

ILLINOIS POLLUTION CONTROL BOARD
December 4, 2014

PIASA MOTOR FUELS, INC.,)	
)	
Petitioner,)	
)	
v.)	PCB 14-131
)	(UST Appeal)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

WILLIAM D. INGERSOLL; BROWN, HAY & STEPHENS, LLP; APPEARED ON BEHALF OF PETITIONER, and

SCOTT B. SIEVERS, SPECIAL ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF RESPONDENT.

INTERIM OPINION AND ORDER OF THE BOARD (by J.D. O’Leary):

Petitioner Piasa Motor Fuels, Inc. (Piasa) appeals an April 8, 2014 determination of the Illinois Environmental Protection Agency (Agency or IEPA or Illinois EPA). The Agency modified Piasa’s proposed Stage 2 site investigation plan for its underground storage tank (UST) site at 4101 Alby Street, Alton, Madison County. Piasa disputes the determination disapproving soil boring and sampling below the water table and the resulting modification of its plan. For the reasons stated below, the Board today partially affirms and partially reverses the Agency’s modification of Piasa’s Stage 2 plan.

The Board’s opinion and order begins with a single preliminary matter, and the procedural history and factual background of this case. The Board then summarizes Piasa’s petition for review, Piasa’s post-hearing brief, the Agency’s response, and Piasa’s reply. After providing statutory and legal background, the Board then discusses the issues presented, reaches its conclusion, and issues its order.

PROCEDURAL HISTORY

On May 16, 2014, Piasa filed a petition for review of the Agency’s April 8, 2014 determination (Pet.). On June 5, 2014, the Board accepted the petition for hearing. On July 29 2014, the hearing officer scheduled a hearing on September 10, 2014, in Springfield.

On August 22, 2014, the Agency filed a motion for leave to file the administrative record *instanter* (Mot.) accompanied by the administrative record (R.). Below under “Preliminary Matter,” the Board grants the Agency’s unopposed motion. On September 9, 2014, Piasa filed a motion to supplement the record with a single one-page document, an electronic mail message

from Mr. Shane Thorpe of CSD Environmental Services, Inc. (CSD) to Mr. Karl Kaiser regarding Stage 1 sampling.

The hearing took place as scheduled on September 10, 2014. On September 18, 2014, the Board received the transcript (Tr.). During the hearing, the hearing officer granted Piasa's unopposed September 9, 2014 motion to supplement the record. Tr. at 7. Also during the hearing, the hearing officer admitted into the record four petitioner's exhibits: the resume of Mr. Joseph Truesdale (Exh. 1) (*see* Tr. at 14-15); a 45-Day Report dated July 2006 (Exh. 2) (*see* Tr. at 40); an Amended 45-Day Report dated September 2006 (Exh. 3) (*see* Tr. at 49); and copies of photographs admitted as pages 50-54 of Exhibit 3 (Exh. 4) (*see* Tr. at 49). The hearing officer also admitted into the record one respondent's exhibit, 35 Ill. Adm. Code 734.315. *See* Tr. at 171-72. Although the hearing officer set a deadline of September 24, 2014, to file public comments, the Board has received no public comment on this case.

On October 6, 2014, Piasa filed its post-hearing brief (Pet. Brief). In an order dated October 16, 2014, the hearing officer extended the Agency's deadline to file its post-hearing brief to October 27, 2014, and set a deadline of November 3, 2014, for Piasa to file a reply. On October 27, 2014, the Agency filed its post-hearing brief (Agency Resp.). On November 3, 2014, Piasa filed its reply (Reply).

PRELIMINARY MATTER

On August 22, 2014, the Agency filed a motion for leave to file the administrative record *instanter* accompanied by the administrative record. The motion notes that the Board had directed the Agency to file the record of its determination by June 16, 2014." Mot. at 1. Counsel for the Agency states that he did not receive written appointment as Special Assistant Attorney General or a copy of the record suitable for filing until after that date. *Id.* Counsel adds that, until he received that appointment, he lacked authority to submit filings to the Board on behalf of the Agency. *Id.* The motion adds that Piasa's counsel did not object to the motion for leave to file *instanter*. *Id.*

The Board's procedural rules provide that, "[w]ithin 14 days after service of a motion, a party may file a response to the motion. If no response is filed, the party will be deemed to have waived objection to the granting of the motion, but the waiver of objection does not bind the Board or the hearing officer in its disposition of the motion." 35 Ill. Adm. Code 101.500(d). Having reviewed the substance of the motion and in the absence of any objection to it, the Board grants the unopposed motion for leave to file *instanter*.

FACTUAL BACKGROUND

Administrative Record

Site History

Piasa owns a site located at 4101 Alby Street, Alton (site), which "formerly operated as a gasoline fueling station and automotive service facility." R. at 8. "Based on Office of the

Illinois State Fire Marshal records, three gasoline USTs (6,000-gallon, 4,000-gallon, and 2,000-gallon), one 560-gallon kerosene UST and one 560-gallon used oil UST were installed during 1966.” Exh. 2 at 9; *see id.* at 3, 49. “The 560-gallon kerosene and used oil tanks were taken out of service in November of 1998, and abandoned in place in September of 2000.” Exh. 2 at 9; *see id.* at 3, 11, 44-46. “All remaining UST system(s) at the site were taken out of service on September 2005.” Exh. 2 at 9; *see id.* at 48-49. An automotive service and repair facility now operates at the site. R. at 8; Exh. 2 at 9.

45-Day Report

CSD prepared a 45-Day Report dated July 2006 for Incident No. 2006-0672. Exh. 2 at 1. The Agency received the report on July 21, 2006. *Id.* at 1, 2; *see* R. at 1.

The 45-Day Report indicates that CSD investigated whether there were indications of a release from the UST system by advancing two soil borings. Exh. 2 at 7. Boring B-1, near the abandoned waste oil tank, was advanced to a depth of 16 feet. *Id.* at 7, 15 (site map), 19 (Laboratory Results), 26 (boring log). The boring log reports that “very high moisture” was encountered at a depth of 11 feet and also reports a groundwater depth of 11 feet. *Id.* at 26. The log also shows positive photoionization detector (PID) readings at depths from four to 12 feet. *Id.* Boring B-2, near the pump island, was also advanced to a depth of 16 feet. *Id.* at 7, 15, 20-21, 27. The boring log reports “very soft & wet” soil at a depth of approximately 10 feet and also reports a groundwater depth of 10 feet. *Id.* at 27. The log also shows positive PID readings at depths from two to 16 feet. *Id.*

The 45-Day Report noted that “[n]oticeably saturated sediments were encountered by CSD at approximately ten (10) to eleven (11) feet below the ground surface. However, no wells have been installed yet to measure static groundwater levels.” Exh. 2 at 8; *see id.* at 26-27. “Results of laboratory analysis indicated concentrations of benzene and MTBE above the Tier 1 clean-up objectives for residential land use.” *Id.* at 9, citing 35 Ill. Adm. Code 742; *see* Exh. 2 at 7, 10 (Table 1), 19-20. Specifically, a soil sample from boring B-2 at a depth of 12 feet exceeded Tier 1 objectives for benzene and MTBE. *Id.* at 10. The Report included a Stage 1 Site Investigation Certification by Joseph W. Truesdale, P.E., P.G. dated July 20, 2006. *Id.* at 6.

The Report states that “[n]o tanks have been removed from the subject site.” Exh. 2 at 11. The Report also states that no soil or backfill material had been excavated from the site. *Id.* at 4, 11. The Report adds that “[a]pplication for permit for removal of the remaining three (3) USTs was submitted to the Office of the Illinois State Fire Marshal (OSFM) on July 3, 2006. The remaining USTs will be removed as soon as the OSFM approves the removal permit.” *Id.* at 9.

In a letter dated July 31, 2006, the Agency stated that it had received a 45-Day Report, including a Stage 1 Site Investigation Plan and Budget certification, for Incident No. 20060672 at the site. R. at 1-2. The letter further states that, “[a]t a later time, the Illinois EPA will conduct a full technical review of the 45-Day Report and any other report submitted pursuant to Section 57.6 of the Act and 35 Ill. Adm. Code 734.Subpart B, in conjunction with any other plan or report selected for review (35 Ill. Adm. Code 734.505).” *Id.* at 1. The Agency stated that,

pursuant to Piasa's certification, "the Stage 1 Site Investigation Plan is approved and must be conducted in accordance with 35 Ill. Adm. Code 734.315." *Id.* The Agency stated that "[y]ou must proceed with the Stage 1 site investigation in accordance with 35 Ill. Adm. Code 734.315." *Id.* The Agency added that "a site investigation plan and budget for the subsequent stage of investigation (including the results of the Stage 1 site investigation and a summary of actual costs) or a site investigation completion report (if the extent of contamination is defined) must be submitted within 90 days of the date of this letter." *Id.* at 1-2.

OSFM Determination

On August 9, 2006, the Office of the State Fire Marshal determined that Piasa was eligible to seek payment for costs in excess of \$10,000 in response to Incident No. 0600672. R. at 195-97.

Amended 45-Day Report

CSD prepared an amended 45-Day Report dated September 2006 for Incident No. 2006-0672. Exh. 3 at 1. The Agency received the report on September 22, 2006. *Id.* at 1, 2.

The Amended 45-Day Report states that, "[o]n August 23, 2006, the 2,000, 4,000, and 6,000 gallon gasoline tanks were removed." Exh. 3 at 10. The Report also states that "[a] total of approximately 236.11 cubic yards (354.17 tons) of contaminated backfill material was excavated from the two tank pits. . . ." *Id.*; *see id.* at 4, 56 (landfill invoice). The Report included a Stage 1 Site Investigation Certification by Joseph W. Truesdale, P.E., P.G. dated September 22, 2006. *Id.* at 6.

The Amended 45-Day Report submitted results of the analyses of samples from the excavations. Exh. 3 at 9, 15 (map of samples locations), 18-44. From Pit 1, CSD obtained samples TP-21 and TP-22 from the floor of the excavation at a depth of 13 feet, samples TP-15, TP-16, TP-17, and TP-18 from the end walls of the excavation, and samples TP-11, TP-12, TP-13, TP-14, TP-19, and TP-20 from the side walls of the excavation. *Id.* at 9 (soil results), 15; *see Tr.* at 46. Samples TP-11, TP-14, TP-15, TP-16, TP-19, TP-20, TP-21, and TP-22 showed concentrations of benzene above the Tier 1 clean-up objectives for residential land use. Exh. 3 at 9, 30, 33-35, 38-41. Samples TP-20 and TP-22 showed concentrations of toluene above the Tier 1 clean-up objectives for residential land use. *Id.* at 9, 39, 41. Samples TP-11, TP-20, TP-21, and TP-22 showed concentrations of ethylbenzene above the Tier 1 clean-up objectives for residential land use. *Id.* at 9, 30, 39-41. Samples TP-20 and TP-22 showed concentrations of total xylenes above the Tier 1 clean-up objectives for residential land use. *Id.* at 9, 39, 41. Finally, samples TP-21 and TP-22 showed concentrations of MTBE above the Tier 1 clean-up objectives for residential land use. *Id.* at 9, 40-41.

