders	\$0.00
Interest Payments to Bondholders	\$0.00
Trustee Fee to Bankers Trust	\$0.00
	<hr/>

\$0.00

Balance of Fund, August 31, 2007

\$0.00

Combined UST Bond Fund Balances, August 31, 2007

\$0.00

**IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND
STATEMENT OF FUND BALANCES
FOR THE MONTH ENDING AUGUST 31, 2007**

0614 - UST CAPITAL RESERVE FUNDS (Bonding)

Series 1990 A

Balance of Fund, August 1, 2007	\$3,990,710.18
Receipts:	
Proceeds From Issuance of Bonds	\$0.00
Disbursements:	
Transfer Interest to Revenue Fund	\$0.00
Balance of Fund, August 31, 2007	\$3,990,710.18

Series 1991 A

Balance of Fund, August 1, 2007	\$2,641,220.03
Receipts:	
Proceeds From Issuance of Bonds	\$0.00
Disbursements:	
Transfer to Cost of Issuance Fund	\$0.00
Balance of Fund, August 31, 2007	\$2,641,220.03

Series 1994 A

Balance of Fund, August 1, 2007	(\$394,430.21)
Receipts:	
Proceeds From Issuance of Bonds	\$0.00
Disbursements:	
Debt Service for Issuance of Bonds	\$0.00
Balance of Fund, August 31, 2007	(\$394,430.21)

Combined UST Capital Reserve Fund Balances, August 31, 2007	\$6,237,500.00
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TOTAL FUND BALANCES, August 31, 2007	\$58,977,626.08
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FOOTNOTES:

Note 1: Funds labeled "Bonding" were created as a result of the issuance of UST Revenue Bonds. Disbursements from these funds are restricted by the Revenue Bond indenture.
Funds labeled "Non-Bonding" are funds not restricted as to use by the Revenue Bond indenture.

**C. Year-to-Date Financial Report
as of August 31, 2007**

**IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND
STATEMENT OF FUND BALANCES
FISCAL YEAR TO DATE ENDING AUGUST 31, 2007**

		FISCAL 2008 BUDGET
0471 - UST REVENUE FUND (Bonding)		
Balance of Fund, July 1, 2007	\$8,930,000.00	\$8,930,000.00
Receipts:		
Tank Management Fees	\$0.00	\$400,000.00
Motor Vehicle Use Tax	\$4,250,000.00	\$17,000,000.00
Intra State Fund Transfers Received	\$104,457.49	
Interest Income	\$0.00	
Interest Income - Capital Reserve Fund	\$0.00	
	\$4,354,457.49	\$17,400,000.00
Disbursements:		
Bond Interest Payment	\$924,788.13	\$1,698,403.75
Bond Principal Payment	\$7,245,000.00	\$7,245,000.00
Transfer to Unassigned Revenue Fund	\$760,211.87	\$8,456,596.25
	\$8,930,000.00	\$17,400,000.00
Balance of Fund, August 31, 2007	\$4,354,457.49	\$8,930,000.00
0450 - UST UNASSIGNED REVENUE FUND (Non-Bonding)		
Balance of Fund, July 1, 2007	\$17,075,662.99	\$17,075,662.99
Receipts:		
Installer's License Fees	\$0.00	\$0.00
Request for Proposal Fees	\$0.00	
Copying/Filing Fees	\$0.00	
Fines & Penalties	\$0.00	\$10,000.00
Refund/Overpayment	\$0.00	\$815.52
Transfer From UST Revenue Fund	\$760,211.87	\$8,456,596.25
Intra State Fund Transfers Received	\$0.00	\$1,102,272.55
Compensation for Pooled Money Investments	\$0.00	
Amort / Accretion	\$4,284.57	(\$70,000.00)
Buys/ Sells	(\$10,553.06)	(\$75,000.00)
Interest Income	\$461,176.89	\$1,800,000.00
	\$1,215,120.27	\$11,224,684.32
Disbursements:		
UST Administrator's Fees	\$236,444.00	\$1,418,664.00
Attorney General's Fees	\$14,205.31	\$105,000.00
Attorney's Fees: Cost-Recovery Administration	\$0.00	
Cost Recovery Expense (Lien Filing)	\$0.00	\$120.00
Actuarial Fees	\$0.00	
Auditor of the State Fees	\$4,786.13	\$4,786.13
Bond Trustee's Fees - Bankers Trust	\$0.00	\$1,500.00
Custodial Fees - BONY	\$378.60	\$1,000.00
Department of Revenue EPC Collection Fees	\$1,526.07	\$8,800.00
Environmental Protection Charge Refunds	\$0.00	\$1,500.00
Inspection & Appeals Service Fees	\$1,002.00	\$2,000.00
Installers/Inspectors/Testers Licensing Refunds	\$0.00	

**IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND
STATEMENT OF FUND BALANCES
FISCAL YEAR TO DATE ENDING AUGUST 31, 2007**

		FISCAL 2008 BUDGET
Legal and Professional Fees	\$0.00	\$5,000.00
Postage / Printing / Miscellaneous	\$12.00	
Professional Admin Services (Investments)	\$21,514.98	\$50,000.00
Rebate	\$0.00	
Tank Closure Claims and Plastic Waterline Claims	\$12,715.00	\$200,000.00
Travel Expenses-UST Board Members	\$227.12	\$500.00
Warrant Float Expense	\$36,417.25	
Transfer to Remedial Non-Bonding Fund	\$0.00	\$5,000,000.00
Transfer to Innocent Landowner Fund	\$0.00	
28E Agreement - RBCA (DNR Staff Training & Development)	\$0.00	
28E Agreement - DNR UST Section Funding - FY07	\$100,000.00	\$200,000.00
Statutory Transfer to DNR - FY08	\$0.00	\$200,000.00
Statutory Transfer to DED - FY08	\$0.00	\$3,500,000.00
Statutory Transfer to General Fund - FY08	\$0.00	\$3,000,000.00
	\$429,228.46	\$13,698,870.13
Balance of Fund, August 31, 2007	\$17,861,554.80	\$14,601,477.18
0208 - UST REMEDIAL NON-BONDING FUND		
Balance of Fund, July 1, 2007	\$6,753,532.72	\$6,753,532.72
Receipts:		
Remedial Refunds	\$733.60	\$10,000.00
Misc. Income (i.e. eligibility settlements)	\$0.00	
Interest Income	\$0.00	
Transfer Received from Unassigned Revenue	\$0.00	\$5,000,000.00
	\$733.60	\$5,010,000.00
Disbursements:		
Retroactive Claims	\$67,591.73	\$600,000.00
Remedial Claims	\$1,124,767.28	\$11,000,000.00
Balance of Outdated Warrants	(\$3,358.27)	
	\$1,189,000.74	\$11,600,000.00
Balance of Fund, August 31, 2007	\$5,565,265.58	\$163,532.72
0478 - UST MARKETABILITY FUND		
Balance of Fund, July 1, 2007	\$2,246,390.04	\$2,246,390.04
Receipts:		
Interest	\$305,907.72	\$1,500,000.00
Use Tax	\$0.00	
	\$305,907.72	\$1,500,000.00
Disbursements:		
Transfer to Aboveground Storage Tank Fund	\$0.00	\$0.00
	\$0.00	\$0.00
Balance of Fund, August 31, 2007	\$2,552,297.76	\$3,746,390.04

**IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND
STATEMENT OF FUND BALANCES
FISCAL YEAR TO DATE ENDING AUGUST 31, 2007**

