

**BEFORE THE POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS**

L. KELLER OIL PROPERTIES/FARINA,)	
)	
Petitioner,)	
v.)	PCB No. 07-147
)	(UST Appeal)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
Respondent.)	

RESPONSE TO PETITIONER'S POST-HEARING BRIEF

NOW COMES the Respondent, the Illinois Environmental Protection Agency ("Illinois EPA"), by one of its attorneys, Melanie A. Jarvis, Assistant Counsel and Special Assistant Attorney General, and hereby submits its Response to the Petitioner's Post-Hearing Brief to the Illinois Pollution Control Board ("Board").

I. BURDEN OF PROOF

Section 105.112(a) of the Board's procedural rules (35 Ill. Adm. Code 105.112(a)) provides that the burden of proof shall be on the petitioner. In reimbursement appeals, the applicant for reimbursement has the burden to demonstrate that costs are related to corrective action, properly accounted for, and reasonable. Rezmar Corporation v. Illinois EPA, PCB 02-91 (April 17, 2003), p. 9.

The primary focus of the Board must remain on the adequacy of the permit application (or, as is the case here, the site investigation plan) and the information submitted by the applicant to the Illinois EPA. John Sexton Contractors Company v. Illinois EPA, PCB 88-139 (February 23, 1989), p. 5. Further, the ultimate burden of proof remains on the party initiating an appeal of an Illinois EPA final decision. John Sexton Contractors Company v. Illinois Pollution Control Board, 201 Ill. App. 3d 415, 425-426, 558 N.E.2d 1222, 1229 (1st Dist. 1990).

Thus L. Keller Oil Properties/Farina (“Farina” or “Petitioner”) must demonstrate to the Board that it has satisfied its burden before the Board can enter an order reversing or modifying the Illinois EPA’s decision under review. While the Petitioner appears to be attempting to shift the burden of proof to the Illinois EPA the burden remains with the Petitioner. The record in front of the Board clearing supports the Illinois EPA decision. In this case, Farina simply failed to meet their burden of proof.

II. STANDARD OF REVIEW

Section 57.8(i) of the Environmental Protection Act (“Act”) grants an individual the right to appeal a determination of the Illinois EPA to the Board pursuant to Section 40 of the Act (415 ILCS 5/57.8(i)). Section 40 of the Act (415 ILCS 5/40) is the general appeal section for permits and has been used by the legislature as the basis for this type of appeal to the Board. When reviewing an Illinois EPA decision on a submitted corrective action plan and/or budget, the Board must decide whether or not the proposals, as submitted to the Illinois EPA, demonstrate compliance with the Act and Board regulations. Broderick Teaming Company v. Illinois EPA, PCB 00-187 (December 7, 2000).

The Board will not consider new information not before the Illinois EPA prior to its determination on appeal. The Illinois EPA’s final decision frames the issues on appeal. Todd’s Service Station v. Illinois EPA, PCB 03-2 (January 22, 2004), p. 4. In deciding whether the Illinois EPA’s decision under appeal here was appropriate, the Board must therefore look to the documents within the Administrative Record (“Record”), along with relevant and appropriate testimony provided at the hearing held on August 22, 2007, in this matter.¹ The Petitioner in this case has attempted to present evidence not before the Illinois EPA prior to its determination that is the subject of this appeal. The

¹ Citations to the Administrative Record will hereinafter be made as, “AR, p. ____.” References to the transcript of the hearing will be made as, “TR, p. ____.” References to the Supplemental Administrative Record will be made as “Supp. AR, p. ____.”

Illinois EPA requests that the Board disregard this information in making its decision. Based on the information within the Record and the relevant and appropriate testimony, along with the relevant law, the Illinois EPA respectfully requests that the Board enter an order affirming the Illinois EPA's decision.

III. INTRODUCTION

The information submitted to the Illinois EPA by Farina that led to the issuance of the final decision under appeal fully supports the content and conclusion of the final decision, in that the Petitioner failed to demonstrate that the information they submitted to the Illinois EPA and upon which the Illinois EPA based its decision supported any other conclusion than that reached by the Illinois EPA when it issued its May 17, 2007 decision letter. The fact that the Petitioner at hearing had to present evidence outside of the record in front of the Illinois EPA at the time the decision was made further confirms the correctness of the Illinois EPA's decision. The Board's review of the Administrative Record, as well as the hearing transcript, should yield the same conclusion as that reached by the Illinois EPA. The Illinois EPA relies upon the owner/operator and their consultants to provide full information regarding the on-site conditions and remediation activities. It is this information that the Illinois EPA relies upon to form its decisions. In this case, the information submitted by the Petitioner supports the decision of the Illinois EPA. The Petitioner tries, at this late date, to add additional information not contained within the Administrative Record and not before the Illinois EPA prior to its decision. This information needs to be disregarded because the Illinois EPA did not rely upon it when making its decision. It is important to point out that what information the Illinois EPA reviews is totally within the control of the owner/operator and their consultant. Simply, if it is not submitted to the Illinois EPA, the Illinois EPA cannot review it.

IV. STATEMENT OF FACTS

The facts in the Illinois EPA record supporting this motion are as follows:

1. Keller Farina was the owner of tanks located at a gasoline service station located at 1003 West Washington Avenue, Farina, Fayette County, Illinois. The underground storage tanks at issue were located on the property which stored gasoline, diesel fuel and heating oil. (AR, p.7)
2. LUST Incident Numbers 20051539, 20060136, 20060153 and 20060346 were obtained by Keller Farina. The site has been assigned LPC #0514155011 – Fayette. (AR, p.7)
3. The 20-Day Certification for Incident Number 20060153 was submitted to Illinois EPA by the Petitioner on February 21, 2006. (AR p. 7)(Exhibit 1)
4. On December 5, 2005, the Illinois EPA approved an extension of the early action period through April 30, 2006. (AR, p. 7)(Exhibit 2)
5. The Petitioner submitted the 45-Day Report and Stage 1 Certification on December 20, 2005. (AR, p. 7) (Exhibit 3)
6. The Illinois EPA rejected the 45-Day Report on May 22, 2006. (AR, p. 7)(Exhibit 4)
7. Petitioner submitted a 45-Day Addendum Report to the Illinois EPA on July 6, 2006. (AR, p.7)(Exhibit 5)
8. The Illinois EPA approved the 45-Day Report on March 8, 2007. (Exhibit 6)
9. On August 7, 2006, Petitioner sent a Stage 1 Report/Stage 2 Site Investigation Plan and Budget to the Illinois EPA. (AR, p. 1)
10. The Illinois EPA issued a decision letter on October 5, 2006 denying the Stage 1 Report/Stage 2 Site Investigation Plan and Budget. (AR, p.157)

11. On January 24, 2007, the Illinois EPA received a Stage II Site Investigation Plan and Budget, Additional Information and Reconsideration. (AR, p.167)

12. The Stage II Site Investigation Plan and Budget, Additional Information and Reconsideration was not a complete Stage II Site Investigation Plan and Budget, but merely responded to the denial points the Illinois EPA listed in its October 5, 2006 denial letter. (AR, p. 168)

13. On May 17, 2007, the Illinois EPA issued a decision letter rejecting the State 2 Plan and Budget, which is the subject of this appeal. (AR, p. 256)

V. ISSUES

The issues before the Board are framed by the Illinois EPA decision letter and are as follows:

- 1) Whether the Petitioner, by drilling soil borings during Stage 1 in excess of the soil borings required in 35 Ill. Adm. Code 734.315, exceeded the minimum requirements of the Act and regulations thereunder.
- 2) Whether the Petitioner's wells were constructed in a manner that allows for samples to be taken at the desired interval pursuant to 35 Ill. Adm. Code 734.430.

VI. ARGUMENT

On August 7, 2006, the Petitioner filed its Stage 1 Report/Stage 2 Site Investigation Plan and Budget. The Illinois EPA issued a decision letter on October 5, 2006 rejecting this submittal. The Illinois EPA's denial letter frames the issues on appeal. Pulitzer Community Newspapers, Inc. v. EPA, PCB 90-142 (Dec. 20, 1990). In the October 5, 2006 decision letter, the Illinois EPA cited to the requirements of the Act and regulations that the Petitioner did not comply with. The Petitioner filed a response to the October 5, 2006 letter on January 24, 2007 attempting to justify the work performed at the site that the Illinois EPA found exceeded the minimum requirements of the Act and regulations.

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On May 17, 2007, the Illinois EPA issued a decision letter regarding the January 24, 2007 submittal and that letter is the subject of this appeal.

Pursuant to 35 Ill. Adm. Code 734.320, a Stage 2 site investigation must be designed to complete the identification of the extent of soil and groundwater of the site that, as a result of the release, exceeds the most stringent Tier 1 remediation objective of 35 Ill. Adm. Code 742 for the applicable indicator contaminants. Additionally, pursuant to 35 Ill. Adm. Code 734.320(b), the Stage 2 plan must consist of the following:

- 1) An executive summary of Stage 1 site investigation activities and actions proposed in the Stage 2 site investigation plan to complete the identification of the extent of soil and groundwater contamination at the exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742.
- 2) A characterization of the site and surrounding area,
- 3) The results of Stage 1 site investigation,
- 4) A stage 2 sampling plan that includes, but is not limited, the following:
 - A) A narrative justifying the activities proposed as part of the Stage 2 investigation,
 - B) A map depicting the location of additional soil borings and groundwater monitoring wells proposed to complete the identification the extent of soil and groundwater contamination at the site that exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator objectives.
 - C) The depth and construction details of the proposed soil borings and groundwater monitoring wells.