From Pit 2, CSD obtained samples TP-1 and TP-2 from the floor of the excavation at a depth of 13 feet, samples TP-3, TP-4, TP-7, and TP-8 from the end walls of the excavation, and samples TP-5, TP-6, TP-9, and TP-10 from the side walls of the excavation. Exh. 3 at 9, 15; *see Tr.* at 45-46. Each of the ten samples from Pit 2 showed concentrations of benzene above the Tier 1 clean-up objectives for residential land use. Exh. 3 at 9, 20-29. Sample T-1 showed a

concentration of ethylbenzene above the Tier 1 clean-up objectives for residential land use. *Id.* at 9, 20.

January 2012 Stage 3 Plan and Budget

CSD prepared a Stage 3 Site Investigation Plan and Budget dated January 2012 for Incident No. 2006-0672 at the site. R. at 3-229. The Agency received the plan and budget on January 11, 2012. *Id.* at 3. The proposal includes results of site investigation activities completed during Stage 1 and Stage 2. *Id.* at 9-15. The proposal also includes actual costs for Stage 1 (*id.* at 198-208) and Stage 2 (*id.* at 198, 209-218) site investigations and proposed costs for a Stage 3 site investigation (*id.* at 198, 219-29).

At Stage 1, CSD and Heartland Drilling & Remediation “advanced a total of twelve (12) soil borings (B-3 through B-14), five of which were completed as monitoring wells (MW-1 through MW-5), on November 27 and 28, 2006.” R. at 11. “A total of four soil samples were submitted from each soil boring for laboratory chemical analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl-tertiary butyl ether (MTBE), with the exception of boring B-13 where three samples were submitted for laboratory analysis.” *Id.*; *see id.* at 11-12 (Table 2.0 Summary of Stage 1 Soil BTEX and MTBE Results). The results of Stage 1 activities include soil boring logs (*id.* at 143-67) and monitoring well completion reports (*id.* at 169-73). CSD also submitted laboratory analytical results and certifications. *Id.* at 25-142.

Soil boring B-3, located southeast of pit 2 at the site (R. at 21 (map of Stage 1 sample locations)), encountered groundwater at a depth of 10 feet (*id.* at 9, 146, 320) and was drilled to a depth of 20 feet (*id.* at 9, 146, 320). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 3 feet to a depth of 17 feet. R. at 146, 320; *see* Tr. at 114-16.

Soil samples were drawn from B-3 at depths of 3, 10, 14, and 17.5 feet and designated as A, B, C, and D, respectively. R. at 9. Sample B-3B exceeded the Tier 1 soil remediation objective for benzene, sample B-3C exceeded the objectives for benzene and MTBE, and sample B-3D exceeded the objective for MTBE. *Id.* at 11 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 67-70 (Laboratory Results), 241 (Table 2.0).

Soil boring B-4, which was finished as MW-1, was drilled northeast of Pit 2 at the site. R. at 21. B-4 encountered groundwater at a depth of 9.5 feet (*id.* at 9, 147, 321) and was drilled to a depth of 20 feet. (*id.* at 9, 147, 321). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 7 feet to a depth of 17 feet. R. at 147, 321; *see* Tr. at 116.

Soil samples were drawn from B-4 at depths of 5.5, 10, 14, and 17 feet and designated as A, B, C, and D, respectively. R. at 9. Sample B-4A exceeded the Tier 1 soil remediation objective for benzene, sample B-4B exceeded the objectives for benzene and MTBE, sample B-4C exceeded the objectives for benzene, ethylbenzene, xylenes, and MTBE, and sample B-4D exceeded the objectives for benzene and MTBE. *Id.* at 11 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 47-50 (Laboratory Results), 241 (Table 2.0).

Soil boring B-5, which was finished as MW-2, was drilled northwest of Pit 2 at the site. R. at 21. B-5 encountered groundwater at a depth of 9 feet (*id.* at 9, 148, 322) and was drilled to a depth of 20 feet (*id.* at 9, 148, 322). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 10 feet to a depth of 17 feet. R. at 148, 322; *see* Tr. at 116.

Soil samples were drawn from B-5 at depths of 3, 10, 14, and 17.5 feet and designated as A, B, C, and D, respectively. R. at 9. Samples B-5B and B-5C exceeded the objectives for benzene and MTBE, and sample B-5D exceeded the objective for benzene. *Id.* at 11 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 43-46 (Laboratory Results), 241 (Table 2.0).

Soil boring B-6, located southwest of Pit 2 at the site (R. at 21), encountered groundwater at a depth of 9 feet (*id.* at 9, 149, 323) and was drilled to a depth of 20 feet (*id.* at 9, 149, 323). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 4 feet to a depth of 16 feet. R. at 149, 323; *see* Tr. at 116.

Soil samples were drawn from B-6 at depths of 3, 9.5, 13, and 16.5 feet and designated as A, B, C, and D, respectively. R. at 9. Sample B-6A exceeded the Tier 1 soil remediation objective for benzene and xylenes, sample B-6B exceeded the objectives for benzene, toluene, and xylenes, sample B-6C exceeded the objectives for benzene, ethylbenzene, xylenes, and MTBE, and sample B-6D exceeded the objective for benzene. *Id.* at 11 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 51-54 (Laboratory Results), 242 (Table 2.0).

Soil boring B-7, located southwest of Pit 2 at the site (R. at 21), encountered groundwater at a depth of 9 feet (*id.* at 9, 150, 324) and was drilled to a depth of 20 feet (*id.* at 9, 150, 324). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 4 feet to a depth of 16 feet. R. at 150, 324; *see* Tr. at 116.

Soil samples were drawn from B-7 at depths of 3, 9.5, 14, and 17 feet and designated as A, B, C, and D, respectively. R. at 9. Sample B-7A exceeded the Tier 1 soil remediation objectives for benzene and xylenes, samples B-7B and B-7C exceeded the objectives for benzene, xylenes, and MTBE, and sample B-7D exceeded the objective for benzene. *Id.* at 11 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 55-58 (Laboratory Results), 242 (Table 2.0).

Soil boring B-8, located between Pit 1 and Pit 2 at the site (R. at 21), encountered groundwater at a depth of 10 feet (*id.* at 9, 151, 325) and was drilled to a depth of 20 feet (*id.* at 9, 151, 325). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 3 feet to a depth of 18 feet. R. at 151, 325; *see* Tr. at 116.

Soil samples were drawn from B-8 at depths of 3, 10, 14, and 18.5 feet and designated as A, B, C, and D, respectively. R. at 9-10. Sample B-8A exceeded the Tier 1 soil remediation objectives for benzene, xylenes, and MTBE, samples B-8B and B-8C exceeded the objectives for benzene, ethylbenzene, xylenes, and MTBE, and sample B-8D exceeded the objectives for benzene and MTBE. *Id.* at 11 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 71-74 (Laboratory Results), 242 (Table 2.0).

Soil boring B-9, located between Pit 1 and Pit 2 at the site (R. at 21), encountered groundwater at a depth of 9.5 feet (*id.* at 10, 152, 326) and was drilled to a depth of 20 feet (*id.* at 10, 152, 326). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 3 feet to a depth of 18 feet. R. at 152, 326.

Soil samples were drawn from B-9 at depths of 3, 10, 14, and 18.5 feet and designated as A, B, C, and D, respectively. R. at 10. Sample B-9A exceeded the Tier 1 soil remediation objectives for benzene, xylenes, and MTBE, samples B-9B and B-9C exceeded the objectives for benzene, ethylbenzene, xylenes, and MTBE, and sample B-9D exceeded the objectives for benzene and MTBE. *Id.* at 11-12 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 75-78 (Laboratory Results), 242 (Table 2.0).

Soil boring B-10, which was finished as MW-3, was drilled northwest of Pit 1 and southwest of Pit 2 at the site. R. at 21. B-10 encountered groundwater at a depth of 10 feet (*id.* at 10, 153, 327) and was drilled to a depth of 20 feet (*id.* at 10, 153, 327). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 6 feet to a depth of 17 feet. R. at 327.

Soil samples were drawn from B-10 at depths of 3, 10, 14, and 17.5 feet and designated as A, B, C, and D, respectively. R. at 10. Sample B-10B exceeded the Tier 1 soil remediation objective for benzene, and sample B-10C exceeded the objectives for benzene and xylenes. *Id.* at 12 (Table 2.0 - Table 2.0 – Summary of Stage 1 Soil BTEX & MTBE Results), 79-82 (Laboratory Results), 242 ().

Soil boring B-11, located west of Pit 1 at the site (R. at 21), encountered groundwater at a depth of 8 feet (*id.* at 10, 154, 328) and was drilled to a depth of 16 feet (*id.* at 10, 154, 328). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 5 feet to a depth of 14 feet. R. at 328.

Soil samples were drawn from B-11 at depths of 3, 8.5, 12, and 15.5 feet and designated as A, B, C, and D, respectively. R. at 10. Samples B-11B and B11-C exceeded the Tier 1 soil remediation objective for benzene. *Id.* at 12 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 35-38 (Laboratory Results), 242 (Table 2.0).

Soil boring B-12, which was finished as MW-4, was drilled southeast of Pit 1 at the site (R. at 21). B-12 encountered groundwater at a depth of 9 feet (*id.* at 10, 155, 329) and was drilled to a depth of 20 feet (*id.* at 10, 155, 329). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 7 feet to a depth of 18 feet. R. at 329.

Soil samples were drawn from B-12 at depths of 3, 9, 13, and 18.5 feet and designated as A, B, C, and D, respectively. R. at 10. Sample B-12A exceeded the Tier 1 soil remediation objective for benzene, sample B-12B exceeded the objectives for benzene, ethylbenzene, and xylenes, samples B-12C and B-12D exceeded the objectives for benzene, xylenes, and MTBE. *Id.* at 12 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 28-31 (Laboratory Results), 242 (Table 2.0).

Soil boring B-13, located within the boundaries of Pit 1 at the site (R. at 21), encountered groundwater at a depth of 9.5 feet (*id.* at 10, 156, 330) and was drilled to a depth of 20 feet (*id.* at 10, 156, 330). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 15 feet to a depth of 20 feet. R. at 330.

Soil samples were drawn from B-13 at depths of 15, 17.5, and 19.5 feet and designated as A, B, and C, respectively. R. at 10. Sample B-13A exceeded the Tier 1 soil remediation objectives for benzene, ethylbenzene and xylenes, sample B-13B exceeded the objectives for benzene, and xylenes, and sample B-13C exceeded the objective for benzene. *Id.* at 12 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 32-34 (Laboratory Results), 242 (Table 2.0).

Soil boring B-14, which was finished as MW-5, was drilled located east of Pit 1 at the site (R. at 21). B-14 encountered groundwater at a depth of 8 feet (*id.* at 10, 157, 331) and was drilled to a depth of 20 feet (*id.* at 10, 157, 331). The boring log reports an “odor” or “slight” odor of gasoline from a depth of 3 feet to a depth of 18 feet. R. at 331.

