STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET HARTFORD, CT 06106-5127

OFFICE OF ADJUDICATIONS

IN THE MATTER OF	:	***SITE NO. 415 SUPPLEMENTAL CLAIM NO. 7***
ALDIN ASSOCIATES	:	***MAY 10, 2011***

PROPOSED FINAL DECISION

I

SUMMARY

This matter involves a supplemental claim (claim #7) filed with the Underground Storage Tank Petroleum Clean-up Review Board (Board) in accordance with the Underground Storage Tank Petroleum Clean-up Program (Program). General Statutes §§22a-449a through 22a-449p. Aldin Associates (Aldin/applicant) filed supplemental claim #7 to recover its costs associated with the remediation of petroleum contamination at 162 West Town Street, Norwich (Site 415). The Board denied a portion of the claim on the basis that Aldin's costs associated with soil excavation and disposal were excessive and therefore unreasonable and ineligible for reimbursement in accordance with the Program conditions for reimbursement. Aldin timely requested a hearing before the Board for reconsideration of its decision. §22a-449f (h).

The hearing in this matter was conducted over four days by the Office of Adjudications at the request of the Board. Regs., Conn. State Agencies §22a-449e-1(h)(6). The applicant and Department of Environmental Protection (DEP) staff responsible for the technical and fiscal review of claims submitted to the Board are the parties in this matter. At the conclusion of the hearing, the record was closed; post-hearing briefs were filed on November 10, 2010.

This matter focused on several issues related to the eligibility of claims for reimbursement. First among them is the threshold issue of whether, in this case, the source of an historic release must be identified with certainty before the costs associated with the clean-up of that release are eligible for reimbursement. Resolution of this issue necessarily precedes the determination of the two remaining issues pertaining to the eligibility of costs for reimbursement: (1) whether Aldin's remediation costs associated with soil excavation and disposal were reasonable; and (2) within that context, whether the remediation exceeded allowable soil and groundwater remedial regulatory standards. General Statutes §§22a-449c (a) (3) (A) and 22a-449f (c) (4) and (6).

I have reviewed the extensive and substantial evidence in the record of this proceeding and find that the applicant has demonstrated by a preponderance of the evidence that it has satisfied the Program conditions for reimbursement. First, regarding the threshold issue, the facts of this case are more than sufficient to demonstrate that the source of the petroleum contamination on the subject site is one or more underground storage tanks covered by the Program, even though the specific tank or tanks have not been identified with absolute certainty.

In addition, based on the documentary evidence and the opinion of eminently qualified experts, I find that Aldin's soil excavation was reasonable, not unnecessarily expanded and that the costs associated with the excavation of contaminated soils that emanated from the eligible underground source are eligible for and should be reimbursed. I therefore recommend that the Board reconsider its initial determination of supplemental claim #7 and award Aldin all costs incurred for soil excavation and removal, omitting however, such costs incurred for the excavation and removal of surface soils in the area of the easternmost gas pump island.

II

DECISION

A

BACKGROUND

The Underground Storage Tank Petroleum Clean-up Program was established in 1989 to assist owners or operators of businesses with petroleum underground storage tanks to comply with federal financial responsibility requirements.[1] The Program was also designed to provide a fund for the clean-up of petroleum releases.[2] The Board is authorized to reimburse or pay directly costs, expenses or other obligations, paid or incurred, "as a result of releases, and suspected releases, costs of investigation and remediation of releases and suspected releases," and claims of third parties for property damage and damage to natural resources. General Statutes §§22a-449c and 22a-449d. Once a qualified responsible party incurs clean-up costs, it must file an application for reimbursement with the Board, which then determines whether the application will be approved on the basis of numerous regulatory qualifications. §22a-449f.

Implementing regulations[3] guide the administration of the Program and include a list of investigation and clean-up activities, the costs of which are eligible for reimbursement. For example, eligible costs resulting from a release or suspected release may include reasonable expenses for the interception and recovery of free petroleum; site investigation and characterization; preparation of investigation reports and remedial action plans and remedial activities. Regs., Conn. State Agencies §22a-449e-1 (d). The regulations also provide application review procedures and criteria that the Commissioner or Board-designated reviewers must follow. Supplemental claim #7 must be reviewed and considered against this statutory and regulatory framework.

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[1] Owners or operators of petroleum underground storage tanks are required to demonstrate financial responsibility for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases due to the operation of petroleum underground storage tanks. 40 CFR §280.93

[2] A release "means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of petroleum from any underground storage tank or underground storage tank system." §22a-449a (2).

[3] The legislature has enacted a number of revisions to the Program statutes over the years, including significant revisions in 2005. However, the regulations promulgated at the start of the Program in 1991 have not been revised.

B

FINDINGS OF FACT

The following findings of fact are based on a review of the entire record of this proceeding, a determination of the credibility and the weight to be given to competing evidence, and on reasonable inferences drawn from the evidence.

1
Procedural History

1. Aldin's supplemental claim #7 was filed on May 29, 2009 and presented to the Board at its December 2009 meeting following a technical and fiscal review. Staff recommended an award of $410,337.43 of the $658,082.40 claim. This recommendation included only 50 percent of Aldin's costs associated with the excavation and disposal of contaminated soils from the site. The Board awarded Aldin $532,443.34, which includes 75 percent of the total soil excavation and disposal costs. Aldin timely filed its request for a hearing on the Board's decision as provided by General Statutes §22a-449f(h). At the Board's request, the matter was referred to the Office of Adjudications to conduct the hearing as authorized by regulation. Regs., Conn. State Agencies §22a-449-1(h)(6). (Exs. DEP-4, 27, 28; test. 7/22/10, J. Duff.[4])

2. During a four-day hearing, Aldin presented documentary evidence and testimony from its principals, managers and two experts, Mark Temple of Lenard Engineering Inc. (LEI) and John Hankins of Fuss and O'Neill, Inc., both Temple and Hankins are Connecticut licensed environmental professionals (LEPs). Temple, who has submitted several hundred claims to the Board since the inception of the Program, testified in his capacity as a consultant to Aldin responsible for the site investigation and remediation. Hankins, who has worked on 50 to 70 UST sites and submitted nearly as many claims to the Board, provided expert testimony regarding his independent review of the work conducted at the site, the investigations and conclusions of LEI and other consultants, and the reasonableness of the extent and costs of

[4] The testimony in this matter was recorded. No written transcript has been prepared. The audio recording of this hearing is on file with the Office of Adjudications as part of the official record of this proceeding.

excavation of the contaminated area. (Test. 6/23/10, M. Temple, 6/24/10, 7/29/10 M. Temple, J. Hankins.)

3. Staff presented documentary evidence and testimony regarding the review of Aldin's claim from Program Lead Analyst John Duff, and Supervising Analyst Jacques Gilbert. Maurice Hamel, Environmental Analyst III of the DEP Remediation Division, provided expert testimony regarding Aldin's site characterization and remediation activities. Post hearing briefs were submitted by Aldin and staff on November 10, 2010.[5] (Test. 7/22/10, M. Hamel, J. Gilbert, J. Duff.)