		FISCAL 2008 BUDGET
0485 - UST INNOCENT LANDOWNERS FUND		
Balance of Fund, July 1, 2007		\$21,354,512.83
		\$21,354,512.83
Receipts:		
Cost Recovery (i.e. lien settlements)	\$0.00	
ILO Refunds	\$1,100.40	\$10,000.00
Intra State Fund Transfers Received	\$0.00	
Miscellaneous Income	\$0.00	
	<u>\$1,100.40</u>	<u>\$10,000.00</u>
Disbursements:		
Other Contractual Services	\$0.00	
Global Settlement Claims	\$80,257.54	\$500,000.00
Innocent Landowner Claims	\$112,713.12	\$2,000,000.00
Balance of Outdated Warrants	\$0.00	
	<u>\$192,970.66</u>	<u>\$2,500,000.00</u>
Balance of Fund, August 31, 2007		<u>\$21,162,642.57</u>
		<u>\$18,864,512.83</u>
0455 - ABOVEGROUND STORAGE TANK FUND		
Balance of Fund July 1, 2007		\$102,443.17
		\$102,443.17
Receipts:		
Interest Income	\$2,014.32	\$0.00
Canceled warrants/Corrected warrants	\$0.00	
Transfer from Marketability Fund	\$0.00	
Transfer from Unassigned Revenue Fund	\$0.00	
	<u>\$2,014.32</u>	<u>\$0.00</u>
Disbursements:		
Transfer to Revenue Fund (0471)	\$104,457.49	\$102,272.55
	<u>\$104,457.49</u>	<u>\$102,272.55</u>
Balance of Fund on August 31, 2007		<u>\$0.00</u>
		<u>\$170.62</u>
0238 - UST LOAN GUARANTEE FUND (Non-Bonding)		
Balance of Fund, July 1, 2007		\$1,228,506.44
		\$1,228,506.44
Receipts:		
Interest Income	\$15,401.44	\$60,000.00
	<u>\$15,401.44</u>	<u>\$60,000.00</u>
Disbursements:		
Payments on Loan Losses	\$0.00	
Transfer to Unassigned Revenue Fund	\$0.00	\$1,000,000.00
	<u>\$0.00</u>	<u>\$1,000,000.00</u>
Balance of Fund, August 31, 2007		<u>\$1,243,907.88</u>
		<u>\$288,506.44</u>

**IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND
STATEMENT OF FUND BALANCES
FISCAL YEAR TO DATE ENDING AUGUST 31, 2007**

		FISCAL 2008 BUDGET
UST BOND FUND (Bonding)		
Series 1997 A Revenue Refunding Bonds		
Balance of Fund, July 1, 2007	\$0.00	\$0.00
Receipts:		
Transfer From/(To) UST Revenue Fund	\$6,092,700.63	\$6,545,916.25
Transfer From/(To) UST Unassigned Revenue Fund	\$0.00	
Accrued Interest From Bonds	\$0.00	
Interest Income	\$0.00	
	\$6,092,700.63	\$6,545,916.25
Disbursements:		
Principal Payments to Bondholders	\$5,510,000.00	\$5,510,000.00
Interest Payments to Bondholders	\$582,700.63	\$1,035,916.25
Trustee Fee to Bankers Trust	\$0.00	
	\$6,092,700.63	\$6,545,916.25
Balance of Fund, August 31, 2007	\$0.00	\$0.00
Series 2004 Cost of Issuance Bonds		
Balance of Fund, July 1, 2007	\$0.00	\$0.00
Receipts:		
Transfer From/(To) UST Revenue Fund	\$0.00	\$0.00
Transfer From/(To) UST Unassigned Revenue Fund	\$0.00	
Accrued Interest From Bonds	\$0.00	
Interest Income	\$0.00	
	\$0.00	\$0.00
Disbursements:		
Principal Payments to Bondholders	\$0.00	\$0.00
Interest Payments to Bondholders	\$0.00	\$0.00
Trustee Fee to Bankers Trust	\$0.00	
	\$0.00	\$0.00
Balance of Fund, August 31, 2007	\$0.00	\$0.00
Series 2004 A Revenue Refunding Bonds		
Balance of Fund, July 1, 2007	\$0.00	\$0.00
Receipts:		
Transfer From/(To) UST Revenue Fund	\$2,077,087.50	\$2,397,487.50
Transfer From/(To) UST Unassigned Revenue Fund	\$0.00	
Accrued Interest From Bonds	\$0.00	
Interest Income	\$0.00	
	\$2,077,087.50	\$2,397,487.50
Disbursements:		
Principal Payments to Bondholders	\$1,735,000.00	\$1,735,000.00
Interest Payments to Bondholders	\$342,087.50	\$662,487.50
Trustee Fee to Bankers Trust	\$0.00	
	\$2,077,087.50	\$2,397,487.50
Balance of Fund, August 31, 2007	\$0.00	\$0.00
Unabated UST Bond Fund Balances, August 31, 2007	\$0.00	\$0.00