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While the Petitioner continually chooses to cherry pick the portion of 35 Ill. Adm. Code 734.510(a) that suits them best, in actuality, pursuant to 35 Ill. Adm. Code 734.510(a), a technical review must consist of a detailed review of the steps proposed or completed to accomplish the goals of the plan and to achieve compliance with the Act and regulations. Under this regulation, items to be reviewed, if applicable, must included, but are not limited to, number and placement of wells and borings, numbers and types of samples and analysis, results of sample analysis, and protocols to be followed in making determinations. The overall goal of the technical review for plans is to determine if the plan is sufficient to satisfy the requirements of the Act and regulations and has been prepared in accordance with generally accepted engineering practices. The overall goal of the technical review for reports is to determine if the plan has been fully implemented in accordance with generally accepted engineering practices or principles of professional geology, if the conclusions are consistent with the information obtained while implementing the plan, and if the Act and regulations have been satisfied. The Illinois EPA May 17, 2007 decision letter does not state that the work performed by the Petitioner was not done in accordance with generally accepted engineering practices or principles of professional geology. (AR, p.256). It is the Illinois EPA's position that the record clearly shows that the information submitted by the Petitioner did not comply with all of the requirements of Part 734, and in some cases exceeded the minimum requirements of the Act and regulations making the activities listed in the May 17, 2007 decision letter as not eligible for payment pursuant to 35 Ill. Adm. Code Section 734.630(o).

The Illinois EPA conducted a review in accordance with the procedures set forth in 734.510(a), to determine if the activities certified in the Stage 1 plan and budget certification had been conducted in accordance with the regulations and generally accepted engineering practices. Information regarding the Stage 1 activities was presented in the Stage 2 Plans in accordance with 35 Ill. Adm. Code 734.320.

(AR, pp. 1-13) During its Section 734.510(a) review, the Illinois EPA determined that the Stage 1 site investigation was not conducted in accordance with the approved plan and the Stage 1 monitoring wells were not installed in a manner consistent with the regulations and generally accepted engineering practices. (AR, p. 256)

The staged site investigation process is designed to provide a systemic approach to define the full extent of soil and groundwater resulting from the release of the underground storage tank system. Each stage builds upon the prior stages. Therefore, Stage 2 and Stage 3 must include the information collected from the prior stage or stages in order to develop a plan for additional activities and locations based on the information gathered from the previous activities. The Stage 1 monitoring well construction diagrams provided in the Stage 2 plans indicate the wells were not screened properly to allow for sampling at the desired interval. (AR, p. 89) Due to this fact, a Stage 2 plan for determining the full extent of groundwater contamination resulting from the release can not be formulated based on the data provided from these improperly screened wells.

Additionally, 35 Ill. Adm. Code 734.315(b) requires that a Stage 1 Site Investigation Plan must consist of a certification by a Licensed Professional Engineer or a Licensed Professional Geologist that Stage 1 will be conducted in accordance with this section. This certification was included as Section G of the 45-day Report Form. (Supp. AR, p.4) This certification is actually a part of the 45-Day Report and not a separate document. This Certification is the only Stage 1 information “reviewed” and “approved” by the Illinois EPA prior to the Stage 1 activities taking place. The 45-Day Report, itself, often only gets a cursory review. By approving the 45-Day Report that includes the Stage 1 certification, the Illinois EPA is not approving the Stage 1 activities at the site foreclosing further review of said activities. In fact, the certification makes it clear that the Petitioner must submit a summary of such activities with the Stage 2 Site Investigation Plan and Budget for review by the

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Illinois EPA to make sure that the provisions of Section 734.315 were followed as the owner or operator certified. The Certification states,

“UST owner or Operator and Licensed Professional Engineer or Licensed Professional Geologist Certification of Stage 1 Site Investigation Plan and Budget (applies to Part 734 sites continuing beyond early action): Pursuant to 35 Ill. Adm. Code Part 734.315(b), I certify that the Stage 1 site investigation will be conducted in accordance with 35 Ill. Adm. Code 734.315 and that costs of the Stage 1 site investigation will not exceed the amounts set forth in 35 Ill. Adm. Code 734 Subpart H, Appendix, D and Appendix E. This certification is intended to meet the requirements for a plan and budget for Stage 1 Site Investigation required to be submitted pursuant to 35 Ill. Adm. Code 734.310.

A summary of the actual costs for conducting the Stage 1 site investigation will be submitted concurrently with the results of the Stage 1 site investigation and the Stage 2 site investigation plan and budget.”

This certification, which the petitioner signed, states that the Petitioner will conduct Stage 1 activities in accordance with 35 Ill. Adm. Code 734.315. However, the Petitioner failed to do so. Activities performed at the site and submitted as part of the Stage 1 Executive Summary in the Stage 2 proposed plan, showed that activities for Stage 1 were not conducted in accordance with the minimum requirements to comply with Section 734.315.

**ISSUE 1: THE SOIL BORINGS EXCEEDED THE MINIMUM REQUIREMENTS OF THE
ACT AND CANNOT BE REIMBURSED.**

The question before the Board is whether the Petitioner, by drilling soil borings during Stage 1 in excess of the soil borings required in 35 Ill. Adm. Code 734.315, exceeded the minimum

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requirements of the Act and regulations thereunder. The requirements of Stage 1 are very specific and are prescribed by Section 734.315. The regulation allows little, if any, deviation from its prescribed activities. The Petitioner exceeded this regulation by performing activities in addition to those allowed in the regulation.

Under 35 Ill. Adm. Code 734.210(h), the owner/operator is required to collect excavation samples and piping run samples during underground storage tank removal to determine if the soil contamination exposed as a result of early action excavation meets the most stringent Tier 1 remediation objectives pursuant to 35 Ill. Adm. Code Part 742. Under 35 Ill. Adm. Code 734.210(h)(3), if the samples (including piping run samples) meet the most stringent Tier 1 remediation objectives pursuant to 35 Ill. Adm. Code Part 742, the owner/operator may submit a report demonstrating compliance with those remediation objectives. If the Illinois EPA determines those remediation objectives have been met, the Illinois EPA will issue a No Further Remediation letter to the owner/operator. This provides regulatory authority for the Illinois EPA to accept piping run samples as acceptable samples to determine if soil surrounding the underground storage tank system meets remediation objectives.

Additionally, the regulations at 35 Ill. Adm. Code 734.315(a)(1)(B), allow for up to two borings to be drilled around each piping run where one or more piping run samples exceed the most stringent Tier 1 remediation objectives under 35 Ill. Adm. Code Part 742. Although it may be technically acceptable to further investigate piping runs, for purposes of reimbursement from the fund, those activities exceed the minimum requirements of the Act and regulations pursuant to 35 Ill. Adm. Code 734.630(o). It should be noted that the Illinois EPA did not reject the plan based on the additional proposed borings which exceeded minimum requirements. The plan was denied because the monitoring wells did not satisfy the requirements of 35 Ill. Adm. Code 734.430. Under 35 Ill. Adm.

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Code 734.505(a), the Illinois EPA conducted the review based on all technical and financial information relied upon by the owner/operator and the Licensed Professional Engineer or Licensed Professional Geologist in developing any plan, budget or report. The Illinois EPA, pursuant to Section 734.505(b), notified the owner/operator that the additional soil investigation exceeded the minimum requirements and was therefore not eligible for reimbursement.

In regards to the specific soil borings at issue in this case, SB4 exceeded the minimum requirements of the Act and regulations because the wall of the excavation closest to SB4 was clean during early action. (AR, p.99) (Supp. AR, p. 4). Because the wall of the excavation was clean, SB4 did not need to be drilled under the regulations. In their response to the initial Illinois EPA denial letter, (AR, p.157) the Petitioner agreed that where SB4 was placed on the map they submitted to the Illinois EPA was in error. They stated that they had moved SB4 to the correct location, however, the new map showed SB4 in the same location as the prior map. (AR, p168, Maps AR, pp.28, 214). At the hearing, Jeff Wienhoff, from the Petitioner's consultant, CW3M admitted that the soil boring map had not been updated and that the information submitted to the Illinois EPA, even after this error was found, was incorrect. (T, p.152-153). The Illinois EPA can only review what is submitted to it and is in the position that it must assume that the information is correct as submitted. If the Illinois EPA made a decision based upon information the Petitioner now claims is incorrect, the Petitioner has no one to blame but themselves because it was their incorrect information.

SB5 and SB6 exceeded the minimum requirements of the Act and regulations because no contamination was found during early action in the excavation wall in that area. (Supp. AR, p. 4). In their response to the initial Illinois EPA denial letter, the Petitioner again agreed that the two borings were in the wrong place. (AR, p.170). These borings should have been drilled in the area of the piping run and not near the excavation. In regards to SB6, the Petitioner fully agreed that the boring exceeded

the minimum requirements of the Act and regulations. (AR, p.170). In regards to SB5, the Petitioner disagrees that the boring was inappropriate because the boring had a slight hit for Benzene. However, the Petitioner has not shown how this hit for Benzene was related to the diesel tank in question when the walls of the Early Action excavation were clean in the area of SB5 and the only contaminant of concern in the area was Naphthalene. (Supp. AR, p. 4). The Petitioner did make a claim that suggested their work during early action may not have been completed correctly. (AR, p.170). However, when submitting the 45-day report, the Petitioner's consultant did certify that the activities taken were done in accordance with the regulations. (Supp. AR, p. 4).

The Petitioner argues that the exact location and depth of the borings were based on field observation and data samples collected from early action. 35 Ill. Adm. Code 734.315(a)(1) defines the requirements for gathering the initial information regarding the extent of on-site soil contamination that as a result of the release, exceeds the most stringent Tier 1 remediation objectives for applicable indicator contaminants. Section 734.315(a)(1) states the following regarding field observations issues: "The borings must be advanced through the entire vertical extent, based on field observations". The Petitioner also states SB5 and SB6 were advanced in the incorrect area in an attempt to define soil contamination from an incorrectly placed excavation sample. It is unclear what field observation and data from sampling was used, as borings were placed in areas previously defined by early action samples.

Further, the Petitioner did not submit to the Illinois EPA data regarding contamination located at 10 ft below the surface. According to the 45-day Report, groundwater infiltrated the bottom of the excavation so confirmation samples could not be collected in accordance with 35 Ill. Adm. Code 734.210(h). (Supp. AR, p. 4). These floor samples, in conjunction the tank excavation sidewall samples usually determine if the tanks have had a release at the bottom the excavation. Contaminated

soil in the groundwater unit is addressed as groundwater contamination. In this case, the excavation sidewalls did not show contamination in the diesel excavation and the piping runs samples did not demonstrate contamination migrating from the piping runs. This information, submitted by the Petitioner, is acceptable to determine the unsaturated soils have been adequately defined in that area without further sampling.