2
The Site

4. The site consists of approximately 0.83 acres and is bounded to the north by Wawecus Street and to the east by West Town Street. Adjacent properties include a commuter parking lot to the east across West Town Street, a Luk Oil gasoline station southeast of the site, an Ace Hardware and Benjamin Moore Paint store to the southwest, a hot dog stand to the west, and a Shell gas station northwest of the site across Wawecus Street. (Ex. DEP-2.)

5. A retail gasoline business has been operating on the site since the early 1960s. At present, this includes a Mobil brand gasoline station and convenience store. The building that housed the convenience store until mid-2008 was constructed in the mid-1950s or early 1960s as a service garage for minor automotive repairs. Sometime during the late 1970s or early 1980s the building was converted to the convenience store; service bay doors were boarded and the bays were used to store inventory and supplies. (Ex. DEP-2; test. 6/23/10, J. MacNeil, 7/29/10, M. Temple.)

6. Prior to the redevelopment of the site in 2008, two gasoline pump islands and a concrete pad situated beneath a large canopy were located on the eastern portion of the property adjacent to West Town Street and a diesel fuel pump island with concrete pad was located on the northern portion of the property adjacent to Wawecus Street. There may have been other configurations of pump islands and canopies over the years the site has operated as a retail gas station. (Ex. DEP-2.)

3

History of On-site UST Systems

7. At the time Aldin acquired the business it did not conduct an environmental assessment, however, five petroleum USTs and two waste oils tanks were known to be present or later discovered on the site in the UST tank grave (historic tanks) to the rear (west) of the convenience store. The petroleum tanks stored unleaded and leaded regular and super gasoline and diesel fuel. The five petroleum USTs and one of the waste oil tanks were registered with the DEP in May 1986. All historic tanks, including the two waste oil tanks, and associated piping were excavated and removed in November 1986. (Exs. DEP-2, 5, 8, 12; test. 6/23/10, D. Savin, J. MacNeil.)

8. Aldin installed four new tanks in 1986, three gasoline tanks and one diesel fuel tank (replacement tanks). These tanks were also located to the west of the building in and adjacent to the historic tank grave, enlarging the grave area to the west. Apparently, new sand and backfill soils would have been required as bedding material around the new tanks during installation.[6] The replacement USTs, which were registered with the DEP in November 1986, stored regular, special and super unleaded gasoline and diesel fuel. (Exs. DEP-2, 5, 12; test. 6/23/10, J. MacNeil.)

9. In May 2008, all replacement USTs were removed and the site was remediated and redeveloped. The existing building was razed and a new convenience store was constructed over the area of the former tank grave. Three new USTs were installed in December, 2008. The present UST grave is located immediately east of the pump island adjacent to West Town Street. Exs. DEP-1, 2; test. 6/23/10, J. MacNeil, M. Temple.)

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[5] Pleadings, petitions, rulings briefs, formal notices, directives and conference summary memoranda are contained in the Office of Adjudications docket file and are a part of the record of this proceeding. General Statutes §4-177(d).

[6] At the time of the installation, tank manufacturers specified the types of soils to be used as fill in tank graves. Aldin typically followed the manufacturer's specification when installing new tanks; however, soils on site or existing in tank graves were not up to the prescribed specifications. Also UST regulations would have required new bedding material at the time of installation. (Test. 6/23/10, J. MacNeil, 7/22/10, J. Gilbert.)

4

Spill/Release History and Reporting

10. DEP files and a commercial database[7] contain records of oil and chemical spills that have occurred at the site. A total of fourteen spills or complaints of spills were reported during the period December 23, 1977 through February 11, 2006. Spills of gasoline or diesel fuel ranged in volume from approximately 1 to 40 gallons and were due to tank overfills, nozzle failures, leaking dispensers, motor vehicle overfills or hose failures. The spill areas were cleaned up at the time of the spill. (Ex. DEP-2.)

11. The DEP Leaking Underground Storage Tank database contains a record that a leaking UST was removed from the site; a clean-up was initiated and the leak was reported on November 15, 1986. At that time there were no established clean-up standards; releases were addressed on a case-by-case basis. On July 21, 1993, approximately an inch of free product, a dark liquid exhibiting petroleum odor, was detected in two tank grave monitoring wells. On August 18, 1993, one quarter of an inch of free product was detected in a tank monitoring well and a petroleum odor was noted in another well. The discovery of suspected petroleum product was reported to the DEP on October 6, 1993. (Exs. DEP-2, 12; test. 6/23/10, J. MacNeil, M. Temple.)

5

Site Investigations

12. Site investigations were conducted immediately after the 1993 discovery of free product in the tank grave and on several occasions thereafter until the 2008 site remediation. A total of ten groundwater monitoring wells were installed at various locations within and around the tank grave, north in the area of the diesel pump island, and east in the area of the gasoline pump island. At least thirty-four soil borings were taken in approximately the same areas and in areas outlying and downgradient of the tank graves. No other potential sources of a release were identified as a result of the investigations. Investigation reports were submitted to the Board at various times from June 1994 through May 2009. (Exs. DEP-5, 7, 8, 11, 12, 14; test. 6/23/10, 7/29/10, M. Temple.)

[7] Environmental FirstSearch®. (Ex. DEP-2.)

13. A Phase I environmental site assessment[8] was conducted in 2008 by a Connecticut LEP. It appears from the site assessment report that there was no inspection of the interior of the garage/convenience store or observation of dry wells or other areas where releases may have occurred beyond the area defined by the prior site investigations. However, no floor drains or dry wells were noted in any site investigation report or confirmed during the 2008 remediation or demolition of the building. Field notes taken during the remediation activities indicate that a trench dug along the west side of the replacement diesel tank revealed impacts that appeared to be heavy oil. The field worker, observing a stone and clay pipe in the area, suspected the area may have served as a dry well. It was later determined that the clay pipe was part of the sanitary sewer connection to the municipal sewer system. (Exs. DEP-2, 15, 17; test. 7/22/10, M. Hamel, 7/29/10, M. Temple.)

Groundwater Flow Direction/ Conflicting Expert Testimony

14. Groundwater flow direction on the site was assessed several times after July 1993. In 1994, LEI installed four monitoring wells (MW-1 through MW-4), three in the area of the tank grave and one in the area of the diesel pump island north of the grave. Depth to groundwater measurements indicated that groundwater flowed southwest and southeast. In 1998, LEI again determined that groundwater flow direction was generally southwest. (Exs. DEP-11, 14.)

15. In 2000, HRP Associates installed three additional groundwater monitoring wells (MW-5 through MW-7). Monitoring well MW-5 was located south of the tank grave; MW-6 was located northwest of the grave and MW-7 was located far west of the tank grave. HRP determined that groundwater flow was generally in a southwesterly direction, however, flow was affected by the current tank grave; groundwater contours reflected mounding in the grave. HRP noted that mounding in "UST graves, resulting from permeability contrasts between the UST bedding materials and native soils, is common in areas of shallow groundwater depths." HRP site maps depicted this mounding effect as moving flow to the north in the direction of MW-6. (Ex. DEP-8.)

