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January 4, 2013

By Hand

Board of Registration of Hazardous Waste Site Cleanup Professionals
One Winter Street – 3rd Floor
Boston, MA 02108
Attention: Terry L. Wood, Esquire, General Counsel

Re: In the Matter of James J. Decoulos, Docket No. LSP 10AP 01

Dear Attorney Wood:

Enclosed for filing in the above-referenced matter are the following documents:

1. Objections of James J. Decoulos, P.E., LSP, to the Presiding Officer's "Recommended Decision" dated September 7, 2002.

2. First Appendix to Objections of James J. Decoulos, P.E., LSP – Eagle Gas Site, Carver.

3. Second Appendix to Objections of James J. Decoulos, P.E., LSP – Speedy Lube Site, Randolph.

Please let me know if you have any questions regarding this filing. Thank you for your assistance and consideration.

Very truly yours,

Peter J. Feuerbach

PJF/ees
Enclosures
cc: Client (w/encls.)
Lynn Read, Esquire, Board of Registration of Hazardous Waste Site Cleanup Professionals (By Hand, w/encls.)

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COMMONWEALTH OF MASSACHUSETTS
BOARD OF REGISTRATION OF
HAZARDOUS WASTE SITE PROFESSIONALS

In the Matter of James J. Decoulos	**Docket No. LSP 10AP 01**

OBJECTIONS OF JAMES J. DECOULOS, P.E., LSP, TO THE PRESIDING OFFICER'S "RECOMMENDED DECISION" DATED SEPTEMBER 7, 2012

The Presiding Officer's Recommended Decision, dated September 7, 2012, concerned two sites where the Respondent, Mr. James J. Decoulos, P.E., LSP ("Decoulos"), was the LSP-of-record; the "Eagle Gas" site in Carver, MA, and the "Speedy Lube" site in Randolph, MA. Decoulos hereby objects to the Recommended Decision because, inter alia, it is not supported by substantial evidence in the record; it misinterprets and misstates key record evidence concerning Decoulos' response actions and compliance with the MCP and the LSP's Rules of Professional Conduct; and, wrongfully presents a DEP-centric view of the evidence, which is not all surprising given that the Board granted DEP excessive control over the adjudicatory proceeding (e.g., DEP had controlled the response actions at Eagle Gas, DEP provided the witnesses, DEP provided the hearing officer (an attorney at DEP), DEP's attorney issued the Recommended Decision, and the hearing officer was hand-picked by Board members (including one who testified against Decoulos).[1]

[1] See Section II, below, concerning Decoulos' objection to the Board's unfair and biased adjudicatory process. In addition, see the Board Minutes of July 26, 2012, wherein the Board stated it "believed the separation that is supposed to exist between

The record evidence amply demonstrates that Decoulos properly conducted, and documented, necessary and appropriate response actions, in a timely manner, in compliance with General Laws Chapter 21E and the implementing regulations at 310 CMR 40.0000 et seq. (the Massachusetts Contingency Plan, MCP) as well as the LSPs' Rules of Professional Conduct at 309 CMR 4.00 et seq. The evidence demonstrates that Decoulos acted with reasonable care and diligence and that Decoulos applied the knowledge and skill ordinarily exercised by LSPs in good standing at the time he performed his services. Similarly, Decoulos complied with the requirements and procedures set forth in the applicable provisions of G.L. c.21E and the MCP.

Accordingly, the Board should not accept the Recommended Decision. The Board should instead determine that, based on the record evidence, the Board did not satisfy its burden of proving that Decoulos violated G.L. c.21E, the MCP, or the LSPs' Rules of Professional Conduct at 309 CMR 4.00 et seq. The Board's disciplinary proceeding against Decoulos should be dismissed with prejudice.

Decoulos' Objections are organized in the following manner:

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the LSP Board and MassDEP in reality no longer exists." (See Minutes, p. 8, in Appendix.)

In support of these Objections, Decoulos files herewith two "Appendix", one for Eagle Gas and one for Speedy Lube, consisting of key exhibits in the record as well as certain technical materials of which the Board should take official notice.

I. SUMMARY OF THE RESPONSE ACTIONS

A. **Eagle Gas Site:** The Eagle Gas Station Site located at 131 Main Street, Carver, was made complicated by an extensive, historic release of gasoline (reported in 1997 by a prior owner) as well as a limited, new release of diesel LNAPL[2] (reported by Decoulos in 2003 on behalf of the new owner). The site was also made complicated by the competing positions of the prior owner (Richard Nantais and Nantais Realty Trust) and their three LSPs (Bart Paulding, Ted Kaegael and David Bennett), who were responding to the historic gasoline release, and the new owner and its LSP (Eagle Gas, Inc. and its LSP, Jim Decoulos) who began responding to the new diesel LNAPL. Further complicating matters were various decisions made by DEP staff attempting to control and direct response actions. As detailed below, DEP's decisions were not supported by site conditions, were not reasonable, and were ultimately demonstrated to be ineffective and wasteful of limited resources.

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[2] Light Non-Aqueous Phase Liquid, or separate product, "LNAPL".

In particular, in January 2003, the prior owner's LSP, who was responding to the gasoline release, discovered LNAPL, believed to be diesel product, in one of the eight monitoring wells (BP-5RR) that had been installed and monitored since 1997. BP-5RR was a 1" diameter microwell.[3] Decoulos was engaged by the new owner in January 2003 to respond to the LNAPL release. Decoulos reasonably concluded at that time, and subsequently, that the LNAPL was likely limited in extent because the diesel UST[4] and pressurized piping were tightness tested, and passed, in January 2003; the LNAPL was observed in only one of the eight monitoring wells that had been sampled since 1997; and a separate remote fuel supply line, if it were leaking, was only four years old and used only on a limited basis when diesel fuel was delivered.[5]

In May 2003, when the owner discovered the remote line had leaked, the line was taken out of service immediately. Therefore, as of May 2003, Decoulos reasonably concluded that the source of the recent diesel release had been eliminated.

On May 16, 2003, after observing a sheen of oil or waste oil on the surface of South Meadow Brook located about 600' away, Decoulos reported the release to the Carver Fire Department and DEP. He visually observed and took VOC headspace readings (with Mark Jablonski of DEP) from the two drain manholes (DMH-1 and

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3 The scientific and technical literature demonstrate that small diameter microwells like BP-5RR exaggerate actual LNAPL thicknesses.

4 Underground Storage Tank, "UST".

5 Eagle Gas had installed the remote fuel supply line to improve safety when the diesel UST was filled. In particular, because the diesel UST was located in an area that was subject to heavy customer traffic, which made it difficult for a large delivery truck to park above the tank for a direct delivery, Eagle Gas had installed a separate remote fuel supply line in approximately 1999 to allow filling at a spot that was away from customer traffic. (RR-8.) The remote fuel supply line, which only contained fuel during a delivery, was separate from the pressurized piping between the UST and the fuel pump at the customer island. That pressurized piping was not leaking.

DMH-2) that were part of the storm drain system located in front of the Station as well as a catch-basin (CB-4) and additional drain manholes located downgradient from the site. (See discussion, below, regarding South Meadow Brook, and Existing Conditions Plan, Exhibit RR-8, a copy of which is attached as an appendix for the Board's convenience.)

Drain manhole DMH-2 was located in front of the Station and immediately downgradient of the remote fuel supply line that had leaked. As such, Decoulos recognized that DMH-2 was the key drainage structure to determine if LNAPL might possibly infiltrate the storm water system. Decoulos' and DEP's visual observations and PID[6] readings indicated that diesel LNAPL had not infiltrated DMH-2. The VOC headspace readings was 0.5 ppm. (RR-8.) Therefore, it was reasonable for Decoulos to conclude at that time that the LNAPL was not infiltrating the storm drain system.

(As discussed below, Decoulos and DEP observed evidence of historic contamination in a downgradient catch-basin known as "CB-4", as well as the manholes connected to and downgradient of CB-4. CB-4 was subject to spills, dumping and uncontrolled contaminated runoff from the gas station area, repair shop, and former automobile junkyard.[7] For example, Decoulos and DEP measured VOC headspace

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6 Photoionization Detector (PID), to field screen each drainage structure for volatile organic compounds (VOCs). (July 2003 IRA report, Ex. B-21, p. 16.)

7 DEP had long been aware of the site's long, uncontrolled history as a former automobile junkyard, repair shop and gas station. For instance, in DEP's Release Log Form Attachment and Notice of Responsibility (NON) to the prior owner, dated March 12, 1997 and August 11, 1997, respectively, DEP described the site's use as an auto junkyard, repair shop for power equipment (lawn mowers, chain saws, etc.), and gas station. (RR-57 and 58.) Those pollutant-generating activities were located right next to the edge of the road (Main Street) and the catch basin connected to the storm drain system. State and Federal environmental agencies, including the DEP and EPA, as well as environmental professionals have long been aware that dumping waste oil and other

readings at 24 ppm and at 27 ppm and 28 ppm at CB-4 downgradient manholes. (RR-8) Based upon multiple lines of evidence, Decoulos reasonably concluded that the historic impacts to CB-4, and not the recent LNAPL release, was the cause of the historic impact and present sheen at the Brook.)[8]

On June 2, 2003, Decoulos advanced three soil borings, each of which were finished as monitoring wells (DCW-1, DCW-2 and DCW-3), immediately downgradient of the LNAPL release and upgradient of the storm drain, to determine whether LNAPL had migrated from the release area to the edge of the pipe and its trench. LNAPL was not detected in the borings or wells. Therefore, Decoulos had additional evidence to reasonably conclude in June 2003 (i) that the LNAPL was limited in extent and had not migrated to or infiltrated the storm drain pipe or the preferential pathway provided by the trench, and (ii) the recent LNAPL was not the cause of the historic impact or present sheen at the Brook. (As indicated below, DEP did not accept Decoulos' opinion. However, DEP did not insist that the LNAPL had infiltrated the storm drain and discharged at a Brook 600' away, causing historic impact at the Brook. If DEP had insisted this point, Decoulos would have been able to provide additional evidence on the point. Notably, at the hearing, DEP raised this issue as after-the-fact rationalization of its prior actions, which the Officer accepted. Baran PFT p. 23; Decision p. 25)

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pollutants directly into catch basins has been commonplace at uncontrolled pollutant-generating businesses like those at this site.

[8] Subsequent sampling demonstrated LNAPL infiltration into the storm drain line was not the cause of the historic impact or current sheen at the Brook. For instance, the highest observed EPH stormwater concentrations at drain manhole DMH-2 were 193 ug/l, whereas the highest concentrations at the outfall at the Brook were 400,000 times higher, at 2,150,000 ug/l. (RR-8) (The immutable laws of chemistry and storm drain flow prevent a causal connection between the relatively low concentrations at DMH-2 and the off-the-chart concentrations at the outfall.

Decoulos continued to perform various response actions throughout 2003 and 2004, including continuously evaluating the LNAPL release for possible conditions of Substantial Release Migration (SRM) or Imminent Hazard (IH). Based on his evaluations, Decoulos determined that no such conditions were present in 2003 or 2004.

One year later, on June 3, 2004, Decoulos observed LNAPL in an additional monitoring well (DWW-1) located between the release area and the storm drain. Although this observation did not create an IH or SRM condition, Decoulos believed that it warranted more aggressive action to contain and recover the LNAPL.

Decoulos immediately prepared an Immediate Response Action (IRA) Plan Modification and filed it with DEP 12 days later, on June 15, 2004. Decoulos' Plan proposed excavation and disposal of impacted soil as well as the installation of a 50' long interceptor trench to collect and recover the LNAPL before potentially reaching the stormwater system. Based upon his professional experience as well as practices in the industry, Decoulos reasonably concluded that the interceptor trench was feasible, cost effective, and consistent with industry practice for soils with low hydraulic conductivity (such as those that existed at the site), including remedial methods recommended by the U.S. EPA, the American Petroleum Institute, and the LSP Association's Technical Practices Committee.

However, on July 1, 2004, DEP denied Decoulos' Plan for LNAPL recovery and the construction of an interceptor trench. DEP asserted that there was insufficient information on the extent of LNAPL as well as to demonstrate the "efficacy" of the proposed "passive" recovery system. Despite the alleged insufficient information, DEP insisted that Decoulos implement "active" remediation. DEP did not specify its

requirement for "active" recovery. Also, DEP did not explain or justify how active recovery was able to proceed in view of the alleged lack of information on the LNAPL delineation whereas passive recovery was prohibited. In response to DEP's denial, Decoulos documented that DEP's proposed "active" remediation would not be effective due to the tight soils (silt, clay, fine sand) that would hinder active recovery.

Decoulos contends that the LNAPL would have been contained and recovered in the Summer of 2004, using cost-effective, proven methods in the low permeability soils (direct excavation of the LNAPL impacted soils) and preventing migration, if DEP had not improperly denied the IRA Modification in July 2004.

After DEP's first denial in July 2004, Decoulos continued to perform appropriate response actions, including additional assessment which involved the installation of and sampling of new wells (e.g., four 4" wells, ERW-1 through ERW-4, and five micro-wells, DCW-4 through DCW-8); continuing measurement of LNAPL thickness; and recovery of LNAPL using a passive skimmer.

On November 5, 2004, after obtaining additional information on the extent and nature of the LNAPL release, Decoulos submitted his second IRA Plan Modification, to contain and recover the LNAPL. He proposed a "groundwater treatment system that withdraws groundwater from wells ERW-1 and ERW-4 at a rate sufficient to pull NAPL and dissolved diesel constituents back to [the Station] property", as well as passive recovery of LNAPL at the existing well points.

On November 26, 2004, DEP denied Decoulos' second remedial plan to contain and recover the LNAPL. DEP repeated its contention that the plan did not provide "sufficient technical justification to support the viability or efficacy of any above the [sic.] proposed remedial actions."

In December 2004, clearly frustrated with the alleged bases of DEP's two denials and the negative effect they were having on his response to the LNAPL, Decoulos proposed the approach that DEP said it wanted, and ultimately approved, which was groundwater depression and treatment to "actively" recover LNAPL using an infiltration trench on the opposite (downgradient) side of the stormwater pipe. However, implementation of DEP's active remediation drew contaminants toward the storm pipe, and, as the groundwater elevation rose in the Spring of 2005, allowed contaminants to enter the stormwater pipe and manholes. Thus, in April 2005, contaminants were observed in DMH-2 (the drain manhole immediately downgradient of the LNAPL release) for the first time.[9]

After Decoulos was dismissed by Eagle Gas in 2005, the new LSP (Daniel Fenten, ECS) submitted a Phase III Report that proposed a clean-up option of "soil excavation and disposal with dewatering combined with activation of the existing groundwater infiltration trench". This was the same type of approach first proposed by Decoulos, and rejected by DEP, back in June 2004.

The next LSP for Eagle Gas (Corporate Environmental Advisors, CEA) ended up implementing "active" remediation (high vacuum extraction), which recovered only 10 gallons of LNAPL, as compared to the 55 gallons of LNAPL recovered by Decoulos using "passive" recovery. According to DEP's website, a temporary Class "C" Response Action

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9 As mentioned above, there was no credible evidence to connect even the relatively low concentrations finally observed in DMH-2 (193 ug/l of EPH C9-C18 aliphatics) to the exceedingly high concentrations (2,150,000 ug/l of EPH C9-C18 aliphatics), and historic impacts observed at the outfall at the Brook. (RR-8 and Summary of EPH Concentrations, Appendix.)

Outcome (RAO) Statement was filed on February 8, 2011. No permanent solution has been achieved.

The evidence demonstrates that DEP's required approach was ineffective and wasteful: DEP's "active" remediation recovered a total of only 22 gallons of product at considerable expense whereas Decoulos' "passive" recovery yielded 55 gallons.[10] In addition, the inefficiency and waste of DEP's required "active" remediation is further demonstrated by the $30,503 in electric costs alone to run the active system, not including a host of other expensive costs associated with the approach (all of which were at taxpayer expense under the 21J UST Program).[11] (Ex. R-16.)

As indicated above, Decoulos' response actions included tracking the nearby storm drain to its outfall located about 600' away on South Meadow Brook. The storm drain outfall, and Brook had never been assessed by the two prior LSPs handling the historic gasoline release or by DEP, which had cited the Brook as a possible downgradient receptor in its 1997 NOR to the prior owner and had also conducted a field audit of the gasoline release and the Station site in 1998. (RR-58, RR-6)

In May 2003, Decoulos took it upon himself to assess the Brook as a part of an Imminent Hazard (IH) evaluation (B-21) and, in doing so, observed a sheen on the Brook at the pipe's discharge point. The observable impact on the bank and vegetation

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[10] It was clear error for attorney Jones to credit DEP's mandated active recovery system as treating "thousands of gallons" of product and water. He clearly missed the point: He counted the mixture of dissolved petroleum, undissolved petroleum, and water, not pure product. Jones failed to acknowledge that Decoulos and Wright managed the withdrawal of over 8,000 gallons of a similar mixture in 2005. (Wright PFT, p. 5; B-49, pp. 18-19.)