Moving on to the soil samples collected from MW1 through MW5, at the hearing the Petitioner stipulated that the analysis of the soil samples collected from MW5 was not necessary. (T., p.8) The soil samples remaining at issue that the Petitioner took in MW1 through MW4 exceed the minimum requirements of the Act and regulations. Section 734.315(a)(2)(C) states that soil samples must be examined from the Monitoring wells "provided that the samples must not be analyzed if other soil sampling conducted to date indicates that soil contamination does not extend to the location of the monitoring well installation boring." In the case at hand, the Petitioner chose to sample soils from the monitoring well borings in contradiction of the requirements of Section 734.315(a)(2)(C). (AR, p.28, 90-101). Soil samples are not required from the monitoring well borings because sampling conducted from the soil borings indicated soil contamination did not extend to that area. The soil samples taken from the soil borings defined the area of contamination. Therefore the BTEX/MTBE soil analysis completed from the drilling of MW1, and the PNA soil analysis completed from the drilling of MW1, MW2, and MW4 exceeded the minimum requirements of the Act and regulations. At the hearing, Jeff Wienhoff offered a new explanation for taking the monitoring well samples. He explained that it was more convenient to take all of the samples at once and not wait for the results to see if more sampling was needed as required under the regulations. (T., p.167) Mr. Wienhoff admitted that he knew this was against the regulations.

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The Petitioner also proposes additional soil borings. (AR, p.29). The proposed soil boring south of the pump island is not needed because the wall of the early action excavation was clean, as was MW1. (Supp. AR, p.4). The soil borings east of the tank field but west of MW2 exceed the minimum requirements of the Act and regulations because MW2 exceeds the clean up objectives. It has, therefore, already been determined that the contamination is beyond the point of the proposed borings. These proposed borings are not reimbursable under the Act and regulations. (AR, p.29). The Petitioner also proposes two additional borings in the area of SB5 because SB5 had that slight hit for Benzene discussed above. However, as discussed previously, the Petitioner has not shown how this hit for Benzene was related to the diesel tank in question when the walls of the excavation were clean in the area of SB5 and the only contaminant of concern in the area was Naphthalene. (Supp. AR, p.4).

In regards to the additional soil borings, the Petitioner argues in their response to the original decision letter that the piping samples are not deep enough to sample the entire vadose zone. (AR, p.171). However, if these samples, required by 734. 210(h)(1)(C), are clean, as in this case, no further sampling is required and a No Further Remediation letter can be obtained without further sampling. Further, if the walls of the excavation are clean towards the piping run, as is the case here, then the depth of the piping run samples is sufficient for the purpose at hand, which is checking to see if the piping run leaked. The Petitioner's consultant seems to be saying that the Board's regulations are not expansive enough to cover contamination throughout the vadose zone if piping samples are used to determine the extent of contamination. This discussion would be better left for a regulatory hearing on Part 734. It should be noted that the Petitioner's consultants, CW3M, were active participants in the last hearings for Part 734 and could have brought up these concerns at that time. (See the Board's docket and record from R04-23)

The Administrative Record, along with the Act and the Board's regulations, clearly supports the decision of the Illinois EPA that the soil borings exceeded the minimum requirements of the Act and cannot therefore be reimbursed.

ISSUE 2: THE MONITORING WELLS WERE NOT SCREENED AT THE PROPER INTERVAL

The question before the Board is whether the Petitioner's wells were constructed in a manner that allowed for samples to be taken at the desired interval pursuant to 35 Ill. Adm. Code 734.430.

Pursuant to 35 Ill. Adm. Code 734.430(a), monitoring well installation requirements, the well must be screened at an interval to allow sampling only at the desired interval. In the instance of gasoline indicator contaminants, specifically benzene, the well must be screened at the interval where the screen intersects the groundwater in the well. This is because the contaminants associated with petroleum releases are lighter than the groundwater. Due to this fact, the contaminants "float" on top of the groundwater, as evidenced in the sheen on water produced when petroleum products and water co-mingle. This top layer in the wells is the intended target for groundwater sampling. When the well screen is submerged in the well, the groundwater being sampled is below where most petroleum contaminants are likely to be observed. Ten-foot well screens are installed to allow for groundwater hydrostatic pressure and seasonal fluctuations. The wells in question were installed on July 12, 2006. (AR, p. 102-107) Normally, this means that the screen was inserted and the well was sealed with bentonite to prevent surface water infiltration. Once the well is installed, the consultant usually waits for a few days for the well to stabilize to a natural groundwater flow state after boring into the soil and setting the well, which can disrupt the groundwater in that location. Next, the consultant returns to the well after it is stabilized to record groundwater elevation readings and collect samples. (T. p. 93-94) In this case, this was conducted on 07/14/06. (AR, p.111) The monitoring well construction diagrams

state the groundwater elevation after stabilization, i.e., 2 days after the well was installed, show the well screens to be submerged. (AR, p. 89)

The Illinois EPA disagrees with the assertion that the wells would be dry if they had been installed as the Illinois EPA stated. According to the monitoring well construction diagrams provided by the Petitioner in the Stage 2 Site Investigation plan dated August 7, 2006, the groundwater could have dropped significantly without causing a dry well. (AR, p. 89) Since the Petitioner claims, without any evidence to support their conclusion that “due to hydro-static pressure of hydraulic head of the formation, the isostatic water levels rose in the monitoring wells” (AR, p. 173), it is very unlikely that the screen, if raised as the Illinois EPA suggests, would be dry.

The Administrative Record clearly shows that the wells at issue in this case were not screened at the desired interval. For wells MW1 through MW5, the Administrative Record indicates that the groundwater depth while drilling was between 10 and 11 feet. (AR, pp.90-94). The Petitioner did not indicate on any of these “Drilling Borehole Logs” the depth of the groundwater after drilling as required by Section 734.425(c)(6). (AR, pp.90-94). The wells were drilled and completed on July 12, 2006. (AR, pp.90-94). *See*, Section VII of this brief for a discussion regarding Carol Rowe’s admission that this required information was not submitted.

For MW1, the record indicates that the depth to water was 97.75 feet static. (AR, p.102). The top of the screen for MW1 is 95.50 feet. The total screen interval is 10 feet. (AR, p.102). This indicates that the screen is submerged 2.25 feet below the surface. Section 734.430 clearly states that the wells are to be constructed in a manner that will enable the collection of representative groundwater samples. Further, wells must be screened to allow sampling only at the desired interval. The contaminants of concern in gasoline and diesel fuel float on the top of water. If the screen is submerged 2.25 feet below the surface, the well is not constructed in a manner that will enable the

collection of representative groundwater samples. Nor is it screened to allow sampling only at the desired interval.

The same can be said about MW2 through MW5. The record indicates that the depth to water for MW2 is 96.91 feet static. (AR, p.103). The top of the screen is at 95.83 feet. (AR, p.103). The top of the screen is 1.08 feet below the surface. The well closest to the surface is MW3. The record shows that MW3 has a depth to water of 97.11 feet static. (AR, p.104). The top of the screen is 96.97 feet. (AR, p.104). Therefore the top of the screen at MW3 is .14 feet below the surface. The record indicates that the depth to water for MW4 is 97.30 feet static. (AR, p.105). The top of the screen is at 96.95 feet. (AR, p.105). Therefore the top of the screen is .35 feet below the surface. For MW5, the record indicates that the depth to water is 98.00 feet static. (AR, p.106). The top of the screen is at 96.20 feet. (AR, p.106). Therefore the top of the screen is submerged 1.80 feet below the surface. These monitoring wells are not constructed in a manner that will enable the collection of representative groundwater samples. None of these wells, MW2 through MW5 are constructed to allow sampling only at the desired interval.

The Petitioner responded to the Illinois EPA's first denial letter, (AR, p.157), by stating that the wells were set at the groundwater table encountered at drilling. (AR, p.173). The Petitioner went on to state that "due to the hydro-static pressure of hydraulic head of the formation, the isostatic water levels rose in the monitoring wells." (AR, p.173). The Petitioner goes on to argue that the groundwater is still entering the monitoring wells in the screen and that to have the wells set at shallower depths would have resulted in no production. (AR, p.173). The Illinois EPA disagrees with that assertion. The total well screen interval is 10 feet. The wells could be raised the amount of distance so that the top of the screen is above the surface and still have adequate screen interval below the surface to collect the necessary samples of the contaminants. Further, having the top of the screens above the surface would

comply with the regulations that require that the wells are constructed to allow it to be screened to allow sampling only at the desired interval. As constructed, the desired interval in these wells is .14 feet to 2.25 feet above the current placement of the top of the screen. The Petitioner admitted that “due to the hydro-static pressure of hydraulic head of the formation, the isostatic water levels rose in the monitoring wells.” (AR, p.173). Basically, by not allowing the water in the well to recharge after drilling and by placing the screens in the wells to the depth of groundwater during drilling, instead of placing the screens in the wells to the depth of groundwater after drilling, the wells were not screened in a manner to satisfy the requirements of Section 734.430. The Petitioner did not provide the groundwater depth after drilling as required under Section 734.725(c)(6) on the soil boring log, so it is unclear if this depth was noted during the investigation.

The Petitioner states the requirement of Section 734.430 to construct a well to allow for sampling only at the desired interval violates Section 734.315(a)(2)(E)(ii), which requires the screen to be submerged for hydraulic conductivity analysis. This is a red herring to distract the Board from the real issue. The Illinois EPA did not deny the hydraulic conductivity analysis from the well with the submerged screen. As stated above, the issues are defined by the Illinois EPA decision letter.

Carol Rowe, CW3M, who supervised the field work, testified at hearing that the wells were not screened as she intended. (T. p.123) In fact, Ms. Rowe herself states she's not sure what strata is producing the groundwater. (T. p.122) This was surprising to the Illinois EPA since all correspondence submitted for review by the Illinois EPA stated the groundwater was located in the silty clay layer. Frankly, the Illinois EPA can only review that which is submitted. If the consultant sends in information stating a definite location for groundwater and the Illinois EPA relies on that during its review, the Petitioner is stuck with that information. The Board will not consider new information not before the Illinois EPA prior to its determination on appeal. Changing their

information at hearing to say they now do not know where the groundwater was found is irrelevant to the question before the Board as to whether the Illinois EPA made the correct decision based upon the record it had in front of it at the time.