Soil samples were drawn from B-14 at depths of 3, 9, 13.5, and 19 feet and designated as A, B, C, and D, respectively. R. at 10. All four samples from B-14 exceeded the Tier 1 soil remediation objective for benzene, and sample B-14C also exceeded the objective for ethylbenzene. R. at 12 (Table 2.0 - Summary of Stage 1 Soil BTEX & MTBE Results), 39-42 (Laboratory Results), 242 (Table 2.0).

In addition to soil sampling, “[g]roundwater samples were obtained from each monitoring well (MW-1 through MW-5) location on December 14, 2006 and submitted for laboratory analyses of BTEX and MTBE.” R. at 12. On that date, depth to groundwater ranged from 3.0 feet in MW-1 to 5.65 feet in MW-4. *Id.* (Table 3.0); *see* Tr. at 53-54. Each of the five samples exceeded the Class 1 groundwater remediation objectives for benzene and MTBE. R. at 13 (Table 4.0). MW-4 also exceeded the objectives for ethylbenzene and total xylenes, and MW-5 also exceeded the objective for ethylbenzene. *Id.*; *see id.* at 90-93 (Laboratory Results).

CSD reported actual costs of \$19,473.17 for Stage 1 activities. R. at 198. Costs included five borings for monitoring wells and seven soil investigation borings with total drilling costs of \$4,407.20. *Id.* at 200. Costs also included installation of the five monitoring wells with total installation costs of \$1,356.80. *Id.* Among the budgeted analytical costs were 47 soil samples and five groundwater samples analyzed for BETX with MTBE. *Id.* at 201. The budget included total analytical costs of \$4,726.89. *Id.* at 198.

Agency Review of Stage 3 Plan and Budget

The Agency’s technical review notes dated April 8, 2014 state that CSD was advised that no Stage 2 plan and budget had been submitted, and that the Agency therefore could not review the Stage 3 proposal. R. at 354. The notes also report that “the Stage I and Stage II actual costs budgets included costs for soil samples that were taken below the water table.” *Id.* The notes state that CSD had agreed to withdraw the proposal until submission of a Stage 2 plan and budget, which would also address samples taken from below the water table. *Id.*

In a May 7, 2012 letter to the Agency regarding Incident No. 060672, CSD addressed the costs for Stages 1 and 2, and the proposed Stage 3 plan and budget submitted on January 11, 2012. R. at 230, 231. CDS requested “that the Agency suspend their review of these documents until receipt of a revised Stage 2 Plan and Budget currently being completed for submittal to the Agency.” *Id.* The Agency received the letter on May 15, 2012. *Id.*; *see id.* at 354 (UST Technical Review Notes).

March 2014 Stage 2 Plan and Budget

CSD prepared a Stage 2 Site Investigation Plan and Budget dated March 2014 for Incident No. 2006-0672 at the site. R. at 232-352. The Agency received the plan and budget on March 14, 2014. *Id.* at 234; *see id.* at 354 (UST Technical Review Notes). In a letter to the Agency, CSD stated that “[t]his Stage 2 Site Investigation Plan summarizes the investigation activities performed under Stage 1, and proposed additional activities as part of a Stage 2 Site Investigation.” *Id.* at 235. CSD further stated that “the proposed work has already been completed and documented within the Stage 3 Site Investigation Plan and Budget submitted on January 11, 2012.” *Id.* CSD requested that the Agency review the proposed Stage 3 plan and budget after review of the Stage 2 proposal. *Id.*

The Stage 2 proposal includes results of site investigation activities completed during Stage 1. R. at 240-43. The Agency’s technical review notes dated April 8, 2014, state that the proposed Stage 2 plan outlined Stage 2 activities previously submitted with the proposed Stage 3 plan and budget. R. at 355. The notes state that “[t]he costs associated with sampling below the water table were still included in the budget. No Stage I actual costs were included.” R. at 355.

The proposal also included a budget for Stage 2 site investigation activities. *Id.* at 340. The budgeted costs included seven borings for MW-6 through MW-12 and one soil boring with total drilling costs of \$3,561.48. *Id.* at 341. The budget also included the installation of the seven monitoring wells with total costs of \$2,445.80. *Id.* Among the budgeted analytical costs were 24 soil samples and 12 water samples analyzed for BETX with MTBE. *Id.* at 342. The budget included 48 EnCore samples with total analytical costs of \$4,043.00. *Id.* at 343.

On March 25, 2014, Karl Kaiser of the Agency performed technical review of the Stage 2 plan and budget submitted for Incident No. 20060272. R. at 353. His review notes report that

[t]his submittal was a follow up to the Stage III Plan and budget that they withdrew 5/12/2012. The Plan was withdrawn due to the fact that no Stage II plan + budget was ever submitted. The Stage III included Stage I and II actual costs. At the time they were notified that the Stage I and II activities included soil sampling below the water table that needed to be removed.

This submittal did not remove such costs and was just a Stage II Plan + Budget with original costs.

I contacted them on these issues and the requested verification of such denial.

The issue of samples below the water table was discussed in the 3/25/2014 managers meeting. They confirmed my understanding that Stage I samples below the water table were not warranted along with Stage II denial of samples below the water table.

The plan will be modified to exclude such activities and costs. Both Stage I and II. *Id.*

On April 8, 2014, Mr. Kaiser continued his review. He noted that CSD agreed to withdraw the Stage 3 plan and budget “until such time that the Stage II plan & Budget could be submitted for review. They would also address the issue of the samples below the water table. Average depth to groundwater was approx. 8.8 ft. The report identified sample below water table.” *Id.* at 354. Mr. Kaiser also noted that “[t]he Stage II plan & budget basically outlined the activities performed as noted in the Stage II actual costs budget previously submitted with the Stage III plan and budget submittal. The costs associated with sampling below the water table were still included in the budget. No Stage I actual costs were included.” *Id.* at 355. Mr. Kaiser noted that “[i]t was determined that the plan would be modified to exclude sampling below the water table. The budget denied due to the above modification.” *Id.* His review added that “[a]n amended budget is needed for Stage II. A Stage III plan and budget/Stage I + II actual costs could be reviewed after clarification of Stage II budget issues and Stage I actual costs, with regards to soil samples below water table.” *Id.*

Agency Decision

In a letter dated April 8, 2014, the Agency stated that it had reviewed the Stage 2 Site Investigation Plan for Incident No. 20060672 received on March 14, 2014. R. at 356. The Agency conditionally approved the plan with modifications. *Id.*, citing 415 ILCS 5/57.7(a)(1), 57.7(c) (2012); 35 Ill. Adm. Code 734.505(b), 734.510(a); *see* R. at 355 (review notes). The Agency first stated that

[i]t is the Illinois EPA’s understanding that the activities noted in this plan have already been completed, without prior Illinois EPA approval. Please be advised that Illinois EPA does not approve of the soil sampling that was performed below the water table. It has not been demonstrated that such samples were warranted as part of Stage I and such samples are specifically prohibited in Stage II. Therefore the Illinois EPA is modifying the plan to exclude all activities associated with such sampling. The associated budgets must reflect the same exclusions. R. at 356.

The Agency also noted that it had not received actual costs for Stage 1 site investigation. *Id.* The Agency advised Piasa that, “*pursuant to the above modification the Stage I actual costs should not include costs associated with soil sampling below the water table.*” *Id.* (emphasis in original), citing 415 ILCS 5/57.7(a)(2), 57.7(c) (2012); 35 Ill. Adm. Code 734.505(b), 734.510(b). The Agency continued by rejecting elements of the Stage 2 budget and costs. R. at 357, citing 415 ILCS 5/57.7(a)(2), 57.7(c) (2012); 35 Ill. Adm. Code 734.505(b), 734.510(b).

The Agency advised Piasa that, “pursuant to the above modification the Stage II Budget/Actual Costs cannot be assessed at this time due to the fact that it includes costs associated with soil sampling below the water table that the Illinois EPA has rejected.” R. at 357 (emphasis in original).

Hearing Testimony

Mr. Joseph Truesdale

Mr. Truesdale was called as a witness by Piasa. Tr. at 9. Mr. Truesdale holds Bachelor’s degrees in environmental engineering and in applied geology and hydrogeology and has completed additional courses in related fields. Exh. 1 at 1 (resume); *see* Tr. at 10-11. He has been employed since 1998 by CSD, where he acts as managing agent, professional engineer, and senior professional hydrogeologist. *See* Tr. at 12-13; Exh. 1. Mr. Truesdale is licensed in Illinois as a professional engineer and professional geologist. Exh. 1 at 2; *see* Tr. at 13.

Mr. Truesdale testified that, “when we advance a soil boring, we pull a core sample from that soil boring using thin wall tube sampling.” Tr. at 28. He testified that this sampling intends “to produce an undisturbed sample that yields more representative information about what’s occurring in the subsurface.” *Id.* at 29. Mr. Truesdale testified that the core is first examined visually for any distinctions or contrasts that indicate transitions between soil types. *Id.* at 30. The soil cores are evaluated, classified using manual/visual classification, and then screened for visual/olfactory evidence of petroleum contamination or PID response. *Id.* at 29, 31. Mr. Truesdale stated that an American Society of Testing and Materials standard outlines a visual and manual classification for the description of soil types in a soil core. *Id.* at 37. He added that a PID response of zero indicates that “there are no petroleum products or organic chemicals that produce organic vapors are present in the subsurface at those particular depths.” *Id.* at 32.

Soil borings report groundwater depth while drilling, and Mr. Truesdale testified that this depth is the point at which the geologist “was actually able to virtually observe moisture in a core sample or groundwater in a core sample.” Tr. at 34; *see id.* at 52. He distinguished this level from the groundwater table, testifying that “[t]here’s no observable degree of saturation, moisture or groundwater that could be uniquely associated with the groundwater table, which is a pressure surface defined as the location where the pore water pressure is equal to atmospheric pressure. *Id.* at 35-36; *see id.* at 53, 67. He added that the groundwater table is dynamic and can only be observed in a monitoring well at a specific place and time. *Id.* at 36; *see id.* at 68, 70. Mr. Truesdale testified that drilling should continue “[u]ntil there is no indication that continual migration of organic chemicals is occurring based on field screening. . . .” *Id.* at 73.

Mr. Truesdale also testified that the height of the column of water coming up into a boring is also insufficient to determine the groundwater table. Tr. at 70-71. He stated that direct push boring causes a smearing effect on the outside of the tube, which limits infiltration of groundwater, particularly in fine-grained soils. *Id.* at 71. He further stated that it is necessary to wait for static conditions in order to determine the water table. *Id.* He added that there is no way to determine how long it would take to reach static conditions because it is not possible to know the effect friction has had on the bore hole. *Id.*

Mr. Truesdale testified that early action activities at the site included taking samples from the floor and walls of the two tank excavations. Tr. at 44-46. He added that the tank floor at a depth of 13 feet was accessible, indicating that there was no water at the bottom. *Id.* at 46. Because there was no free flow of groundwater into the open excavation, Mr. Truesdale testified that he could conclude that the groundwater table was below 13 feet. *Id.* at 51.