[11] Decoulos' original plan to remediate the LNAPL by excavating in accordance with industry standards was proposed to cost only approximately $15,000. (Wright PFT p. 3.)

appeared to be historic and not recent. Decoulos observed the outfall pipe into the Brook to have "caked" oil lining the interior of the pipe, indicating pollutant impacts, such as direct dumping and drainage, which were older than the recent LNAPL release. (See Ex. RR-2, Photos 20-21, 34-35, 54, 70, 77, 88-89.)[12] Decoulos (along with Mark Jablonski of DEP) traced the storm system upgradient and observed the first, original point of contamination in a catch basin referred to as "CB-4". CB-4 was located just downgradient of the Eagle Gas station (and the machine repair shop, and former auto junkyard) and received runoff from the site, which included areas of barrel/drum storage, boat storage and the area around the repair garage and former junkyard. (See Exs. RR-2, Photos 3-14, 163; and RR-8.)[13] In view of the site's historic and current land uses (junkyard, repair shop, gas station, storage yard), and the nature of the contaminants from CB-4 and downgradient, Decoulos reasonably concluded that CB-4 likely received direct spills and dumping as well as contaminated runoff on a historic basis, which were then conveyed to the outfall at the Brook by gravity and storm flow.

Importantly, Decoulos and DEP determined on May 16, 2003 that the drain manhole (DMH-2) located immediately "upgradient" of CB-4, and immediately downgradient of the LNAPL release, did not have observable contamination, a sheen or significant PID readings. Specifically, DMH-2 had VOC headspace readings of only 0.5 ppm on May 16, 2003, whereas the obviously impacted CB-4 had readings of 24 ppm. (RR-8.)

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12 Historic releases are supported by the testimony of Cynthia Baran of DEP who reported black oil oozing out of the soil. This indicates historic impact, not a recent LNAPL release. (Baran PFT, p. 21-22)

13 All of the cited Exhibits can be found at http://www.decoulos.com/LSPBoard10AP01.htm and the Photos for the Eagle Gas site are available at http://goo.gl/7Jy1i

Richard E. Doherty, PE, LSP concluded from the factual evidence that the trail of contamination originated at CB-4. (Doherty PFT; Hearing testimony, Day 2, p. 431.) He noted that the 0.5 ppm response at DMH-2 -- which was less than 10 feet from 15,000 gallons of gasoline being stored underground -- was not indicative of a fresh diesel LNAPL release flowing through the drainage structure. (Hearing testimony, Day 2, pp. 431-434.)

Based on his engineering experience and the evidence before him, Decoulos reasonably concluded that the historic impact and current sheen at the Brook were not caused by the recent LNAPL infiltrating the storm drain. Instead, Decoulos reasonably concluded that the impact and sheen were likely due to direct, historic dumping and runoff of oil spills and other contaminants into CB-4 coupled with contaminated stormwater entering CB4, with flow to and discharge at the outfall. A subsequent video inspection of the storm drain confirmed that the recent LNAPL release had not infiltrated the storm system in any meaningful way. The video survey found "no areas exhibiting prominent infiltration of water and/or LNAPL...on the inside of the pipe". (B-53, pp. 18-19.) (As mentioned, Decoulos had installed a series of wells between the LNAPL release and the storm pipe, measurements of which indicated that LNAPL had not migrated to the pipe. However, over time the active recovery required by DEP eventually caused LNAPL to migrate toward the storm drain and, when groundwater levels rose sufficiently to reach the pipe, infiltrate the pipe in a limited manner.)

The data indicate that the relatively low concentrations of EPH observed at DMH-2 could not have caused the sky-high concentrations at the outfall. (See Summary of EPC Concentrations in the Appendix.)

The bad faith nature of the disciplinary complaint against Decoulos is also relevant. The complaint was filed by Decoulos' client, Eagle Gas, Inc.[14], in bad faith retaliation for Decoulos filing a lawsuit against Eagle to recover $79,110 in unpaid fees and services. A Superior Court Judge granted Decoulos a Writ of Attachment against Eagle and its affiliates in the amount of $79,110, demonstrating the merits of Decoulos' claim against Eagle. The parties subsequently resolved their dispute, with Eagle agreeing to pay Decoulos' fees, withdraw its bad faith complaint against Decoulos and drop the complaint with the Board. However, the Board chose to continue pursuing Decoulos. (Decoulos understands that the Board has never accepted a private complaint for discipline that was not initiated by DEP.)

B. **Speedy Lube Site:** The Speedy Lube gas station site located at 633 North Main Street, Randolph, was a relatively straightforward response action concerning releases from gasoline underground storage tanks ("USTs") at the site. There was a release from a 2,000 gallon UST and from two 6,000 gallon USTs in June and October, 1997, respectively. The leaking tanks were removed and replaced in November 1997 with a 12,000 gallon double-walled, fiberglass UST, which, since that time, was continuously monitored and automatically gauged (along with its associated piping) with an electronic monitoring system, with no evidence of leaking. At the time the USTs were removed, 275 tons of petroleum contaminated soil were excavated and recycled at the Bardon Trimount facility in Stoughton, MA.

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14 See Exhibits RR-12 and RR-14. The Presiding Officer incorrectly credited DEP as having initiated the case referral to the Board. RD, p. 1, n.1.

In June 1998, SAGE Environmental, Inc. filed its Phase I – Initial Site Investigation, the substance of which was never challenged by DEP. In June 2002, after reviewing SAGE's report and data and after conducting additional sampling and analysis of soil, soil gas and groundwater and performing a Method 2 risk characterization, Decoulos filed a Response Action Outcome ("RAO") report, documenting that the site could be closed using a Class A-3 RAO with an Activity and Use Limitation ("AUL"), limiting the use of the site to commercial or industrial uses. Decoulos' report documented, inter alia, that a preexisting defective monitoring well installed by the prior LSP was allowing surface contaminants to flow directly into the well and skew one exposure point, and that the boring data indicated that the site was located in a bedrock bowl that restricted the extent of the release.

In November 2003, DEP issued a Notice of Audit Findings ("NOAF") and Notice of Noncompliance ("NON") to the owner, asserting that a condition of No Significant Risk had not been achieved to support the RAO. In response, Decoulos promptly took an additional round of groundwater samples in November 2003, and again in March 2004, along with additional soil gas samples in June 2004, and used that information to file a new RAO report on June 18, 2004. The 2004 RAO reported that the additional sampling supported his original conclusions and opinion in the 2002 RAO. Decoulos also confirmed that the original AUL recorded in June 2002 remained in effect to limit the use of the site to commercial or industrial uses.

DEP did not issue a second NOAF or NON for Decoulos' new RAO. Decoulos' prompt resolution of DEP's concerns and confirmation of his original conclusions and opinions demonstrated that no additional enforcement actions were warranted.

There is no substantial evidence in the record to support the Board's assertions or the various statements in the Recommenced Decision. For instance, the record evidence does not support the following assertions:

a. Alleged residual soil contamination constituted a "source" of contamination (in fact, the leaking tanks had been removed, 275 tons of impacted soil were removed, and there were no leaks from the new tank);

b. Decoulos allegedly wrongfully attributed an increase in concentrations to "groundwater fluctuations" (in fact, Decoulos demonstrated that a preexisting monitoring well did not have a cover and allowed surface contaminants to drain into the well, causing an increase in concentrations at that one well; once the compromised well was eliminated, follow-up sampling demonstrated that concentrations were reduced);

c. Decoulos allegedly failed to comply with available guidance (in fact, Decoulos complied with guidance in effect when the RAO was filed in June 2002; the guidance did not specify how to calculate Method 2 standards; DEP and the Board improperly imposed new standards on sampling and analysis that were adopted four months later, in October 2002);

d. Decoulos allegedly failed to calculate exposure point concentrations at each individual monitoring point (in fact, Decoulos calculated EPCs at each individual monitoring point);

e. Decoulos allegedly failed to include benzene and MTBE in his risk assessment (in fact, Decoulos properly assessed those contaminants);

f. Decoulos allegedly failed to define the horizontal and vertical extent of the contamination (in fact, Decoulos demonstrated that the site was in a bedrock bowl which restricted the horizontal and vertical extent of remaining dissolved phase gasoline constituents);

g. Decoulos allegedly improperly averaged soil gas results (in fact, Decoulos complied with applicable policy regarding limitations on averaging of groundwater samples and soil samples, and documented that, in June 2002, there were no DEP policies regarding soil gas samples; he documented his handling of soil gas results under the specific site conditions, the results of which were demonstrated to be accurate and appropriate in follow-up sampling conducted in June 2004);

h. Decoulos allegedly improperly used groundwater filtering (in fact, Decoulos properly documented his decision to filter groundwater samples due to the amount of sediment that was withdrawn during low-flow sampling from the newly constructed wells; two subsequent groundwater

sampling rounds in November 2003 and March 2004, without filtering, confirmed the results of Decoulos' original sampling);

i. Decoulos allegedly failed to conduct LNAPL gauging (in fact, Decoulos documented that only one well displayed a "slight sheen" during one sampling round, all other wells did not exhibit a sheen, there was no evidence of LNAPL in the soil cores, the low-flow sampling did not reveal any separate phase product, the leaking USTs and the petroleum contaminated soil were removed, and there was no evidence of any new leaks).

II. OBJECTIONS TO UNFAIR AND BIASED ADJUDICATORY PROCEEDING

Decoulos objects to the Board's Adjudicatory Proceeding because it was unfair and biased, where (i) Board members interviewed and selected a DEP attorney to serve as the Board's Hearing Officer, and one of those interviewing members testified before that attorney, and (ii) DEP had controlled the disputed response actions, provided the witnesses, and provided the attorney to serve as the Officer, rule on the Motions and case, and issue the "Recommended Decision", all after DEP had spent several years controlling and enforcing actions at the Eagle Gas Site. Decoulos objects to the Board's "adjudicatory proceeding" as being fundamentally unfair and biased on its face and as applied in this instance. At the outset, it is important to recognize that DEP never initiated disciplinary action against Decoulos despite their professional disagreement over response actions at the Eagle Gas site or at the Speedy Lube site[15]. It was only after Decoulos' client (Eagle Gas, Inc.) had filed a retaliatory disciplinary complaint with the Board (in retaliation for Decoulos filing a lawsuit to recover $79,110 in unpaid fees), and

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15 At the Speedy Lube site, Decoulos had promptly and properly responded to DEP's concerns back in 2004, which resolved issues without the need for formal enforcement or disciplinary action.

then dismissed its complaint, did DEP support the disciplinary complaint with the Board.[16]

The Board's Minutes demonstrate that Board members Robert Luhrs, Debra Stake and Jeanine Commerford (of DEP) and General Counsel Terry Wood interviewed DEP Attorney, Timothy Jones, in October 2009, to serve as the Board's "Presiding Officer" on the Decoulos complaint. (See 10/29/09 Minutes, attached as an Appendix.) At that time, and for all times relevant to this adjudicatory proceeding, Attorney Jones was employed by DEP in its Office of Appeals and Dispute Resolution ("OADR"). Prior to that DEP position Jones was employed by DEP in its Office of General Counsel. Prior to that, Jones represented DEP as a client in matters as an Assistant Attorney General. Mr. Luhrs reported being "impressed" with Attorney Jones. On February 12, 2010, the Board issued its formal appointment of OADR to serve as the Board's Presiding Officer for the Decoulos complaint.[17]

Three of the Board's four witnesses were either colleagues of Attorney Jones at DEP or had interviewed Jones and recommended him for the job as Presiding Officer. , Robert Luhrs had interviewed Jones for the job and then, shortly after, he filed testimony and testified before Jones. In addition, Cynthia Baran[18] and John Fitzgerald

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16 On October 8, 2010, Decoulos filed a Motion to Dismiss which included an argument that DEP was a necessary and indispensable party. Throughout the proceeding, the Officer rejected Decoulos' attempts to obtain DEP witnesses and evidence.

17 Although the Appointment does not identify DEP Attorney Jones by name, it is clear that Jones was a foregone conclusion based on the Board's interview and vote.

18 Ms. Baran was the DEP staff person assigned to the Eagle Gas site. She had issued several notices and directives attempting to control response actions at the site.

of DEP testified before their DEP colleague, hearing Officer Jones. It should come as no surprise that Attorney Jones, acting as Presiding Officer, fully credited the testimonies of Luhrs, Baran and Fitzgerald.[19]

Importantly, it appears that the Presiding Officer principally relied on the witnesses' interpretations and characterizations of the underlying MCP reports filed by Decoulos instead of relying on the numerous reports themselves. Said another way, although the MCP reports filed by Decoulos provide complete, objective and contemporaneous accounts of the response actions taken and decisions made at the relevant time periods, the Recommended Decision reflects the Officer's principal approach of accepting the Board and DEP witnesses' after-the-fact characterizations of those reports, actions and decisions. The witnesses' characterizations were not objective or neutral; instead, the witnesses were advocates for discipline against Decoulos and their testimonies were biased against Decoulos.

The Supreme Judicial Court has held,

> "We agree with the plaintiff that '[a] fair trial in a fair tribunal is a basic requirement of due process.' Amos Treat & Co. v. SEC, 306 F.2d 260, 264 (D.C. Cir. 1962), quoting Berkshire Employee Ass'n of Berkshire Knitting Mills v. NLRB, 121 F.2d 235, 238 (3d Cir. 1941)."

Craven v. State Ethics Commission, 390 Mass. 191, 196-197 (1983).

In sum, the Board's adjudicatory proceeding was unfair to and biased against Decoulos from the beginning. The proceeding contained numerous flaws prejudicial to

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19 Attorney Jones' unquestioned acceptance of DEP testimony extended to another DEP witness, Mark Jablonski, who was called on rebuttal. At the hearing, Jablonski attempted to contradict the unambiguous, contemporaneous Release Log Form that he had completed back on May 16, 2003. His after-the-fact attempt to change his 2003 Form directly pertained to the key issue of whether there was early evidence of LNAPL in the drain manholes of the adjacent storm drain system (which there wasn't). Despite this significant change, the Officer did not address it at the hearing or in his Recommended Decision.

Decoulos' rights, including members of the Board's Complaint Review Team (CRT) interviewing and hand-picking the Presiding Officer and then testifying before that same Officer, and DEP acting as the complainant, providing the witnesses, providing the judge to evaluate those witnesses, and issuing the Recommended Decision.

III. LEGAL STANDARD OF REVIEW

The Board's disciplinary regulations provide that, "a licensed site professional who, individually or in concert with another person, violates any provision of M.G.L. c.21A, §§19 through 19J, or any provision of 309 CMR, including but not limited to the Rules of Professional Conduct in 309 CMR 4.00, shall be subject to the disciplinary authority of the Board." 309 CMR 7.01(2).

309 CMR 7.07 prescribes when and how the Board may initiate an LSP disciplinary proceeding:

> If the Board determines that, based on the preliminary investigation [conducted pursuant to §7.04(1)], sufficient grounds exist to initiate a disciplinary action or other disposition as described in 309 CMR 7.02, the Board may commence a formal adjudicatory proceeding by providing the respondent with an order to show cause why disciplinary action or other disposition as described in 309 CMR 7.02 should not be taken. The order shall state the grounds for taking disciplinary action or other disposition, including the specific facts relied upon and the statute(s) and/or regulations authorizing the Board to take disciplinary action or other disposition. It shall also explain the respondent's right to request an adjudicatory hearing to contest the grounds for discipline or other disposition set forth in the order. . . ."

In this case, the Board commenced a proceeding under 309 CMR 7.07 to confirm its asserted grounds for discipline against Decoulos, and Decoulos requested an adjudicatory hearing to contest those grounds. The adjudicatory proceeding resulted,

which, pursuant to 309 CMR 7.08, was governed by the Standard Adjudicatory Rules of Practice and Procedure set forth in 801 CMR 1.00, et seq.

In this case, the Board has the burden of proving the grounds for discipline. In other words, it is the Board's burden to prove that Decoulos failed to act with reasonable care or diligence and that Decoulos failed to apply the knowledge and skill ordinarily exercised by LSPs in good standing at the time he performed the services. Similarly, the Board had the burden of proving that Decoulos failed to comply with the requirements and procedures set forth in the applicable provisions of G.L. c.21E and 310 CMR 40.0000, et seq., the Massachusetts Contingency Plan ("MCP").

The Board's burden of proof is by the "preponderance of the evidence" standard. "Proof by a preponderance of the evidence is the standard generally applicable to administrative proceedings." Craven v. State Ethics Commission, 390 Mass. 191, 200 (1983). "Preponderance of the evidence" is defined as,

> "The greater weight of the evidence, not necessarily established by the greater number of witnesses testifying to a fact but by evidence that has the most convincing force; superior evidentiary weight that, though not sufficient to free the mind wholly from all reasonable doubt, is still sufficient to incline a fair and impartial mind to one side of the issue rather than the other."

Black's Law Dictionary, 8th Edition. The Board's decision must be supported by "substantial evidence" in the record. "Substantial evidence is 'such evidence as a reasonable mind might accept as adequate to support a conclusion,' taking 'into account whatever in the record fairly detracts from its weight.'" Boston Gas Company v. Board of Assessors of Boston, ____ Mass.App.Ct. __ (slip opinion, October 3, 2012), citing Assessors of Brookline v. Buehler, 396 Mass. 520, 524 (1986) and New Boston Garden Corp. v. Assessors of Boston, 383 Mass. 456, 466 (1981).