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[8] A Phase I site assessment is an evaluation of current and historical uses of a site and associated activities for the purpose of identifying all areas where a release could or did impact the environment. State of Connecticut Department of Environmental Protection *Site Characterization Guidance Document* (September 2007).

16. After the 2008 site remediation, LEI installed a broader and more comprehensive network of groundwater monitoring wells than existed prior to the 2008 excavation. A number of wells were installed in native soils that were not disturbed by the excavation process. Groundwater flow direction was assessed quarterly from December 2, 2008 through March 12, 2010. Flow was again determined to be generally to the southwest, however, there was almost no variance in groundwater elevations between the former tank grave and the northern area extending to the former monitoring well, MW-6, an indication that groundwater could flow in the direction of that well. (Exs. DEP-19 through 24; test. 7/29/10, M. Temple, J. Hankins.)

17. Groundwater flow direction is a significant issue in this matter because it provides the bases for various and conflicting opinions with respect to the sources of contamination found in the tank grave and in the area of monitoring well MW-6 north of the tank grave. Staff's expert Hamel opined that the contamination is distributed on site in such a way that is inconsistent with the groundwater flow direction. In forming his opinion, he disregarded the HRP groundwater flow direction determination after concluding that certain data was unreliable[9] and because the HRP flow directions were convoluted and inconsistent with the data developed by LEI. Hamel also disregarded the LEI post-remediation groundwater flow direction determinations because the excavation area had been disrupted by the remediation and groundwater contours would have been impacted. Hamel concluded that the data did not support a conclusion that free product found in the HRP monitoring well MW-6 was part of the subject release discovered in 1993. (Test. 7/22/10, M. Hamel.)

18. Aldin's experts Temple and Hankins testified that the post-remediation groundwater flow determinations were appropriate to use to confirm flow direction prior to and after the remediation. The bases for their opinions are that the post remediation monitoring well network is broader and more comprehensive, the vast majority of the monitoring wells are in undisturbed, native soils, and the area disturbed by the 2008 remediation is not much larger than the area

[9] Hamel noted that the groundwater elevation measured at MW-4, located in the southwest corner of the site, was not used by HRP in its groundwater flow direction determination. Hamel concluded that this indicated the data was unreliable. Aldin's consultant Hankins testified that whatever the reason this data was not used, it would not have much bearing on the contours in the impacted area including the area of MW-6. It is more indicative that there is something more happening in that southern corner of the site. (Test. 6/24/10, J. Hankins, 7/22/10, M. Hamel.)

disturbed in 1986 so the groundwater would flow over the site generally in the same direction. (Test. 7/29/10, M. Temple, J. Hankins.)

19. Hankins opined that the post-remediation groundwater elevations provided "ample evidence that it would be possible to move free phase product from certain areas of the site, specifically the diesel pump island and the piping that led to the diesel pump island, into the vicinity of MW-6." Hankins and Temple testified that the presence of free product in MW-6 indicates significant contamination in that area above and below the water table. Both experts stated that any surface release that would result in free product in groundwater would have to have been so significant that official reports would have been generated. Hankins noted that contamination found in the upper layers of soil in the area of MW-6 were likely due to a surface release; however no contamination was detected immediately below the shallow soils and high concentrations of contaminants were detected at greater depths, which indicates a more significant release that moves across the water table. Notably, Hamel also testified that at some point in time there was significant contamination in the area of MW-6. (Exs. DEP-8, Aldin-6, 19 through 24; test. 6/24/10, J. Hankins, 7/22/10, M. Hamel, 7/29/10, M. Temple, J. Hankins.)

7

Depths of Contamination

20. Petroleum contamination was detected during the site investigations conducted between 1993 and 2008. Free product was initially discovered on July 21, 1993 and again on August 18, 1993 in the historic tank grave monitoring wells. A product sample was laboratory-tested in September 1993 and determined to be leaded gasoline. A soil gas survey was conducted in October 1993 in the tank grave and at other areas on site at depths of 6.0 to 7.5 feet below grade. Samples in the areas of the tank grave showed the highest concentrations of aromatic volatile organic compounds with lower concentrations at the sample point located north near the diesel pump island. (Ex. DEP-14.)

21. Free product was again detected in the tank grave monitoring wells on October 25, 1993, and in November 1993. Laboratory analysis of a sample of the free product detected lead and ethylene dibromide consistent with leaded gasoline. LEI concluded that the product identified

was likely formulated prior to December 31, 1985, suggesting that the release occurred prior to the excavation of the USTs in 1986.[10] (Exs. DEP-7, 14; test. 6/23/10, M. Temple.)

22. Product was hand-bailed for a time and no free product was detected in any monitoring well after December 3, 1993. BTEX[11] concentrations were detected in three monitoring wells in February 1994. Contamination, including MTBE, was detected during quarterly monitoring for the period May 1994 through September 1998. Monitoring was discontinued after September 1998. (Ex. DEP-11.)

23. Soil borings taken by HRP in the area of the historic and replacement tank graves revealed contamination at levels ranging from 2 to 12 feet below grade. Specifically, benzene was detected above applicable remediation standards in the replacement tank grave at a depth of between 2 and 4 feet and at depths between 4 and 6 feet and 10 and 12 feet in the historic tank grave. Soil samples exhibiting gasoline odors were found at levels of 1, 2 and 3 feet below grade in borings located in the tank grave area. Free product and total petroleum hydrocarbons (TPH) were also detected at levels above applicable standards in MW-6 located northwest of the tank grave. Concentrations of MTBE were also detected in two soil borings and one monitoring well. (Ex. DEP-8.)

24. Soil samples taken by LEI in July 2003 confirmed impacted areas in and around the entire tank grave. BTEX was detected in soils at depths between 1 and 4 feet and in extremely high levels of concentration at depths between 8 to 12 feet. High concentration levels at depths of 12 feet would likely mean that the contamination does not end at that depth but extends deeper than 12 feet. Another round of soil samples was taken in May 2008. Eight areas were sampled at depths ranging from 4 feet to 12 feet. Laboratory results confirmed that soils between about 8 and 14 feet below grade in the tank grave were contaminated by gasoline and diesel fuel and waste oil. (Exs. DEP-5, 11; test. 6/24/10, J. Hankins.)

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[10] Between June 30, 1985 and January 1, 1986, the US EPA required a 90% reduction in the lead content of gasoline i.e., from 1.1 g/gal to 0.1 g/gal. After December 31, 1985 leaded gasoline contained very little lead. (Ex. DEP-7; test. 6/23/10, M. Temple.)

[11] "BTEX" is an acronym for the gasoline compounds benzene, toluene, ethylbenzene and xylene. (Ex. DEP-14.)

8

Remedial Action Plans

25. In 1994, LEI proposed soil vapor extraction to remediate the free product discovered on the site. At the time, this approach was consistent with the DEP 1993 proposed soil remediation standards. This remedial action plan was provided to the Board in May 1994 as part of Aldin's first claim for reimbursement. By the time remediation was again considered for the site, soil vapor extraction ceased to be a viable remedial approach given newly adopted RSR volatilization criteria. The approach was later abandoned in favor of soil excavation and disposal, which is considered a more efficient and less costly alternative. (Exs. DEP-7, 12, 14, 26; test. 6/23/10, M. Temple 6/24/10, J. Hankins.)