The Illinois EPA would also like to point out that the Illinois EPA's reviewer notes may give insight into the decision of the Illinois EPA, however, the reviewer notes are not the decision of the Illinois EPA. The decision of the project manager is reviewed by their supervisor and not all of the comments in the reviewer notes make the Illinois EPA decision letter.

The Administrative Record, along with the Act and the Board's regulations, clearly supports the Illinois EPA decision that the Petitioner's wells were not constructed in a manner that allows for samples to be taken at the desired interval pursuant to 35 Ill. Adm. Code 734.430.

ADDITIONAL ARGUMENT: REJECTION OF BUDGET

The Illinois EPA and the Petitioner resolved the certification issue prior to hearing with the Petitioner submitting the required document. (T., p.7)

In regards to the rejection of the budget, a proposed budget may not be approved unless the corresponding plan is approved. The corresponding plan has not been approved. Further, the Stage 1 Investigation did not meet the requirements of the regulations in regard to the screening of the monitoring wells. Activities for Stage 2 may not proceed until all the requirements of Stage 1 have been satisfied. Activities which exceed the minimum requirements of the Act and regulations were conducted and all associated costs associated with activities conducted that exceed the minimum requirements to comply with the Act and regulations are ineligible for payment from the fund.

The regulations at 35 Ill. Adm. Code 734.625 and 734.630 provide detailed items which are considered eligible and ineligible for payment from the Fund. Pursuant to 734.630(o), costs for

corrective action and associated materials or services exceeding the minimum requirements necessary to comply with the Act are not eligible for payment from the Fund.

Part 734 describes the requirements necessary to comply with the regulations. Sections 734.315 and 734.320, state the specific requirements for Stage 1 and Stage 2 Site Investigation that are necessary to comply with the Act in order to receive payment from the Fund. Any additional corrective action activities, materials or services provided that are not specifically required in the 734.315 and 734.320 requirements exceed the minimum requirements necessary to comply with the Act and its regulations. All costs for activities outside the scope of work required by the regulations must be denied payment from the Fund.

Additionally, the regulations require that the Stage 1 site investigation must be conducted from data acquired during early action as described in Section 734.210. The Illinois EPA must rely on the owner/operator and their consultants to comply with early action requirements including the early action sampling procedures described in Section 734.210(h)(1) in order for site investigation to proceed in accordance with the Board's regulations. Site Investigation requirements are specifically based on UST excavation samples collected pursuant to 734.210(h). The Petitioner claimed at hearing that they missed the contamination. (T., p.131-134, 157) "Missing contamination" during early action sampling violates Section 734.210(h). Further it is not an acceptable excuse that would allow the Illinois EPA to approve reimbursement for these costs associated with a non-compliance of the regulations. Additionally, work conducted as the result of clerical errors is not eligible for reimbursement because it exceeds the requirements of Sections 734.315 and 734.320. (See testimony of Jeff Wienhoff starting T. p. 125)

Pursuant to Section 734.630(p), costs associated with improperly installed sampling or monitoring wells are not eligible for payment from the Fund. Part 734 sets forth the requirements for

monitoring well construction and sampling. Section 734.430 specifically prescribes the requirements for monitoring well construction. The monitoring wells were not constructed in a manner that allows for the screen to be placed at the desired interval. The length of the screens may be 5 foot, 10 foot, or 15 foot, or longer, as determined by the Geologist in the field. The Illinois EPA must rely on the owner/operator and its consultant to make determinations in the field, as to how the wells are drilled, provided the regulations are satisfied. If aspects of the well are not constructed in accordance with the regulations, the Illinois EPA cannot make a determination on the validity of the samples. The Geologist must determine in the field the specific groundwater bearing unit which would most likely be impacted by the release, hence the requirement for a representative groundwater sample. The Illinois EPA must rely on the expertise of the person performing the fieldwork to ensure that these requirements are satisfied.

The Administrative Record, along with the Act and the Board's regulations, supports the final decision of the Illinois EPA in denying the budget.

**VII. THE PETITIONER'S BRIEF IS IN ERROR AND THE HEARING TESTIMONY
SUPPORTS THE FINAL DECISION**

As noted in the above argument, the Petitioner's brief fails to present any tangible or persuasive argument on which the Board could rely in reversing the Illinois EPA's final decision. Further, there are numerous passages of testimony from the hearing that either support the Illinois EPA's final decision or weaken the Petitioner's arguments.

**ISSUE 1: THE SOIL BORINGS EXCEEDED THE MINIMUM REQUIREMENTS OF THE
ACT AND CANNOT BE REIMBURSED.**

Illinois EPA directs the Board to the requirements of Section 734.315(a) in the appendix of this Brief. This section sets forth the requirements for soil borings and uses the term "UST field".

Although Part 734 does not defined the term “UST field”, Section 732.103 does define “tank field” to means all underground storage tanks at a site that reside within a circle with a 100 foot radius. Section 732.103 begins with the statement, “Except as stated in this Section, or unless a different meaning of a word or term is clear from the context, the definitions of words or terms in this Part shall be the same as that applied to the same words or terms in the Environmental Protection Act [415 ILCS 5]”. The two tank excavations at issue in this case encompass one UST field under 734.315(a), as they both reside within a 100 foot radius of one another.

Section 734.315(a) states that up to four boring must drilled around each independent UST field. Mr. Wienhoff stated at hearing that he understood the interpretation of the regulations was that up to 4 borings were acceptable for Stage I Investigation, and those borings should be placed in the direction of contamination emanating from tank excavation (T. page 163). SB4, as it originally placed (AR, page 28), exceeded these requirements. The contamination found in excavation samples N1 and N2 was demonstrated by the Petitioner as *not* emanating from the tank excavation in the northern direction. The amended placement of SB4, as testified to by Mr. Wienhoff, still attempts to further define contamination emanating northward. Since only one tank basin excavation sample exceeded the most stringent remediation objectives, soil sample E1, only one soil boring (SB3) is needed per the minimum requirements of Section 734.315(a)(1)(A). Any other soil boring such as SB4 exceed the minimum requirements of the Act and regulations. Soil borings that exceed the minimum requirements are not reimbursable. SB4 exceeded the minimum requirements of the Act and therefore is not eligible for reimbursement pursuant to Section 734.630(o).

Regarding soil boring SB5, Mr. Wienhoff stated in his testimony, that both SB5 and SB6 were drilled to fulfill the requirements of Section 734.315(A). He also admitted that SB5 and SB6 were drilled as the result of “clerical error” (T. page 154). The drilling and sampling of SB6 is no longer

part of the appeal. In regards to SB5, Mr. Wienhoff, stated that contamination noted as the result of drilling SB5 should make the boring an acceptable location for fulfilling the requirements of Section 734.315(a)(1)(A). Mr. Wienhoff stated that the contamination found at SB5 was “most likely” the result of diesel tank overfills. However, soil sampling of the tank diesel excavation sidewalls demonstrated that contamination from the tank, including overfills, had been successfully excavated to the most stringent Tier 1 remediation objectives during early action requirements. Therefore, under Section 734.315(a)(1)(A), drilling and sampling did not comply with the regulations as it states “[u]p to four borings must be drilled around each independent UST field where one or more UST excavation samples collected pursuant to 734.210(h) excluding backfill samples, exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants.” No excavation samples from that area exceeded the most stringent remediation objectives. Drilling and sampling of borings other than those prescribed as fulfilling the minimum requirements, are not reimbursable. SB5 exceeded the minimum requirements to fulfill the regulations and therefore is not eligible for reimbursement pursuant to Section 734.630(o).

In regards to the monitoring well soil samples, the minimum requirements of Part 734 are spelled out in 734.315(a)(2)(C). This states, that one soil sample must be collected from each five-foot interval of each monitoring well installation boring drilled pursuant to subsection (a)(2)(B). Each sample must be collected from the location within the five-foot interval that is the most contaminated as a result of the release. If an area of contamination cannot be identified within a five-foot interval, the sample must be collected from the center of the five-foot interval. All soil samples exhibiting signs of contamination must be analyzed for the applicable indicator contaminants. For borings that do not exhibit any signs of soil contamination, samples from the following intervals must be analyzed for the applicable indicator contaminants, *provided that the samples must not be analyzed if other soil*

sampling conducted to date indicates that soil contamination does not extend to the location of the monitoring well installation boring:

- i) The five-foot intervals intersecting the elevations of soil samples collected pursuant to Section 734.210(h), excluding backfill samples, that exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants.
- ii) The five-foot interval immediately above each five-foot interval identified in subsection (a)(2)(C)(i) of this Section; and
- iii) The five-foot interval immediately below each five-foot interval identified in subsection (a)(2)(C)(i) of this Section

The Illinois EPA's denial of these samples is specific only to monitoring well soil samples collected and analyzed for indicator contaminants. Collecting and analyzing soil samples from the wells exceeded the minimum requirements to comply with the Act and regulations.

The Petitioner states that monitoring wells MW2, MW4 and MW5 were sampled to further define the contamination from sample D10 (the diesel piping excavation). (AR, p. 171) However, when these wells were sampled for soil contamination, it was believed by the Petitioner that it was sample D7, a tank excavation sidewall sample located at 8 feet, that they were determining contamination from, not D10, located at 3 feet. The additional argument was an attempt at justifying allowing reimbursement for what the regulations state expressly not to do. In order to further define the piping run sample D10, SB7 and SB8 were advanced pursuant to 734.315(a)(1)(B), after the Illinois EPA's denial letter of October 15, 2006. (AR, page 157-164) These soil borings were omitted from the original activities and required to fulfill the soil sampling requirements of 734.315(a)(1)(B), and are the borings conducted to further define the contamination emanating from piping sample D10.

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Conducting additional sampling because the first set of sample locations were not placed in accordance with the regulations does not make the additional activities eligible for reimbursement.

As stated above, pursuant to Section 734.320, the Stage 2 site investigation must be designed to complete the identification of the extent of soil and groundwater contamination at the site that, as a result of the release, exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants. The investigation of any off-site contamination must be conducted as part of the Stage 3 site investigation. The requirements state that Stage 2 activities are conducted to complete the identification of soil and groundwater contamination as the result of the release. It specifically states that activities must collect all samples necessary to identify the extent of soil and groundwater occurring at the site. Soil and groundwater samples from Stage 1 investigation have identified the contamination extent to extend to monitoring well MW2. Therefore, in order to meet the minimum requirements contained in the regulations, samples should not be collected in areas where contamination is already found to occur, rather it is to identify the further extent of the soil and groundwater plume. Any additional sampling not identifying the further extent of the soil and groundwater plume exceeds the minimum requirements to comply with the Act and its regulations (See Section 734.630(o)).