Mr. Truesdale testified that soil sampling requirements for monitoring well development differ from requirements for soil borings. Tr. at 65-66. He testified that, under regulations applying to monitoring wells, “[y]ou collect samples based on the maximum PID reading or the highest evidence of visual and olfactory organic vapor occurrence for every five-foot interval through the extent of contamination.” Tr. at 66-67, citing 35 Ill. Adm. Code 734.315(a)(2). He further testified that the water table is not a factor in this sampling. Tr. at 67.

Mr. Truesdale testified that monitoring wells are not present at the start of a Stage 1 investigation. Tr. at 68. He added that, in the absence of those wells, there was no way for field staff to know where the groundwater table was at a specific time and location. *Id.* at 75.

Mr. Truesdale testified that, in his opinion, there were field observations at this site “showing site-specific conditions warranting drilling through the water table.” Tr. at 68. He further testified that “[n]ormal contaminant fate and transport for any fine grain soil would almost always necessitate drilling below the water table and evaluation of the distribution of soil phase contaminants absorbed to the solids within the water bearing unit.” *Id.* at 68-69. Mr. Truesdale stated that, at a typical UST site in Illinois, the requirement to justify drilling below the water table with site-specific conditions “would never be applicable.” *Id.* at 86; *see id.* at 76. He further stated that “[s]ite-specific conditions with glacial geology, with a typical LUST site in Illinois, always provides site-specific conditions that dictate drilling below the water table.” *Id.* at 85. He stated that there are Illinois environments where sampling below the water table may not be necessary: “alluvial, sand and gravel, [and] valley terrains.” *Id.* at 86. He added that, “[i]f there’s a large vertical separation between the source and observed groundwater and visual olfactory evidence or field screening of organic vapors, that indicates that migration ceases before groundwater is observed in a boring,” then sampling below the water table would not be necessary. *Id.*

Mr. Brandon Hargrave

Mr. Hargrave was called as a witness by Piasa. Tr. at 88. Mr. Hargrave has been employed since June of 2012 by the Agency in the solid waste permit section of its Bureau of Land. *Id.* at 88-89, 100. Before working for the Agency, he was a staff geologist for CSD. *Id.* at 89, 101.

Mr. Hargrave testified that he was present at the site during the tank removal and while soil samples were taken from the tank excavation. Tr. at 122-26, citing Exh. 3 at 15, 44.

Mr. Hargrave testified that soil borings intend to catalog soil types and search for evidence of contamination. Tr. at 103. A single boring can establish the vertical extent of

contamination, and multiple borings can establish the horizontal extent. *Id.* at 103-04. He testified that borings are advanced with four-foot steel tubes, which produce soil cores for observation. *Id.* at 105. Mr. Hargrave testified that he visually determined soil types on the basis of his training and also took readings using a PID. *Id.* at 106.

Mr. Hargrave testified that the depth of a boring at a UST site varied with conditions. Tr. at 108. He added that, if a boring showed signs of contamination, he would continue boring until soil cores no longer showed those signs. *Id.*; *see id.* at 119-20.

Mr. Hargrave testified that he physically extracted soil samples and prepared the boring logs and monitoring well completion reports in the Stage 2 Site Investigation Plan and Budget. Tr. at 99, 111; *see R.* at 232-352. He testified that the 12 Stage 1 Site Investigation Borings were drilled to a depth of 20 feet with the exception of one drilled to a depth of 16 feet. Tr. at 111-12, citing R. at 240-41 (Table 1). He further testified that the summary of Stage 1 borings reports groundwater depth in boring, the depth at which he encountered the groundwater table. Tr. 112; *see R.* at 240-41. He testified that he determined the level of the groundwater table “[i]nside the boring, that’s where the – you kind of have a change from, you know, a dryer soil into a wetter soil. That’s where you kind of – that’s where you kind of surmise there might be a groundwater table right there.” Tr. at 126-27.

Mr. Hargrave testified that he was the geologist whose initials appeared on the boring logs for boring B-1 at the site. Tr. at 96, citing R. at 144 (dated June 2006). He testified that the column marked “OVA/PID” shows numbers reflecting PID readings of the hydrocarbons released by soil samples. Tr. at 96; *see R.* at 144.

Mr. Hargrave testified that he was the geologist whose initials appeared on the boring logs for soil borings B-3 through B-14 at the site. Tr. at 94, citing R. at 320-331 (dated November 2006). He testified that the column marked “OVA/PID” on those boring logs ordinarily shows numbers taken from a PID. Tr. at 95-96, 114. He added that, because they did not have a working PID at the site on the day the borings were advanced, he recorded an olfactory or visual sense of any soil contamination. *Id.* at 95, 114; *see R.* at 320-31. He testified that his descriptions, “slight” or “odor,” or “ND” for no detection, were not standard practice because the log usually reports a number recorded by a PID. Tr. at 95-96.

Mr. Hargrave also testified that the boring log for B-3 reports groundwater depth while drilling of 10 feet. Tr. at 96-97, citing R. at 320. He testified “[t]hat means that we encountered the groundwater table at a depth of ten feet.” Tr. at 97. His testimony defined “groundwater table” as the depth below the ground surface at which groundwater is generally encountered. *Id.* Mr. Hargrave testified that, where his boring logs indicate groundwater table, he determined that level by analyzing soil cores for changes from drier to wetter soil. *Id.* at 126-27.

Mr. Karl Kaiser

Mr. Kaiser was called as a witness by Piasa. Tr. at 130. Mr. Kaiser is an environmental protection specialist and has worked for the Agency for approximately 23 years. *Id.* at 148. His duties include review, approval, denial, and modification of budget plans in the UST program.

Id. at 147-48. He has served as the Agency's assigned project manager for the site. *Id.* at 131, 149.

Mr. Kaiser testified that, after Piasa submitted its amended 45-Day Report in 2006, its next submission was the Stage 3 Site Investigation Plan and Budget the Agency received in January 2012. Tr. at 150-52, citing R. at 3-229. He further testified that, after receiving and performing an initial review of Piasa's Stage 3 submission, he spoke with Mr. Truesdale. Tr. at 152-53. Because Piasa had never submitted a Stage 2 Site Investigation Plan and Budget to the Agency, Mr. Kaiser felt that he could not review the actual costs for Stage 1 and Stage 2. *Id.* at 153. He testified that he suggested to Mr. Truesdale "that they suspend review on this particular report at such time that would give them the opportunity to submit a Stage 2 Plan and Budget so that it would bring things back into the normal progression of submittal of the plans and reports to the Agency." *Id.* He believed that this conversation resulted in a May 7, 2012 letter from CSD, which requested that the Agency suspend review of the Stage 3 plan and budget. *Id.* at 152-53, citing R. at 231. He testified that, in response to this letter, the Agency did suspend its review. Tr. at 152-53.

Mr. Kaiser testified that the Agency had not included the 45-Day Report and Amended 45-Day Report in the Administrative Record because he "had already seen a Stage 3 Site Investigation Plan and Budget that documented Stage 1 and Stage 2 activities." Tr. at 146. He further testified that he had not relied on the 45-Day Report or the Amended 45-Day Report in reaching a decision on the Stage 2 site inspection and budget. *Id.* at 147.

Mr. Kaiser testified that the Agency later received a Stage 2 Site Investigation Plan and Budget from Piasa. Tr. at 154, citing R. at 232-352. He testified that this submission did not include "any actual costs incurred in Stage 1." Tr. at 159-60.

Mr. Kaiser testified that he determined the average depth to groundwater at the site to be approximately 8.8 feet based on information in the report. Tr. at 135-36, 139-40, citing R. at 9, 354. He added that he reached this determination by relying on the depth while drilling and not depths shown in monitoring wells. R. at 137-38; *see* R. at 9, 14. He testified that the Agency has determined to rely on depth to drilling in the UST program, although he was not involved in making that determination. Tr. at 139.

Mr. Kaiser testified that he did not see any site-specific conditions that would require Piasa to take samples below the groundwater table in this case. Tr. at 140, 159. He further testified that this issue was discussed at a managers' meeting, at which it was determined that "there was no site-specific conditions that warranted the sampling below the groundwater table." *Id.* at 141. He also testified that, in addition to the information in a report, an applicant needs to provide "their reasoning why they had site-specific conditions that warrant them taking samples below the water table." *Id.* at 162.

Mr. Kaiser testified that he prepared review notes regarding Piasa's Stage 2 plan and budget. Tr. at 131-32, citing R. at 353-55. He also testified that he drafted the Agency decision letter for signature by his supervisor. Tr. at 156-57, citing R. at 356-58. He further testified that this letter relied on Section 734.315 of the Board's UST regulations. Tr. at 158-59.

Mr. Shane Thorpe

Mr. Thorpe was called as a witness by the Agency. He is a senior project manager for CSD and has been employed there since 2007. Tr. at 163-64. As a consultant, he signed the Stage 2 Site Investigation Plan and Budget, which includes results of a Stage 1 investigation. *Id.* at 164-65, citing R. at 238. He testified that the Stage 2 plan was based in part on soil boring cores obtained at Stage 1. Tr. at 166-67. As a consultant, he also signed the Stage 3 Site Investigation Plan and Budget. *Id.* at 168; *see* R. at 7.

Mr. Thorpe testified that the Stage 2 plan and budget report states that “[f]or budgetary purposes, only two BTEX and MTBE soil samples are proposed from each soil boring.” Tr. at 169, citing R. at 246. He testified that “I knew that was going to be an issue with the samples from below the water table.” Tr. at 169. He added that he intended the budget to include only two samples. When he reviewed the budget, however, he saw that it included four samples from each boring. *Id.* at 169-70. He explained that, “as we have conceded in this case, the Stage 2 explicitly denies or prohibits samples from below the water table whereas Stage 1 does not.” *Id.* at 170. He added that the budget had not been approved. *Id.* at 169.

SUMMARY OF PIASA’S PETITION FOR REVIEW

Piasa states that it owns a former gas station located at 4101 Alby Street in Alton that included USTs. Pet at 1 (¶1). Piasa further states that “[t]he tanks have been removed and the service station is no longer selling fuel.” *Id.* Piasa adds that “[t]he site has been assigned IEPA Bureau of Land Identification Number 1190105178.” *Id.* Piasa states that notice of a release was made on June 2, 2006, to the Illinois Emergency Management Agency, which assigned Incident Number 20060672. *Id.* (¶2). Piasa further states that, on August 9, 2006, the OSFM issued a determination that the release was eligible for reimbursement from the UST Fund with a deductible of \$10,000. *Id.*; *see* R. at 195-97, 350-52.

Piasa states that it submitted a Stage 2 Site Investigation Plan to the Agency on March 13, 2014. Pet. at 2 (¶3); *see* R. at 232-352. Piasa further states that on April 8, 2014, the Agency issued a determination conditionally approving the plan with modifications regarding certain sampling activities. Pet. at 2 (¶4); *see* R. at 356-58. Piasa’s petition cites the Agency’s determination, which states in part that

[i]t is the Illinois EPA’s understanding that the activities noted in this plan have already been completed, without prior Illinois EPA approval. Please be advised that Illinois EPA does not approve of the soil sampling that was performed below the water table. It has not been demonstrated that such samples were warranted as part of Stage I and such samples are specifically prohibited in Stage II. Therefore the Illinois EPA is modifying the plan to exclude all activities associated with such sampling. The associated budgets must reflect the same exclusions. Pet. at 2 (¶6); *see* R. at 356.