26. In July 2003, LEI proposed a plan to excavate contaminated soils after further investigation of the site. At the time, LEI was unaware of the HRP investigation performed in 2000. LEI recommended that Aldin excavate and dispose of contaminated soils at depths between 8 and 14 feet below grade and reuse the upper 8 feet of clean soils. LEI projected a soil disposal volume of 1200 tons. LEI also anticipated soil excavation in the area around the diesel pump island and proposed to implement a de-watering process in both excavation areas. This proposal was provided to the Board on July 21, 2005. (Ex. DEP-11.)

27. The decision to undertake site remediation was postponed until Aldin conducted a major site redevelopment in late summer and fall of 2008. LEI again proposed a remedial action plan that would include excavation and off-site disposal of contaminated soils. LEI compiled all of the previous subsurface investigation results including the HRP investigation, into a single plan that showed where soil contamination exceeded the applicable RSR criteria. (Ex. DEP-5; test. 6/23/10, M. Temple.)

28. LEI concluded that the data compilation showed that multiple releases of gasoline and to a lesser extent diesel fuel occurred in the entire tank grave area. Laboratory data also suggested that petroleum compounds may be present below the groundwater table in close proximity to the tank grave. Laboratory data also confirmed the presence of waste oil contamination in the area of the former waste oil tanks. (Ex. DEP-5; test. 6/23/10, M. Temple.)

29. The proposed remediation area included soils that were immediately around and beneath the existing USTs and the entire excavation area including the tank grave (replacement and historic), soils to the northwest in the vicinity of monitoring well MW-6 and soils between these areas that made up the suspected ground water plume. LEI anticipated excavation of approximately 4800 tons of soil, off-site disposal of 4050 tons and reuse of the remaining 750 tons in accordance with the department's soil reuse policy. This plan was provided to the Board on May 29, 2009 with Aldin's supplemental claim #7 after remediation was complete and in accordance with the Program requirements of Milestone #4.[12] (Ex. DEP-5; test. 6/23/10, M. Temple, 6/24/10, J. Hankins.)

9
The Remediation

30. Three distinct areas on the site were excavated between June and September 2008. The first area, depicted in the remedial action plan, encompassed the entire tank grave and an area around the perimeter of the grave. Another small area, identified during the remediation activities, was excavated northwest of MW-6 and immediately adjacent to Wawecus Street. The third area involved contaminated surface soils directly beneath the easternmost gasoline pump island. (Ex. DEP-1; test. 6/23/10, M. Temple.)

31. Soils were excavated from the tank grave, an area approximately 30 feet by 70 feet, and north to the area of monitoring well MW-6. An area around the perimeter of the grave was also excavated and soils stockpiled for reuse. This perimeter area was used to establish a grade that would allow equipment and field workers safe access to the excavation hole. Actual excavation in this area generally mirrored the excavation plan. (Ex. DEP-1; test. 6/23/10, M. Temple.)

32. Soils immediately overlying the replacement tank grave were excavated from the surface to a depth of about 14 feet below grade, including all grey colored sand, which was typically considered to be contaminated. Soils overlying the eastern or historic portion of the tank grave were stripped to a depth of 1 to 2 feet and stockpiled onsite for reuse. Soils removed from that

[12] As of 2005, applicants for reimbursement are required to demonstrate that they have completed one of seven milestones. General Statutes §22a-449p. Milestone #4 requires a soil remedial action report that provides a detailed description of the extent of soil pollution resulting from the release, the remedial actions taken, and all documents that demonstrate that such soil pollution has been remediated in accordance with the RSRs. §22a-449p (4).

area were excavated from depths between about 2 and 14 feet. During the excavation Aldin personnel observed staining in soils that was indicative of weathered gasoline. (Exs. DEP-1, 12; test. 6/23/10, J. MacNeil, 7/29/10, M. Temple.)

33. Once the excavation had proceeded to the northern limit contemplated by the plan, bottom and sidewall samples were taken. LEI took perimeter samples at a depth of approximately 8.5 feet below grade that showed that aromatic volatile compounds were present at levels that exceeded applicable RSR criteria. LEI continued the excavation in that area for another 10 feet in a northerly direction to depths between 8.5 and 9.5 feet below grade until field observations and photoionization detector (PID) readings verified that soils were in compliance with applicable RSR criteria. (Ex. DEP-1; test. 6/23/10, 7/29/10, M. Temple.)

34. Soils in areas that were not directly overlying the tank grave were stripped to a depth of 4 to 6 feet and stockpiled on site. Soils at depths between 6 and 14 feet below grade were excavated and removed for disposal. Shipping logs reflect a total of 4934.12 tons of soil were excavated and removed for disposal from the two excavation areas. During the excavation activities, LEI personnel continuously screened the excavated soil for volatile organic compounds and select soil limit samples were field analyzed for the presence of TPH. (Exs. DEP-1, 12; test. 6/23/10, 7/29/10, M. Temple.)

35. In the third area, surface soils directly beneath the gasoline pump island were excavated to depths between 2.0 and 2.5 feet below grade. Contamination in this area was discovered during the site redevelopment in 2008 by construction workers when the pump island was being removed to prepare for installation of new USTs in that area. A total of 257.48 tons of soil were taken offsite for disposal from this remediation area. The contamination in these se soils was apparently due to recent surface releases; not the subsurface releases considered to have emanated from USTs. (Ex. DEP-1; test. 6/23/10; M. Temple, 7/29/10, M. Temple.)

36. Confirming the appropriateness of the remediation activities, Aldin's expert Hankins testified that LEI prepared a plan that illustrated the area of necessary excavation based on sufficient data to be comfortable at the time. Once an excavation area is identified, according to Hankins, the excavation contractor proceeds within the scope of the plan as written. Field

personnel must have contingency plans and the "field smarts" to react to circumstances that do not go according to plan. Contamination in the hole is easy to identify by black staining, PID readings and strong odors. Once in the hole, excavation continues to the edge of it when confirmation samples are taken to ensure further excavation is unnecessary. (Test. 6/24/10, J. Hankins.)

37. There are no standards that dictate how to remediate a site. The RSRs provide the remediation goals and prescribe the limits of any soil contamination that may be left on the site. Almost fifty confirmation samples were taken on the bottom and along the excavation sidewalls about every 20 lateral feet to ensure compliance with RSR criteria, a protocol followed in Hankins' firm. According to Hankins, the data that justified excavation to depths of 15 feet were observations of stained soils, elevated PID readings, significant gasoline odors and field judgment. He also noted that because perimeter samples showed the presence of contaminants remaining in the side walls at levels that did not exceed the RSRs the volume of soils removed was appropriate; the remediation was not unnecessarily expanded. (Test. 6/24/10, J. Hankins.)