**IOWA COMPREHENSIVE PETROLEUM UNDERGROUND STORAGE TANK FUND
STATEMENT OF FUND BALANCES
FISCAL YEAR TO DATE ENDING AUGUST 31, 2007**

0614 - UST CAPITAL RESERVE FUNDS (Bonding)

		FISCAL 2008 BUDGET
Series 1990 A		
Balance of Fund, July 1, 2007	\$3,990,710.18	\$3,990,710.18
Receipts:		
Proceeds From Issuance of Bonds	\$0.00	
Disbursements:		
Transfer Interest to Revenue Fund	\$0.00	
Balance of Fund, August 31, 2007	<u>\$3,990,710.18</u>	<u>\$3,990,710.18</u>
Series 1991 A		
Balance of Fund, July 1, 2007	\$2,641,220.03	\$2,641,220.03
Receipts:		
Proceeds From Issuance of Bonds	\$0.00	
Disbursements:		
Transfer to Cost of Issuance Fund	\$0.00	
Balance of Fund, August 31, 2007	<u>\$2,641,220.03</u>	<u>\$2,641,220.03</u>
Series 1994 A		
Balance of Fund, July 1, 2007	(\$394,430.21)	(\$394,430.21)
Receipts:		
Proceeds From Issuance of Bonds	\$0.00	
Disbursements:		
Debt Service for Issuance of Bonds	\$0.00	
Balance of Fund, August 31, 2007	<u>(\$394,430.21)</u>	<u>(\$394,430.21)</u>
Combined UST Capital Reserve Fund Balances, August 31, 2007	<u>\$6,237,500.00</u>	<u>\$6,237,500.00</u>
TOTAL FUND BALANCES, August 31, 2007	<u>\$58,977,626.08</u>	<u>\$52,832,089.83</u>

FOOTNOTES:

Note 1: Funds labeled "Bonding" were created as a result of the issuance of UST Revenue Bonds. Disbursements from funds are restricted by the Revenue Bond indenture.
Funds labeled "Non-Bonding" are funds not restricted as to use by the Revenue Bond indenture.

D. August Opt-In Report

OPT-IN PROGRAM SUMMARY REPORT
September 26, 2007
For the Period August 1 to August 31, 2007

GENERAL PROGRAM SUMMARY:

Notices to potential claimants:	2
Eligible claims referred to GAB this period:	0
Number of 90-Day Notices sent this period:	1
Settlement Agreements outstanding at major oil company for execution:	2
Settlement Agreements forwarded to GAB for processing warrants or co-payment credit:	5
Number of claimants receiving warrants or co-payment credit this period:	41
Number of 1st Party Affidavits received in lieu of supporting docs (# this month/# Total to date):	0/88

WARRANTS MAILED THIS PERIOD SUMMARY:

	Number	Total
First Warrant	3	\$ 28,353.45
Additional Warrants	38	\$ 23,005.52
Co-Payment Credit	0	\$ -
TOTALS:	41	\$ 51,358.97