Piasa further claims that, pursuant to this modification, the Agency noted that actual Stage 1 costs had not been submitted and advised that “the Stage I actual costs should not include costs associated with soil sampling below the water table.” Pet. at 3 (¶6); *see* R. at 356. The Agency advised that, pursuant to its modification, it could not assess the Stage 2 Budget/Actual Costs “due to the fact that it includes costs associated with soil sampling below the water table that the Illinois EPA has rejected.” Pet. at 3 (¶6); *see* R. at 357.

Piasa states that it “does not challenge the modification made as to soil samples in Stage 2 activities.” Pet. at 3 (¶7). Piasa acknowledges that “[t]he Agency was correct in stating soil samples from below the water table ‘are specifically prohibited in Stage 2.’” *Id.*, citing 35 Ill. Adm. Code 734.320(a)(1). Piasa argues, however, that “[t]here is no such prohibition regarding Stage 1 investigations.” Pet. at 3 (¶8). Piasa cites the Board’s Stage 1 site investigation rules, which state in part that “[t]he 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.” Pet. at 3 (¶8), citing 35 Ill. Adm. Code 734.315(a)(1)(A), (B).

Piasa claims that the Agency has determined only “that there has not been a demonstration that soil samples below the water table were warranted in Stage 1.” Pet. at 3 (¶9). Piasa further claims that required observations and screening in the field show whether site-specific conditions are present. *Id.* Piasa argues that the Agency apparently requires some demonstration and approval of these site-specific conditions. *Id.* Piasa states “[t]hat seems more than the Act and regulations require for Stage 1 activities.” *Id.* Piasa stresses that sample results showing contamination exceeding the Tier 1 remediation objectives at various depths supports field observations. *Id.* at 4 (¶9); *see* R. at 240-42 (Stage 1 results). Piasa argues that questioning persons performing field work at a site “is contrary to the intent of Stage 1 requirements.” *Id.* at 3-4 (¶9).

Piasa cites the Board’s UST rules, which provide in part that a “*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.*” Pet. at 4 (¶10) (emphasis in original), citing 35 Ill. Adm. Code 734.315(b). Piasa states that this certification is “[t]he one necessary component” of the Stage 1 plan. Pet. at 4 (¶10). Piasa argues that the Agency’s approval of its Stage 1 plan (R. at 1-2) “completely satisfied regulatory requirements.” *Id.* (¶11). Piasa further argues that the approved plan “only should require the exercise of professional judgment consistent with the certification.” *Id.* Piasa claims that, “[a]bsent some considerable, if not outrageous, deviation from regulatory obligations, the exercise of that professional judgment should not be revisited during the review of a subsequent plan.” *Id.* Piasa claims that this is particularly the case when “the Stage 1 results were not submitted for review but as background information.” *Id.*

Relief Requested

Piasa requests that the Board find the Agency’s April 8, 2014 decision “is arbitrary, capricious and not supported by statutory or regulatory authority,” as least with regard to Stage 1 activities. Pet. at 5. Piasa further requests that the Board reverse the Agency and direct it to

approve its proposal. *Id.* Piasa also requests that the Board award it “reasonable attorney’s fees and expenses related to bringing this action.” *Id.*

SUMMARY OF PIASA’S POST-HEARING BRIEF

Piasa notes the Agency’s disapproval of soil sampling performed below the groundwater table and the Agency’s direction to remove the costs of such sampling from submitted budgets. Pet. Brief at 1-2. Piasa argues that the Agency has misinterpreted regulatory limits applicable to Stage 1 soil investigation. *Id.* at 2. Piasa states that these regulations address soil borings and provide that “[t]he 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.” *Id.*, citing 35 Ill. Adm. Code 734.315(a)(1)(A), (B). The Board summarizes Piasa’s arguments in the following subsections of the opinion.

Establishing Groundwater Table

Piasa notes that the Board’s TACO rules defines the term “water table” as “the top water surface of an unconfined aquifer at atmospheric pressure.” Pet. Brief at 2-3, citing 35 Ill. Adm. Code 742.200. Piasa states that Mr. Truesdale’s testimony elaborated on this definition. He testified that “[t]he only way you can determine the water table is by measurement of the depth of the height which a column of water will rise in a monitoring well screened in the aquifer. . . .” Tr. at 68; *see* Pet. Brief at 3. Mr. Truesdale further testified that the point at which a geologist visually observes groundwater or moisture in a core sample is not necessarily the water table. Tr. at 34-35. He added that “[t]here’s no observable degree of saturation, moisture or groundwater from a soil boring or core sample that could be uniquely associated with the groundwater table. . . .” *Id.* at 35-36; *see* Pet. Brief at 3. Mr. Truesdale also testified that “the water table is a dynamic environmental condition that varies spatially and temporal.” Tr. at 56; *see* Pet. Brief at 3.

Piasa notes that Section 734.430 of the Board’s UST regulations addresses monitoring well construction and sampling. Pet. Brief at 3. Subsection (c) provides in its entirety that “[s]tatic 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 Ill. Adm. Code 734.430(c); *see* Pet. Brief at 3. Piasa argues that this provision demonstrates “that the static groundwater elevation in a well is determinative of water table, which makes the most sense since the surface of the water is open to atmospheric pressure.” Pet. Brief at 3.

Piasa argues that Mr. Kaiser’s testimony on behalf of the Agency is not inconsistent with Mr. Truesdale’s testimony. Piasa argues that Mr. Kaiser did not describe how the observation of core samples could determine the water table. Pet. Brief at 3. Piasa further argues that he did not describe any way that measuring observed moisture would define the water table. *Id.*

Piasa argues that the Agency determines the water table by relying on the depth to groundwater while drilling. Pet. Brief at 3, citing Tr. at 136, 138-40. Piasa stressed that Mr. Kaiser relied on the depth during drilling even when monitoring well data were available. Pet. Brief at 4, citing Tr. at 138-40. Piasa claims that the Agency has determined to define the water table as the depth while drilling without adopting that definition through the rulemaking process. Pet. Brief at 4. Piasa suggests that this definition is easy for the Agency to apply and limits the amount of soil sampling that can be reimbursed. *Id.* Piasa argues, however, that “it just is not accurate” and reflects “expediency rather than scientific reality.” *Id.*

Site-Specific Conditions

Piasa noted Mr. Truesdale’s testimony that a typical UST site in Illinois has site-specific conditions justifying drilling below the water table. Pet. Brief at 5-6; *see* Tr. at 86. He added that there are specific environments and sources at which site-specific conditions would not justify drilling below the water table. Pet. Brief at 5-6; *see* Tr. at 86.

Piasa argues that Mr. Truesdale addressed site-specific conditions from a geological perspective. He testified that “[n]ormal contaminant fate and transport processes for any fine grain soil would almost always necessitate drilling below the water table and evaluation of the distribution of soil phase contaminants absorbed to the solids within the water bearing unit.” Pet. Brief at 5, citing Tr. at 68-69. He testified that field personnel would perform this evaluation through “[f]ield screening and PID [photoionization detector] response combined with textural classification of the soils that are impacted according to ASTM [American Society for Testing and Materials] classification.” Pet. Brief at 5, citing Tr. at 69. Piasa notes Mr. Hargrave’s testimony that he typically performs this evaluation by advancing borings until obtaining a clean sample. Pet. Brief at 5, citing Tr. at 103-08.

Piasa notes Mr. Kaiser’s testimony that he has not seen “any site-specific conditions that would warrant taking samples below the groundwater table.” Pet. Brief at 6, citing Tr. at 140. Piasa also notes Mr. Kaiser’s testimony that Piasa’s report to the Agency did not provide such site-specific conditions. Pet. Brief at 6, citing Tr. at 159. Piasa argued that, if facts establishing site-specific conditions are submitted to the Agency, then the applicant “should reasonably expect them to be reviewed for their significance.” Pet. Brief at 6.

Piasa notes that the Agency’s originally-proposed Section 734.315 did not allow soil borings to extend below the water table. Pet. Brief at 6-7, citing Exh. A at 3; *see* Regulation of Petroleum Leaking Underground Storage Tanks (Proposed new 35 Ill. Adm. Code 734), R04-22, 23 (consolidated), slip op. at 28 (Jan. 13, 2004). Piasa adds that the Agency revised its proposed Section 734.315 to provide that boring could extend below the groundwater table if site-specific conditions warrant. Pet. Brief at 7, citing Exh. B at 7; *see* Regulation of Petroleum Leaking Underground Storage Tanks (Proposed new 35 Ill. Adm. Code 734), R04-22, 23 (consolidated), slip op. at 6-8 (Oct. 6, 2004) (Agency *errata*). Piasa indicates that the Agency proposed an additional amendment to its proposal, which the Board adopted. Pet. Brief at 7. Piasa argues that, based on the Agency’s positions in this proceeding, it seeks “to implement the rules as proposed rather than the way it was actually promulgated.” *Id.* Piasa notes that its application included the required certification of Mr. Truesdale, which the Agency approved. *Id.* at 8, citing

35 Ill. Adm. Code 734.315(b), R. at 1. Piasa concludes that the judgment of Mr. Truesdale, overseeing the work of Mr. Hargrave, “may be reviewed before actual reimbursement is made, but it should not be ‘second-guessed’ by ‘someone sitting in the office’ at IEPA.” Pet. Brief at 8.

Monitoring Well Borings

Piasa states that Section 734.315(a)(2)(C) addresses sampling from monitoring well installation borings during a Stage 1 site investigation and does not include a restriction on sampling below the groundwater table. Pet. Brief at 8, citing 35 Ill. Adm. Code 734(a)(2)(C). Piasa argues that, even if the Board accepts the Agency’s position, it “would not even apply to the soil samples taken in the five monitoring well borings done in Stage 1:” borings B-4, B-5, B-10, B-12, and B-14. Pet. Brief at 8, citing R. at 240-41, Tr. at 65-67. Piasa claims that the Agency’s “Stage 1 modification clearly should be reversed to the extent it affects the soil samples taken in monitoring well borings. . . .” Pet. Brief at 8.

Summary

Piasa requests that the Board reverse the Agency’s April 8, 2014 decision regarding Stage 1 soil sampling and the resulting rejection of its budget. Piasa further requests that the Board award it “reasonable attorney’s fees and expenses related to bringing this action.” *Id.*

Piasa claims that a reversal of the Agency’s determination “would likely need a remand for proper review.” Pet. Brief at 9. Piasa elaborates that “it would be necessary for the IEPA to separate the Stage 1 sampling costs from the others, or separating the monitoring well soil samples from the others in the event Petitioner fails on the Stage 1 sampling issue.” *Id.*

SUMMARY OF AGENCY’S POST-HEARING BRIEF

Groundwater Table

The Agency states that Piasa’s Stage 1 site investigation included 12 soil borings, 11 bored to a depth of 20 feet and one to a depth of 16 feet. Agency Resp. at 17, citing R. at 240-41, 320-31. The Agency adds that Piasa reported groundwater depth no greater than 10 feet in any of the borings. Agency Resp. at 17, citing R. at 240-141, 320-31. The Agency stresses that Piasa reported groundwater depth while drilling and did not separately report groundwater depth after drilling. Agency Resp. at 17, citing R. at 240-41, 320-31. The Agency states that, from those soil borings, Piasa took 32 samples below the depth at which it reported encountering groundwater. Agency Resp. at 17, citing R. at 240-41, 320-31.