The Administrative Record, along with the Act and the Board's regulations, clearly supports the decision of the Illinois EPA that the soil borings exceeded the minimum requirements of the Act and cannot therefore be reimbursed.

**ISSUE 2: THE MONITORING WELLS WERE NOT SCREENED AT THE PROPER
INTERVAL**

The Illinois EPA determined the monitoring wells were not installed properly based on the information provided in the plan. The following documents provided in the Administrative Record support the Illinois EPA decision.

1. A narrative discussing the in-situ hydraulic conductivity on the groundwater located at the site. The narrative regarding site-specific parameters stated the hydraulic conductivity of the groundwater is $9.61E-7$ cm/sec. This low hydraulic conductivity is representative of a silty clay type soil. (AR, p. 13)
2. Groundwater Elevation Map. This map represents the static water elevation of groundwater across the site. (AR, p. 35)
3. Geologic Cross-Section. This cross-section depicts the GW interval while drilling to be located in the silty clay layer. (This is in opposition to the testimony of Mr. St. John.) (AR, p. 37)
4. Soil Boring Logs indicating groundwater was encountered in the silty clay unit at 10.5 ft below surface grade. Data was not provided as required as to the groundwater depth after drilling. (AR, p. 90-101, 224-225)
5. Monitoring Well Construction Diagrams, indicating the depth to water, and the screened interval. All screens appear to be placed below the static water level. (AR, p. 102-107)
6. Hydraulic Conductivity Data and Results. The information supplied in these pages provides the supporting documentation regarding the hydraulic conductivity determination. The groundwater hydraulic conductivity documentation states that CW3M personnel conducted 2 slug tests in monitoring well 4 (MW4). The hydraulic conductivity determined from the first slug test was $1.31E-6$ cm/sec. The hydraulic conductivity from the second slug test was $9.61E-7$ cm/sec. (AR, p. 227-230)

The testimony of Ronald St. John:

The testimony of Ronald St. John did not prove that the Illinois EPA was incorrect in its decision. Ronald St. John was offered as an expert witness by the Petitioner. It was clear from the testimony at hearing that Mr. St. John was not hired to work closely with the Petitioner and its consultant in order to render an opinion in this case. He was merely hired by the Petitioner's counsel. (T. p.61) Thus, it was impossible for the Illinois EPA to get into what he discussed with his client, because his client was the Petitioner's counsel. Mr. St. John was also found unreliable by a federal judge in the United States District Court for the Northern District of Illinois, Eastern Division. *See LeClercq v. The Lockformer Co.*, 2005 WL 1162979 (N.D. Ill. 2005). Judge Leinenweber stated in his opinion as follows:

“The Court agrees that St. John's testimony is unreliable. In pertinent part, St. John opines that the contaminants TCE, PCE, and TCA traveled in relatively equal proportions from Defendant' facilities to the DGSD WWTP, passed through the DGSD WWTP into the effluent line, leaked out of the effluent line, migrated downward through the soil to contaminate the soil and groundwater beneath the effluent line, and then contaminated groundwater then carried the TCE, PCE, and TCA to the *LeClercq* and *Mejdrech* class areas. The 17 effluent samples that ST. John ignored reflect non-detects for TCE, PCE, and TCA-this data clearly is material and would be relevant to St. John's conclusions. Mestek concedes that ST. John did not include these 17 samples in his hydrogeological analysis. St. John testified that he was aware of the DGSD effluent data when he prepared his reports.

The Court concludes the St. John's failure to discuss the import of, or even mention, these material facts in his reports amounts to “cherry-pick[ing] the facts he

considered to render his opinion, and such selective use of facts fail[s] to satisfy the scientific method and *Daubert*. *Holden Metal & Aluminum Works v. Wismarq Corp.*, No. 00 C 0191, 2003 WL 1797844, at *2 (N.D.Ill. Apr.2, 2003). This disregard of relevant data undermines the reliability of St. John's entire opinion in this matter. Accordingly, TPDs motion to bar the testimony of St. John is granted."

While Mr. St. John was found to be an expert in his field in *LeClercq*, it was also clear that the Court found him to be nothing more than a hired gun that would cherry pick his facts in order to reach the conclusion of the party that hires him. Under cross examination in this case, it became clear that Mr. St. John didn't visit the site in question and either didn't review the entire Administrative Record, or simply choose to once again cherry pick the facts he found useful to make a conclusion in favor of the Petitioner. Even in the Petitioner's brief, they state that "Mr. St. John testified at hearing that he reviewed the various reports in the record and that the monitoring wells were constructed properly." (Petitioner's Brief, p.9) It states that he reviewed "various reports" not all reports, yet he was able to make a determination that the wells were "constructed properly" without a full review of the Administrative Record nor a visit to the site. Mr. St. John is once again cherry picking his facts, this time just from a different tree.

No where within the Administrative record is there any indication that the saturated groundwater is located in the 12-13.5 feet sand layer as stated during the testimony of Mr. St. John. (T., p.21) Mr. St John's asserted that the sand layer is the only layer capable of producing water. However, he was unable to explain the hydraulic conductivity provided by the Petitioner in Administrative Record. (T. p.72) In fact, it seemed that he had not even reviewed this information in forming his opinion, or if he had reviewed it, he merely chose to ignore it. Under cross examination, Mr. St. John admitted that he would expect the hydraulic conductivity of the porous grain found in the

aquifer at 12-13.5 foot to be in the order of $10E(-3)$ cm/sec, indicating the increased permeability of sands versus the slower permeability of silty clay. (T., p.72) Mr. St. John also admitted, once directed to the page in the Administrative Record, that a silty clay layer (identified in the plan as being the groundwater producing layer) would more likely have a hydraulic conductivity similar to the hydraulic conductivity presented in the plan (T. p.72-73). Additionally, Mr. St. John, agreed under cross examination, that groundwater can infiltrate the silty clay layer (T. p.72), thereby contradicting his direct testimony and indicating that the groundwater may be infiltrating the well at a level somewhere above the sand layer. All documentation submitted by the Petitioner regarding groundwater, indicates that the groundwater producing layer is the silty clay layer depicted in the Administrative Record, not the sand layer on which Mr. St. John's testimony is based. In his review of the data regarding the activities at the Farina site, Mr. St. John apparently ignored the hydraulic conductivity data and the geologic cross-section maps provided in the Administrative Record, all of which point to the groundwater producing layer being the silty clay layer. Once again, Mr. St. John cherry picked the facts that supported his conclusions and ignored others.

During Mr. St. John's testimony, the Petitioner attempted to admit two documents. One successfully and one unsuccessfully. The first document is a Glossary of Hydrogeology. The Illinois EPA notes that the Petitioner did not attempt to admit the entire glossary, just certain pages that fit their needs. More cherry picking? The other document Mr. St. John relied upon in basing his opinion that indicator contaminants found in gasoline and diesel generally migrate downward when dissolved in groundwater. The document was written concerning diving plumes. There was no testimony at the hearing that those were the conditions at the site. While the contaminants may migrate downward in a diving plume situation, there was no testimony or other evidence presented that they do so during the conditions at the Farina site. The hearing officer took it as an offer of proof while stating that it's not

necessarily relevant. (T., p.185) Mr. St. John cherry picked an article that supported his opinion in favor of the Petitioner even though the same conditions the article was discussing were not present at the site. The Illinois EPA has generally found the most representative sample of indicator contaminants for gasoline and diesel should be from the uppermost water layer as found in the well. Indicator contaminants from gasoline and diesel each have a specific gravity of <1. That means the contaminants weigh less than water. Therefore they will not mix equally in the aquifer, rather the uppermost layer of the aquifer will be the most representative of the contamination located at the site.

As stated repeatedly throughout this brief, the Illinois EPA can only review that which is submitted to it prior to making its determination. Mr. St. John's testimony should be ignored by the Board for its unreliability. Mr. St. John, as in *LeClercq* disregarded relevant data when making his decision. Further, what he testified to is in no way found within the Administrative Record and was not before the Illinois EPA when it conducted its review. Mr. St. John's testimony should be stricken.

The testimony of Carol Rowe:

The testimony of CW3M's Carol Rowe regarded only the monitoring wells and nothing in her testimony contradicted the decision of the Illinois EPA. In fact it confirmed the portions of the record used by the Illinois EPA in making its decision. The following exchange during cross examination is telling:

Ms. Jarvis Q: * * * "Okay. Let's go to page 90 of the Agency record. Do you see the section all the way down at the bottom where it says Groundwater Depth After Drilling? I'd like you to look at pages 90 through 94. That section wasn't filled in by you; is that correct?"

Ms. Rowe A: "No, it wasn't.

Q. Did you determine the groundwater depth after drilling?

A. No, we did not.

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- Q. And if we could go to pages 102 and look for Monitoring Wells 1 through 5. On page 102 if you could read the depth to water.
- A. 10 to 11 well drilling, 97.75 feet static.
- Q. Okay. And the top of the screen?
- A. 95.5 feet.
- Q. So the top of the screen in this well is below water; correct?
- A. Yes.
- Q. It's below the static water level?
- A. Yes.
- Q. Okay. And if you could look through, we'll just try to shortcut this a little bit, that's true for the following wells to Monitoring Well 5?
- A. Correct.
- Q. Now you testified that when you hit moisture around 10 feet you thought you had hit the groundwater level; correct? You thought you had hit groundwater?
- A. Yeah, 10 feet we hit moisture and then it became virtually saturated and we thought we hit groundwater.
- Q. *And that's the information you presented to the Agency; correct?*
- A. *Correct.*
- Q. *And you never presented any information in opposition to that to the Agency; correct?*
- A. *Correct.* (emphasis added)
- Q. So you never told the Agency, hey, we were wrong. This isn't where we hit. Groundwater is actually down here, as Mr. St. John testified in the 12 foot area; is that correct? That was never submitted to the Agency; correct?
- A. Well, we're -- we're still not sure that that unit didn't produce some water. It was either capillary or it was -- it was groundwater.
- Q. But you do understand the Agency relies on the information you submit to it –

A. Correct.

Q. -- in order to make its decision? And for the Agency to understand what you submitted was that groundwater was at 10 feet; correct?