10

Staff Investigation of Claims/ Conflicting Expert Testimony

38. Since the 1993 discovery of the petroleum release at the site, Aldin has filed its initial claim and six supplemental claims for reimbursement with the Board for costs associated with site assessments and investigations, preparation of remediation plans and remediation. Aldin's initial claim was filed with the Board on August 30, 1995. Cleanup Program Lead Environmental analyst John Duff, with more than 15 years experience with the Program and responsibility to ensure consistency in staff recommendations to the Board, has reviewed all of Aldin's claims filed over the 13-year history of this release. At the time of the review of claim #7, prior claims (1 through 6) were awarded totaling $73,130.24. (Exs. DEP-12, 28, 31; test. 7/22/10, J. Duff.)

39. During the review of Aldin's first claim and supplemental claim #2, Duff requested additional information on a number of issues, many of which addressed the purported source and nature of the petroleum release discovered in July 1993. Duff specifically asked about the origin of the free product found in 1993, details on the 1986 excavation and replacement of the historic

tanks, other potential sources of releases, and clarification of laboratory reports of MTBE contamination that suggested a more recent release. Duff also asked about stockpiled soils and contaminated soils recently removed from the site and whether a recovery well had been installed on the site. Aldin and LEI responded to each of Duff's inquiries. (Ex. DEP-7.).

40. Duff, knowing that contamination was present on the site at levels above the RSRs, was aware that the remediation was going to involve a significant excavation project. During his review of Aldin's claims, Duff concluded that the contamination on site was petroleum in nature. In his summary of supplemental claim #7 prepared for the Board, Duff noted that "there was probably a considerable amount of contaminated soil at this location based on all of the data provided recently and historically since this claim was submitted." Duff testified that in cases involving historic UST systems there is frequently no way of knowing the exact source and timing of a release; there is no documentation of a confirmed release. He relies on site data, the location and concentration of contamination and the best efforts of the applicant to determine the source of the release. (Ex. DEP-28; test. 7/22/10, J. Duff.)

41. In his review of supplemental claim #7, Duff raised a number of issues concerning the data used to define the impacted areas, the extent of the excavation and volume of soils removed, and the lack of field test data that would demonstrate that excavation beyond a certain point was necessary. He also questioned whether it was appropriate to incorporate the 2000 HRP investigation data to define the excavation area. (Ex. DEP-28; test. 7/22/10, J. Duff.)

42. Duff questioned whether the soil excavation went beyond the point necessary to bring the soils into compliance with the RSRs. Duff considered the materials submitted with claim #7 and additional materials provided during the claim review and concluded that Aldin did not provide sufficient field data to support the entire volume of soils excavated and removed from the site. (Test. 7/22/10, J. Duff.)

43. Duff also testified that it is not unusual for an applicant to "chase" contaminated soils during a site remediation; however, he relied on the planned excavation area rather than the actual area to arrive at his recommendation to the Board. Based on the remediation action plan, Duff calculated a volume of soil that he considered warranted excavation and removal. Duff's

calculation included soils across the entire excavation area at depths between 8 to 16 feet with soils above 8 feet left on site for reuse. He concluded from this exercise that approximately 2500 tons of contaminated soil should have been removed, roughly half of 5192 tons, the costs of which Aldin claimed for reimbursement. Duff's calculation formed the basis for his recommendation that the Board award only 50 percent of the expenses associated with the soil excavation and removal. (Ex. DEP-28; test. 7/22/10, J. Duff.)

44. Staff's expert Hamel also calculated a soil volume that he considered reasonable using an upper depth of 6 or 7 feet based on the LEI conceptual site model[13]. Hamel determined that approximately 3000 tons of soil could have been attributed to the release as depicted in the conceptual site model. Having calculated the area of soils to be excavated, Hamel used what he described as a middle number, a soil density factor of 1.4 tons per cubic yard in arriving at his total volume by weight. (Test. 7/22/10, M. Hamel.)

45. According to Aldin's expert Temple, soils were excavated and removed at various upper depths. For instance, in areas not directly overlying the replacement tank grave, soils between the surface and 5 feet below grade were stripped and stockpiled on site. Typically, soils directly overlying a tank grave are disturbed during the tank removal process, which involves tipping the tanks on end to pump out the last bit of fuel potentially impacting soils in the area. For this reason, the soils in the area of the replacement tanks were excavated from the surface. Surface soils at depths of either 1 to 2 feet or 4 to 6 feet were stripped in the area of the historic tank grave and stockpiled for reuse. Using this information, Temple calculated the additional area of soils represented by these varying depths and added them to the totals calculated by Duff and Hamel. Using an industry standard soil density factor of 1.5 tons per cubic yard, Temple arrived at a total of 4471 tons based on Duff's calculation and 4771 tons based on Hamel's calculation. (Test. 7/29/10, M. Temple.)

46. Aldin's expert Hankins testified in response to the concerns raised by staff's witness Duff regarding the eight-year-old data collected by HRP used to characterize the remediation area.

[13] A conceptual site model is intended to establish the pattern of contamination and what is required for remediation, identify the mechanism of a release, the means of movement from the release point and the degree the contamination spread out. (Test. 6/24/10, J. Hankins.)

Hankins stated that it was appropriate for LEI to use the data to assist with the site characterization and, in fact, LEPs are required to do so. Hankins noted that LEI supplemented the HRP data confirming that soils in the replacement/historic tank grave continued to be contaminated. He opined that the HRP data were appropriately considered, particularly in this case where large portions of the remediation area had concentrations of total petroleum hydrocarbons (TPH) above applicable RSR criteria; TPH does not degrade quickly. Hankins added that the "data were likely still representative of soil conditions in 2008 when remediation was performed." (Test. 6/24/10, J. Hankins.)

47. Hankins also gave his expert opinion on the extent of the 2008 remediation. He concluded that the remedial action plan was appropriate and the actions in the field were necessary to address soil that was contaminated at levels that exceeded RSR criteria or "was serving as a continuing source of contamination to groundwater." Hankins noted that the remedial action report indicated that field personnel continuously screened soils for confirmation of the presence of volatile organic compounds (VOCs). Hankins also noted that the presence of petroleum constituents in several sidewall samples at levels below RSR criteria is an indication that the excavation went far enough to bring the soils into compliance with the RSRs without the unnecessary excavation of soils that did not exceed RSR criteria. (Ex. Aldin-6; test. 6/24/10, J. Hankins.)

48. With respect to the source of the release, Aldin's experts Temple and Hankins agreed with Duff that, in the case of an historic site such as the subject site, such a determination with certainty is seldom possible. Temple stated that unless a hole or crack is observed in a tank or pipe, especially in cases such as this where there has been an historic release identification of the source of the release is seldom precise. Hankins testified that over the years he does not know that he has seen a release where the specific tank or source of the release is certain. In such cases, consultants strive for an explanation that fits the facts and the science. (Test. 6/24/10, J. Hankins, 7/22/10, J. Duff, 7/29/10, M. Temple.)