Therefore, the Board must examine the entirety of the administrative record, taking into account whatever in the record fairly detracts from the supporting evidence's weight. A decision of an administrative agency shall be set aside if it is not supported by substantial evidence in the record.

The Board is not obligated to accept or adopt the Presiding Officer's Recommended Decision. 309 CMR 7.10(2) provides in pertinent part that,

> The Board may affirm and adopt the presiding officer's recommended decision in whole or in part, and it may recommit the recommended decision to the presiding officer for further findings as it may direct. If the Board does not accept the whole of the recommended decision, it shall provide an adequate reason for rejecting those portions of the recommended decision it does not affirm and adopt.

The Board is authorized to reject the Recommended Decision provided that it explains its reasons for doing so. The Board is obligated to evaluate the evidence and apply its own expertise to the Officer's subsidiary findings. See, Strasnick v. Board of Registration in Pharmacy, 408 Mass. 654, 662 (1990), wherein the Court held that the Pharmacy Board should evaluate the record evidence in light of its own expertise. In conducting its evaluation and applying its expertise, the Board should identify the basis for its expertise and experience as well as the basis for applying its expertise to the particular issue in question. D'Amour v. Board of Registration in Dentistry, 409 Mass. 572, 585 (1991).

An agency rejecting or disagreeing with a hearing officer's recommended findings should identify the basis of its disagreement and identify an awareness of that disagreement and explain it, so that a reviewing court may determine whether the agency's findings are supported by substantial evidence. See, Vinal v. Contributory Retirement Appeal Board, 13 Mass.App.Ct. 85, 100-101 (1982).

Where a hearing officer is not demonstrated to be an experienced examiner, or an impartial neutral, the recommended findings of the officer are entitled to less deference. Vinal v. Contributory Retirement Appeal Board, 13 Mass.App.Ct. at 100. In this case, Decoulos has demonstrated that Attorney Jones of the DEP was not truly an "impartial" examiner. (See, Section II, above.) In addition, there is no record evidence to demonstrate that Attorney Jones was experienced with industry standards for assessment and recovery of LNAPL or the design or operation of municipal storm drain systems, which were fundamental, technical issues relevant to the complaint against Decoulos.

Based on the foregoing, the Board is authorized, and obligated, to reject the proposed findings of fact and rulings of law in the Recommended Decision because the same are not supported by substantial evidence in the record. The Board did not satisfy its burden of proof by a preponderance of the evidence that Decoulos violated the Rules of Professional Conduct or G.L. c.21E or the MCP. To the contrary, Decoulos demonstrates herein that substantial evidence in the record supports his compliance with the Rules of Professional Conduct as well as with Chapter 21E and the MCP.

The Board should not engage in a "Monday morning quarterbacking" of reasonable, supportable decisions made by Decoulos. As a Licensed Site Professional in the privatized MCP process, Decoulos is allowed professional discretion in interpreting site conditions, response actions and MCP requirements so long as reasonable and adequate justification exists based on scientific and technical practices, DEP guidance and policy, and industry standards. As acknowledged by Officer Jones, but not implemented in his recommendations, "the LSP profession was created by legislation

that became effective in 1992. . . . As a result of this legislation, DEP no longer had to oversee every phase of the cleanup at the site of oil or hazardous waste contamination."

The Board should review the record of the proceedings in detail (in particular, the numerous MCP-related documents filed by Decoulos) and apply the Rules of Professional Conduct and the standard of care to the documented work performed by Decoulos at the subject times. Decoulos believes that the Board should reach conclusions different from the Presiding Officer's conclusions.

IV. PROFESSIONAL EXPERIENCE OF JAMES J. DECOULOS, P.E., LSP

Jim Decoulos has had a long, unblemished career as a Professional Engineer and a Licensed Site Professional. He has held his P.E. license since 1990 and his LSP license since 1995.

Other than these two cases, Decoulos has never suffered enforcement actions either as an LSP or a Professional Engineer. It is clear there is no evidence of a pattern of Decoulos disregarding applicable MCP regulations or standards of care, failing to disclose known information, or failing to protect human health and safety or the environment. In fact, at Eagle Gas, it was Decoulos' proactive assessment of the Brook located 600' away that led to the discovery of the sheen. (Significantly, DEP itself had failed to proactively assess the Brook during its audit site inspection. Two other LSPs had also failed to assess the Brook.)

With particular relevance to the two sites at issue here (particularly the Eagle Gas site), Decoulos has significant experience with municipal stormwater management systems as well as underground storage tanks (USTs) and pressurized piping. Decoulos has served as a technical consultant with EPA to develop a web based Leaking

Underground Storage Tank Corrective Action Compendium. The purpose of the Compendium is to provide state and federal remediation specialists handling leaking UST with resources and information on UST issues and how to properly address leaks from USTs. Resume at R-9.[20]

For instance, Decoulos has designed, installed and inspected literally hundreds of storm water drain systems in his capacity as a Professional Engineer. Decoulos knows how drain manholes, catch basins, pipes, inverts and the related appurtenances are constructed and how they operate. None of the DEP staff who handled the Eagle Gas Site, and none of the Board's witnesses in this case, had a similar amount of engineering experience regarding the construction or function of a municipal storm drain system.

With regard to USTs, Decoulos has substantial experience with USTs and their piping and appurtenances. He is a certified UST system inspector (unlike any of the Board's witnesses). During the late 1980s, Decoulos oversaw the Massachusetts Bay Transportation Authority's (MBTA) entire program for UST inspection, removal and replacement as part of EPA's mandated tank upgrade program. This involved assessment and response actions for over 155 USTs at approximately 30 different facilities. He has also provided contract support for EPA to develop a web based Leaking Underground Storage Tank Corrective Action Compendium. The purpose of the Compendium was to provide state and federal UST specialists with resources and information on UST issues and how to properly address leaks from USTs.

Decoulos has been a member in good standing of the LSP Association since 1996. He regularly attends the LSPA meetings to obtain up-to-date information on technical

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[20] Decoulos' professional experience with stormwater management systems as well as UST systems far exceeds that of the DEP staff who issued directives while the response actions were underway and the Board's witnesses at the hearing.

practices and on the development and implementation of new policies, guidance and regulations. He has been a current member and former Chairman of the Loss Prevention Committee, which has kept him abreast of current developments in technical, regulatory, and policy aspects of the LSP practice.

V. DETAILED CHRONOLOGY OF THE RESPONSE ACTIONS

A. The Eagle Gas Station Site, 131 Main Street, Carver.

1. Actions of Other LSPs (Bartlett Paulding, Theodore Kaegael, Jr., David Bennett): Extensive, Historic Gasoline Release at the Station (RTN 4-12848 and RTN 4-13333)

On April 11, 1997, DEP issued a Notice of Responsibility (NOR) to the former owner of the gas station, Mr. Richard Nantais, after sampling at a downgradient residential drinking water well indicated the presence of the gasoline constituent benzene above the applicable GW-1 reportable concentration. (See Notice of Noncompliance Summary, 12/8/98, Ex. RR-7, p. 2.)

On September 8, 1997, Bartlett W. Paulding, LSP, contacted DEP to report a release of oil at the site. After some response actions, including filing an Immediate Response Action (IRA) Plan and installation of and sampling from eight microwells, on February 4, 1998, Paulding filed a Class C Response Action Outcome (RAO) Statement along with a Phase II and Phase III Report.

DEP conducted an audit of the RAO, including an in-person site inspection by Mr. Thomas Powers of DEP on August 19, 1998. (RR-6) During his inspection, Powers did not inspect the storm drain located directly in front and downgradient of the station.

Further, Powers of DEP did not follow the drain to its outfall at South Meadow Brook, to assess the discharge.[21] (RR-6)

On December 8, 1998, DEP issued a Notice of Audit Findings (NOAF) and Notice of Noncompliance (NON) to Nantais, ordering him to retract the Class C RAO; prepare a "Tier I" Permit because the Site was located within an interim wellhead protection area (IWPA); obtain and analyze samples from the eight existing monitoring wells over four sampling rounds; determine whether a condition of Substantial Release Migration (SRM) existed relative to contamination in the adjacent residential drinking water well; conduct a Phase I investigation; and, conduct other response actions. (RR-7, Attachments A and B.)

In its NON, DEP indicated its awareness that, since 1945, the Site had been used for the historical storage and retail sale of gasoline. (RR-7, Attachment A, p. 4.) In addition, when Powers inspected the Site, he observed, and took photographs of, the auto repair shop on the Site as well as leakage and pavement staining from barrels stored in the open on the Site. (See photographs, Appendix.) The repair shop, barrels and retail gas operations were right next to Main Street and easily drained to the catch basin (known as CB-4) and into the storm drain in the road. (Id.)

Notably, Powers' Audit Site Inspection and DEP's NON failed to mention any inspection or assessment of the storm drain system located in front, and downgradient, of the Station.

Theodore J. Kaegael took over as LSP for Paulding.[22] In January 2003, Kaegael discovered LNAPL, believed to be diesel, in one of the eight monitoring wells he had

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[21] Powers did inform Nantais that the LSP license for Paulding was "temporarily suspended." (RR-6)

been monitoring for the gasoline release. (See Section "B", below, concerning the diesel LNAPL release and Decoulos' work on that release.) Even though Kaegael and the subsequent, third LSP, David Bennett[23], purportedly responded to the gasoline release, they obviously failed to accurately delineate, contain or remediate the gasoline release, as demonstrated in the LNAPL chronology, below. The gasoline release continued to expand and appear in additional monitoring wells and in the storm drain system. Nonetheless, Kaegael, Bennett, and Nantais cajoled DEP into focusing on Decoulos and the diesel LNAPL despite the clear evidence that the gasoline release, not the LNAPL, was migrating, uncontrolled, and causing a condition of Substantial Release Migration (SRM).

In December 2005, Nantais and DEP entered into an Administrative Consent Order (ACO) to direct response actions for the gasoline release. (B-54, p. 5, ¶T.) Nantais and Eagle Gas, Inc. subsequently struck a deal to transfer the gasoline response actions.

In May 2007, Eagle Gas, Inc., executed an Administrative Consent Order (ACO) with DEP to direct the response actions for both the gasoline release and diesel LNAPL release. (B-54, p. 5, ¶X.) According to the DEP website, a temporary Class C RAO was filed in February, 2011.

2. Actions of James Decoulos: Chronology and Scope of Decoulos' Work on the Diesel LNAPL Release (RTN 4-17582) and the Sheen at South Meadow Brook (RTN 4-17825)

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22 The Board's website indicates that Paulding surrendered his LSP license on November 23, 1998.

23 The Board's website indicates that Kaegael's LSP license was revoked on November 18, 2004.

The chronology of the LSP services performed by Decoulos on the diesel LNAPL release, based upon the record evidence, is extremely important in this case. That chronology is outlined below (in double-space) along with Decoulos' comments (in single-space) on particular evidence at specific points in time.[24]

Substantial evidence in the record demonstrates that Decoulos properly conducted, and documented, necessary and appropriate response actions pertaining to the NAPL release and Brook release, in a timely manner, in compliance with G.L. c.21E and 310 CMR 40.0000 (the Massachusetts Contingency Plan or "MCP") and in compliance with 309 CMR 4.00. In contrast, the record evidence does not support the DEP-centric view of the evidence that was credited by the DEP Hearing Officer. The record also fails to support the DEP Officer's prejudicial hyperbole aimed at Decoulos (e.g., Decoulos' "inexplicable" conclusions and "disturbingly myopic view of the problem", etc.). (Recommended Decision, "RD" or "D", pp. 17, 19)[25]

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[24] It is essential to review the MCP Reports that Decoulos submitted as well as the contemporaneous communications between Decoulos and DEP staff. Those documents "tell the story" in this case. Notably, the Recommended Decision failed to delve into the specific details of those documents. In addition, the Decision wrongfully disregards the high level of Decoulos' activities and reporting. Notably, the Officer principally relied on the testimonies of the Board's witnesses (fellow DEP colleagues and the interviewing Board member) who were clearly focused on presenting a post-hoc rationalization of DEP's decision-making as well as an after-the-fact challenge to the professional judgment exercised by Decoulos.

[25] So accepting was the DEP Officer of the DEP staff and Board's witnesses, and so dismissive was the Officer of Decoulos and his witnesses, that the Officer repeatedly asserted that the Board met its burden of proof based upon the "*overwhelming* preponderance of the evidence." However, the Officer appears to have made up this evidentiary standard because it does not exist in Massachusetts. An "overwhelming preponderance" standard has never been used in Massachusetts by the Appeals Court or Supreme Judicial Court. One is left to conclude that the Officer attempted to bolster his recommendation by referencing a non-existent and inapplicable evidentiary standard as well as claiming that the factual evidence was "overwhelming".

January, 2003: The LSP working on the historic gasoline release at the Station observed approximately 10" of product in one of the eight existing monitoring wells identified as "BP-5RR." BP-5RR was a 1" microwell.[26] On January 21, 2003, Decoulos reported the release to DEP. (Ex. B-13.)

January 21, 2003: DEP's Release Log Form for the new releases at the Station (4-17582) indicated that "diesel fuel" and "gasoline" were released. The Form also stated: "Tanks were tight tested over weekend – no problems. UST & piping <two years old."[27] (Ex. B-13.)

[Thus, as of January 21, 2003, the available information indicated that the NAPL release, if it were diesel, was limited in scope: the diesel UST and pressurized piping were not leaking; the remote fuel supply line (if it were leaking) was in operation only recently and used infrequently; and, the NAPL was observed in only one of eight wells that had been monitored by the other LSPs.]

January 27, 2003: Decoulos orally proposed an IRA Plan, which DEP approved orally. (Ex. B-14.) DEP's Release Log Form Attachment stated the following:

> "Proposed IRA Activities:
>
> - large recovery well
> - sample private well(s)
> - inspect stormwater drain system
> - tightness tests – redo if necessary."

Under "Other Comments", DEP's Release Log Form Attachment provided, "Sample nearby ('at-risk') private water supply wells, conduct air monitoring, inspect

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[26] The scientific and technical literature support the proposition that small diameter microwells (e.g., a 1" microwell like BP-5RR) do not accurately measure actual NAPL thicknesses. The microwells tend to "suck up" the NAPL, which greatly exaggerates actual NAPL thickness.

[27] The diesel tank and pressurized piping were actually installed in 1989 but the remote fill pipe, discussed below, was installed in 1999.

storm water system for potential impacts, & perform additional tank tightness testing." (Ex. B-14.)

February 12, 2003: DEP issued a Notice of Responsibility ("NOR") to Eagle Gas, Inc. for the NAPL release (4-17582) (B-15). The NOR summarized the response actions that were approved as an IRA on January 27 and required the submission of a written IRA Plan. The NOR provided that "the written IRA Plan must include . . . a proposal to include an active remediation system to address the historical and/or reoccurring accumulation of free phase petroleum product in both on-site and off-site wells, as well as the reoccurring oil and hazardous material vapors in utility man-ways." (Ex. B-15, emphasis added.)

> [The NOR contained several false assertions, which appear to explain, at least in part, the bases of the unreasonable actions that DEP took well into the future. For instance, as of the date of the NOR in February 2003, there was no evidence of "reoccurring accumulation of free phase produce in both on-site and off-site wells." Instead, there was one sample, from only one well (among 8 wells) that had been monitored for about five years. Also, there was no evidence of "reoccurring oil and hazardous material vapors in utility man-ways." In addition, even though there was limited information available concerning the LNAPL and underlying geology, DEP jumped to the conclusion of requiring "active" remediation. DEP's immediate and subsequent continued requirement of active remediation is paradoxical because, as discussed below, DEP subsequently denied Decoulos' remediation plans, on two occasions, allegedly because there was "insufficient information" concerning the nature and extent of the LNAPL. In addition, Decoulos demonstrated that the tight silt and clay strata rendered active remediation ineffective.]

March 17, 2003: Decoulos submitted the written IRA Plan for the NAPL release (4-17582). (Ex. B-16.) The IRA Plan proposed eight separate actions, including "evacuation of NAPL at BP-5RR[28] by a drum vacuum system operated by a pneumatic

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28 Monitoring well BP-5RR, a micro-well, was the one well containing LNAPL.

compressor"; re-measurement of LNAPL within BP-5RR within 30 minutes after the completed evacuation; installation of a 1" microwell ten feet downgradient of BP-5RR if no further LNAPL was identified; installation of a 12" recovery well downgradient of BP-5RR if additional LNAPL continued to infiltrate BP-5RR; sample the private drinking water well at 132 Main Street; monitor the stormwater drain manholes and the utility manholes within 200 feet of BP-5RR with a photoionization detector (PID) for volatile organic vapors as well as visual observations and photographs; and, perform air monitoring of the residence basement abutting the site to the south with a PID. (Ex. B-16, p. 12.)[29]

DEP did not deny, object to or modify Decoulos' IRA plan dated March 17, 2003. The IRA Plan was therefore presumptively approved pursuant to 310 CMR 40.0420(9).