The Agency disputes Piasa’s claim that the Board’s rules clearly define the term “groundwater table.” Agency Resp. at 17, citing Pet. Brief at 2-3. The Agency argues that Piasa has cited the TACO rules, which define the term “water table.” Agency Resp. at 17-18, citing 35 Ill. Adm. Code 742.200. The Agency claims that “[d]ifferent terms presumably have different meanings.” Agency Resp. at 18. The Agency disputes Mr. Truesdale’s position that the term is “explicit.” *Id.*, citing Tr. at 71-72. The Agency claims that, although the Illinois Administrative

Code employs the term “groundwater table” 21 times, the Code does not define it anywhere. *Id.*, n.1 (citations omitted).

The Agency emphasizes Mr. Truesdale’s testimony that a person performing a Stage 1 site investigation and conducting soil boring will not and cannot know where the groundwater table is. Agency Resp. at 18, citing Tr. at 74-75. The Agency notes his testimony that Mr. Hargrave “wouldn’t have been able to determine where the water table was at all at that point.” Agency Resp. at 18, citing Tr. at 72-73. The Agency also notes Mr. Truesdale’s testimony that monitoring wells are the only way to determine accurately the location of the groundwater table, although monitoring wells are not in place when soil borings are advanced during Stage 1. Resp. at 18, citing Tr. at 35-36, 52, 68, 70, 74-75.

The Agency also emphasizes the testimony of Mr. Hargrave, a former CSD geologist who was present at the site during Stage 1 and who analyzed the soil borings drilled there. Resp. at 18, citing Tr. at 110-11. The Agency cites his testimony that the groundwater depth while drilling is the point at which he encountered the groundwater table. Resp. at 18, citing Tr. at 96-97, 112, 126-27.

The Agency argues that the Board addressed the issue of establishing the depth of the groundwater table in Brimfield Auto and Truck v. IEPA, PCB 12-134 (Sept. 4, 2014). The Agency claims that, while the petitioner in that case submitted depth while drilling, after drilling, and in monitoring wells, the Board referred to the depth measured while drilling as the maximum depth shown in the record. Resp. at 20, citing Brimfield Auto and Tire, slip op. at 13. The Agency argues that it was not improper for it to consider that measurement submitted by Piasa. Resp. at 20. The Agency argues that data favored by Mr. Truesdale as more accurate show a higher groundwater table. *Id.*, citing Tr. at 53-56.

Site-Specific Conditions Under 35 Ill. Adm. Code 734.315

The Agency claims that Piasa has not argued that its soil boring did not extend below the groundwater table. Resp. at 20. The Agency notes Mr. Truesdale’s testimony that site-specific conditions warranted drilling below this depth. *Id.*, citing Tr. at 68. The Agency cites his testimony that “[n]ormal contaminant fate and transport processes for any fine grain soil would almost always necessitate drilling below the water table. . . .” Resp. at 21, citing Tr. at 68-69. The Agency claims, however, that Piasa’s submissions do not refer to this factor or other site-specific conditions. Resp. at 21. The Agency notes Mr. Truesdale’s testimony that the geology of typical Illinois UST sites “always provides site-specific conditions that dictate drilling below the water table.” *Id.* at 21-22, citing Tr. at 84-85.

The Agency discounts Piasa’s statement that Stage 1 site investigation seeks to determine the vertical extent of any contamination. Resp. at 22, citing Pet. Brief at 5. The Agency states that, with only one exception, CDS advanced borings to a depth of 20 feet. Resp. at 22. The Agency adds that one of those borings showed contamination at the bottom. *Id.*, citing R. at 330 (B-13). The Agency claims that, if boring intended to define the extent of contamination, it would have continued until the producing a clean core. Resp. at 22, citing Pet. Brief at 6.

The Agency stresses the testimony of Mr. Kaiser, who stated that he had not seen any conditions justifying sampling below the groundwater table. Resp. at 22, citing Tr. at 139, 159. The Agency cites his testimony that, in addition to data, he looks for reasoning that site-specific conditions warrant sampling below the groundwater table. Resp. at 23, citing Tr. at 162.

The Agency argues that the applicant in Brimfield Auto and Tire did not support drilling below the groundwater table and failed to meet its burden of proving that its submission would not violate the Act or regulations. Resp. at 23, citing Brimfield Auto and Tire, slip op. at 12-13. The Agency further argues that, although Mr. Truesdale contended in testimony that site-specific conditions existed, its “review generally is limited to the information submitted by the petitioner.” Resp. at 23, citing Keller Oil Props., Inc. v. IEPA, PCB 07-147, slip op. at 38 (Dec. 6, 2007). The Agency claims that Piasa’s submission lacks any assertion that site-specific conditions justified drilling below the groundwater table during Stage 1. Resp. at 23. The Agency concludes that Piasa has failed to meet its burden of proving that the submission would not violate authorities including 35 Ill. Adm. Code 734.315. *Id.*

Summary

The Agency argues that it correctly modified Piasa’s Stage 2 Site Investigation Plan and Budget. The Agency claims that Piasa has failed to meet its burden of proof and requests that the Board affirm its April 8, 2014 determination to approve that plan with modifications. Resp. at 24.

SUMMARY OF PIASA’S REPLY

Groundwater Table

Piasa notes that the Agency had criticized it for defining the term “groundwater table” with the regulatory definition of “water table” and employing the separate terms as if they mean the same thing. Reply at 2. Piasa states that neither the Act nor the Board’s UST rules defines the term “groundwater table.” *Id.* at 3. Piasa cites various defined terms including “aquifer” and “groundwater.” *Id.*, citing, *e.g.*, 415 ILCS 5/3.210, 55/3 (2012). Based on the similarities and relationships among those defined terms, Piasa claims that it should be acceptable to use the terms “water table” and “groundwater table” interchangeably in a UST site investigation. Reply at 3. Piasa states that, while the Agency apparently sought to refer consistently to the “groundwater table,” the Agency’s decision letter refers to the “water table,” a reference carried forward into the Agency’s brief. *Id.*, citing R. at 356-57, Resp. at 5-6.

Piasa argues that the Agency overstates the Board’s finding in Brimfield Auto and Tire, PCB 12-134 (Sept. 4, 2014). Reply at 4. While Piasa notes the Board’s finding in that case that “the depth to groundwater was no greater than nine feet,” Piasa argues that this does not support “the proposition that the level of the groundwater table for the purposes of the limitations on soil sampling was determined by drilling.” *Id.* Piasa claims that “[t]he Board actually looked at all of the available information from drilling and from monitoring wells, and then without determining an exact depth, decided that none of the data showed anything greater than nine feet, and therefore it was reasonable to use that depth.” *Id.*

Piasa acknowledges “that it drilled and took soil samples below the ‘water table.’” Reply at 4. However, Piasa “strongly disagrees that the level of the water table can be discerned by looking at soil cores pulled from the ground and laid horizontally for field screening evaluation.” *Id.* Piasa argues that water observed while drilling might represent the capillary fringe or assist in setting well screens. *Id.* Piasa claims that setting the water table at the depth of contact with water while drilling reflects nothing more than Agency policy. Piasa contends, however, that “drilling information cannot be definitive” and that it is not proper to make the Agency’s administrative convenience the equivalent of a regulatory definition. *Id.*

Site-Specific Conditions Under 35 Ill. Adm. Code 734.315

Piasa claims that, for a plan including soil sampling below the water table, the Agency requires an explicit claim that site-specific conditions exist and a description of those conditions. Reply at 5, citing Tr. at 160, Resp. Brief at 21-24. Piasa acknowledges that this requirement “is easier on the IEPA. It would only have to look for a special section in the report, and if not present, reject it out of hand.” Reply at 7. Piasa argues, however, that this requirement is not included in the Board’s UST regulations or in Agency reporting forms. Reply at 5, 7.

Piasa claims that its submission included information that the Agency could have considered in determining whether site-specific conditions warranted sampling below the water table. Reply at 5-6. Piasa notes that it submitted the following to the Agency:

[listed] geologic publications/maps indicate that subsurface geology in the area generally consists of predominantly fine-grained glacial deposits of Illinoian and Wisconsinan ages. More specifically, the geology is described as fifteen (15) to twenty (20) feet of Wisconsinan age loess deposits (Peoria Loess and/or Roxana Silt) underlain by Illinoian age diamicton of the Glasford Formation (Fort Russell Till), which is in turn underlain by Pennsylvanian bedrock.

Subsurface stratigraphy determined from site specific borings indicates that the combined thickness of the Peoria Loess and Roxana Silt extends to a depth of twenty (20) feet below ground surface, which correlates to the maximum boring depth to date. However, it appears that a couple of the borings may have encountered the Fort Russell Till near their termination depth, as the transition is not always readily distinguishable in the field. Reply at 6, citing R. at 239-40.

Piasa also cited Mr. Truesdale’s testimony that “[n]ormal contaminant fate and transport processes for any fine grain soil would almost always necessitate drilling below the water table and evaluation of the distribution of soil phase contaminants absorbed to the solids within the water bearing unit.” *Id.*, citing Tr. at 68-69. Piasa claims that this testimony “clearly relates” to the characterization of geologic conditions in its submission to the Agency. Reply at 6, citing R. at 239-240. Piasa argues that the Agency did not discuss this geological characterization in its review notes or at hearing. Reply at 6, citing R. at 353-55.

Piasa claims that boring logs also address site-specific conditions by describing contamination “based upon field observations and field screening for organic vapors.” Reply at 6, citing 35 Ill. Adm. Code 734.315(a)(1), R. at 144-67. Piasa notes that both Mr. Truesdale and Mr. Hargrave offered testimony that drilling should continue until migration of contaminants had ended or tapered. Reply at 6, citing Tr. at 73, 103-08. Piasa disputes the Agency’s claim that Mr. Hargrave’s testimony is inconsistent with drilling B-13 only to a depth of 20 feet, where evidence of contamination remained at that depth. Reply at 6; *see* R. at 330. Piasa responds that Mr. Hargrave “made a decision that 20 feet was adequate based upon his observations and using his best professional judgment that contamination was beginning to cease.” Reply at 7. Piasa adds that its geologic assessment of the site “showed that the top layers of glacial deposits extended to a depth of 20 feet.” Reply at 6, citing R. at 240. Piasa argues that the Agency did not discuss these factors in its review or at hearing. Reply at 6-7.