A. Uh-huh. Because it was saturated --

Q. Right.

A. -- you know.

Q. That's the information you submitted to us?

A. Yeah. There's not a magic blue line that says that, okay, you've gone from the capillary fringe to groundwater. And when it's saturated we're saying we're in groundwater --

Q. Okay.

A. -- or at the top of the groundwater table.

Q. *When you set the well screen, did you intend the well to be submerged?*

A. *No.*" (emphasis added)

During the above exchange, Ms. Rowe admitted that the regulations were not followed when she said that groundwater depth after drilling was not determined prior to the installation of the monitoring wells as required per Section 734.425(c)(6). (T. p.120) Determining this information should have been helpful in setting the screens to the correct depth, yet it was not done.

Ms Rowe also agreed that no information was submitted to the Illinois EPA contradicting the original submittal by the Petitioner which stated that groundwater was located in the silty clay layer. (T. p.122) She therefore admitted that the Petitioner never submitted anything to the Illinois EPA which stated that the groundwater was located in the sand layer instead. In fact, Ms. Rowe's testimony states that the possibility exists that the silty clay layer is producing water, as she is "unsure that that layer didn't produce some water" (T. p.122). This appears to contradict the testimony of the Petitioner's own expert witness Mr. St. John. Ms. Rowe also testified that the information submitted to

the Illinois EPA stated that groundwater was located in the silty clay layer because it was saturated during drilling. (T. p.122)

In reviewing plans under the Act, the Illinois EPA must rely on the Professional Engineer or Geologist hired by the owner/operator to make determinations in the field based on conditions encountered at each site. In this case, one such determination would be whether groundwater encountered at the site and depicted in the soil boring logs, monitoring well construction diagrams, and geologic cross-sections is present under confined conditions, causing the hydrostatic pressure to increase the rise of the water column in the well. These determinations are an important component when determining whether the activities in the field are consistent with generally accepting engineering practices. However, as Ms. Rowe testified at the hearing, the Petitioner never submitted this information to the Illinois EPA prior to making its determination.

Finally, Ms. Rowe, states that she did not intend for the well screen to be submerged within the well. (T. p.123) This is consistent with the position of the Illinois EPA. If Ms. Rowe knew the well screen was going to be submerged, she would not have placed the well screen in that manner. The testimony of this professional geologist confirms the decision of the Illinois EPA. The wells were submerged, Sections 734.430(a)(1) and 734.430(a)(3) were not complied with and therefore the monitoring wells were not constructed in a manner to ensure the most representative sampling of the groundwater unit.

On page 15 of its Brief, Petitioner states that the Illinois EPA has approved monitoring wells where the water level rose above the top of the well screen at two other sites. As the Board is well aware, each site that the Illinois EPA handles is different than the next due to site specific conditions and contaminants of concern. It is important to note that the Petitioner fails to tell the Board that it once again cherry-picked what it included in the exhibit on the two cases mentioned. (T. p.105) Upon

cross examination, Ms. Rowe admitted that the geologies at the two other sites were different than the Farina site. (T. p.105-107. 109) She also admitted that they had not produced a complete record of the sites in that all monitoring wells and boring logs were not included in the exhibit. (T. p.110) In fact at one site, they presented documentation for only two out of an estimated 30 monitoring wells. (T. p. 110) The Petitioner picked out information from two cases out of the hundreds that the Illinois EPA handles and then did not even present the full report on each site. In fact the hearing officer specifically did not admit the exhibits and took them only as an offer of proof. Due to the testimony at hearing, the fact that a complete exhibit was not proffered, and the hearing officer's findings, the Board should find this argument unpersuasive.

The Administrative Record, along with the Act and the Board's regulations, clearly supports the Illinois EPA decision that the Petitioner's wells were not constructed in a manner that allows for samples to be taken at the desired interval pursuant to 35 Ill. Adm. Code 734.430.

VIII. THE FINAL DECISION WAS CORRECT

The Petitioner has sought to twist or somehow obfuscate the plain wording of the May 17, 2007 final decision. A simple reading of that decision shows it to be an accurate and sufficient explanation of the Illinois EPA's conclusion. There is nothing in the final decision that is incorrect, inaccurate or unsupported by the documents in the Record.

IX. CONCLUSION

For all the reasons and arguments included herein, the Illinois EPA respectfully requests that the Board affirm the Illinois EPA's May 17, 2007 final decision. The Petitioner has not met even its *prima facie* burden of proof, and certainly has not met its ultimate burden of proof. For these reasons, the Illinois EPA respectfully requests that the Board affirm the Illinois EPA's final decision.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

Respondent

/s/

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This filing submitted on recycled paper.

ATTACHMENT A

Relevant Law

35 Ill. Adm. Code 734.210, Early Action, states as follows:

- a) Upon confirmation of a release of petroleum from an UST system in accordance with regulations promulgated by the OSFM, the owner or operator, or both, must perform the following initial response actions within 24 hours after the release:
 - 1) Report the release to IEMA (e.g., by telephone or electronic mail);
 - 2) Take immediate action to prevent any further release of the regulated substance to the environment; and
 - 3) Identify and mitigate fire, explosion and vapor hazards.
- b) Within 20 days after initial notification to IEMA of a release plus 14 days, the owner or operator must perform the following initial abatement measures:
 - 1) Remove as much of the petroleum from the UST system as is necessary to prevent further release into the environment;
 - 2) Visually inspect any aboveground releases or exposed below ground releases and prevent further migration of the released substance into surrounding soils and groundwater;
 - 3) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product that have migrated from the UST excavation zone and entered into subsurface structures (such as sewers or basements);
 - 4) Remedy hazards posed by contaminated soils that are excavated or exposed as a result of release confirmation, site investigation, abatement or corrective action activities. If these remedies include treatment or disposal of soils, the owner or operator must comply with 35 Ill. Adm. Code 722, 724, 725, and 807 through 815;
 - 5) Measure for the presence of a release where contamination is most likely to be present at the UST site, unless the presence and source of the release have been confirmed in accordance with regulations promulgated by the OSFM. In selecting sample types, sample locations, and measurement methods, the owner or operator must consider the nature of the stored substance, the type of backfill, depth to groundwater and other factors as appropriate for identifying the presence and source of the release; and

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- 6) Investigate to determine the possible presence of free product, and begin removal of free product as soon as practicable and in accordance with Section 734.215 of this Part.
- c) Within 20 days after initial notification to IEMA of a release plus 14 days, the owner or operator must submit a report to the Agency summarizing the initial abatement steps taken under subsection (b) of this Section and any resulting information or data.
- d) Within 45 days after initial notification to IEMA of a release plus 14 days, the owner or operator must assemble information about the site and the nature of the release, including information gained while confirming the release or completing the initial abatement measures in subsections (a) and (b) of this Section. This information must include, but is not limited to, the following:
 - 1) Data on the nature and estimated quantity of release;
 - 2) Data from available sources or site investigations concerning the following factors: surrounding populations, water quality, use and approximate locations of wells potentially affected by the release, subsurface soil conditions, locations of subsurface sewers, climatological conditions and land use;
 - 3) Results of the site check required at subsection (b)(5) of this Section; and
 - 4) Results of the free product investigations required at subsection (b)(6) of this Section, to be used by owners or operators to determine whether free product must be recovered under Section 734.215 of this Part.
- e) Within 45 days after initial notification to IEMA of a release plus 14 days, the owner or operator must submit to the Agency the information collected in compliance with subsection (d) of this Section in a manner that demonstrates its applicability and technical adequacy.
- f) *Notwithstanding any other corrective action taken, an owner or operator may, at a minimum, and prior to submission of any plans to the Agency, remove the tank system, or abandon the underground storage tank in place, in accordance with the regulations promulgated by the Office of the State Fire Marshal (see 41 Ill. Adm. Code 160, 170, 180, 200). The owner may remove visibly contaminated fill material and any groundwater in the excavation which exhibits a sheen. For purposes of payment of early action costs, however, fill material shall not be removed in an amount in excess of 4 feet from the outside dimensions of the tank [415 ILCS 5/57.6(b)]. Early action may also include disposal in accordance with applicable regulations or ex-situ treatment of contaminated fill material removed from within 4 feet from the outside dimensions of the tank.*
- g) For purposes of payment from the Fund, the activities set forth in subsection (f) of this Section must be performed within 45 days after initial notification to IEMA of a release

plus 14 days, unless special circumstances, approved by the Agency in writing, warrant continuing such activities beyond 45 days plus 14 days. The owner or operator must notify the Agency in writing of such circumstances within 45 days after initial notification to IEMA of a release plus 14 days. Costs incurred beyond 45 days plus 14 days must be eligible if the Agency determines that they are consistent with early action.

BOARD NOTE: Owners or operators seeking payment from the Fund are to first notify IEMA of a suspected release and then confirm the release within 14 days to IEMA pursuant to regulations promulgated by the OSFM. See 41 Ill. Adm. Code 170.560 and 170.580. The Board is setting the beginning of the payment period at subsection (g) to correspond to the notification and confirmation to IEMA.

- h) The owner or operator must determine whether the areas or locations of soil contamination exposed as a result of early action excavation (e.g., excavation boundaries, piping runs) or surrounding USTs that remain in place meet the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants.
 - 1) At a minimum, for each UST that is removed, the owner or operator must collect and analyze soil samples as indicated in subsections (h)(1)(A). The Agency must allow an alternate location for, or excuse the collection of, one or more samples if sample collection in the following locations is made impracticable by site-specific circumstances.
 - A) One sample must be collected from each UST excavation wall. The samples must be collected from locations representative of soil that is the most contaminated as a result of the release. If an area of contamination cannot be identified on a wall, the sample must be collected from the center of the wall length at a point located one-third of the distance from the excavation floor to the ground surface. For walls that exceed 20 feet in length, one sample must be collected for each 20 feet of wall length, or fraction thereof, and the samples must be evenly spaced along the length of the wall.
 - B) Two samples must be collected from the excavation floor below each UST with a volume of 1,000 gallons or more. One sample must be collected from the excavation floor below each UST with a volume of less than 1,000 gallons. The samples must be collected from locations representative of soil that is the most contaminated as a result of the release. If areas of contamination cannot be identified, the samples must be collected from below each end of the UST if its volume is 1,000 gallons or more, and from below the center of the UST if its volume is less than 1,000 gallons.