April 24, 2003: Decoulos oversaw the vacuum evacuation of LNAPL from BP-5RR[30] as well as baildown test of BP-5RR[31]. (Ex. B-21, p. 13-15; Ex. RR-2, photos 15-19.)

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[29] At the time of his first visit to the Eagle Gas Site on February 4, 2003, Decoulos was recovering from an Achilles tendon repair operation and was on crutches. The operation limited his ability to conduct field work in the Winter and early months of 2004. (RR-1, p. 5)

[30] The drum vacuum system was used for the LNAPL baildown test in April 2003. Starting on June 2, 2003, and continuing through the end of 2004, LNAPL recovery was done by hand using disposable bailers. (B-21, p. 15) An LNAPL Withdrawal Form was created and used by Eagle Gas's owner to record the LNAPL removal actions.

[31] In 2003, based on his extensive experience with the MBTA UST upgrade program as well as his working knowledge of the then-existing API and EPA programs, Decoulos reasonably believed that it was an appropriate practice when responding to an LNAPL release to first begin with a baildown test, to evaluate the transmissivity of the soil and the actual measured thickness of the LNAPL, and to determine the possible recoverability of the LNAPL.

Decoulos' experience and judgment have been confirmed by the evolution of the industry practice toward conducting a baildown test at the outset to evaluate recoverability. (See Session 5 – LNAPL Remediation Technology Overview, in "Light,

The baildown test demonstrated that the LNAPL Transmissivity (Tn) value was extremely low and that LNAPL recoverability would be poor.[32]

May 16, 2003: Decoulos assessed the site in person, including following the storm drain pipe that passed in front of the Station, to the pipe's outfall approximately 600 feet away at South Meadow Brook. Decoulos performed his inspections of the site, drainage system and outfall as part of an Imminent Hazard (IH) Evaluation and as an Immediate Response Action. (IRA Status Report, 7/3/03, Ex. B-21, p. 15.) Decoulos observed, and reported to DEP (RTN 4-17825) a sheen at the outfall of the pipe at the Brook. The impacted area of the sheen appeared to be historic and not a recent occurrence. (RR-1, p. 21-22) Decoulos visually inspected the stormwater system within the Main Street right of way, and conducted head space screening of catch basins and drain manholes, along with Mark Jablonski of DEP and the Town of Carver Public Works and Fire Department personnel. (Ex. B-21; Ex. RR-2, photos 20-27.) Visual observations and head space screening demonstrated that the two drain manholes (DMH-1 and DMH-2) in front of the Station (and downgradient of the diesel UST and remote fill line) were not impacted by the LNAPL. (Id. and RR-8.). In contrast, the downgradient catch basin (CB-4), which collected surface runoff from the exposed pumps and pad as well as the balance of the site (gas station, service area, former

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Nonaqueous-Phase Liquids: Science, Management, and Technology", presented by Interstate Technology and Regulatory Council (ITRC), Boston, MA, April 5 and 6, 2012, in the Appendix.)

[32] See new ASTM guidance E2856-11 on LNAPL Transmissivity at http://www.astm.org/Standards/E2856.htm (See Appendix)

junkyard), was impacted as were all of the drain manholes between CB-4 and the stormwater outfall.[33]

> [The final 250 feet of the storm drain pipe existed within an overgrown "paper street"[34]. (Ex. B-30, App. J) The pipe's outfall at the Brook had never been inspected by the two other LSPs that had performed work on the gasoline release at the site. In addition, although Thomas Powers of DEP had conducted field investigations of the site, DEP had never inspected the outfall or Brook. (Ex. RR-6; RR-7; RR-57; RR-58; RR-59).

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[33] CB-4, like other catch basins, has an open grate as its cover. The open grate allowed direct dumping and infiltration of oil and waste oil into the catch-basin over the long life of the adjacent gas station, repair shop, and junk yard, as well as contaminated stormwater to drain into the catch basin. The stormwater created flow through the storm drain system, to convey contaminants to the outfall point, where Decoulos observed caked oil at the outfall pipe. Because dumping into catch-basins has been so prevalent, numerous federal, state and local agencies have created markers and symbols to install on or near the basins in an attempt to discourage illicit dumping. (See examples of "Don't Dump" markers in the Appendix.)

In contrast, a drain manhole has a solid cover that allows little to no stormwater to enter the manhole, or dumping. The manholes are junction points (or gateways) for the pipes, to service and maintain a long run of piping or change direction, slope or elevation. Thus, the concentrations of contaminants, if any, in a manhole reflect the liquids that are flowing within the drain system itself from upgradient catchments or inflow/infiltration of groundwater at breaches in the system.

Thus, as demonstrated below, the evidence supported Decoulos' position that the elevated concentrations of contaminants" observed at CB-4 reflected the historic dumping and disposal of oil directly into CB-4 as well as high concentration of contaminants on the ground surface at the gas station and historic "bad housekeeping" at the service area and former junkyard.

Decoulos emphasizes "contaminated" surface runoff because he knew at that time that the site generated uncontrolled runoff from the fuel filling and dispensing area (without any form of canopy) and that the site also contained a former junkyard, service station, and auto repair uses as well as several active sources of contaminants (e.g., barrels, oil tanks, lawn mowers, boat storage). (Ex. RR-2, Photos 3-14, 163) Decoulos observed that surface runoff from those areas flowed without containment or treatment to CB-4 in front of the station.

[34] Even though the site plan (Ex. RR-8) depicts a "Town Layout", no actual road exists on the ground. The layout is an overgrown vegetated corridor that is privately owned and not readily passable. (Decoulos Rebuttal PFT, p. 23; Exs. B-30, p. 19 and App. J; B-31; RR-30; RR-50; RR-51.) Hence, it is referred to as a "paper street".

May 16, 2003: Jablonski's Release Log Form and Release Log Form Attachment indicated that Decoulos reported "no oil sheen in manholes next to gas station". (B-17, emphasis added) After receiving Decoulos' telephone notice, Jablonski went to the Site to inspect, and his second Release Log Form Attachment dated May 16, 2003, stated:

> "Conducted site inspection – Determined oil sheen on So. Meadow Brook is emanating from storm drain that is connected to catch basins in Main Street.
>
> Carver Highway Dept. removed catch basins covers & an oil sheen & vapors were noted. CB upgradient of gas station was clean. The CB next to the Gas Station[35] had diesel fuel odor & an oil sheen was noted on the storm water.
>
> It was determined that a diesel fuel release was occurring & a field NOR was issued. . . .
>
> Refer to field NOR for actions req'd." (Ex. B-18, emphasis added)

[It is important for the Board to realize that, at the hearing, Jablonski contradicted the observations he recorded in his contemporaneous Release Log Form Attachment that he prepared on May 16, 2003. Although his 2003 Form specifically stated that product was observed only in CB-4 (and product was not observed in the drain manhole DMH-2), Jablonski asserted at the hearing that he observed product in the *manhole*. (Transcript Day 1, pp. 86-95.) Jablonski's attempt to change key evidence should not have been accepted by the Officer, and it should not be accepted by the Board.]

[Decoulos' visual observations of the drain manholes (DMH-1 and DMH-2) in May 2003, and on various subsequent occasions, and sampling from wells installed adjacent to the stormwater pipe, demonstrated that product had not entered the storm drain pipe from the LNAPL. In contrast, Decoulos never contested that CB-4 showed evidence of contamination. However, based on the available evidence, Decoulos reasonably concluded that the impact at CB-4 was from direct dumping and discharge and surface water runoff from the contaminated site and its present and historic land uses.]

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35 There is only one catch basin "next to" the Station. It is CB-4, located just downgradient from the Site's stormwater discharge area. (Site Plan, RR-8, Appendix)

May 16, 2003: Jablonski issued a "field" Notice of Responsibility relative to the Brook release (4-17825), wherein he stated:

> "Eliminate source from leaking diesel fuel UST spill bucket/P.P.NG.[36]
>
> Initiate active collection of NAPL from impacted MW
>
> Construct remedial system as necessary to stop diesel fuel discharge to the storm drain." (Ex. B-19.)

[As mentioned above, the diesel UST and pressurized piping were tightness tested in January 2003 and there were "no problems". (Ex. B-13.) Decoulos was aware that the tank was installed in 1989, double-walled, and not leaking. (Id.; B-30, UST records, Appendix C of Phase I Report.) He was also aware that the remote fill line was relatively new (installed in 1999, about four years earlier) and was not used frequently. This evidence led to the reasonable conclusion that there were no significant existing sources of diesel release at the site.]

Mid-May 2003: The owner discovered that the remote unpressurized fill line for the diesel UST was not tight and would therefore allow leakage when a delivery of diesel fuel was made. As stated in Decoulos' IRA Status Report dated July 3, 2003,

> "During the middle of May, a discovery was made by Eagle Gas that the diesel supply fuel line, which runs from the southerly portion of the concrete pad to the northerly location (where the diesel UST resides), was not secure. It appeared that the unsecured line was releasing a small amount of diesel product to the ground – every time a diesel fuel delivery was made to fill the 5,000 gallon UST. Upon obtaining knowledge of this condition, all deliveries to the diesel UST were ceased.
>
> The purpose of the remote diesel fill line was to restrict tanker deliveries to the southerly portion of the Site. Eagle Gas had designed the delivery line in this location to provide extra safety for its customers as they entered and exited the Site during a diesel fuel delivery.
>
> At the end of May, the remote diesel delivery line was taken out of service. All diesel deliveries are now made directly over the fill manhole on top of the UST." (Ex. B-21, p. 15.)

Therefore, in approximately mid-May 2003, Decoulos was able to identify the approximate location of the leak in the fill line. (Ex. RR-8.) Given that location as well

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[36] The letters "P.P.NG" appear to mean "piping".

as the known direction of groundwater flow from the release area eastward to Main Street and the storm drain pipe, Decoulos reasonably concluded that, if the LNAPL were to possibly infiltrate the storm pipe, evidence of the NAPL would appear at DMH-2 in front of the Station. DMH-2 was the gateway to identify impacts from the LNAPL to the outfall. (Ex. RR-8.) However, as indicated, there was no evidence of the NAPL having impacted DMH-2.

[Based upon the information available at the end of May, 2003, Decoulos understood that: (i) all possible sources of diesel LNAPL release had been eliminated; (ii) LNAPL was observed in only one of the eight wells that had been monitored on and adjacent to the site, indicating a limited extent of LNAPL; (iii) groundwater flow was from the area of the diesel UST and fill line eastward toward Main Street and the storm drain; and, (iv) diesel was not observed in the closest drain manhole (DMH-2) in front of the Station and downgradient of the diesel UST and fill line. The available evidence supported Decoulos' reasonable conclusion that LNAPL at the Station was not entering the storm drain system on Main Street or causing the historic impact or present sheen at the outfall at South Meadow Brook. Decoulos reasonably concluded that the sheen observed in CB-4 was due to direct dumping and spilling along with contaminated storm runoff. Because CB-4 was located further downgradient from the source of the LNAPL release than DMH-2, and at a shallower depth, it was not reasonable to conclude that the LNAPL might cause impact at CB-4 but not at DMH-2.]

May 21, 2003: Decoulos collected samples from the stormwater outfall, existing monitoring wells BP-2, BP-3, BP-4 and MW-A[37] located downgradient of the LNAPL release, as well as two private drinking water wells at the closest downgradient neighbors. (Ex. B-21, Fig. 4, p. 20) The analytical results demonstrated that the private drinking water wells had not been impacted by the LNAPL. (The results indicated that one of the wells contained elevated levels of the gasoline constituents MTBE and

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37 These wells had been installed by the LSPs responding to the gasoline release at the site. These wells were located downgradient of the LNAPL release. MW-A and BP-4 are located on-site, immediately downgradient of the entry point of the remote fill line. BP-2 and BP-3 are located across Main Street. (Ex. RR-8; IRA Status Report, 7/3/03, Ex. B-21, Fig. 4, p. 20.)

Benzene.) In addition, the four existing monitoring wells were not impacted by the LNAPL.

June 2, 2003: Decoulos conducted a GeoProbe boring investigation on the Station property and within the Main Street right-of-way. (IRA Status Report, 7/3/03, Ex. B-21, p. 16-20.) The soil borings were advanced around the one existing well (BP-5RR) that had been impacted by the NAPL. Three of the borings were completed as monitoring wells DCW-1, DCW-2, and DCW-3. Those three wells were installed adjacent to the storm drain, BP-5RR (the impacted well), and the two drain manholes in front of and downgradient of the site. (Ex. 21, fig. 4.) One purpose of those borings and wells was to determine whether LNAPL had migrated along the preferential pathway created by the bedding material associated with the storm drain. On June 12, 2003, samples were collected from monitoring wells DCW-1, DCW-2, DCW-3, and BP-4 (downgradient of the fill line) as well as from a third private drinking water well. The analytical results demonstrated that the diesel LNAPL had not migrated to the storm drain pipe or along a pathway in the bedding material of the storm line.[38] The results also demonstrated that the drinking well at the third residence was not impacted by the LNAPL. (Ex. B-21, p. 20.)

The soil borings performed on June 2, 2003, "revealed fine to medium sand between depths of one to four feet; and, silt and clay between depths of four to ten feet." (Ex. B-21, p. 18.) The NAPL was believed to exist within the "silt and clay" strata, which indicated that it would be slow to migrate and difficult to remove by active remediation. (Exs. RR-2, Photos 40-43; B-21, p. 20; B-30, App. K.)

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[38] In contrast, the results from DCW-1 showed strong evidence of the prior gasoline release.

June 2, 2003: The recovery of NAPL within BP-RR5 was resumed by hand with a microbailer. The LNAPL was measured ten days later, on June 12, 2003, to a thickness of approximately 0.28 feet, well below the 6-foot thickness measured on April 24 and May 14, 2003. (Ex. B-21, p. 13-15.) The slow recovery demonstrated that the LNAPL Transmissivity (Tn) value was extremely low and that LNAPL recoverability would be poor.

June 13, 2003: DEP issued an NOR to the owner of Eagle Gas for the Brook release (4-17825) (B-20). The NOR asserted that,

> "Observations within the manholes determined that an oil sheen was noted on the stormwater flowing within the culvert. Air sampling conducted within the manholes determined that vapor concentrations were within the range of diesel fuel. Observations and air sampling of manholes upgradient and downgradient of the gas station determined that a release of diesel fuel was occurring at 131 Main Street." (Ex. B-20.)

The NOR stated that oral approval of IRAs consisted of "assessment only" and "deployment of absorbent/containment materials." The NOR indicates that additional submissions might include an IRA Plan, an IRA Completion Statement, and/or an RAO Statement.

July 3, 2003: Decoulos submitted an IRA Status Report for the Station release (4-17582) which documented, among other things, the range of response actions performed in April, May and June, 2003. (Ex. B-21.) The IRA Status Report included the following text under "Proposed Response Actions":

> "The source of the NAPL identification at BP-5RR has been identified and eliminated. Continued hand bailing recovery of NAPL from BP-5RR is proposed. The results of hand bailing have been beneficial and it does not appear productive or cost-effective to install a recovery well to collect NAPL from the low yielding silt and clay stratas. An additional concern for a potential recovery well installation are the overhead utility lines directly above BP-5RR. . . .

> The clear priority for response is the recently identified condition at the stormwater outfall to South Meadow Brook. Although Eagle Gas has taken preliminary responsibility for providing immediate protection to the wetland resource, it is clear from the recent investigations that the diesel delivery line failure has not caused the impact to the stormwater system. . . ." (B-21, p. 20)

November 26, 2003: DEP issued a Notice of Noncompliance ("NON") to Eagle Gas for the Brook release (4-17825). (Ex. B-22.) The NON asserted that noncompliance occurred on July 16, 2003, which, according to DEP, was the date when a Release Notification Form ("RNF") and an IRA Plan were due to be submitted to the Department.[39] (Ex. B-22, Attachment 1.) (See the RNF filed on December 18, 2003.)

December 18, 2003: Decoulos filed a Release Notification Form with the DEP for the Brook release, to satisfy the NON on November 26. (Ex. B-23.) Decoulos' transmittal letter confirmed the agreement of Cynthia Baran of DEP to an extension of the date to file the IRA Plan to January 21, 2004, because Decoulos' was travelling overseas. (Id.)

January 21, 2004: Decoulos filed an IRA Plan with DEP for the Brook release. (Ex. B-24.) The IRA Plan documented several response actions undertaken by Decoulos, including a GeoProbe boring investigation; soil, groundwater and surface water sampling; stormwater system inspections and PID screening; and the placement of absorbent pads and booms at the stormwater outfall. In addition, the IRA Plan proposed four separate actions to address the release at the stormwater outfall:

1. Reconstruct the concrete pad above the USTs so the pad was able to contain spills of gasoline or diesel fuel.

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39 Eagle Gas bought the site with two existing RTNs in play. The PRP (prior owner, Nantais) agreed to resolve the prior releases at the time of the sale. When the new LNAPL release was discovered, there was hesitation and doubt among the parties as to who was responsible for addressing that release, resulting in delays in responding to DEP.