Finally, Piasa disputes the Agency’s argument that Mr. Truesdale’s testimony regarding typical Illinois UST sites “ignores the limitation found in the regulations.” Reply at 7. Piasa argues that Mr. Truesdale has not ignored the requirement that site-specific conditions must warrant drilling below the water table. *Id.* Piasa claims that Mr. Truesdale “just knows from his experience and education that most of Illinois was glaciated, which produces the fine grained layer that has the contaminant transport qualities that will justify drilling below the water table.” *Id.*; *see* Tr. at 68-69.

Monitoring Well Borings

Piasa stresses its contention “that the limitation on soil sampling below the water table does not apply to the five monitoring well borings.” Reply at 2, citing Pet. Brief at 2, Tr. at 66-67. Piasa claims that the Agency appears to have conceded this point. Reply at 2. Piasa argues that, “no matter what the Board decides as to the other samples, all soil samples from the monitoring well borings . . . should be approved.” *Id.* Piasa claims that the Board should reverse the Agency’s modification of the plan and budget as to samples B-4, B-5, B-10, B-12, and B-14. *Id.*, citing R. at 240-41 (Table 1.0 – Summary of Stage 1 Site Investigation Borings and Soil Samples).

Summary

Piasa claims that it has shown the Agency erred on three grounds in modifying its Stage 2 Site Investigation Plan and Budget. Reply at 7. Piasa first argues that the Agency has “implemented an incorrect definitional interpretation of the term ‘groundwater table’ or ‘water table.’” *Id.* Second, Piasa argues that the Agency failed to properly review facts relating to site-specific conditions included in its submission. *Id.* Third, Piasa argues that the Agency “has improperly required a separate explanation or justification of those site-specific conditions not required by the regulations or otherwise provided on required reporting forms.” *Id.*

Piasa requests the Board reverse the Agency’s April 8, 2014 determination regarding Stage 1 soil sampling activities and budget for them. Reply at 8. Piasa also requests that the Board award it “reasonable attorney’s fees and expenses related to bringing this action.” *Id.*

STATUTORY AND LEGAL BACKGROUND

Title XVI of the Act and Part 734 of the Board's Regulations

Title XVI of the Act provides for administration and oversight of the Leaking Underground Storage Tank Program, which includes the UST Fund and requirements for reimbursement from it. 415 ILCS 5/57-57.18 (2012). Section 57.1(a) of the Act provides in its entirety that “[a]n owner or operator of an underground storage tank who meets the definition of this Title [XVI] shall be required to conduct tank removal, abandonment and repair, site investigation, and corrective action in accordance with the requirements of the Leaking Underground Storage Tank Program.” 415 ILCS 5/57.1(a) (2012).

Section 734.315(a)(1) of the Board's UST regulations addresses Stage 1 soil investigations and provides that

[t]he 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. 35 Ill. Adm. Code 734.315(a)(a).

Section 734.315(b) of the Board's UST regulations provides in its entirety that "[t]he 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." 35 Ill. Adm. Code 734.315(b).

Section 734.320(a)(2) of the Board's UST regulations addresses Stage 1 groundwater investigation and provides in pertinent part that

- 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.

Section 734.505(b) of the Board's UST regulations addresses the Agency's review of plans and budgets and provides in pertinent part that

- 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. . . . 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. 35 Ill. Adm. Code 734.505(b)

Section 734.510 of the Board's UST regulations addresses standards for the Agency's review of plans and budget and provides in pertinent part that

- (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.
...
- (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. . . . 35 Ill. Adm. Code 734.510.

Section 57.7(c)(4) of the Act provides that “[a]ny action by the Agency to disapprove or modify a plan or report . . . shall be subject to appeal to the Board in accordance with the procedures of Section 40.” 415 ILCS 5/57.7(c)(4) (2012); *see* 415 ILCS 5/40 (2012). For the purposes of Title XVI, “plan” includes any site investigation plan or budget submitted pursuant to Section 57.7(a). 415 ILCS 5/57.7(c)(5)(A, B) (2012). Section 57.8(i) of the Act provides in its entirety that, “[i]f the Agency refuses to pay or authorizes only a partial payment, the affected owner or operator may petition the Board for a hearing in the manner provided for the review of permit decisions in Section 40 of this Act.” 415 ILCS 5/57.8(i) (2012).

Standard of Review and Burden of Proof

The standard of review under Section 40 of the Act (415 ILCS 5/40 (2012)) is whether Piasa’s submission to the Agency would not violate the Act and Board regulations. Ted Harrison Oil Co. v. IEPA, PCB 99-127, slip op. at 5 (July 24, 2003); citing Browning Ferris Indus. of Ill. v. PCB, 534 N.E.2d 616 (2nd Dist. 1989). The Board will not consider new information that was not before the Agency prior to its final determination regarding the issues on appeal. Kathe’s Auto Serv. Ctr. v. IEPA, PCB 95-43, slip op. at 14 (May 18, 1995). The Agency’s denial letter frames the issues on appeal. Pulitzer Cmty. Newspapers, Inc. v. IEPA, PCB 90-142 (Dec. 20, 1990).

The Board’s procedural rules provide that, in appeals of final Agency determinations, “[t]he burden of proof shall be on the petitioner. . . .” 35 Ill. Adm. Code 105.112(a), citing 415 ILCS 5/40(a)(1), 40(b), 40(e)(3), 40.2(a). The standard of proof in UST appeals is the

“preponderance of the evidence.” Freedom Oil Co. v. IEPA, PCB 03-54, 03-56, 03-105, 03-179, 04-04 (cons.), slip op. at 59 (Feb. 2, 2006), citing McHenry County Landfill, Inc. v. County Bd. of McHenry County, PCB 85-56, 85-61, 85-62, 85-63, 85-64, 85-65, 85-66 (consol.), slip op. at 3 (Sept. 20, 1985) (“A proposition is proved by a preponderance of the evidence when it is more probably true than not.”).

BOARD DISCUSSION

As noted above in the summary of its petition for review, Piasa has stated that it “does not challenge the modification made as to soil samples in Stage 2 activities.” Pet. at 3 (¶7). Piasa acknowledges that “[t]he Agency was correct in stating soil samples from below the water table ‘are specifically prohibited in Stage 2.’” *Id.*, citing 35 Ill. Adm. Code 734.320(a)(1). Accordingly, the Board will not discuss the issue of these samples.

However, Piasa disputes the Agency’s April 8, 2014 determination regarding Stage 1 soil sampling and the resulting modification of its plan. The Agency modified Piasa’s proposed Stage 2 Site Investigation Plan by excluding soil sampling below the groundwater table during Stage 1 and determined that associated budgets must reflect this exclusion. Piasa asserts that the Agency’s decision is based on misinterpretation of the regulatory requirements applicable to Stage I site investigation under Part 734. Piasa presents several arguments to support its contention that the Agency erred.

Groundwater Table

Piasa contends that the Agency erred by determining the groundwater table based on the presence of moisture in core samples obtained during soil investigation borings. *See* Tr. 34-35. Citing the definition of “water table” in the Board’s TACO regulations, Piasa argues that the only way to determine the water table is by measuring the depth to the surface of the water column in a monitoring well screened in the aquifer. Pet Brief at 3, citing Tr. at 68. Piasa contends that, while the Agency’s determination of groundwater table may be expedient, it is not scientifically accurate or definitive. *See* Reply at 4.

The Agency questions Piasa’s claim that the Board’s rules clearly define the term “groundwater table.” Agency Resp. at 17, citing Pet. Brief at 2-3. The Agency notes that, while the TACO rules defines the term “water table,” the Illinois Administrative Code does not define the term “groundwater table.” Agency Resp. at 17-18, citing 35 Ill. Adm. Code 742.200. The Agency disputes Mr. Truesdale’s position that the term is “explicit,” noting that the “[d]ifferent terms presumably have different meanings.” *Id.*, citing Tr. at 71-72.

The Agency counters Piasa’s arguments regarding the depth of groundwater table by referring to testimony of Mr. Hargrave, a former CSD geologist. Mr. Hargrave was present at the site when the Stage 1 borings were conducted and the depth to groundwater while drilling was observed. He testified that he considered the depth to the groundwater table as the depth at which groundwater was encountered while drilling. Agency Resp. at 18, citing Tr. at 126-127. Further, the Agency asserts that the Board’s finding in Brimfield Auto & Truck v. IEPA, PCB

12-134, supports reliance on the depth to groundwater while drilling to establish the groundwater table for the purposes of a Stage 1 site investigation.

Section 734.315 provides that “Stage 1 site investigation is designed to gather *initial* information regarding the extent of on-site soil and groundwater contamination. . . .” 35 Ill. Adm. Code 734.315 (emphasis added). Subsection (a)(1) addresses soil investigation, and subsection (a)(2) addresses groundwater investigation where it is required. *Id.*

The Board notes that the Agency originally proposed Section 734.315(a)(1)(A) to limit the depth of a soil investigation boring to 30 feet, or until groundwater or bedrock is encountered, whichever is less. Pet. Brief, Exh. A at 3; *see Regulation of Petroleum Leaking Underground Storage Tanks (Proposed New 35 Ill. Adm. Code 734), R04-23 (Jan. 13, 2004)*. As Piasa notes, the Agency amended its proposed Section 734.315(a)(1)(A) to allow soil sampling below the groundwater table when warranted by site-specific conditions. Pet. Brief, Exh. B at 6-7. The Board adopted soil investigation requirements providing that “borings must be drilled below the groundwater table only if site-specific conditions warrant.” In comparison, Section 734.315(a)(2)(C) addresses groundwater investigation and does not specifically restrict soil sampling below the groundwater table during installation of monitoring wells. *See* 35 Ill. Adm. Code 734.315(a)(2)(C).

Thus, Section 734.315(a)(1)(A) clearly contemplates that an owner or operator must ascertain the depth to the groundwater table before determining whether there are site-specific conditions that warrant extending soil investigation borings beyond that depth. Mr. Hargrave, CSD’s geologist who oversaw the drilling of soil borings, considered the depth at which groundwater was encountered while drilling as the depth of the groundwater table. Tr. at 126-127. As noted above, the Agency relied on boring logs prepared by Mr. Hargrave to establish the depth of groundwater table. The Board recognizes that the depth of groundwater table based on contact with groundwater while drilling may not be as definitive as depth in an installed monitoring well. However, the Board notes that CSD did not install a monitoring well before drilling below the groundwater table. For the purposes of an initial Stage 1 soil investigation, the Board finds the Agency’s approach to be reasonable. Further, as noted by the Agency, the Board in *Brimfield Auto & Truck* considered “depth to groundwater while drilling” as one factor regarding the depth to groundwater table at the site. *Brimfield Auto & Truck v. IEPA*, PCB 12-134, slip op. at 12-13 (Sept. 4, 2014).