C

CONCLUSIONS OF LAW

1
Identification of Source of Release

A considerable amount of evidence was entered on the record in this proceeding that focused on whether the source of the release that is the subject of supplemental claim #7 must be identified before a claim for reimbursement will be considered. The parties were therefore directed to address this issue in their post-hearing submissions. Before reaching the issue of the reasonableness of Aldin's costs associated with supplemental claim#7, it is necessary to determine whether the source of the release must be specifically identified and whether Aldin's inability to pinpoint the source should render the release ineligible for reimbursement from the Program.

Aldin argues that the issue of the eligibility of the release is not a subject for this proceeding as the Board has already made this determination with respect to the Program requirements. Aldin maintains that the Board's findings constitute a full adjudication of this issue and any further consideration of the eligibility of the release is barred by the doctrine of collateral estoppel or res judicata.[14] These doctrines represent judicial recognition of the public policy that litigation should come to a close; litigants should not be able to re-litigate a matter they have already had the opportunity to litigate. *New England Estates, LLC. v. Town of Branford*, 294 Conn. 817, 844 (2010).

I cannot agree that the doctrines of res judicata or collateral estoppel apply in this context to preclude consideration of this issue. For these principles to apply in this case, the Board's procedures for acting on a claim for reimbursement would have to be equivalent to a judicial process that would result in the type of final judgment contemplated by either doctrine. It is evident that certain administrative adjudications culminate in a final decision where the

[14] Collateral estoppel is an aspect of the doctrine of res judicata that applies to issues that have been fully and fairly litigated and decided in a prior matter between the same parties on a different claim. "For an issue to be subject to collateral estoppel, it must have been fully and fairly litigated in the first action. It also must have been actually decided and the decision must have been necessary to the judgment." *Lighthouse Landings, Inc. v. Conn. Light & Power Co.*, 300 Conn. 325, 343-344 (2011).

principles of collateral estoppel and res judicata may have application. However, even though the Board entertains comments, or perhaps even argument, from staff and applicants at the time a claim is presented, this process does not rise to the level of a full adjudication of issues between the parties.

Staff argues for an opposite conclusion, claiming that the source of the release is a central issue in this case and should not depend on or be considered with regard to any prior Board determinations.[15] Staff contends that any reliance on prior decisions of the Board as definitive on the issue of the eligibility of the subject release would exempt Aldin from having to meet its burden of proof that the costs claimed emanated from an eligible release.[16] In its brief, staff argues further that "[e]ven if it is assumed that the Review Board based on different information and in a different context concluded that there was an eligible release at [the site], this does not mean that there are no ineligible releases at [the site], or that every cost that Aldin incurs is attributable to a release previously found eligible by the Review Board."[17]

This latter portion of staff's argument is inconsistent with the evidence in the record. As staff confirms in its brief and as set out in the factual findings herein, each investigation and each proposed remediation plan has been presented to and considered by the Board. The Board has considered and relied on the same evidence that has been placed on the record in support of supplemental claim #7. The record contains virtually nothing new. Therefore, the Board could not have based its prior decisions on different information and in a different context than has been established on the record of this proceeding.

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[15] Staff presents extensive arguments on this issue, based on what it characterizes as the precedential affect of past rulings of the Board and another hearing officer. The prior rulings of hearing officers do not establish precedent; such rulings can be accepted or rejected by the Board in its final decision. Where there has been no final decision, there is no precedent established by such rulings. Similarly, minutes of Board meetings, pleadings and opinion letters of legal counsel cannot fill in the gaps in a final decision rendered by the Board where it failed to provide any basis, including even an expression of disagreement, for deleting a proposed legal conclusion regarding the proper scope of a hearing. That is not the way precedent is created. In order for a decision to have precedential affect it must provide the basis for determining future cases involving similar facts or issues. Black's Law Dictionary (7th Ed. 1999). The Board's final decision does not provide that basis.

[16] Staff also argues that reliance on previous Board determination for this site would be inconsistent with my evidentiary rulings where evidence of Board minutes, and Board payment decisions were excluded as irrelevant.

[17] Staff's Brief After Hearing, p.7.

Perhaps more significant to this issue is Duff's testimony regarding his review and consideration of supplemental claim #7 leading up to his recommendation to the Board. Duff has extensive experience reviewing claims for reimbursement, including his past eleven years as a lead staff person for Program administration responsible for assuring consistency in the recommendations made by staff to the Board. In his summary of supplemental claim #7 and recommendation to the Board and in his testimony in this proceeding, Duff clearly relied on the aggregate of the information provided to the Board over the years. If I were to agree with staff's contention, the effect of doing so would be to render the testimony and conclusions of one of its own witnesses virtually meaningless.

The Program provides for the filing of supplemental claims and for the reimbursement of costs associated with such claims. The statutes and implementing regulations contemplate on-going clean-up activities at a site over a period of time as evidenced by the fact that filing deadlines are imposed on supplemental claims once an initial claim has been received by the Board. §22a-449c (b) (1) and (2); §22a-449e-1 (e) (4). In addition, the very term "supplemental claim", literally applies to claims that would add to or build on the initial claim. Moreover, as noted earlier, applications are reviewed for consistency with the regulatory criteria, which requires an investigation of any and all costs. §22a-449c-1 9f) (3) (A) (viii). It is evident that by the time the Board is presented with the seventh in a series of related claims, it should be able to rely on the Commissioner having satisfied the requirement that each claim be investigated and a determination made as to the source and therefore the eligibility of the release.

In this case, the evidence shows that Duff conducted an extensive investigation of Aldin's initial claim and recommended that Aldin's costs be reimbursed. The evidence also shows that he conducted an extensive investigation of supplemental claim #7, relying in part on the information provided in claims previously filed. Duff relied on his experience with historic sites and his understanding that other factors may necessarily be involved in determining the eligibility of a release. Morevoer, Aldin's experts, with extensive experience with UST sites and with the Program, agree that it is seldom possible to pinpoint the precise the source of a release, especially at an historic site.

Duff set out a standard for reviewing claims in such cases that one could reasonably infer has been satisfactory to the Commissioner and to the Board. He uses site data, the location and concentration areas of contamination, and a showing that applicants have used best efforts to determine the source and timing of a release. Applying those standards to Aldin's claims, including supplemental claim #7, Duff determined that the source of the release, and therefore the release itself, was eligible for the reimbursement of reasonable clean-up costs.

Even if I were to dismiss Duff's determination and agree with staff, the facts in this case do not support a different conclusion. The record demonstrates that: (1) at the time the historic USTs were excavated and removed, a leaking tank was reported to the department and some cleanup was initiated; (2) the petroleum stored in the historic USTs included leaded gasoline; (3) free product, representing significant contamination, was detected in a tank grave monitoring well in 1993 and was reported to the department; (4) lab tests concluded that the release contained petroleum constituents used in pre-1986 leaded gasoline; (5) site investigations revealed a plume of contamination; (6) free product was also detected in monitoring well MW-6; (7) the depths of contamination indicate a subsurface release; (8) field observations, site investigations and excavation sampling did not reveal any off-site or other sources of a release; (9) there is speculation but no confirmed evidence of service bay drains or dry wells on the site; and (10) there is typically no means of identifying the time, volume and source of a release in circumstances such as those present in this case. These are at least some of the facts available to Duff to consider in light of his standards for review and his determination that the release or releases on this site were eligible for reimbursement.