2. Install an overhead canopy above the pad and dispensers to ensure that rain and snow do not contact the pumping equipment or concrete pad and cause runoff of contaminated stormwater from the filling area to CB-4. The installation of the canopy would be subject to obtaining a zoning variance under the Town of Carver Zoning Bylaws.

3. Install an oil/water separator to collect contaminated runoff from the paved surfaces of the site and discharge the treated water (without the oil) to the Town's drain manhole in front of the site. The outlet of the separator would be fitted with an alarm that would trigger if oil flowed from the separator into the Town's manhole.

4. Investigate effective methods to clean the impacted stormwater collection system in coordination with the Town.

The purpose of the proposed work was to minimize the release of gasoline and diesel fuel onto the Main Street right-of-way and significantly reduce the quantity of petroleum which flowed to (or were dumped or discharged into) CB-4. Any significant spills or dumping at the Eagle Gas site would also be captured by the oil/water separator first, rather than immediately threatening the stormwater system and South Meadow Brook. (Decoulos Rebuttal PFT, pp. 21-22)

DEP did not deny, object to or modify the January 21, 2004, IRA Plan, therefore, it was presumptively approved under 310 CMR 40.0420(9). DEP also understood that it did not make sense to undertake these Best Management Practice (BMP) actions until the subsurface characterization and remedial action plan was underway.

March 11, 2004: Decoulos met on-site with Cynthia Baran and Lori Williamson of DEP. The Release Log Form Attachment prepared by Williamson admitted the obvious sources of contaminated surface water runoff from the Station property to CB-4 and the storm drain system. Williamson reported the following:

- "Pump island pad is in poor condition – numerous cracks

- Poor housekeeping – evidence of staining on garage floor around waste oil AST & exterior pavement adjacent to garage where 55-gallon drums of bailed NAPL are being housed." (Ex. B-26.)

March 19, 2004: DEP issued a Notice of Noncompliance ("NON") to Eagle Gas, purportedly for the NAPL release. (Ex. B-27.) However, the NON was clearly directed at the gasoline release that was being handled by another LSP under RTN 4-12848 and 4-13333. For instance, DEP relied on samples from the private water wells from February 3, 1999 (four years before Decoulos was engaged for the NAPL release) to assert that Decoulos had failed to evaluate a possible condition of Substantial Release Migration (SRM) and a Critical Exposure Pathway (CEP). (B-27, p. 3, ¶1). DEP also asserted that samples from the drinking water well on May 21, 2003 "documented measurable concentrations of oil". (See 5/21/03 entry, above, documenting that gasoline constituents, not diesel, were reported in the wells.) DEP also asserted that "potential indoor air impacts" to residential dwelling had not been assessed.

[DEP's complaint against Decoulos was clearly misplaced and issued in error. DEP should have acted on the 2/3/99 gasoline data back in 1999 with the prior owner and other LSP(s) in charge of the gasoline release. DEP should not have blamed Decoulos for that condition. Similarly, DEP should not have cited Decoulos for the gasoline constituents reported on 5/21/03. Decoulos was not responsible for response actions for the gasoline release. Finally, because the diesel LNAPL release was demonstrated to be limited in scope and contained in tight soils, based on data from monitoring wells installed downgradient of the diesel remote fill line and the LNAPL release area, it was not reasonable to cite Decoulos for allegedly failing to assess "potential indoor air impacts" of downgradient residences.]

April 5, 2004: DEP issued a Request for IRA Plan Modification to Eagle Gas for the Brook release (4-17825). DEP asserted that the actions outlined in Decoulos' IRA Plan dated January 21, 2004 did not adequately address the condition(s) of Substantial Release Migration (SRM) "that exist" at the Site and did "not provide sufficient information to support the assertion that the impact to the surface water body was

caused solely by surface water runoff from the gasoline station and not contributed to by an on-going subsurface release at the Site." (Ex. B-28 p. 2.) DEP required a plan and schedule to mitigate the alleged condition of SRM, perform an Imminent Hazard (IH) evaluation, and eliminate and/or mitigate alleged Critical Exposure Pathways, including sampling private water supply wells and/or air sampling "if necessary". DEP also required a plan and schedule to conduct "sufficient assessment" to determine "all sources of oil contamination impacting the catch basins and stormwater drainage system" and a plan and schedule for assessment and remediation "for the entire storm water drainage system from the impacted catch basins on Main Street". (Id. p. 3-4.)

[As mentioned above, Decoulos had already sampled the private water wells and reported no impact from the diesel LNAPL but some impact from the gasoline release. Also, given the limited extend of the LNAPL and the tight soils, indoor air testing was not reasonable.]

April 21, 2004: Decoulos filed the IRA Modification Plan in accordance with the DEP's Request dated April 5, 2004. (B-29) The IRA Modification Plan proposed 16 separate IRA tasks including management of the absorbent booms at the outfall; sampling surface water, sediment and soil at the outfall; sampling nine monitoring wells downgradient of the LNAPL release; a schedule to file an Imminent Hazard evaluation, preparation of a remediation plan to eliminate stormwater contamination to the Brook; conducting a video inspection of the storm drain system;[40] and, preparing an

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[40] Eagle Gas refused to pay to conduct the video inspection, so it could not be performed. (Wright PFT p. 3.) Nonetheless, because Decoulos and Mark Jablonski of DEP had not visually observed or measured oil in DMH-2 (immediately in front of the Station and downgradient of the release), which Decoulos re-confirmed in subsequent observations on September 4, 2003, June 24, 2004, and December 10, 2004 (RR-1, pp. 6, 40, 41), a video inspection was not a significant benefit to understanding the fate and transport of the diesel release.

application to federal and state programs[41] to fund the assessment and remediation of the contaminated stormwater drain system. (B-29 p. 9-12.)

April 21, 2004: DEP's technical staff and attorney convened a meeting with Decoulos as well as the attorney and LSP for the prior owner (Nantais) who was responsible for the gasoline release (RTN 4-12848 and 4-13333). (Meeting agenda, RR-49.) DEP's agenda for the meeting indicated that DEP was aware that the private drinking water wells were impacted by gasoline constituents (not diesel) and that the prior owner was supposed to have assessed potential indoor air impacts.

[Decoulos believed that the meeting was productive; it lead to numerous discussions and suggestions for resolution and a site inspection was held by DEP officials immediately after the meeting.]

April 30, 2004: Decoulos filed the Phase I Initial Site Investigation and Tier Classification for the Station release (4-17582), concluding that it was a Tier IA site and was linked to the Brook release (4-17825). (Ex. B-30.) The Phase I Report described the response actions performed by the two LSPs for the two gasoline releases at the site, including the installation of and sampling from eight groundwater monitoring wells beginning in 1997. The Report also described Decoulos' Imminent Hazard (IH) evaluation of the site, including observations of the drainage structures as well as sampling at the outfall, several monitoring wells at the Station, and the private drinking water wells on May 21 and June 12, 2003. Decoulos reported that the private wells had not been impacted by the diesel LNAPL and that the diesel LNAPL had not migrated

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41 Buzzards Bay Project National Estuary Program for the Buzzards Bay Watershed Wetlands and Open Space Protection Grant Program, and to the Massachusetts Coastal Zone Management Program for the Coastal Pollutant Remediation Grant Program.

along a potentially preferred pathway outside the stormwater pipe in Main Street.

Decoulos' conclusions included the following:

> "The [Station] release (17582) appears to be caused by Eagle and the source of the release (the diesel fuel fill pipe) has been eliminated. The NAPL discovered from the release appears limited and confined to a small area (approximately 100 square feet) within the Main Street right-of-way.
>
> The [Brook] release [17825] appears historic with many potential sources contributing to significant cumulative depositions within the Main Street stormwater collection system. Headspace screenings of stormwater structures show strong correlation of impact to the collection system from the Site.
>
> It is clear that significant further investigations and remedial actions are required at the Site and surrounding area. The work will require the cooperation of all the potentially responsible parties identified to date; town officials and, representatives from the Department. Funding from both private and public sources will be required and significant public involvement will be warranted." (Ex. B-30, p. 26.)

May 20, 2004: Cynthia Baran of DEP sent an e-mail to Decoulos providing comments on the IRA Plan Modification for the Brook release (4-17825) dated April 21, 2004 (See entry, above). (Ex. B-31.)

[Decoulos believes that DEP was aware that permission of the private owner was needed to conduct actions at the Brook outfall. Also, permitting was necessary under the Wetlands Protection Act.]

May 26, 2004: Decoulos provided additional information on the IRA Plan Modification dated April 21, 2004, in response to Cynthia Baran's e-mail dated May 20, 2004. (Ex. B-32.) Decoulos proposed ten specific additional actions in response to Baran's e-mail.

June 2, 2004: At the request of the Carver Board of Selectmen, Decoulos sent an e-mail to the Town's attorney to obtain the Town's consent to the grant applications to the Buzzards Bay Project National Estuary Program and to CZM. (RR-25 .)

June 15, 2004: Decoulos submitted an IRA Plan Status Report and Modification for the Station release (4-17582) (B-33). Decoulos reported LNAPL recovery with a micro-bailer, yielding approximately 25 gallons of product between April 2003 and June 2004.[42] During a sampling round on June 3, 2004, LNAPL was identified for the first time in monitoring well DCW-1. "Unlike the NAPL discovered from BP-5RR, the NAPL from DCW-1 did not appear to be fresh diesel fuel." (Ex. B-33, p. 1.) Decoulos proposed immediate actions in response to this new discovery:

> "Due to the continuing emanation of NAPL from BP-5RR and the newly discovered NAPL at DCW-1 further remedial actions are immediately required. The purpose of the next action step shall be to accelerate the recovery of NAPL in a rapid, safe and comprehensive manner." (Id. p. 2, emphasis added.)

Decoulos proposed to construct a 50' long trench, 3' wide, between the location of the diesel release and the storm drain system in Main Street, to intercept and recover the LNAPL, and properly dispose of the LNAPL-impacted soil encountered during the excavation. The trench would be installed to a depth of 7' below grade, with 3' of panel piping for interception. This was adequate for the depth of the LNAPL and the storm pipe and the possible seasonal fluctuations in groundwater and LNAPL elevations. The main recovery point would be a 12" HDPE recovery well in the middle of the trench. "To provide for possible active NAPL recovery, a PVC electrical conduit" would be installed. Decoulos provided a detailed description of the interceptor trench in narrative form and on a site plan. (Id., p. 3-4 and Figure 1.)

Decoulos proposed that,

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[42] Decoulos' recovery of 25 gallons of product in this interval exceeded the 22 gallons of product recovered by the "active" remediation that DEP required. In addition, Decoulos recovered additional product after June 2004, bringing his total LNAPL recovery to 55 gallons as compared to 22 gallons using DEP's required method.

"The initial phase of NAPL collection from the interceptor trench shall be made with a passive skimmer collection system. . . inspected and emptied three times a week for one month. If it is found that the recovery of NAPL cannot be handled by the passive recovery system, a more aggressive phase of NAPL recovery shall commence. If necessary, the active recovery system shall consist of a submersible, explosion proof, NAPL recovery pump which shall pump the product to an above ground product holding tank." (Id., p. 4.)

June 21, June 29 and June 30, 2004: Decoulos discussed his IRA Plan Modification for the Station release (4-17582) with DEP on three separate occasions (Ex. B-34.)

July 1, 2004: Cynthia Baran of DEP sent an e-mail denying Decoulos' proposed LNAPL interceptor trench and IRA Plan Modification for the Station release (4-17582) dated June 15, 2004. (Ex. B-34.) DEP asserted that "the extent of NAPL is not fully delineated"[43] and the Plan Modification "does not contain sufficient supporting documentation to demonstrate the efficacy of contaminant removal capabilities of the proposed passive recovery system."

[The consequence of DEP's July 2004 denial was to prevent Decoulos from attacking the LNAPL by removing the soil that was impacted by the LNAPL as well as by installing the recovery trench. Given the exigencies, DEP was unreasonable in requiring "more data" while at the same time insisting that Decoulos implement "active" remediation. Notably, the new LSP who took over the site in 2005 (Daniel Felten, ECS) also proposed (two years later, in November 2006) soil excavation combined with a groundwater interceptor trench, just as Decoulos proposed. Thus, if LNAPL conditions allegedly worsened after July 2004, it was due to DEP's unreasonable and incorrect requirements and decisions.]

[See the expert testimony of Richard Doherty, LSP, demonstrating that DEP's asserted need for "more data" was unreasonable and not necessary or appropriate. Also,

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43 Although DEP denied the Modification allegedly because the extent of NAPL was not fully delineated, DEP asserted that Decoulos was in violation of the field NOR dated May 16, 2003, which purported to require the immediate implementation of an active NAPL recovery system. (See B-34). DEP's position was clearly inconsistent and unreasonable.

Doherty demonstrated that Decoulos' approach was warranted and justified. Doherty PFT p. 8-10.]

July 7, 2004: DEP sent an IRA Plan Modification Denial, and Request for IRA Plan Modification, to Eagle Gas for the Station release (4-17582) (B-35), mirroring Cynthia Baran's e-mail of July 1, 2004 (see above).

July 21, 2004: Decoulos met with Cynthia Baran of DEP to discuss absorbent controls at the Brook, conducting further remedial actions, addressing the stormwater system contamination, and the role the prior owner (Nantais) should play in addressing gasoline NAPL at DCW-1. (Ex. RR-30.)

August 18, 2004: Decoulos informed DEP that he had installed four 4" wells within the diesel LNAPL impacted area (Ex. RR-31.) A summary of the LNAPL depth measurements at all the wells between August 26, 2004 and October 7, 2004 was provided in Table 2 of the IRA Status and Modification Report dated November 5, 2004. (Ex. B-37)

October 20, 2004: The attorney for Richard Nantais, the former owner, contacted DEP to advocate that the "newly discovered free-phase product" in DCW-1 is "unquestionably diesel fuel, a product unrelated to Mr. Nantais' prior ownership." (B-36.) The attorney asserted, incorrectly, that "the free-phase diesel plume is migrating unabated" and that "no action has been taken by Eagle Gas" to abate the LNAPL.

[The attorney's letter was clearly designed to stoke fears at DEP of an "uncontrolled" diesel LNAPL plume. However, there was no data to support those fears. Plus, Decoulos had proposed steps to recover the LNAPL, to prevent its migration, but DEP had denied them.]

November 5, 2004: Decoulos filed an IRA Status Report Modification Plan for the Station release of (4-15782). (Ex. B-37). This Report addressed several issues, including the following:

- Decoulos reported the installation of four, 4" inch wells (ERW-1 to ERW-4) and five micro-wells (DCW-4 to DCW-8) in August, 2004, of which Decoulos had provided notice to DEP in August.

- Decoulos reported 14" of "pure petroleum saturated soil" at approximately 7' below grade within the DCW-7 core sample (DCW-7 was located immediately downgradient of the two gasoline USTs that the previous owner had abandoned in-place and upgradient of the diesel UST and former remote fill pipe. This indicated separate gasoline LNAPL at the Station.).

- Even though DCW-7 implicated gasoline and the prior owner (and not the diesel LNAPL), Decoulos took the initiative to set a Summa canister within the residence at the adjacent commercial/residential building on the site. Decoulos reported that the air phase hydrocarbon (APH) analysis showed no detectible concentration of the APH constituents. Detectible concentrations of gasoline's BTEX compounds were identified just above reportable limits.

- Decoulos measured LNAPL depths on August 26 and October 7, 2004.[44] Decoulos reported an increase in LNAPL depths in three of the 4" wells on October 7. LNAPL recovery was resumed on October 7.

- Decoulos conducted additional site inspections on October 14, October 28 and November 1, 2004.

- On October 28, 2004, a passive recovery canister (PRC) skimmer was placed in well ERW-2 to more accurately measure the rate of LNAPL recovery. Decoulos reported that, after an initial recovery of over 3 liters the first day, LNAPL recovery subsequently diminished to less than 1 liter per day. (p. 3)

- Decoulos reported that LNAPL could be recovered at existing well points using passive recovery mechanisms. However, to address concerns of possible migration of LNAPL and dissolved diesel constituents underneath Main Street, Decoulos proposed to implement a "groundwater treatment system that withdraws groundwater from wells ERW-1 and ERW-4 at a

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44 Cynthia Baran of DEP and the LSP for the prior owner, David Bennett, conducted the site visit with Decoulos on October 7, 2004.

rate sufficient to pull NAPL and dissolved diesel constituents back to its property." The groundwater would be pumped to a treatment trailer, treated, and discharged into the ground via infiltration chambers. (p. 3, emphasis added)

- Decoulos reported that once LNAPL has been adequately removed (until LNAPL had been recovered to a sheen), a second phase of treatment would commence involving the introduction of chemical oxidants to the soil and groundwater through the existing 4" wells or into an infiltration trench across Main Street from the Station.