PROGRAM PAYMENT DISBURSEMENT TO DATE:

Oil Company	Total Claims to Date	New Claims this Period	Payments Made to Date	Payments Made this Period
ARCO	55	0	\$ 410,368.42	\$ 162.00
PHILLIPS	262	0	\$ 1,711,056.58	\$ 7,345.63
AMOCO	306	1	\$ 2,248,322.84	\$ 19,379.48
CONOCO	110	0	\$ 686,570.38	\$ 333.26
SOUTHLAND	18	0	\$ 89,796.04	\$ -
FINA	12	0	\$ 97,143.09	\$ 715.50
SUN/SUNOCO	179	2	\$ 1,213,170.22	\$ 17,557.57
TEXACO	154	0	\$ 1,049,714.74	\$ 5,322.83
CHAMPLIN	23	0	\$ 124,016.74	\$ -
KERR-McGEE	78	0	\$ 526,446.62	\$ -
CHEVRON	24	0	\$ 165,855.64	\$ 288.00
OXY	0	0	\$ -	\$ -
T.P.I. INC.	15	0	\$ 129,921.16	\$ 254.70
TOTAL:	1236	3	\$ 8,452,382.47	\$ 51,358.97

ADDITIONAL WARRANT SUMMARY:

Arco	\$ 162.00	Sunoco	\$ 2,817.57
Phillips	\$ 7,345.63	Texaco	\$ 5,322.83
Amoco	\$ 5,766.03	Champlin	\$ -
Conoco	\$ 333.26	Chevron	\$ 288.00
Southland	\$ -	Kerr-McGee	\$ -
Fina	\$ 715.50	TPI, Inc.	\$ 254.70

Attorney General's Report

Claim Payment Approval



IOWA UNDERGROUND STORAGE TANK Financial Responsibility Program

Susan E. Voss, Chairperson

Scott M. Scheidel, Administrator

Board Members:

Michael L. Fitzgerald

Jeff W. Robinson

Jacqueline A. Johnson

James M. Holcomb

Richard A. Leopold

Nancy A. Lincoln

Douglas M. Beech

TO: UST Board

FROM: James R. Gastineau

**SUBJECT: Contract No. CRPCA 0308-31: Former Service Station, Chelsea
Contract Extension Request**

DATE: September 25, 2007

This project was awarded to Trileaf in November 2003. The site had been assessed under the State Lead Closure Contract project and was deemed high risk due to plastic water lines, vapor receptors, and a protected groundwater source. During this project, site activities have included replacement of plastic water lines and an excavation to remove the main area of the contaminant plumes. Recent sampling however has identified new areas of contamination which require remediation. Planned activities include a second excavation, further monitoring, and the completion of an environmental covenant to restrict the placement of wells on the property.

Funding

The City of Chelsea is the current owner of the subject property. The City acquired the property through Tama County, following the County's acquisition of the land for back taxes. A fund eligible claim is possible, however does not currently exist.

Original Contract:	\$77,723.35
Current Contract:	\$102,984.35
Projected Costs:	\$100,000 – 150,000.00
Board Authorization:	\$120,000.00
Requesting Authorization to:	\$250,000.00

Recommendation

It is requested the Board provide authorization for funding of additional corrective action activities to the sum of \$250,000.