- C) One sample must be collected from the floor of each 20 feet of UST piping run excavation, or fraction thereof. The samples must be collected from a location representative of soil that is the most contaminated as a result of the release. If an area of contamination cannot be identified within a length of piping run excavation being sampled, the sample must be collected from the center of the length being sampled. For UST piping abandoned in place, the samples must be collected in accordance with subsection (h)(2)(B) of this Section.
 - D) If backfill is returned to the excavation, one representative sample of the backfill must be collected for each 100 cubic yards of backfill returned to the excavation.
 - E) The samples must be analyzed for the applicable indicator contaminants. In the case of a used oil UST, the sample that appears to be the most contaminated as a result of a release from the used oil UST must be analyzed in accordance with Section 734.405(g) of this Part to determine the indicator contaminants for used oil. The remaining samples collected pursuant to subsections (h)(1)(A) and (B) of this Section must then be analyzed for the applicable used oil indicator contaminants.
- 2) At a minimum, for each UST that remains in place, the owner or operator must collect and analyze soil samples as follows. The Agency must allow an alternate location for, or excuse the drilling of, one or more borings if drilling in the following locations is made impracticable by site-specific circumstances.
- A) One boring must be drilled at the center point along each side of each UST, or along each side of each cluster of multiple USTs, remaining in place. If a side exceeds 20 feet in length, one boring must be drilled for each 20 feet of side length, or fraction thereof, and the borings must be evenly spaced along the side. The borings must be drilled in the native soil surrounding the UST(s) and as close practicable to, but not more than five feet from, the backfill material surrounding the UST(s). Each boring must be drilled to a depth of 30 feet below grade, or until groundwater or bedrock is encountered, whichever is less. Borings may be drilled below the groundwater table if site specific conditions warrant, but no more than 30 feet below grade.
 - B) Two borings, one on each side of the piping, must be drilled for every 20 feet of UST piping, or fraction thereof, that remains in place. The borings must be drilled as close practicable to, but not more than five feet from, the locations of suspected piping releases. If no release is suspected within a length of UST piping being sampled, the borings must be drilled in the center of the length being sampled. Each boring must be drilled to a depth of 15 feet below grade, or until groundwater or bedrock is encountered, whichever is less. Borings may be drilled below the

groundwater table if site specific conditions warrant, but no more than 15 feet below grade. For UST piping that is removed, samples must be collected from the floor of the piping run in accordance with subsection (h)(1)(C) of this Section.

- C) If auger refusal occurs during the drilling of a boring required under subsection (h)(2)(A) or (B) of this Section, the boring must be drilled in an alternate location that will allow the boring to be drilled to the required depth. The alternate location must not be more than five feet from the boring's original location. If auger refusal occurs during drilling of the boring in the alternate location, drilling of the boring must cease and the soil samples collected from the location in which the boring was drilled to the greatest depth must be analyzed for the applicable indicator contaminants.
 - D) One soil sample must be collected from each five-foot interval of each boring required under subsections (h)(2)(A) through (C) of this Section. Each sample must be collected from the location within the five-foot interval that is the most contaminated as a result of the release. If an area of contamination cannot be identified within a five-foot interval, the sample must be collected from the center of the five-foot interval, provided, however, that soil samples must not be collected from soil below the groundwater table. All samples must be analyzed for the applicable indicator contaminants.
- 3) If the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants have been met, and if none of the criteria set forth in subsections (h)(4)(A) through (C) of this Section are met, within 30 days after the completion of early action activities the owner or operator must submit a report demonstrating compliance with those remediation objectives. The report must include, but not be limited to, the following:
- A) A characterization of the site that demonstrates compliance with the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants;
 - B) Supporting documentation, including, but not limited to, the following:
 - i) A site map meeting the requirements of Section 734.440 of this Part that shows the locations of all samples collected pursuant to this subsection (h);
 - ii) Analytical results, chain of custody forms, and laboratory certifications for all samples collected pursuant to this subsection (h); and

- iii) A table comparing the analytical results of all samples collected pursuant to this subsection (h) to the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants; and C) A site map containing only the information required under Section 734.440 of this Part.
- 4) If the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants have not been met, or if one or more of the following criteria are met, the owner or operator must continue in accordance with Subpart C of this Part:
 - A) There is evidence that groundwater wells have been impacted by the release above the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants (e.g., as found during release confirmation or previous corrective action measures);
 - B) Free product that may impact groundwater is found to need recovery in compliance with Section 734.215 of this Part; or
 - C) There is evidence that contaminated soils may be or may have been in contact with groundwater, unless:
 - i) The owner or operator pumps the excavation or tank cavity dry, properly disposes of all contaminated water, and demonstrates to the Agency that no recharge is evident during the 24 hours following pumping; and
 - ii) The Agency determines that further groundwater investigation is not necessary.

35 Ill. Adm. Code 734.315, Stage 1 Site Investigation, states as follows:

The Stage 1 site investigation must be designed to gather initial information regarding the extent of on-site soil and groundwater contamination that, as a result of the release, exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants.

- a) The Stage 1 site investigation must consist of the following:
 - 1) Soil investigation.
 - A) Up to four borings must be drilled around each independent UST field where one or more UST excavation samples collected pursuant to 734.210(h), excluding backfill samples, exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants. One additional boring must be drilled as close as practicable to each UST field if a groundwater investigation is not required under subsection (a)(2) of this Section. The borings must be

advanced through the entire vertical extent of contamination, based upon field observations and field screening for organic vapors, provided that borings must be drilled below the groundwater table only if site-specific conditions warrant.

- B) Up to two borings must be drilled around each UST piping run where one or more piping run samples collected pursuant to Section 734.210(h) exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants. One additional boring must be drilled as close as practicable to each UST piping run if a groundwater investigation is not required under subsection (a)(2) of this Section. The borings must be advanced through the entire vertical extent of contamination, based upon field observations and field screening for organic vapors, provided that borings must be drilled below the groundwater table only if site-specific conditions warrant.
- C) One soil sample must be collected from each five-foot interval of each boring drilled pursuant to subsections (a)(1)(A) and (B) of this Section. Each sample must be collected from the location within the five-foot interval that is the most contaminated as a result of the release. If an area of contamination cannot be identified within a five-foot interval, the sample must be collected from the center of the five-foot interval. All samples must be analyzed for the applicable indicator contaminants.

2) Groundwater investigation.

A) A groundwater investigation is required under the following circumstances:

- i) There is evidence that groundwater wells have been impacted by the release above the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants;
- ii) Free product that may impact groundwater is found to need recovery in compliance with Section 734.215 of this Part;
or
- iii) There is evidence that contaminated soils may be or may have been in contact with groundwater, except that, if the owner or operator pumps the excavation or tank cavity dry, properly disposes of all contaminated water, and demonstrates to the Agency that no recharge is evident during the 24 hours following pumping, the owner or operator does not have to complete a groundwater investigation, unless the Agency's review reveals that further groundwater investigation is necessary.

- B) If a groundwater investigation is required, the owner or operator must install five groundwater monitoring wells. One monitoring well must be installed in the location where groundwater contamination is most likely to be present. The four remaining wells must be installed at the property boundary line or 200 feet from the UST system, whichever is less, in opposite directions from each other. The wells must be installed in locations where they are most likely to detect groundwater contamination resulting from the release and provide information regarding the groundwater gradient and direction of flow.

- C) One soil sample must be collected from each five-foot interval of each monitoring well installation boring drilled pursuant to subsection (a)(2)(B) of this Section. Each sample must be collected from the location within the five-foot interval that is the most contaminated as a result of the release. If an area of contamination cannot be identified within a five-foot interval, the sample must be collected from the center of the five-foot interval. All soil samples exhibiting signs of contamination must be analyzed for the applicable indicator contaminants. For borings that do not exhibit any signs of soil contamination, samples from the following intervals must be analyzed for the applicable indicator contaminants, provided that the samples must not be analyzed if other soil sampling conducted to date indicates that soil contamination does not extend to the location of the monitoring well installation boring:
 - i) The five-foot intervals intersecting the elevations of soil samples collected pursuant to Section 734.210(h), excluding backfill samples, that exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants.
 - ii) The five-foot interval immediately above each five-foot interval identified in subsection (a)(2)(C)(i) of this Section;
and
 - iii) The five-foot interval immediately below each five-foot interval identified in subsection (a)(2)(C)(i) of this Section.

- D) Following the installation of the groundwater monitoring wells, groundwater samples must be collected from each well and analyzed for the applicable indicator contaminants.

- E) As a part of the groundwater investigation an in-situ hydraulic conductivity test must be performed in the first fully saturated layer below the water table. If multiple water bearing units are encountered, an in-situ hydraulic conductivity test must be performed on each such unit.

- i) Wells used for hydraulic conductivity testing must be constructed in a manner that ensures the most accurate results.
 - ii) The screen must be contained within the saturated zone.
 - 3) An initial water supply well survey in accordance with Section 734.445(a) of this Part.
- b) The Stage 1 site investigation plan must consist of a certification signed by the owner or operator, and by a Licensed Professional Engineer or Licensed Professional Geologist, that the Stage 1 site investigation will be conducted in accordance with this Section.
- c) If none of the samples collected as part of the Stage 1 site investigation exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants, the owner or operator must cease site investigation and proceed with the submission of a site investigation completion report in accordance with Section 734.330 of this Part. If one or more of the samples collected as part of the Stage 1 site investigation exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants, within 30 days after completing the Stage 1 site investigation the owner or operator must submit to the Agency for review a Stage 2 site investigation plan in accordance with Section 734.320 of this Part.

35 Ill. Adm. Code 734.320, Stage 2 Site Investigation, states as follows:

The Stage 2 site investigation must be designed to complete the identification of the extent of soil and groundwater contamination at the site that, as a result of the release, exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants. The investigation of any off-site contamination must be conducted as part of the Stage 3 site investigation.