- Decoulos reported that, "Eagle Gas appreciates the Department's patience and cooperation in resolving the remediation of this release. As you know, part of the delay associated with an appropriate response has been that the work to be conducted is mostly within the Main Street right-of-way controlled by the Town of Carver. The Carver Board of Selectmen voted on October 12, 2004 to endorse a license agreement between Eagle and the Town, which provides authority to conduct these proposed actions." (Ex. B-37.)

November 10, 2004: David Bennett, LSP for the prior owner, filed a Phase II Scope of Work regarding the gasoline release at the Station. (See reference to Bennett's filing in Decoulos' November 24, 2004 letter to DEP, which is Ex. B-38, below.) Bennett advocated to DEP that the diesel LNAPL release being addressed by Decoulos in 4-17582 had caused "impact to abutting wetlands and downgradient dissolved phase groundwater impact, as overlapping and masking the historic dissolved phase groundwater impact." See Decoulos' November 24 response, below.

November 24, 2004: Decoulos contacted DEP to respond to the prior owner's allegation that the diesel LNAPL was impacting the wetlands. (Ex. B-38.) Decoulos demonstrated that: there was no observation of migration of diesel LNAPL outside of the stormwater drain system or impact to wetland resources from the LNAPL release; there was minimal "overlapping" or "masking" of the gasoline release (4-13333) with the diesel release of (417582); and, the prior owner's LSP had incorrectly drawn his plume map, which incorrectly attempted to implicate the LNAPL.

November 26, 2004: DEP issued an IRA Plan Modification Denial and Request for IRA Plan Modification for the Station release (4-17582), in response to the November 5, 2004 IRA Plan Modification and IRA Status Report submitted by Decoulos. (Ex. B-30.) DEP's denial asserted the following, while acknowledging Decoulos' proposed groundwater recovery and treatment:

> "The IRA Plan Modification proposed passive recovery of Light Nonaqueous Phase Liquid (LNAPL), installation of a groundwater recovery and treatment system and injection of remedial additives (hydrogen peroxide or persulfate) through an infiltration trench. Your Licensed Site Professional (LSP) has not, however, provided sufficient technical justification to support the viability or efficacy of any above the [sic.] proposed remedial actions. Further, the new IRA Plan Modification does not address the nine requirements outlined in the Department's IRA Plan Modification Denial and Request for IRA Plan Modification with Interim Deadline letter to you, dated July 7, 2004 (attached). As noted in that letter, because conditions of Substantial Release Migration[45] exist at the site, an active LNAPL and groundwater recovery and treatment system is required. . . . The IRA Modification does not provide sufficient technical information to demonstrate that the proposed passive collection system is properly located nor has capacity to contain and remove the LNAPL present at the site. Geologic and stratigraphic conditions have not been adequately characterized and the extent of LNAPL had not been fully delineated. . . ." (emphasis added)

December 2, 2004: Decoulos met with Cynthia Baran and Jon Hobill of DEP to discuss response actions at the site, including DEP's assertion of further delineating the extent of LNAPL, conducting an IH evaluation, evaluating the threat of the LNAPL becoming an SRM, and Decoulos' proposal to install a trench within Main Street in view of DEP denying his two prior plans. (See reference to the meeting in Decoulos' e-mail dated December 6, 2004, Ex. B-40, below),

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45 The evidence does not support DEP's contention that the LNAPL had caused a condition of SRM in July, or November, 2004.

December 2, 2004: Decoulos met with Carver's Town Administrator and DPW Superintendent to discuss the access agreement for Main Street, the necessary road opening permit, and the logistics of constructing a trench within the roadway. (See reference to the meeting in the December 6th entry, Ex. B-40 below.)

December 6, 2004: Decoulos sent an e-mail to Cynthia Baran of DEP following their meeting with Jon Hobill on December 2nd. (Ex. B-40; see December 2 entry, above.) Decoulos discussed his response to DEP's second denial of his plan to address the LNAPL on November 26.

[Decoulos' frustration with DEP's requirements and control is evident in Decoulos' letter. He agreed to provide another response to DEP's November 26 denial, but "the response will be our last effort to modify the IRA plan and will incorporate your concerns from the denial as well as the issues reviewed during our meeting on December 2nd."]

December 15, 2004: In an exchange of three e-mails, Decoulos provided DEP with the plans for his new proposed IRA modification. (Ex. B-41) The plans showed a proposed 3' wide diesel product recovery trench located on the east side (downgradient) of the storm drain pipe within Main Street, as well as a proposed groundwater depression/treatment trailer to actively recover LNAPL, if any, at the trench. Although DEP initially indicated that it would not grant approval, DEP subsequently approved the plan after Decoulos provided additional information required by DEP. (Id.) (Decoulos Rebuttal PFT, pp. 18 and 43)

December 22, 2004: Decoulos submitted IRA Modification Plan #3 for the Station Release (4-17582). (Ex. B-42) The Plan included, among other information, an evaluation of possible Imminent Hazard (IH) conditions as well as possible conditions of Substantial Release Migration (SRM) and possible Critical Exposure Pathways (CEP). Decoulos made the following determinations:

- an Imminent Hazard "could potentially exist at the Site, and further evaluative and remedial actions are therefore necessary," due to the runoff of petroleum residuals (waste oil and petroleum) from the surface, collecting in the first downgradient catch basin (CB-4) and flowing to South Meadow Brook, causing potential chronic harm to ecological receptors. A condition of SRM was potential for the same reason. (Id., p. 7-12.) (This potential IH was attributable to contamination in CB-4 from dumping and runoff, not the LNAPL.)

- a CEP did not exist. (Id., p. 11.)

- Decoulos did not find evidence supporting the proposition that the diesel LNAPL caused a condition of SRM, or an Imminent Hazard, or a CEP.

Decoulos' Modification Plan also reported:

On December 10, 2004, Decoulos oversaw the installation of eight new soil borings located downgradient of the diesel LNAPL release and the storm drain pipe within Main Street, (EGS-1 through EGS-8);

Decoulos also installed two new borings along the northeasterly boundary of Main Street, which were completed as monitoring wells. (DCW-9 and DCW-10);

Decoulos constructed the product interceptor trench on December 16-17;

Decoulos conducted pilot pumping test and percolation test on December 22, 2004; and,

Decoulos' evaluated LNAPL recovery using passive recovery skimmers in the 4" wells that were established in August 2004 (ERW-1 through ERW-4). Decoulos reported LNAPL recovery at wells ERW-1, ERW-2 and ERW-3 averaging between 0.5 and 1.0 liters per day at each well. (Ex. B-42, p. 18.)

The Plan also proposed LNAPL recovery and groundwater treatment. Specifically, Decoulos proposed to collect LNAPL from wells ERW-1, ERW-2 and ERW-4 (located between the diesel release and the storm drain pipe) using PRC skimmers in each well. Decoulos reported that, "This proposed passive skimming arrangement is considered acceptable for the low permeability of the material in which the NAPL resides", referencing the September 1996 publication of U.S. EPA OSWER National Risk

Management Research Laboratory titled, "How to Effectively Recover Free Project at Leaking Underground Storage Tank Sites." (B-42, p. 20.)

The Plan also evaluated wetland resource mitigation at the Brook, reporting that, "All evidence collected to date demonstrates that the petroleum impacts to South Meadow Brook are caused by surface water runoff from Main Street. The primary cause of impact is the runoff into the downgradient catchbasin located in front of 133 Main Street. Petroleum contaminated runoff from Eagle [Gas] is the primary source of runoff to this basin." (Id., p. 22.)

The Plan also proposed quarterly sampling of 12 existing groundwater monitoring wells in the area surrounding the LNAPL plume for Extractable Petroleum Hydrocarbon (EPH) analysis. Because one area of the LNAPL investigation (to the south and southwest) had been suspended due to a hydraulic line failure in the GeoProbe unit, Decoulos proposed to continue that investigation. The groundwater treatment system would also be monitored for EPH and Volatile Petroleum Hydrocarbon (VPH) analysis. (Id., p. 23.)

January 5, 2005: Decoulos informed DEP that Eagle proposed to conduct a rising head slug test at well EOW-1 for additional characterization of the strata between 5 and 11 feet below grade, and that LNAPL would be removed from five wells (ERW-1, ERW-2, ERW-4, BP-5RR and DCW-7) using a vacuum truck. (Ex. RR-34.)

January 18, 2005: Decoulos submitted IRA Plan Modification #4 for the LNAPL release (4-17582). (Ex. B-44.) Decoulos proposed a hydraulic conductivity assessment and the proposed collection of LNAPL from wells ERW-1, ERW-2, and ERW-4 through the use of 4" diameter passive recovery canister skimmers.

January 19, 2005: Decoulos proposed to pump fluids from the interceptor trench, which DEP approved. (Ex. B-45.)

February 22, 2005: Decoulos submitted the Completion Report for IRA Plan Modification #4 for the LNAPL release (4-17582). (Ex. B-47.) Decoulos reported the results of calculations for hydraulic conductivity, pumping rate, and the change-out period for the activated carbon drums that would treat the water collected from the recovery system, as well as the design for the discharge of treated groundwater using infiltration. With that information presented, Decoulos was prepared to begin construction of the revised remedial design that was first proposed in IRA Modification #3 on December 22, 2004. (Id. at p. 4.)

May 6, 2005: Decoulos submitted an IRA Status Report for the LNAPL release (4-17582) (Ex. B-49.) which included the following information:

- Data from another full round of groundwater sampling that was performed on April 6, 2005, including ten wells for EPH analyses and five wells for VPH analyses. The results indicated gasoline constituents (MBTE, Benzene, C5-C8 aliphatics) above GW-1 standards in two wells (DCW-2 and DCW-4) that were located adjacent to and upgradient of the storm drain pipe. (Ex. B-49, p. 10.) Diesel constituents were not observed above GW-1 or other standards.

- LNAPL product was pumped from the interceptor trench, two of the 4" wells (ERW-1 and ERW-2), and two of the 1" microwells (BP5-RR and DCW-7), on February 9, February 16, February 23, March 16 and April 13, 2005. Decoulos reported pumping approximately 8 gallons of diesel product on those five days. (Id., p. 19, Table 4.)

- Decoulos reported his investigations into possible groundwater impacts to the storm drain system. On April 20, 2005, he collected samples from the storm drain manhole located in front of the Station (DMH-2). The results showed low levels of the gasoline constituent MTBE (a leading indicator for gasoline migration) and C9-C18 aliphatic hydrocarbon range

(indicative of diesel) above background but well below GW-1 and GW-3 standards infiltrating the drainage system.[46]

- Decoulos acknowledged that the low levels of MTBE and EPH fractions in the storm drain system could be affected by dilution from upgradient dryflow within the system as well as changes in elevation of the groundwater surface. Based on calculations provided in the Report, Decoulos estimated that the storm drain system would be impacted by groundwater petroleum contamination when groundwater at the USGS Lakeville well[47] was approximately 10.6 feet below land surface. (Id., p. 20.)

July 8, 2005: Decoulos filed an IRA Plan Modification for the LNAPL release (4-17582). (Ex. B-50.) The Plan included evaluations for possible Imminent Hazard and Substantial Release Migration conditions. Decoulos concluded that the diesel LNAPL release was posing a low risk of harm to public health and safety and the environment, although further response actions would be necessary to address aggravating conditions (i.e., the migration of petroleum residuals from the surface into the stormwater

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[46] The concentrations of MTBE (23.1 ug/1) and C9-C18 aliphatic hydrocarbon range (193 ug/1) in the manhole DMH-2 were far below the concentrations of samples that were taken at the storm drain outfall at the Brook. (RR-8) This demonstrated that infiltration into the storm drain was not the cause of the very high readings at the outfall. Instead, Decoulos demonstrated that those high outfall readings were caused by spills and dumping transported by surface runoff from the contaminated Site into the adjacent catchbasin (CB-4) and then onto the outfall.

See, also, the Summary of EPH Concentrations in the Appendix.

[47] Attorney Jones misunderstood and mischaracterized Decoulos' calculation of fluctuations in groundwater elevations and use of the USGS Lakeville well. Contrary to the Officer's statements, Decoulos' calculations included groundwater data from the various monitoring wells at the site. (Exs. RR-1, pp. 19-20, RR-35; RR-40.) Decoulos referenced the USGS well in Lakeville to evaluate longer term changes in groundwater elevations as well as to develop an easy-to-use reference point. For instance, based upon his calculations and use of the Lakeville Well as a reference datum, Decoulos estimated that there was an approximately six-week period between January 1 and July 1, 2005, when groundwater elevations were near record heights and the storm drain many have acted as a migration pathway for a limited amount of petroleum. (Ex. B-50, p. 10.) The Officer's criticism of the Lakeville well reflects his misunderstanding of the analysis and, therefore, was misplaced.

collection system as well as possible infiltration into the system during periods of high groundwater elevation). (Id., p. 6-15.)

- Decoulos concluded that a Critical Exposure Pathway (CEP) did not exist.

- Decoulos concluded that site conditions "could" present a Substantial Release Migration due to low concentrations of petroleum hydrocarbons in the groundwater being intercepted by the storm drain system during the Spring season when groundwater levels were elevated as well as the threat of gasoline constituents contaminating a private well located downgradient of the site. (Id., p. 14-15.)

- The Plan also proposed LNAPL recovery and groundwater treatment operation to recover free product and treat the groundwater using the constructed well and trench network. Decoulos reported that, "Although the Department has argued vigorously for active recovery of LNAPL on Site, recent standards and practices for LNAPL recovery with similar site characteristics do not support this need." (Id., p. 23.) Over the course of four pages, Decoulos described in detail the bases for his conclusions that DEP's requirement for active recovery of LNAPL lacked a reasonable technical basis, including the low hydraulic conductivity of the soils and noncompliance with guidelines and programs issued by the U.S. Environmental Protection Agency and the American Petroleum Institute.

- Decoulos reported that, according to industry standards, the "recommended remedial solution" would be either monitored natural attenuation and passive skimming (if LNAPL was not migrating or there were not any business or regulatory drivers), or excavation and the installation of a trench with HDPE[48] and skimming (if LNAPL were migrating or there were business or regulatory drivers). (Id., p. 23.)

- Decoulos reported and relied on the "White Paper" issued by the LSP Association Technical Practices Committee, dated April 2005[49], titled "LNAPL and the Massachusetts Contingency Plan, Part I". The LSPA's "White Paper" demonstrated that DEP's approach was "no longer

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48 High-density polyethylene (HDPE) plastic.

49 Although the LSPA's Technical Practices Committee formally issued LNAPL "White Paper" in April 2005, Decoulos was aware through his participation in the LSPA that the Committee was formally working on the Paper in early 2004. Decoulos was also aware of the American Petroleum Institute's approach to the remediation of LNAPL, including passive skimming or excavation and the installation of a trench where hydraulic conductivity was low, even before he was hired by Eagle Gas at this Site in January 2003.

considered by technical associations in the oil industry and national technical consensus standard setting associations to be the best or even an appropriate conceptual model to describe and understand the presence and movement of LNAPL released to the environment." (Id., p. 24.)

- Decoulos proposed diesel product recovery from the wells located close to the source of the release (ERW-1, ERW-2, and ERW-4) through the use of PRC skimmers, as well as a single pump recovery system for withdrawal of LNAPL and groundwater from the interceptor trench. (Id., p. 24.) Decoulos reported that, "the depression of the groundwater table at the interceptor trench shall significantly reduce the threat of petroleum constituents being intercepted by the preferential pathway of the storm drain system."

- Wetland resource mitigation at the outfall at the Brook outfall was described, including storm water management protection at the catch basin located in front of 133 Main Street (CB-4), which was the primary cause of impact, control at the outfall, and management of stormwater contaminated sediment. (Id., p. 26-27.)

- Quarterly sampling of existing groundwater monitoring wells in the area surrounding the LNAPL plume; LNAPL investigation to evaluate the extent of product to the south and southwest (which had been halted due to a malfunction in the drilling equipment); and, monitoring the groundwater treatment system for EPH and VPH analysis.

August 5, 2005: Daniel Felten of Environmental Compliance Services, Inc. (ECS) informed Cynthia Baran of DEP that he would become the LSP-of-Record for the LNAPL release (4-17582). (Ex. B-51.) Notably, ECS promised DEP the "implementation of active recovery of light non-aqueous phase liquid (LNAPL) from existing recovery wells and/or trenches."

September 16, 2005: Decoulos informed DEP that his engagement as the LSP-of-Record was terminated. (Ex. B-52.) Decoulos informed DEP that the information concerning various assessment and remedial actions that were conducted after the last IRA Status Report in May 2005 would not be released until Eagle Gas had provided compensation for various services and expenses that had accrued.

November 14, 2005: The attorney for Decoulos & Company and its subcontractor, Wright Industries, Inc. ("Wright"), sent a demand to Eagle Gas concerning the $79,110.38 that Eagle Gas owed Decoulos ($29,013.47) and Wright ($50,096.91) (RR-12). Eagle Gas was alerted that Decoulos and Wright would file a lawsuit to recover payment of the outstanding invoices if settlement was not made within thirty days. (Ex. RR-12.)