Duff's conclusions are also consistent with the opinion of two highly qualified experts with significant experience with UST sites and with the Program requirements. Temple and Hankins opined that, based on their experience and knowledge of this site, the release should be considered eligible for reimbursement. The aforementioned facts coupled with the skills and experience of Duff, Temple and Hankins are sufficient to allow a reasonable fact-finder to make the inference that the release came from one or more USTs located onsite. See *Connecticut v. Tangari*, 44 Conn. App. 187, 197 (1997) (it is the "right and duty of the fact finder to draw reasonable and logical inferences from the evidence"). Even though the specific UST from which the release emanated has not been identified, it is undisputed that all of the USTs involved

in this site were within the scope of tanks governed by the federal financial assurance requirements and the Program. There is therefore sufficient evidence to conclude that in all respects, the release that is the subject of supplemental claim #7 is a release that is eligible for reimbursement of the reasonable remediation costs associated with it.

2

Supplemental Claim #7 Soil Excavation and Disposal Costs

According to the applicable Program statutes, applicants must satisfy certain conditions for reimbursement, many of which were not challenged in this proceeding and are therefore not issues for consideration in this decision. However, two conditions must be determined in this matter, specifically whether the remediation costs associated with the on-site soil excavation and disposal were reasonable and, within that context, whether the remediation exceeded allowable soil and groundwater remedial regulatory standards. General Statutes §§22a-449c (a) (3) (A) and 22a-449f (c) (4) and (6).

In addition, the procedures and factors set forth in the implementing regulations that are relevant to this proceeding include: (1) a review and investigation of the all requests for reimbursement; (2) an assessment of the eligibility of the applicant; (3) an evaluation of whether some or all of the costs were incurred as a result of a release or suspected release; (4) whether some or all of the costs were reasonable based on costs and standards prevalent in the relevant market or industry; and (5) whether proper notice of the release was provided to the Board as soon as practicable. Regs., Conn State Agencies §22a-449e-1 (f) (A) (viii), (ix) – (xii).

The Program statutes and regulations do not expressly define the phrase "reasonable costs" or provide specific clean-up standards that would result in reasonable costs. However, with respect to clean-up standards, the statutes do refer to the remediation standard regulations adopted pursuant to General Statutes §22a-133k (RSRs). For instance, an applicant must complete one or more of seven milestones before Program funds may be available for reimbursement. General Statutes §22a-449p. Four milestones relevant to this discussion include: (1) an investigation report and plan to remediate the release in accordance with the RSRs; (2) a plan to remediate soil pollution in accordance with the RSRs; (3) post-remediation and annual progress reports that demonstrate the remedial actions and groundwater monitoring

necessary to achieve compliance with the RSR; and (4) a final remedial action report that documents that the pollution caused by the release has been remediated in accordance with the RSRs. §22a-449p (3) – (6).

The prescription for compliance with the RSRs to qualify for reimbursement shows that the legislature clearly anticipated that releases would be remediated to the standards set out in the RSRs. It is evident that in appropriate circumstances, a conclusion that costs are reasonable may be reached, at least in part, by a determination of whether the clean-up was consistent with and no more stringent than the requirements of the RSRs. §§22a-449c (a) (3) (A) and 22a-449f (c) (6).[18]

The Program regulations establish the types of activities and associated costs that are eligible for reimbursement provided such costs are reasonable and such activities are conducted in accordance with applicable laws. §22a-449e-1 (d). The supplemental claim #7 costs that are at issue with respect to this requirement of "reasonableness" are the costs associated with the excavation and disposal of 5191.61 tons of soils that Aldin determined contained pollutants at levels that exceed the acceptable standards for such pollutants established in the RSRs.

The record shows that in its remedial action plan, LEI established the area of excavation based on the totality of investigative findings that were reported since the discovery of the release in 1993. LEI prepared an excavation plan detailing the depths of excavation and estimates of the volume of soils to be reused or removed for disposal. Those estimates included approximately 4050 tons of contaminated soils to be removed and 750 tons to be reused. The difference between the estimated volume and the actual volume of soils removed, over 1100 tons, is claimed by Aldin to be due to its intention to avoid installation of environmental controls under the new convenience store, ensuring a complete and thorough remediation once the hole

[18] Staff points out that even if the remediation is reasonable, costs may not be due to factors such as gross overpayment for services, an issue that has not been raised in this case. However, staff contends that the Board's awards for reimbursement for repeat remediation strategies that were not executed and Aldin's failure to conduct remediation in a timely manner may make the costs of remediation unreasonable and argues for denial of claim #7 on this basis throughout its brief. Notably, Staff also argues that the Board's previous "decisions regarding Aldin's prior applications (i.e., prior determinations that releases were eligible)... have no bearing upon whether the release or releases that led to the incurrence of costs in claim #7 are eligible for reimbursement." On the one hand, staff argues that the Board should consider supplemental claim #7 without regard for its determination of previous claims for the same site. On the other hand, staff seeks to have this claim denied based on previous determinations and awards made by the Board.

was opened, the removal of contaminated soils at varying depths in that area and the unexpected excavation of the area adjacent to Wawecus Street; all necessary to bring the soils and groundwater into compliance with the applicable RSR criteria.

As noted previously, in accordance with the requirements of the fourth statutory milestone that is pertinent to supplemental claim #7, Aldin was required to submit a remedial action report that described the extent of soil pollution, all remedial actions taken to abate the soil pollution and all documentation that demonstrates that the soil pollution has been remediated in accordance with the RSRs. §22a-49p (4). According to Aldin, the remediation at this site complies with these requirements.

Staff's witness, Duff, and Aldin's experts, Temple and Hankins, all agree that it is not unusual during an excavation to go beyond the limits of the excavation plan to "chase" the contamination. Field observations and professional judgment along with soil and groundwater sampling results provide the elements for decisions to expand or reduce excavation in a given area. Aldin argues that, based on these factors, it has demonstrated that the scope of the excavation was appropriate and not more than was required to attain compliance with remedial standards; therefore, the milestone requirements have been demonstrated in accordance with the statutory prohibition against unnecessary remedial expense. Aldin maintains, therefore, that the entire costs of the remediation are eligible for reimbursement.

Even though Duff acknowledged that the scope of an excavation can be adjusted once the process begins, his calculation of the appropriate volume of soils that should have been removed from the site was based entirely on the remediation action plan and an assumption that such soils were present at the same depths at the top and bottom of the range of contamination across the entire excavation area, i.e., 8 to 16 feet below grade. I find this assumption inconsistent with the evidence regarding the varying depths of contamination. Staff's expert Hamel performed a similar calculation based on the assumption that contaminated soils were only present at one top and bottom depth, although at the more shallow top depth of 6 feet below grade. I also find this calculation inconsistent with the evidence.