c: Sandi Porter, GAB Robins

Claim Payment Authority Reports

	<u>Site #</u>	<u>Site Name</u>	<u>1st Bd Rpt</u>	<u>2nd Bd Rpt</u>	<u>3rd Bd Rpt</u>	<u>4th Bd Rpt</u>	<u>Paid to Date</u>	<u>Recommended Authority</u>	<u>Approved Authority</u>	<u>Pd Since Last Bd Report</u>	<u>Comments</u>
1	8600894	Casey's Marketing Co	08/23/07				\$76,963	\$200,000	\$200,000		
2	9016721	Kutcher Welding	08/23/07				\$88,191	\$120,000	\$120,000		
3	8604079	Bluff Service Center	08/23/07				\$74,357	\$210,000	\$210,000		
4	8607462	Daniel Grothus	08/23/07				\$84,481	\$150,000	\$150,000		dww in Scott Cty
5	8603249	Al's Corner Oil Co	08/23/07				\$82,813	\$75,500	\$75,500		
6	8607406	Messer Oil Co	08/23/07				\$82,763	\$130,000	\$130,000		
7	8608909	Jerry Roney	08/23/07				\$83,068	\$225,000	\$225,000		potential groundwater source
8	8811292	Robert E Cummings	09/26/07				\$46,834	\$275,000			
9	8606587	Casey's General Store	09/26/07				\$84,451	\$104,000			
10	8601125	Seeley Oil Co	09/26/07				\$74,313	\$350,000			
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**IOWA UNDERGROUND STORAGE TANK PROGRAM
 FIRST BOARD REPORT
 SEPTEMBER 10, 2007
 ROBERT E CUMMINGS
 619 W MAIN ST
 ANAMOSA
 SITE REGISTRATION NUMBER: 8811292
 LUST NUMBER: 8LTG00**

RISK CLASSIFICATION:

HIGH LOW UNDETERMINED

PRESENT CLAIM RESERVE: \$ 250,000.00

ELIGIBILITY: The contamination was discovered and reported to the IDNR during site testing on September 26, 1990. A timely claim was filed. This is an eligible remedial claim.

COST INCURRED TO DATE:

1. Site assessment and clean-up reports	\$ 12,786.96
2. Tank pull	1,264.58
3. Free product recovery	2,939.80
4. RBCA Tier II report	16,501.50
5. Site monitoring reports	<u>13,340.75</u>
TOTAL COSTS INCURRED TO DATE:	\$ 46,833.59

PROJECTED COSTS:

<input type="checkbox"/> Risked Based Corrective Action Tier I & II Report	<input type="checkbox"/> Tank Pull/Up-Grade.
<input checked="" type="checkbox"/> Site Monitoring Report (SMR)	<input type="checkbox"/> Free Product Recovery (FPR)
<input checked="" type="checkbox"/> Corrective Action Design Report (CADR)	<input checked="" type="checkbox"/> Implementation of CADR

TOTAL PROJECTED COSTS: \$ 150,000 to 300,000.00 +

TOTAL AUTHORITY RECOMMENDED:

\$ 275,000.00

COMMENTS: The site is an exempt granular bedrock site with high levels of groundwater contamination and historical free product. The site is high risk for a number of residential basements and sewers. Soil gas sampling has failed. The groundwater professional recommends an excavation followed by soil vapor extraction.

**IOWA UNDERGROUND STORAGE TANK PROGRAM
 FIRST BOARD REPORT
 SEPTEMBER 29, 2007
 SEELEY OIL CO
 108 S MAPLE AVE
 LOGAN
 SITE REGISTRATION NUMBER: 8601125
 LUST NUMBER: 8LTH18**

RISK CLASSIFICATION:

HIGH

LOW

UNDETERMINED

PRESENT CLAIM RESERVE:

\$ 300,000.00

ELIGIBILITY: The contamination was discovered and reported to the IDNR in October of 1990 during site check activities. A timely claim was filed. This is an eligible remedial claim.

COST INCURRED TO DATE:

1. Site check t	\$ 717.60
2. RBCA Tier II report	19,315.00
3. Tank pull	6,594.00
4 Free product recovery	28,955.00
5. Site monitoring reports	<u>18,731.50</u>
TOTAL COSTS INCURRED TO DATE:	\$ 74,313.10

PROJECTED COSTS:

<input type="checkbox"/>	Risk Based Corrective Action Tier I & II Report	<input type="checkbox"/>	Tank Pull/Up-Grade.
<input checked="" type="checkbox"/>	Site Monitoring Report (SMR)	<input checked="" type="checkbox"/>	Free Product Recovery (FPR)
<input checked="" type="checkbox"/>	Corrective Action Design Report (CADR)	<input checked="" type="checkbox"/>	Implementation of CADR