December 1, 2005: Decoulos' attorney confirmed that Eagle Gas had requested Decoulos on September 30, 2005, to not make any more submittals for reimbursement under the Chapter 21J program. (Ex. RR-13.)

December 13, 2005: Eagle Gas, through its attorneys, filed its complaint against Decoulos with the Board. (Ex. RR-14.)

December 15, 2005: Decoulos and Wright filed a Complaint in Plymouth Superior Court against Eagle Gas and its related entities to recover the $79,110 in unpaid invoices. (Ex. RR-15.)

December 15, 2005: Plymouth Superior Court issued a Writ of Attachment allowing Decoulos to attach the real estate controlled by Eagle Gas to secure Decoulos' claim for $79,110.38 in unpaid invoices. The Court specifically found that, "There is a reasonable likelihood that the plaintiff will recover judgment, including interest and costs, in an amount equal to or greater than the amount of the attachment over and above any liability insurance known or reasonably believed to be available." (RR-17, emphasis added.)

November 2006: ECS filed its Phase II Comprehensive Site Assessment with DEP for the LNAPL and Brook releases (4-17582 and 4-17825). (Ex. B-53.) ECS

reported many findings that supported Decoulos' positions, and undermined DEP's positions, including the following:

- ECS reported that, "No diesel fuel impact has been detected in the water sampled from the manholes associated with the stormwater drain line since April 2006, therefore, there does not appear to be an on-going release to South Meadow Brook." (Id., p. 5)

- ECS reported that no apparent sheen on the water discharging from the outlet pipe has been observed since March 2006. (Id., at 18.)[50]

- ECS reported that, "In May and July 2006 EPH carbon fractional ranges were detected in the water discharging from the outfall pipe, however, no contaminant concentrations were detected in MH-1, MH-2, or MH-3. This suggests another contributing source for the detected dissolved contaminant concentrations at the outfall, i.e. potential impact entering MH-4 or residual concentrations from sediment trapped in the drain-line following MH-3.[51]

- "In addition, concentrations of VPH[52] have been detected in the groundwater samples collected as part of this investigation. Though some of the VPH contamination is possibly related to the release of diesel fuel, it is the opinion of ECS that a substantial amount of the VPH contamination is due to the previous release of gasoline at the Site." (Id., p. 5-6.)

- ECS reported that, "contaminants are present in media at the Site that are not in whole or in part related to the subject release of diesel fuel . . . . The contaminants in question . . . are MTBE and PCE detected in groundwater of the Eagle Gas private drinking water well, . . . APH compounds detected in the indoor air of 131 Main Street building, . . . and gasoline related

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50 It is likely that the owner improved its "housekeeping" of spills, dumping, storage, etc. once the problem had been identified.

51 MH-4 (Manhole 4) and MH-3 were located farther downgradient from the site. (See Plan, RR-8.) However, MH-3 received the contaminated flow directly from CB-4, which is the catch basin Decoulos identified as having received direct dumping and contaminated runoff.

52 Generally speaking, the volatile petroleum hydrocarbons detected in VPH analyses result from gasoline and its constituents, including the BTEX compounds (benzene, toluene, ethylbenzene, and xylene). Therefore, concentrations of VPH are indicative of a gasoline release. In contrast, the extractable petroleum hydrocarbons associated with EPH analyses would relate to diesel and its constituents as well as other compounds not applicable at this Site.

compounds in soil and groundwater . . . it would appear that elevated concentrations of these compounds would more realistically be related to gasoline." (B-53, p. 21)

- The LNAPL sampled from monitoring well ECS-10 (immediately downgradient of diesel release, and next to BP-5RR, where the LNAPL was first observed) contained gasoline at up to 10%, indicating that the prior owner's release of gasoline was contributing to the LNAPL. (Id., at 16.)

- The plan of the LNAPL plume demonstrated that the majority of the plume was associated with the gasoline release and not the diesel release.[53] That is, most of the plume was located upgradient of the remote diesel fill line where the diesel release occurred. ECS demonstrated that the LNAPL plume actually originated at the two former gasoline USTs that the prior owner had abandoned in place. (Id., Figure 6.)

- "The diesel fuel released at the Site property exists as LNAPL and dissolved phase hydrocarbon and is limited in extent in groundwater and soil in the vicinity of the Eagle Gas property. Diesel fuel has migrated to the east with groundwater beneath Main Street and has apparently intercepted the subsurface drain line beneath Main Street. Migration with groundwater is limited, impact has not been detected on the east side of Main Street or along the outer annulus of the storm drain pipe to any substantial degree downgradient of the Site property. At times of high water, when the groundwater table intersects the outer annulus of the storm drain line, LNAPL and diesel fuel impacted groundwater apparently enter the drain line...." (Id., pp. 35-36, emphasis added.)

- "Stratigraphy at the Site consists of fine sand and silt consistent with glaciofluvial deposits. The hydraulic conductivity was estimated to be 1.0 x E^{5} cm/s. Groundwater was determined to flow under the Site property to the east under an average gradient of 0.043; and under Main Street to the east at an average gradient of 0.012. Linear groundwater velocities for the 2 hydraulic gradients were calculated to be 2.19 and 0.73 feet per year, respectively." (Id., p. 36.)

- "The primary migration pathway for diesel fuel released to the subsurface was determined to be migration through soil to groundwater and the migration or 'spreading' of the LNAPL across the water table. Dissolved constituents have also been observed to migrate to a limited extent with groundwater flow. . . .The other migration pathway identified at the Site is infiltration to the inner annulus of the subsurface storm water drain-line located beneath Main Street and discharge at the outfall to South Meadow

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53 Cynthia Baran of DEP testified that the LNAPL plume as identified and mapped by Decoulos was similar to that identified and mapped by ECS. (Day 1 testimony, p. 181-182.

Brook. Vapor migration of diesel fuel constituents along utility conduits or to indoor air has not been observed and is not believed to be a significant pathway." (Id., p. 36.)

- The stormwater piping between DMH-1 and DMH-2 is "the one area of the drain line where possible infiltration of groundwater and dissolved phase hydrocarbons and/or LNAPL in the pipe may occur." (Ex. B-53, p. 18.)

- ECS conducted video screening of the inside of the stormwater drain between DMH-1 and DMH-2 in front of the Station, and reported the following:

> "No areas exhibiting prominent infiltration of water and/or LNAPL were observed on the inside of the pipe, i.e., no cracks or joints with water clearly spraying or leaking into the pipe were observed. No holes were observed in the pipe. However, indications of water intrusion into the pipe through joints and cracks was observed as indicated by wetness around these areas, drops of water seeping from the seams, upward movement of water from the base of the pipe and/or visual staining along joints. A slight sheen was also periodically observed on the water within the drain line. The staining of the concrete pipe was especially prevalent at the location where the LNAPL had apparently been in contact with the outer portion of the pipe." (Id., pp. 18-19.)

- ECS also confirmed Decoulos' previous findings regarding no Imminent Hazard but the existence of a condition of Substantial Release Migration due to the storm drain pipe conveying contaminants. "It is the opinion of ECS that an Imminent Hazard does not exist but that a condition of SRM does exist. This is in agreement with past evaluations." (Id. at 37.)

- Although ECS reported that it was "aggressive" in conducting active remediation, ECS recovered very little diesel NAPL compared to Decoulos' "passive" recovery. ECS recovered only approximately 12.1 gallons of product[54] whereas Decoulos recovered approximately 54.9 gallons of

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54 The Hearing Officer clearly misunderstood and mischaracterized the volume of product using "passive" and "active" recovery methods. The Officer incorrectly referred to "thousands" of gallons recovered by ECS using "active" recovery required by DEP. (RC p. 31). However, it is clear that the Officer incorrectly included the total volume of water that was being pumped using the active remediation. However, pumping water does not help to remove LNAPL, and is ineffective, wasteful and unreasonable. The electrical costs alone for the DEP active remediation exceeded $30,000. (R-16.) Decoulos' original plan to remediate the LNAPL by excavating in accordance with industry standards was proposed to cost only approximately $15,000. (Wright PFT p. 3.)

product. (Id. at 11 and Table 10; B-33, p. 1; B-50, Table 2, p. 20; Decoulos Rebuttal PFT p. 21; RR-36, p. 2.)

- In reviewing the prior assessment work of Bennett & O'Reilly, ECS discounted their hydraulic conductivity determination of 10^{-3} cm/sec and agreed with Decoulos' calculations and determination on the lower permeability calculation of 10^{-5} cm/sec. (Ex. B-53, p. 28.)

- Soil sampling in 1998 indicated "VPH and EPH impact to the soil was present in 1998." (Ex. B-53, p. 16.) This is evidence that the diesel release was historic and not adequately characterized by Nantais or his LSPs.

- The diesel "contaminant plume has not been observed to migrate substantially through the aquifer;" (Ex. B-53, p. 24.)

May 1, 2007: DEP and Eagle Gas executed an Administrative Consent Order with Penalty ("ACOP") concerning all four RTNs at the Site (the two gasoline RTNs of 4-12848 and 4-1333, and the NAPL release of 4-17582, and the Brook release, 4-17825). (Ex. B-54.) Although Decoulos does not adopt the alleged "facts" contained in the ACOP, Decoulos notes that ECS' Phase III Report dated November 2006, as described in the ACOP, presented a remedial response alternative consisting of "soil excavation and disposal with dewatering combined with activation of the existing groundwater interceptor trench, followed by chemical oxidation, surfactant injection, enhanced biodegradation and/or monitored natural attenuation." (Id. at p. 5, ¶V.) ECS proposed the same remedy that Decoulos proposed two years earlier, back in June 2004! (Ex. B-33.) Decoulos also notes that DEP asserted that Eagle Gas and its new LSPs were "late" in filing reports (Id., ¶W.), and DEP required a 9-step plan to take Eagle Gas from its Phase III Report Addendum to a permanent or temporary solution Response Action Outcome or Remedy Operation Status. (Id. at p. 6-7.)

July 23, 2007: Decoulos and Eagle Gas entered into a Settlement Agreement whereby Eagle Gas agreed to pay Decoulos $25,000 in cash and the "full remaining

unpaid balance" upon receipt of reimbursement for outstanding Chapter 21J claims, and Eagle Gas would withdraw its complaint against Decoulos with the Board.

August 6, 2007: Eagle Gas requested the Board to withdraw its private complaint against Decoulos. (Ex. R-12.)

August 15, 2007: The Board declined Eagle Gas' request to withdraw its private complaint. [Decoulos understands this to be a rare, if not unique, decision.]

September 30, 2008: Corporate Environmental Advisors, Inc. (CEA)[55] submitted a Phase IV Final Inspection Report and Completion Statement with DEP (Ex. RR-36), demonstrating that DEP's requirement for "active" remediation was a failure, and that Decoulos' long-held concerns regarding active remediation in soils with low hydraulic conductivity were justified. CEA reported the following:

- "A High Vacuum Extraction (HVE) system was designed to recover impact groundwater, soil vapor and NAPL from the Site and prevent the migration of contaminants to the discharge outfall located at South Meadow Brook. . . . HVE operational data were summarized in the August 2008 Phase IV Status Report, indicating that the HVE system has been effectively meeting design standards. Specifically, the Phase IV Status Report indicated that the system has treated approximately 93,000 gallons of groundwater and has recovered approximately 10 gallons of NAPL. . . ." (Id. at 1-2, emphasis added.)[56]

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55 The Final Inspection Report does not indicate what happened to the second LSP at ECS or how CEA got involved in the Site.

56 Attached to the Appendix is the 2008 NPDES NOI filed by CEA to discharge treated groundwater into CB-1 (which is labeled on the RR-8 drawing). The water would then flow through DMH-1, and then onto DMH-2, passing through the section of storm water pipe for which DEP had expressed concern for LNAPL infiltration. EPA's approval is at the end of the document (which was included in CEA's Phase IV, RR-36). Cynthia Baran of DEP authorized this discharge, which ended up flushing the entire "diesel LNAPL impacted" stormwater system between the alleged impacted section between DMH-1 and DMH-2. (Hearing Day 1, pp. 170-179.) Obviously, if DEP were truly concerned about LNAPL infiltration in that section, it would not have allowed additional discharge through it.

February 8, 2011: According to DEP's website, a temporary Class "C" Response Action Outcome Statement was filed for the NAPL release and the Brook release (4-17582 and 4-17825, respectively).

[V. CHRONOLOGY– continued]

B. The Speedy Lube Site, 633 North Main Street, Randolph, MA

June 11, 1997: A release of gasoline from a 2,000 gallon underground storage tank (UST) was identified during tank closure operations at the site. DEP authorized assessment activities as an Immediate Response Action (IRA). The 2,000 gallon UST was removed by RC Construction in June of 1997. Decoulos was not involved in response actions at the time of this or the second release; he was not involved until 2002. (See Background information in SAGE's Phase I report, RR-41, p. 1, and in Decoulos' Response Action Outcome, B-55, p. 10.)

October 27, 1997: A second release of gasoline was reported related to two 6,000 gallon USTs that were removed from the site. As part of an IRA, 275.05 tons of petroleum contaminated soil from the release were excavated and later recycled at the Bardon Trimount facility in Stoughton, MA. (RR-41, pp. 8-9; B-55, p. 10.)

November 1997: A 12,000 gallon double-walled, fiberglass gasoline UST was installed. The UST and associated piping were continuously monitored and automatically gauged with an electronic monitoring system. For all times relevant to

this matter, the new UST and piping system were tight and there was no evidence of leakage from the system. (RR-41, p. 10.)

June 1998: SAGE Environmental, Inc. filed its Phase I – Initial Site Investigation. (RR-41) SAGE's Phase I report, the substance of which was never challenged by DEP, was based on SAGE's collection, screening and analysis of soil samples; monitoring well construction; groundwater gauging; collection and analysis of groundwater samples; and, other assessments and evaluations of the nature and extent of impact, possible migration pathways and exposure potential, and Tier classification as a "Tier II" site.

June 14, 2002: After conducting additional sampling and analysis of soil, soil gas and groundwater and after performing a Method 2 risk characterization, Decoulos filed a Response Action Outcome (RAO) Report, documenting that the site could be closed using a Class A-3 RAO with an Activity and Use Limitation (AUL), limiting the use of the site to commercial or industrial uses. (B-55) In his report, Decoulos documented that one of the preexisting monitoring wells installed by the prior LSP did not have a cover and was therefore allowing surface contaminants to flow directly into the well and contaminate and skew that one exposure point. (p. 11) Decoulos also reported that the boring data indicated that the site was located in a bedrock bowl that restricted the possible migration of groundwater contaminants. (p. 11)

November 6, 2003: DEP issued a Notice of Audit Findings (NOAF) and Notice of Noncompliance (NON) to the owner, asserting that a condition of No Significant Risk (NSR) had not been achieved to support a Class A RAO for the site. "Specifically, groundwater data provided in the RAO does not demonstrate that the source of release has been adequately controlled and/or eliminated, or that the extent of contamination

has been adequately defined, to meet MCP requirements for site assessment and risk characterization." (B-57) DEP also asserted that Decoulos failed to identify Exposure Point Concentrations (EPCs) that were conservative estimates of concentrations contacted by a receptor at the exposure point; the two rounds of groundwater data collected within four weeks of one another in 2002 showed increasing levels of BTEX[57] and MTBE; and a level of No Significant Risk had not been achieved. (NON, Attachment A.)

June 18, 2004: Decoulos submitted a new RAO Report to respond to DEP's NON dated November 6, 2003. (B-58) The new RAO report included, among other things, two additional rounds of groundwater samples collected on November 12, 2003, and March 15, 2004, and two additional soil gas samples collected on June 9, 2004. Decoulos reported that the additional groundwater and soil gas data supported his original conclusions and opinion in the original RAO on June 14, 2002. Decoulos also confirmed that the AUL recorded in June 2002 remained in effect to limit the use of the site to commercial or industrial uses. (B-58)

DEP did not issue a second NOAF or NON relative to Decoulos' new RAO. Decoulos' prompt and accurate resolution of DEP's concerns, confirming Decoulos' initial conclusions and opinion, demonstrate that no additional enforcement or disciplinary actions were warranted.

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57 BTEX consists of the gasoline constituents benzene, toluene, ethyl-benzene, and xylene.

VI. SPECIFIC OBJECTIONS TO THE RECOMMENDED DECISION

A. Eagle Gas Site

[Author's note: "**[D@x]**" is an abbreviation that signifies the reference to the September 7, 2012 Decision at a particular page number "x". The following statements highlighted in "bold" relate to statements of attorney Jones, the Presiding Officer. Decoulos strongly opposes all statements purporting to criticize his work, as indicated below.]