- a) The Stage 2 site investigation must consist of the following:
 - 1) The additional drilling of soil borings and collection of soil samples necessary to identify the extent of soil contamination at the site that exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants. Soil samples must be collected in appropriate locations and at appropriate depths, based upon the results of the soil sampling and other investigation activities conducted to date, provided, however, that soil samples must not be collected below the groundwater table. All samples must be analyzed for the applicable indicator contaminants; and
 - 2) The additional installation of groundwater monitoring wells and collection of groundwater samples necessary to identify the extent of groundwater contamination at the site that exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants. If soil samples are collected from a monitoring well boring, the samples must be

collected in appropriate locations and at appropriate depths, based upon the results of the soil sampling and other investigation activities conducted to date, provided, however, that soil samples must not be collected below the groundwater table. All samples must be analyzed for the applicable indicator contaminants.

- b) The Stage 2 site investigation plan must include, but not be limited to, the following:
- 1) An executive summary of Stage 1 site investigation activities and actions proposed in the Stage 2 site investigation plan to complete the identification of the extent of soil and groundwater contamination at the site that exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants;
 - 2) A characterization of the site and surrounding area, including, but not limited to, the following:
 - A) The current and projected post-remediation uses of the site and surrounding properties; and
 - B) The physical setting of the site and surrounding area including, but not limited to, features relevant to environmental, geographic, geologic, hydrologic, hydrogeologic, and topographic conditions;
 - 3) The results of the Stage 1 site investigation, including but not limited to the following:
 - A) One or more site maps meeting the requirements of Section 734.440 that show the locations of all borings and groundwater monitoring wells completed to date, and the groundwater flow direction;
 - B) One or more site maps meeting the requirements of Section 734.440 that show the locations of all samples collected to date and analyzed for the applicable indicator contaminants;
 - C) One or more site maps meeting the requirements of Section 734.440 that show the extent of soil and groundwater contamination at the site that exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants;
 - D) One or more cross-sections of the site that show the geology of the site and the horizontal and vertical extent of soil and groundwater contamination at the site that exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants;

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- E) Analytical results, chain of custody forms, and laboratory certifications for all samples analyzed for the applicable indicator contaminants as part of the Stage 1 site investigation;
 - F) One or more tables comparing the analytical results of the samples collected to date to the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants;
 - G) Water supply well survey documentation required pursuant to Section 734.445(d) of this Part for water supply well survey activities conducted as part of the Stage 1 site investigation; and
 - H) For soil borings and groundwater monitoring wells installed as part of the Stage 1 site investigation, soil boring logs and monitoring well construction diagrams meeting the requirements of Sections 734.425 and 734.430 of this Part; and
- 4) A Stage 2 sampling plan that includes, but is not limited to, the following:
- A) A narrative justifying the activities proposed as part of the Stage 2 site investigation;
 - B) A map depicting the location of additional soil borings and groundwater monitoring wells proposed to complete the identification of the extent of soil and groundwater contamination at the site that exceeds the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 for the applicable indicator contaminants; and
 - C) The depth and construction details of the proposed soil borings and groundwater monitoring wells.
- c) If the owner or operator proposes no site investigation activities in the Stage 2 site investigation plan and none of the applicable indicator contaminants that exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 as a result of the release extend beyond the site's property boundaries, upon submission of the Stage 2 site investigation plan the owner or operator must cease site investigation and proceed with the submission of a site investigation completion report in accordance with Section 734.330 of this Part. If the owner or operator proposes no site investigation activities in the Stage 2 site investigation plan and applicable indicator contaminants that exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 as a result of the release extend beyond the site's property boundaries, within 30 days after the submission of the Stage 2 site investigation plan the owner or operator must submit to the Agency for review a Stage 3 site investigation plan in accordance with Section 734.325 of this Part.

- d) If the results of a Stage 2 site investigation indicate that none of the applicable indicator contaminants that exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 as a result of the release extend beyond the site's property boundaries, upon completion of the Stage 2 site investigation the owner or operator must cease site investigation and proceed with the submission of a site investigation completion report in accordance with Section 734.330 of this Part. If the results of the Stage 2 site investigation indicate that applicable indicator contaminants that exceed the most stringent Tier 1 remediation objectives of 35 Ill. Adm. Code 742 as a result of the release extend beyond the site's property boundaries, within 30 days after the completion of the Stage 2 site investigation the owner or operator must submit to the Agency for review a Stage 3 site investigation plan in accordance with Section 734.325 of this Part.

35 Ill. Adm. Code 734.430 Monitoring Well Construction and Sampling, states as follows:

- a) At a minimum, all monitoring well construction must satisfy the following requirements:
- 1) Wells must be constructed in a manner that will enable the collection of representative groundwater samples;
 - 2) Wells must be cased in a manner that maintains the integrity of the borehole. Casing material must be inert so as not to affect the water sample. Casing requiring solvent-cement type couplings must not be used;
 - 3) Wells must be screened to allow sampling only at the desired interval. Annular space between the borehole wall and well screen section must be packed with clean, well-rounded and uniform material sized to avoid clogging by the material in the zone being monitored. The slot size of the screen must be designed to minimize clogging. Screens must be fabricated from material that is inert with respect to the constituents of the groundwater to be sampled;
 - 4) Annular space above the well screen section must be sealed with a relatively impermeable, expandable material such as cement/bentonite grout that does not react with or in any way affect the sample, in order to prevent contamination of groundwater samples and groundwater and avoid interconnections. The seal must extend to the highest known seasonal groundwater level;
 - 5) The annular space must be backfilled with expanding cement grout from an elevation below the frost line and mounded above the surface and sloped away from the casing so as to divert surface water away;
 - 6) Wells must be covered with vented caps and equipped with devices to protect against tampering and damage. Locations of wells must be clearly marked and protected against damage from vehicular traffic or other activities associated with expected site use; and

- 7) Wells must be developed to allow free entry of groundwater, minimize turbidity of the sample, and minimize clogging.
- b) Monitoring well construction diagrams must be completed for each monitoring well. The well construction diagrams must be submitted in the corresponding site investigation plan, site investigation completion report, or corrective action completion report on forms prescribed and provided by the Agency and, if specified by the Agency in writing, in an electronic format.
- c) Static groundwater elevations in each well must be determined and recorded following well construction and prior to each sample collection to determine the gradient of the groundwater table, and must be reported in the corresponding site investigation plan, site investigation completion report or corrective action completion report.

35 III. Adm. Code 734.505 Review of Plans, Budgets, or Reports, states as follows:

- a) The Agency may review any or all technical or financial information, or both, relied upon by the owner or operator or the Licensed Professional Engineer or Licensed Professional Geologist in developing any plan, budget, or report selected for review. The Agency may also review any other plans, budgets, or reports submitted in conjunction with the site.
- b) The Agency has the authority to approve, reject, or require modification of any plan, budget, or report it reviews. The Agency must notify the owner or operator in writing of its final action on any such plan, budget, or report, except in the case of 20 day, 45 day, or free product removal reports, in which case no notification is necessary. Except as provided in subsections (c) and (d) of this Section, if the Agency fails to notify the owner or operator of its final action on a plan, budget, or report within 120 days after the receipt of a plan, budget, or report, the owner or operator may deem the plan, budget, or report rejected by operation of law. If the Agency rejects a plan, budget, or report or requires modifications, the written notification must contain the following information, as applicable:
 - 1) An explanation of the specific type of information, if any, that the Agency needs to complete its review;
 - 2) An explanation of the Sections of the Act or regulations that may be violated if the plan, budget, or report is approved; and
 - 3) A statement of specific reasons why the cited Sections of the Act or regulations may be violated if the plan, budget, or report is approved.
- c) For corrective action plans submitted by owners or operators not seeking payment from the Fund, the Agency may delay final action on such plans until 120 days after it

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receives the corrective action completion report required pursuant to Section 734.345 of this Part.

- d) An owner or operator may waive the right to a final decision within 120 days after the submittal of a complete plan, budget, or report by submitting written notice to the Agency prior to the applicable deadline. Any waiver must be for a minimum of 60 days.
- e) The Agency must mail notices of final action on plans, budgets, or reports by registered or certified mail, post marked with a date stamp and with return receipt requested. Final action must be deemed to have taken place on the post marked date that such notice is mailed.
- f) Any action by the Agency to reject or require modifications, or rejection by failure to act, of a plan, budget, or report must be subject to appeal to the Board within 35 days after the Agency's final action in the manner provided for the review of permit decisions in Section 40 of the Act.
- g) In accordance with Section 734.450 of this Part, upon the approval of any budget by the Agency, the Agency must include as part of the final notice to the owner or operator a notice of insufficient funds if the Fund does not contain sufficient funds to provide payment of the total costs approved in the budget.

35 III. Adm. Code 734.510 Standards for Review of Plans, Budgets, or Reports, states as follows:

- a) A technical review must consist of a detailed review of the steps proposed or completed to accomplish the goals of the plan and to achieve compliance with the Act and regulations. Items to be reviewed, if applicable, must include, but not be limited to, number and placement of wells and borings, number and types of samples and analysis, results of sample analysis, and protocols to be followed in making determinations. The overall goal of the technical review for plans must be to determine if the plan is sufficient to satisfy the requirements of the Act and regulations and has been prepared in accordance with generally accepted engineering practices or principles of professional geology. The overall goal of the technical review for reports must be to determine if the plan has been fully implemented in accordance with generally accepted engineering practices or principles of professional geology, if the conclusions are consistent with the information obtained while implementing the plan, and if the requirements of the Act and regulations have been satisfied.
- b) A financial review must consist of a detailed review of the costs associated with each element necessary to accomplish the goals of the plan as required pursuant to the Act and regulations. Items to be reviewed must include, but are not limited to, costs associated with any materials, activities, or services that are included in the budget. The overall goal of the financial review must be to assure that costs associated with materials, activities, and services must be reasonable, must be consistent with the associated technical plan, must be incurred in the performance of corrective action activities, must not be used for corrective action activities in excess of those necessary

to meet the minimum requirements of the Act and regulations, and must not exceed the maximum payment amounts set forth in Subpart H of this Part.

35 Ill. Adm. Code 734.630, Ineligible Corrective Action Costs, states as follows:

Costs ineligible for payment from the Fund include but are not limited to:

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- o) Costs for corrective action activities and associated materials or services exceeding the minimum requirements necessary to comply with the Act;

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