TOTAL PROJECTED COSTS:

\$ 185,000 to 350,000.00 +

TOTAL AUTHORITY RECOMMENDED:

COMMENTS: The site is high risk for the groundwater vapor to enclosed space pathway for six residential basements and six residential sewers. The soil leaching to groundwater vapor and soil vapor pathways are also high risk for the same receptors. Soil gas sampling has failed and free product is present in several monitoring wells intermittently. A dual phase extraction system is recommended by the groundwater professional.



IOWA UNDERGROUND STORAGE TANK

Financial Responsibility Program

Susan E. Voss, Chairperson

Scott M. Scheidel, Administrator

Board Members: Michael L. Fitzgerald Jeff W. Robinson Jacqueline A. Johnson James M. Holcomb
Richard A. Leopold Nancy A. Lincoln Douglas M. Beech

TO: UST Board

FROM: Scott M. Scheidel

**SUBJECT: Contract No. CRPCA 0309-34: Former Service Station, Conesville
Contract Extension Request**

DATE: September 4, 2007

This project was awarded to Seneca Environmental Services, Inc. on December 20, 2003. The project work included additional testing and evaluation of corrective action options. Due to low contaminant levels the Department approved the installation of a carbon filter on the on-site water well combined with monitoring in lieu of invasive corrective actions. The filter was first installed in 2004 and is replaced annually. In 2007, an attempt was made to reclassify the site, however the DNR rejected this and has required monitoring for one year before reconsidering. It is hoped the site can be reclassified to NAR in 2008.

The original agreement for this project was written as a 2-year agreement, with the option of four 1-year extensions. The current Agreement term will expire on December 20, 2007. It is requested that the Board authorize the extension of the consultant agreement for a one-year period to allow continued activity on the project.

Funding

The site is not eligible for UST Fund benefits due to the date contamination was discovered and the inability to document a pre-October 1990 release. A lien has been filed on the site for costs associated with prior site assessment activities and current operational activities.

Original Contract (11/10/03)	\$8,500.00
Total Invoiced / Paid	\$10,288.30
Current Contract / Authorization	\$43,272.20

No change to the Board's funding authorization is recommended at this time.

c: Sandi Porter, GAB Robins



IOWA UNDERGROUND STORAGE TANK

Financial Responsibility Program

Susan E. Voss, Chairperson

Scott M. Scheidel, Administrator

Board Members:

Michael L. Fitzgerald

Jeff W. Robinson

Jacqueline A. Johnson

James M. Holcomb

Richard A. Leopold

Nancy A. Lincoln

Douglas M. Beech

TO: UST Board

FROM: Scott M. Scheidel

**SUBJECT: Contract No. CRPCA 0309-33: Ballard Service, Bentley (Neola)
Contract Extension Request**

DATE: September 4, 2007

This project was awarded to Barker Lemar Engineering Consultants on December 20, 2003. The project work has included additional testing and evaluation of corrective action options. Due to proximity of multiple private water wells and the lack of a public water supply system, corrective action has been deemed necessary. Due to the hydrogeologic conditions, an in-well air stripping system has been installed. The system commenced operation in early 2007 and it is anticipated the system will need to be in operation for 2 to 3 years.

The original agreement for this project was written as a 2-year agreement, with the option of four 1-year extensions. The current Agreement term will expire on December 20, 2007. It is requested that the Board authorize the extension of the consultant agreement for a one-year period to allow continued activity on the project.

Funding

The site is eligible for UST Fund benefits based on a settlement agreement with the prior owner's estate.