The record also shows that the upper depths of contaminated soils varied with respect to the location of these soils in the impacted areas. The excavation area contemplated in the remedial action plan was expanded due to the contamination found to the north during the remediation. It is evident that the removal of contaminated soils could not have occurred at one consistent upper or lower depth but at different depths depending on the concentrations of petroleum contaminants at various locations.

However, I recognize the significance of Duff's concerns over Aldin's use of the historic HRP data, the limited 2008 data to define the excavation area, and the apparent absence of sampling data typically reported to confirm the extent of the excavation was necessary and not unnecessarily expanded. Despite these concerns, I cannot disregard the evidence on these issues presented by Aldin, especially evidence that is based on the reasoned judgment of qualified professionals with extensive relevant experience, one of whom was familiar with the site and frequently present during the excavation activities.

This expert evidence shows that although the HRP data used to define the excavation area was 8 years old, its use was appropriate. The 2003 soil investigation results showing BTEX at significantly high levels at depths of 12 feet below grade was an indication that contamination was likely present at even lower depths. Three of seven soil samples taken in 2008 in the tank grave at and immediately south of the tanks showed the continued presence of high concentrations of contamination. During the remediation activities, field personnel noted petroleum odors in soils; heavy soil impacts were observed at the bottom of the common UST grave. It is therefore reasonable to adopt Hankins' opinion that it was likely the contamination identified in the HRP investigation was still present at the time of the remediation.

Hankins confirmed that the entire excavation was not unnecessarily expanded as evidenced by the fact that laboratory results samples showed the presence of contaminants remaining in the side walls at levels that did not exceed the RSRs; the volume of soils removed was appropriate. Hankins also noted that soil excavation is typically the most cost-effective method to use to achieve compliance with the RSRs. Hankins opined that LEI sampled the excavation area according to standard industry practice; the remediation was necessary to bring

the site into compliance with the RSRs. I am persuaded by this opinion in combination with the evidence in the record that the remediation at this site was not unnecessarily expanded. The remediation was no more stringent than that required by the RSRs. §22a-449f (c) (6).

The most accurate accounting of the volume of soils removed from the site is provided by the shipping logs. Aldin has reported that a total of 4934.13 tons of soil contaminated by one or more subsurface releases were removed from the two excavation areas in and around the tank grave and MW-6. This total is not based on arbitrary calculations. Although an additional 257.48 tons of surface soils were removed from the eastern-most dispenser island, these soils were obviously due to recent surface releases; not the subsurface releases considered to have emanated from USTs. Therefore, the costs associated with these soils are not part of my consideration.

The preponderance of the evidence on the record supports a conclusion that the remediation was conducted in accordance with industry standards, the remediation activities were conducted so as to achieve but not exceed the limits required by the RSRs, the contamination that was remediated is the result of one or more releases that have emanated from one or more USTs on site, and the USTs were all of a type governed by the Program. I therefore find that there is substantial persuasive evidence to conclude that the costs associated with the excavation and removal of 4934.13 tons of soil are reasonable and eligible for reimbursement.

Staff has argued that a number of other factors implicate the reasonableness of the costs of supplemental claim #7. First, staff claims that Aldin failed to provide information to the Board of the 1986 release in its initial claim. Staff also argues that Aldin failed to provide evidence of when or how the release occurred, the volume of the release, the point of release or that free product was present at the time of the 1986 removal. Much of this argument has been addressed in the discussion regarding the threshold issue in this matter and need not be repeated here. However, the record shows that Aldin's initial claim included a considerable amount of information regarding the release discovered in 1993, including the laboratory analysis of the free product and the conclusion that the release likely emanated from the USTs removed in 1986.

Staff next claims that Aldin knew of the release in 1986 but failed to properly investigate and remediate the release at the time. Staff argues this failure to act is patently unreasonable and led to unreasonable costs. Notably, the record shows that the standards for site remediation in 1986 were not uniform; site remediation was assessed on a case-by-case basis. However, a report of the release was made to the DEP Leaking Underground Storage Tank unit, which indicated that a cleanup was initiated. There is no evidence on the record that contamination was known to be present on the site after 1986 until the discovery of free product in 1993. At that time, the free product was removed manually. I agree with staff that site owners and operators are required to address contamination when it is discovered. However, there is insufficient evidence in the record to conclude that Aldin failed to clean up the site to the satisfaction of the department in 1986.

Staff also claims that Aldin delayed remediation in 1993 and in subsequent years and failed to minimize, reduce and eliminate the volume of soils excavated in 2008. There is no dispute that Aldin waited fifteen years to address the contamination known to be present on the site. However, it is reasonable to infer that Duff and the Board have been aware of this delay and it appears that is has not affected any of Aldin's prior claims. Moreover, staff has not cited to nor do I find any Program statute or regulation or any standards that would support a conclusion that the costs associated with the removal of contaminated soils in 2008 should be denied as unreasonable due to this delay. To reach such a conclusion in the absence of law or standards would be arbitrary and unlawful. See *Tele Tech of Connecticut Corp. v. Dept. of Public Utility Control,* 270 Conn. 778 (2004) (administrative agency must act strictly within its statutory authority; agency cannot modify, abridge or otherwise change statutory provisions unless expressly authorized by statute to do so).

Finally, staff argues that Aldin's costs are unreasonable because Aldin received reimbursement for repeat investigations and remedial action plans that were never implemented. Again, while this evidence is undisputed, I find no basis in law to conclude that the excavation costs that are the subject of claim #7 are unreasonable as a result of these prior reimbursements. Moreover, it is reasonable to infer from the evidence that the costs of these repeat investigations

and remedial actions plans were submitted to and awarded by the Board over a number of years. It is not for me to overturn those decisions by the Board in this proceeding.

3
CONCLUSION

Although it is not possible to identify the source of the on-site petroleum contamination with absolute certainty, based on the substantial and persuasive evidence on the record I find that Aldin has satisfactorily demonstrated the eligibility of the source of the petroleum contamination that was remediated at this site. The investigation and review of supplemental claim #7 was conducted in accordance with the Program's implementing regulations and the conclusions of staff regarding the source of the subject release provide a reasonable and sufficient basis upon which the Board may rely in its consideration of costs associated with this claim.

The remediation of the petroleum release or releases on the site was reasonable and in accord with the RSRs as required by the Program conditions for reimbursement. The remediation that occurred on the site was not more stringent than that required by the RSRs; the volume of soils excavated and removed was not unnecessarily expanded. General Statutes §§22a-449c (a) (3) (A) and 22a-449f (c) (4) and (6). I therefore conclude that the costs associated with the excavation and removal of the documented 4934 tons of soils contaminated by subsurface releases are reasonable and therefore eligible for reimbursement.

III

RECOMMENDATION

On the basis of the foregoing, I recommend that the Board reconsider its initial determination of Aldin's supplemental claim #7 and modify its award to include the costs associated with the excavation and removal of the documented 4934 tons of soil that are a part of that claim.

Jean F. Dellamarggio, Hearing Officer

SERVICE LIST

Proposed Final Decision In the Matter of Aldin Associates
Site 415/Supplemental Claim #3

PARTY	REPRESENTED BY
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