Site-Specific Conditions

Section 734.315(a)(1)(A) addresses soil investigation and provides that “[t]he 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.” Piasa argues that site-specific geological conditions and physical observations by the geologist at the site justified drilling below the groundwater table. Pet. Brief at 5-6. Piasa notes Mr. Truesdale’s testimony that “[n]ormal contaminant fate and transport processes for any fine grain soil would almost always necessitate drilling below the water table and evaluation of the distribution of soil phase contaminants absorbed to the solids within the water bearing unit.” Pet. Brief at 5 citing Tr. at

68-69. Piasa asserts that the record before the Agency included geological background supporting Mr. Truesdale's testimony. Reply at 5-6 citing Rec. at 239-240. Piasa also stressed that Mr. Hargrave advanced soil borings until reaching clean samples in order to define the full vertical extent of contamination.

The Agency asserts that Piasa's submission did not refer to "normal contaminant fate and transport processes for any fine grain soil" or other conditions that warranted drilling below the groundwater table during the Stage 1 soil investigation activities. Agency Brief at 21. Mr. Kaiser, the Agency's project manager charged with reviewing Piasa's Stage 2 Site Investigation Plan and Budget, stated that Piasa did not indicate the presence of any site-specific conditions that warranted boring below the groundwater table. Tr. at 159. Mr. Kaiser stated that, when evaluating compliance with this provision, he would look for reasoning as to the site-specific conditions that warrant sampling below the groundwater table. Tr. at 162. In this regard, the Agency notes that its review is generally limited to information submitted by the petitioner. Agency Brief at 23, citing Keller Oil Properties/Farina v. IEPA, PCB 07-147, slip op. at 38 (Dec. 6, 2007).

The Stage 1 site soil investigation requirement at Section 734.315(a)(1)(A) was adopted by the Board as proposed and modified by the Agency in Docket R04-23. In proposing the Stage 1 site investigation provisions, the Agency stated that it

is proposing a new three-stage approach to site investigation. Consultants originally suggested this new approach to site investigation. The idea was to allow more site investigation work (Stage 1) to be conducted after early action activities and prior to submittal of a site investigation plan and budget (Stage 2) to the Agency. This would give consultants more information to be used in the development of their Stage 2 site investigation plan. *This requires a fairly prescriptive approach to Stage 1, since there is no prior Agency approval of a plan or budget in Stage 1.* Stage 2 would be the proposed plan to fully define the extent of contamination on-site, and Stage 3 would be the plan to fully define the extent of contamination off-site. Regulation of Petroleum Leaking Underground Storage Tanks (Proposed New 35 Ill. Adm. Code 734), R04-23 (Mar. 8, 2004) (prefiled testimony of Douglas W. Clay) (emphasis added).

The Board notes that Section 734.315(a)(1)(A) requires soil boring through the entire vertical extent of contamination but limits those borings to the depth of the groundwater table unless a greater depth is warranted by site-specific conditions. If Section 734.315(a)(1)(A) intended to define the "entire" vertical extent of contamination under all circumstances, then there would be no reason to limit the depth of soil investigation borings based on the depth of the groundwater table. The Board notes that its UST rules separately address groundwater investigation in Section 734.315(a)(2).

Piasa does not dispute that it drilled soil investigation borings below the groundwater table. Under Section 734.315(a)(1)(A), Piasa must describe site-specific conditions that warranted drilling below the groundwater table. As noted above, Stage 1 is intended to be a prescriptive approach to soil investigation, and the burden is on the owner or operator to

demonstrate compliance with the investigation requirements. Therefore, it is reasonable for the Agency to expect the Stage 1 site investigation report to refer the site-specific conditions and the reason they warranted drilling soil investigation borings below the groundwater table. Piasa asserts that site geologic information provided in the Stage 2 Site Investigation Plan relates to Mr. Truesdale's testimony. While the Board does not discount the accuracy of the site geological information, it does not refer to any way in which those conditions affect the depth of soil investigation borings. The Board cannot construe this information as a basis to conclude that site-specific conditions warranted drilling soil investigations borings below the groundwater table. Piasa's summary of Stage 1 site investigation activities included in the Stage 2 Site Investigation Plan does not persuasively establish site-specific conditions that warranted such drilling.

While the Board agrees with Piasa that Stage 1 soil investigation borings must be advanced through the entire vertical extent of contamination, the UST rules specifically limit the vertical extent of a soil investigation boring to the depth of groundwater table unless warranted by site-specific conditions. 35 Ill. Adm. Code 734.315(a)(1)(A). The Board notes that groundwater investigation provisions at Section 734.315(a)(2) separately address soil sampling below the groundwater table. That provision does not limit soil sampling to the depth of the groundwater table. *See* 35 Ill. Adm. Code 734.315(a)(2).

Thus, the presence of contamination below the groundwater table in a soil investigation boring is not necessarily a site-specific condition that warrants drilling soil investigation borings below the groundwater table. The Board's UST rules provide that site-specific geologic conditions may warrant drilling soil investigation borings below the groundwater table. However, Piasa did not provide the Agency with any explanation or reason that site-specific conditions warranted drilling soil investigation borings below that level. In addition, the Agency's review is generally limited to information submitted by the petitioner. Keller Oil Props./Farina v. IEPA, PCB 07-147, slip op. at 38 (Dec. 6, 2007). In light of this, the Board finds that Piasa has failed to meet its burden to prove that its submission to the Agency regarding soil investigation borings would not violate the Act and Board regulations, including Section 734.315(a)(1)(A, B). The Board therefore affirms the Agency's April 8, 2014 determination to the extent that it disapproved soil sampling performed below the groundwater table in soil investigation borings.

Monitoring Well Borings

Regarding groundwater investigation borings, however, Piasa stresses that subsection (a)(2) does not restrict sampling below the groundwater table in the course of Stage 1 groundwater investigation. *See* 35 Ill. Adm. Code 734.315(a)(2)(C). Piasa argues that the Board should reverse the Agency on samples taken from monitoring well borings. Piasa claims that, even if the Board affirms the Agency on the issue of soil investigation borings, that determination would not apply to samples taken from borings B-4, B-5, B-10, B-12, and B-14. Pet. Brief at 8, citing R. at 240-41, Tr. at 65-67. Piasa emphasizes that the Agency's response does not address this distinction and that the Agency apparently "intended to concede this point." Reply at 2.

The Board notes that the Agency's determination did not distinguish between the soil and groundwater elements of the Stage 1 site investigation. *See* R. at 356-57. The Agency determined that it "does not approve of the soil sampling that was performed below the water table. It has not been demonstrated that such samples were warranted as part of Stage 1. . . . Therefore the Illinois EPA is modifying the plan to exclude *all activities* associated with such sampling." *Id.* at 356 (emphasis added).

The Agency has not challenged the performance of groundwater investigation under subsection (a)(2)(A)(i) and has not disputed the number or location of groundwater monitoring wells at the site under subsection (a)(2)(A)(ii). *See* R. at 356-57; 35 Ill. Adm. Code 734.314(a)(2)(A)(i, ii). Boring logs show that CSD performed sampling consistent with requirements that "[o]ne sample must be collected from each five-foot interval of each monitoring well installation boring" and that "[e]ach sample must be collected from the location within the five-foot interval that is the most contaminated as a result of the release." 35 Ill. Adm. Code 734.315(a)(2)(C); *see* R. at 147-48, 153, 155, 157. As noted above, these requirements do not limit sampling to locations above the groundwater table. Based on these authorities and the record before it, the Board finds that Piasa has met its burden of proving that samples from below the groundwater table in borings B-4, B-5, B-10, B-12, and B-14 completed as groundwater monitoring wells would not violate the Act and Board regulations, including Section 734.315(a)(2). The Board reverses the Agency's determination regarding these samples in these five borings.

The Board notes that Piasa has not submitted actual costs for Stage 1 site investigation to the Agency. R. at 356. Any submission of such costs must be consistent with the Board's order. The Agency's April 8, 2014 determination "conditionally approved" Piasa's Stage 2 Site Investigation Plan with the modification of excluding Stage 1 costs associated with soil sampling below the water table. The Board has addressed this modification by partially affirming and partially reversing the Agency's exclusion of these costs.

Attorney Fees

Section 57.8(l) of the Act provides that corrective action excludes "legal defense costs," which include "legal costs for seeking payment . . . unless the owner or operator prevails before the Board in which case the Board may authorize payment of legal fees." 415 ILCS 5/57.8(l) (2012); 35 Ill. Adm. Code 734.630(g). The Board has required the reimbursement of legal fees from the UST Fund where a petitioner prevailed in appealing the Agency's modification of a plan and budget. Illinois Ayers Oil Co. v. IEPA, PCB 03-214, slip op. at 7-9 (Aug. 5, 2004). Piasa has requested reimbursement of attorney fees and costs. Pet. at 5; Pet. Brief at 9, Reply at 9.

Having partially reversed the Agency's determination to modify Piasa's Stage 2 Site Investigation, the Board concludes that Piasa has prevailed before the Board for the purposes of Section 57.8(l) of the Act (415 ILCS 5/57.8(l) (2012)). *See Webb & Sons, Inc. v. IEPA*, PCB 07-24, slip op. at 4-5 (May 3, 2007) (partial reimbursement). However, the record does not now include any amount of "legal costs for seeking payment" incurred by Piasa in this proceeding. *See* 415 ILCS 57.8(l) (2012). Consequently, the Board today reserves ruling on whether to

exercise its discretion to award attorney fees and, if it chooses to exercise that discretion, the amount of reimbursement.

In its order below, the Board directs Piasa to file a statement of its legal costs that may be eligible for reimbursement if the Board determines to exercise its discretion to reimburse attorney fees. *See* 415 ILCS 5/57.8(l) (2012); 35 Ill. Adm. Code 734.630(g). The order provides an opportunity for the Agency to respond to Piasa's statement.

CONCLUSION

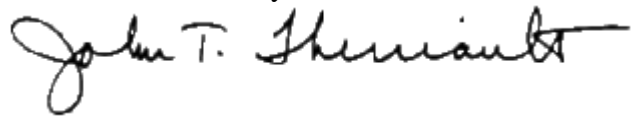
The Board affirms the Agency's April 8, 2014 determination regarding costs for soil investigation boring and sampling below the groundwater table. The Board reverses the Agency's determination regarding costs for groundwater investigation boring and sampling below the groundwater table in borings B-4, B-5, B-10, B-12, and B-14 completed as groundwater monitoring wells. In addition, the Board allows Piasa to file a statement of its legal costs that may be eligible for reimbursement and allows the Agency to respond to Piasa's statement.

ORDER

1. The Board grants the Agency's unopposed motion for leave to file the administrative record *instanter*.
2. The Board affirms the Agency's April 8, 2014 determination regarding costs for soil investigation boring and sampling below the groundwater table.
3. The Board reverses the Agency's determination regarding costs for groundwater investigation boring and sampling below the groundwater table in borings B-4, B-5, B-10, B-12, and B-14 completed as groundwater monitoring wells.
4. The Board allows Piasa to file a statement of its legal costs that may be eligible for reimbursement no later than Monday, January 5, 2015, the first business day after 30 days from the date of this order. The Agency may file a response within 30 days of service of Piasa's statement.

IT IS SO ORDERED.

I, John T. Therriault, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above interim opinion and order on December 4, 2014, by a vote of 4-0.



John T. Therriault, Clerk
Illinois Pollution Control Board