Original Contract (11/10/03)	\$21,935.00
Current Contract	\$129,846.00
Current Authorization	\$400,000.00

No additional funding authorization is requested at this time.

c: Sandi Porter, GAB Robins

**Contracts Entered Into
Since August 23, 2007 Board Meeting**



IOWA UNDERGROUND STORAGE TANK

Financial Responsibility Program

Susan E. Voss, *Chairperson*

Scott M. Scheidel, *Administrator*

Board Members: Michael L. Fitzgerald

Jeff W. Robinson

Jacqueline A. Johnson

James M. Holcomb

Richard A. Leopold

Nancy A. Lincoln

Douglas M. Beech

ΦΦΦ MEMO ΦΦΦ

TO: UST Board

FROM: Scott Scheidel

DATE: September 19, 2007

RE: Contracts Entered Into Since August 23, 2007

Since the August 23, 2007 Board meeting, the Board has entered into the following contracts or agreements:

- 1) One-year agreement extension with Aon for the Administrator's contract with the Board

Other Issues as Presented

Correspondence and Attachments

Timeline detailed for Welton water project

By Jeremy Huss *2A-82-51*
Staff writer *120P*

Construction of a municipal water system in the city of Welton could be complete by December of 2008, the city council learned this week.

Tuesday night, Sept. 5, the council approved plans and specifications for the construction of the \$1.38 million water system that will allow engineering firm MSA Professional Services to begin the bidding process and submit paperwork to the Department of Natural Resources (DNR) for environmental permits.

Under a timeline presented by James Holtz of MSA, the city will advertise Sept. 19 for bids to be opened Nov. 1. Bids will be awarded Nov. 6, and a notice to proceed on the project could be issued by Dec. 1, contingent on approval of a contract and all necessary environmental and construction permits.

The system is expected to be up and running by Nov. 1, 2008, and would be fully complete by Dec. 1, 2008.

The city council last month agreed to move forward with construction of a fire protection system over a less-costly domestic water system after holding a public hearing to gather citizen input on the choices.

However, some residents who attended Tuesday's meeting questioned the cost of the system and urged the city council to find additional grant funding to ease the burden of monthly water bills estimated to cost \$80 per household.

The council was asked about efforts on the part of U.S. Rep. Bruce Braley, whose representative met earlier this year with city officials.

"Basically, all he did was lay us down the same path we're on," said city clerk LeAnn McCallister.

Holtz said he is continually looking for funding opportunities but he has exhausted all the funding options available to the city.

"I know of all the sources, and I've exhausted them."

The city is lucky to have received a \$250,000 grant from the state Underground Storage Tank Fund to assist in the project,

he said. The water project came about because a benzene plume from underground fuel storage tanks has contaminated several private wells in the city and is threatening others.

Holtz said a grant and loan program through the USDA's rural development office is not feasible because the agency will fund construction only of a domestic water system, not a fire protection system.

Under the program, the city first must obtain a loan from the USDA, and it then would be eligible for grant funds if the loan didn't cover the full cost of the project. However, accepting the USDA funds would prevent the city from using any other loans on the project.

Holtz said he dealt with the same situation in Delmar, which used the USDA grant and loan program and issued general obligation bonds to cover the difference in the project cost.

"Welton doesn't have the capacity to bond for that difference," he said.

Resident Jan Huffman said she was told by representatives of the East Central Intergovernmental Association (ECIA) Welton would be eligible for a "sizable amount of funding from the USDA." Holtz countered the city is eligible, but the amount of money available would not be sizable.

Several residents proposed a re-vote on the water project because the cost has gone up significantly since voters originally approved it.

"The point is, the project has more than doubled since the vote. You are spending our money without our approval," Huffman said.

Holtz noted residents who attended the recent public hearing overwhelmingly supported building the fire protection system.

Council member Glen Boswell said he doesn't personally need the new water system because he has a well with clean water, but residents in the path of the benzene plume will be required to close their wells, and something has to be done.

"I don't think the city's trying to cram anything down anyone's throat," he said.

Observer
DeWitt, IA
Circ. 4451
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