1. **The disciplinary case with the LSP Board was initiated by the private client, Eagle Gas - not DEP [D@1].** Decision, p. 1, fn. 1. *See* Decoulos PFT pp. 2-3 and R-11, R-12, R-13a.
2. **All motions were not acted upon, all evidence from DEP was not provided, several witnesses proposed by Decoules were not allowed to testify and many of the exhibits provided by the Board were deficient and incomplete [D@2].** Decision pp. 2-3. No ruling or order was made on Respondent's second motion for leave to file a Surreply dated June 22, 2011 based on the NOAF issued to Eagle Gas on April 7, 2011 (which demonstrated that additional sampling clearly showed no significant risk and that DEP did not pursue additional assessment or risk characterization actions.) Hearing transcript, Day 1, pp. 150-156 and various rulings and orders between October 12, 2010 and February 1, 2011.
3. **The Board's witnesses lacked credibility and appropriate qualifications [D@3].** None of the Board's witnesses for Eagle Gas were

professional civil engineers or UST system inspectors. *See* e.g. Respondent's Surreply dated May 20, 2011 [Luhrs unable to identify or understand purpose of benchmarks]; rationale of Phillips at Hearing, Day 1, p. 114 [Phillips expecting UST distribution piping to be below frost line]; and DEP employee Cynthia Baran's inaccurate estimation that the stormwater piping was approximately 10-15 feet below grade. RR-49. *See also* Respondent's Surreply dated May 20, 2011, where he alleges that the Board violated the standard practice of engineering. G.L. c. 112, s. 81D.

4. **The Eagle Gas site is not "surrounded by a relatively extensive wetland system" [D@9]** - unless you consider the United States surrounded by oceans. There are no wetlands within 300 feet of the site. Decision p. 9; RR-8.
5. **The diesel UST at Eagle Gas is 4,000 gallons, not 5,000 gallons [D@10].** Decision p. 10. B-30, App. C and RR-8.
6. **Decoulos never verbally proposed installing a 12-inch recovery well [D@13].** Decision p. 13; Decoulos Rebuttal PFT p. 4. The proposed actions that Respondent did agree to perform were described in the IRA Plan dated March 17, 2003 (B-16).
7. **The "simple terms" in which active remedial systems work do not apply to all soil conditions especially low permeable soils where passive remedial systems work more effectively [D@15, 26-27].** Decision p. 15. In tight soils, with low permeabilities, active remedial systems are simply ineffective. B-50, pp. 23-26 and API Interactive LNAPL Guide, App. C. Jones acknowledged the position taken by Decoulos with regards to the low

permeability of soils at the Day 1 Hearing and did not give it any weight or consideration in his Decision. Hearing Day 1, p. 172. Decoulos oversaw the passive collection of 54.9 gallons of LNAPL in 2004. B-33, p. 1; B-50, Table 2, p. 20. ECS only demonstrated 12.1 gallons of LNAPL actively collected and CEA only actively recovered 10 gallons. Decoulos Rebuttal PFT p. 21; RR-36, p. 2; B-53, Table 10. The Board should be able to determine which process was more effective.

8. **The work performed by Decoulos between January and March of 2003 included UST tightness testing and the preparation of an IRA Plan [D@15].** B-16, App. B. This testing ensured that the UST system, the tanks and pressurized piping, were tight and not causing a significant leak. The record also reveals that Decoulos was recovering from an Achilles tendon rupture during this period and that he had limited mobility. Decoulos Rebuttal PFT p. 5.
9. **The IRA Plan stated that a 12-inch recovery well would be installed "if NAPL continues to infiltrate the well" [BP-5RR] [D@15].** LNAPL did not infiltrate well BP-5RR after two separate vacuum drawdowns on April 24, 2003. Decoulos Rebuttal PFT pp. 21, 25, 37. The slow infiltration of LNAPL into BP-5RR - *weeks later* - was a clear indication of the slow permeability of the underlying soils and the ineffectiveness of an active remedial system. Decision p. 15 [where it was stated that it took one month for the LNAPL to return to BP-5RR].
10. **By May of 2003, Decoulos had performed the following appropriate important response actions in a timely manner [D@16]:**

a. Overseen tightness testing of the UST system. B-16, App. B; B-30, p. 18; RR-2, Photos 28-32 (*all photos subsequently cited for the Eagle Gas site refer to RR-2*).

b. Conducted a baildown test of the LNAPL impacted well (BP-5RR). B-21 pp. 13-15; Photos 15-19.

c. Identified a sheen of oil on the surface of South Meadow Brook and traced the sheen to a significant historic contamination problem at a stormwater outfall into the Brook [which had not been identified by either DEP or two prior LSPs]. B-21; Photos 20-27;

d. Overseen the visual inspection and headspace screening of the stormwater collection system within the Main Street right-of-way. Ex. B-21. Photos 20-27;

e. Measured groundwater levels and LNAPL thickness at existing groundwater monitoring wells on and off the site. The wells were previously advanced to address the two prior gasoline releases for Nantais000. B-30 and RR-40, Ex. A.

f. Sampled private drinking water supply wells and monitoring wells. B-30, Tables 3 and 4.

g. Collected surface water samples at the stormwater outfall. B-30, Table 3.

11. **In a privatized cleanup program, the LSP should not be hamstrung by "MassDEP directives" [D@16].** Decoulos provided substantial evidence to demonstrate that the stormwater drainage system was impacted from historic, surface spills, dumping and contaminated runoff originating at CB-4. Decoulos Supp. Rebuttal PFT No. 2, pp. 2-3. He also demonstrated that active remediation

was an inefficient and costly solution to remediate the diesel release. Regulatory changes recently proposed will eliminate the tier classification process that granted DEP direct command and control in this case. Decoulos Rebuttal PFT pp. 8, 13, 24, 24, 30, 37, 40; B-30, pp. 17-25, Tables 2 and 3, Apps. B, C, D and K; B-50, pp. 15-27, App. C; Post Hearing Brief, p. 10. As proof of the ineffectiveness of the active remedial solution demanded by DEP, Decoulos oversaw the passive collection of 54.9 gallons of LNAPL in 2004. B-33, p. 1; B-50, Table 2, p. 20. In contrast, ECS only demonstrated 12.1 gallons of LNAPL actively collected and CEA only actively recovered 10 gallons. Was that worth the time and (taxpayer) expense? Decoulos Rebuttal PFT p. 21; B-53, Table 10; RR-36, p. 2. It was a clear error for the Officer to state that Decoulos "never" justified his actions.

12. **Obligation to inspect the stormwater system outfall [D@16].** For six years (since 1997), neither Nantais (the original PRP for the gasoline release) nor DEP had the foresight to consider downgradient wetland resource impacts from the Eagle Gas station. Most importantly, they are not being held accountable. RR-6; RR-7; RR-57 to RR-61. There is no question that there was gross historic contamination at the outfall and all responsible parties should have been "astounded by the amount of contamination" Baran PFT, pp. 21-22. Decoulos was astounded as well. Particularly since no one had previously identified the ongoing and significant release that had created a major sheen on South Meadow Brook when it was discovered, discharging into major cranberry bogs. B-30, p. 18. For attorney Jones to connect the gross outfall contamination with the 2003 diesel release was all presumption and not justified by substantial evidence on

the record. There was no scientific evidence whatsoever proffered by the Board that the subsurface diesel release caused the gross outfall contamination.

13. **The record is clear as to where and when the diesel fuel leak was discovered [D@16, fn. 9].** B-30, p. 18. See also location identified on RR-8.

14. **Strands of corroborating evidence connecting the subsurface diesel release to the outfall contamination were all presumed and not based on any evidence [D@17-18].**

    a. **LNAPL observed in monitoring well BP-5RR did not demonstrate infiltration into the stormwater system and the well was not directly adjacent to the stormwater piping.** Soil boring DCB was advanced between BP-5RR and the piping. B-30, Fig. 3. If LNAPL was infiltrating the system in the vicinity of DCB, it would have been observed flowing through DMH-2 and the headspace readings at that structure would have higher than 0.5 ppm. Decoulos Rebuttal PFT pp. 6, 21, 36-37. Attorney Jones failed to understand that the "apparent" depth of LNAPL in microwell BP-5RR was likely "significantly greater than the actual thickness" B-10, p. 36; B-21, p. 13, n. 1. Microwells exaggerate actual subsurface conditions as compared to larger diameter wells, such as demonstrated by larger diameter wells subsequently installed in the same vicinity.

    b. **The diesel fuel intake line had been leaking for an unspecified time in unspecified amounts.** How has the Board proved infiltration from this observation? By the way, the remote fill line was installed during the concrete pad reconstruction in 1999 and the time for release was clearly limited.

Furthermore, leaks were only occurring during intermittent fuel deliveries. B-30, pp. 17-18.

c. **DEP employee Mark Jablonski did not observe a petroleum sheen or diesel odor near well BP-5RR or in front of the site**. The statement was based on testimony from Baran, who never personally observed a sheen or measured any odors in front of Eagle Gas. Baran PFT p. 14. Baran's testimony references field observations by Jablonski. Jablonski noted in his field observations that an oil sheen and vapors were emanating from the catch basin "*next to the gas station*" and that the catch basin upgradient of the gas station was clean. The PID readings presented by Decoulos, which the Board admitted were accurate, clearly showed petroleum vapor impacts originating at CB-4. RR-8; B-30; B-21, Fig. 3; Hearing, Day 1, pp. 79 and 81. Catch basin CB-4 is the only catch basin "next to the gas station" that had elevated PID responses. Jablonski attempted to change his field observations at the hearing, even though his memory was not clear. Jablonski testimony, Day 1, pp. 86-95. In addition to the significant rebuttal testimony of Decoulos – which completely contradicted this baseless allegation - there was substantial evidence in the record that the first contaminated stormwater drainage impact originated at CB-4. B-53, p. 32; Doherty testimony, Day 2, p. 431.

d. **The PID readings in front and downgradient of the site were entirely consistent with petroleum contamination originating at CB-4**. Baran herself admitted that the "PID screening results provided useful real-time data to make field decisions regarding the release." Baran PFT, p. 15. Doherty concluded that the trail of contamination originated at CB-4.

Doherty testimony, Day 2, p. 431. To speculate that an upgradient diesel release caused a 0.5 ppm response from a PID in DMH-2 - which was less than 10 feet from 15,000 gallons of gasoline being stored underground – was purely hypothetical and without merit. Doherty testimony, Day 2, pp. 431-434.

e. **There was a clear "proximate source of petroleum" with multiple supporting lines of evidence**. Decoulos and Doherty were the only witnesses who were qualified to assess the stormwater system as professional civil engineers. G.L. c. 112, s. 81D. Both witnesses provided numerous lines of scientific evidence demonstrating that the source of petroleum was surface infiltration at CB-4. B-30; Decoulos Rebuttal PFT; Decoulos Supp. Rebuttal PFT No. 2, pp. 2-3; Doherty PFT, pp. 3-6. Attorney Jones ignored several industry and governmental sources (including DEP itself), who designed web pages, brochures and templates (to be affixed next to catch basins) to educate the public on the significant dangers of surface spills and dumping of oil into stormwater catch basins. RR-20 to RR-24; RR-27; RR-28.

f. **The extremely high concentrations of EPH at the outfall had no physical connection to the limited subsurface diesel fuel release.** The high concentrations –- by themselves -- did not demonstrate a connection between the diesel LNAPL and outfall contamination. The Board could not draw any evidentiary connection. In fact, the gross surface water contamination contained elevated levels of pyrogenic PAHs, which are clearly not a component of pure diesel fuel. B-10, pp. 14-15; B-30, Table 3. The sediment at the outfall also contained elevated pyrogenic PAHs (four of which

exceeded the Method 1 standard), in addition to heavy metals, including barium, chromium, lead, mercury and silver, which are clearly not a component of pure diesel fuel. RR-30.

15. **The waste site cleanup program has been "privatized" - not "semi-privatized" [D@20].** See http://www.mass.gov/dep/cleanup/privatiz.htm

16. **The simplest way to determine infiltration of contaminated groundwater or LNAPL was to open and inspect drainage manholes, especially DMH-2, not speculate that LNAPL infiltrated the stormwater system [D@20, 26].** The testimony of Baran and Luhrs on this determination was not credible – and it should not have been relied upon. Baran, an epidemiologist, speculated that the inverts were 10 to 15 feet below grade. RR-49. In fact, the invert to DMH-2 was 5.88 feet below grade. R-11. The inverts and cross-sections of the UST and stormwater system were provided on December 15, 2004 (not January 13, 2005). RR-11 and Baran PFT p. 20. Luhrs, a geologist, had no concept of how engineers establish elevations or how field surveys were conducted. He showed a remarkable lack of understanding of engineered plans by stating that "[t]here is a 95 foot [difference in elevation] that you can't reconcile." Hearing Day 2 at pp. 378-387. In its Rebuttal Brief dated May 13, 2011, the Board alleged that Luhrs demonstrated "ample command of the engineering principles". Board Rebuttal Brief, p. 8. To reach this conclusion, the Board improperly argued that the site plans "lacked a fundamental benchmark without which no engineer could reconcile the elevations asserted on the plan." The plans showed a well-defined benchmark southeast of the USTs. The

benchmark was a PK masonry nail set in the pavement with an assumed elevation of 100.00. B-21, Fig. 4 and B-41, Fig. 1.

17. **The video survey of the stormwater system confirmed Decoulos' findings [D@20-21, 26].** The Board argued that a survey of the stormwater piping would provide further valuable evidence of LNAPL infiltration. Decoulos had requested Paul Wright to conduct this work and Wright was seeking payments from Eagle Gas before he ordered the video survey. Wright could not perform this work because Wright was owed substantial sums by Eagle Gas. Decoulos PFT p. 3; Wright PFT p. 3; RR-12; RR-13. The video survey overseen by ECS corroborated – not invalidated – the evidence and conclusions reached by Decoulos. The video survey found "no areas exhibiting prominent infiltration of water and/or LNAPL...on the inside of the pipe". B-53, pp. 18-19. This conclusion was not a surprise. Decoulos Rebuttal PFT p. 21. Despite hoping for a different outcome, Baran never oversaw a "successful repair/effective sealing of the storm water drainage system" – because it was not necessary. RR-66. Eventually, Baran authorized the discharge of treated groundwater into CB-1, which then flowed directly through the stormwater piping that she and the Board alleged had been breached. Hearing Day 1, pp. 175-178; RR-36, p. 4, App. A. Locating the treatment system north (and upgradient) of the LNAPL source and discharging the effluent upgradient of the LNAPL source was completely illogical. In his own active pump and treat system design, Decoulos proposed a treatment system and discharge downgradient of the LNAPL source. B-37, Fig. 1.

18. **Alleged failure to follow through with active LNAPL recovery [D@21].** The implementation of active recovery that Decoulos described in the IRA Plan

dated March 17, 2003 was only to occur if NAPL continued to infiltrate monitoring well BP-5RR after the baildown test. It clearly did not. In fact, it took weeks for the LNAPL to recover after two separate vacuum drawdowns on April 24, 2003. Decoulos Rebuttal PFT pp. 21, 25, 37. *See also* Decision p. 15 [where it was stated that it took one month for the LNAPL to return to BP-5RR]. Active recovery was proposed as an alternative in the IRA Plan dated June 15, 2004 and as a primary means of recovery in the IRA Plan dated November 5, 2004. Both proposals were denied by DEP. At the demand of DEP, Decoulos oversaw the construction of an active recovery trench in the middle of Main Street (Route 58) on December 16 and 17, 2004. Decoulos Rebuttal PFT p. 31. For Jones to state that Decoulos "never performed it as directed" is a clear error not supported by evidence in the record.

19. **Evidence found by successor LSP relative to diesel concentrations in the stormwater system was consistent with prior evidence collected by Decoulos. [D@22]** Decoulos identified and documented the same diesel fuel migration into the stormwater drainage system – beginning on April 20, 2005. B-49, pp. 19-22; RR-1, pp. 7, 40; RR-8; and Respondent's Post Hearing Brief [After the motion to correct exhibit B-53 on February 4, 2011 was denied, Decoulos provided the comparative data in par. 52 of his closing brief]. Prior to the time, there was no credible evidence "that diesel fuel has migrated from the source area into the municipal storm water drainage system beneath Main Street." Decision p. 22, n. 11. B-42, pp. 7-12; RR-1, pp. 6, 7-8, 9, 24, 26, 40. The low concentrations of diesel fuel that eventually infiltrated into the stormwater system could have been prevented if DEP had not denied the interceptor trench

proposed by Decoulos in June of 2004. RR-1, pp. 15, 44. The low concentrations of diesel fuel which eventually infiltrated the system were orders of magnitude below the contamination first found at the outfall in May of 2003. B-30, Table 3; RR-8.

20. **Conclusions in the first IRA Status Report that the underlying soils were comprised of silts and clays was "premature" is not supported by substantial evidence in the record [D@23].** After personally overseeing the soil boring investigation on June 3, 2003, Decoulos directly observed the composition and structure of the full depth of underlying soils from the Geoprobe investigation. Photos 40-43. He reported his direct observations in the IRA Status Report dated July 3, 2003. B-21, p. 20. The Officer claimed that these observations were "premature and in error given all the contradictory evidence". The basis of the statement is testimony from Ian Phillips. Phillips purely speculated in his testimony, without any supporting evidence, that the site area was "characterized by sandy soils which are generally permeable." Phillips PFT, pp. 6. The Phase I Site Assessment included the septic design for Eagle Gas, which showed a percolation rate of 30 minutes per inch. Philips was unaware that the 30 minute rate was extremely slow. Hearing Day 2, pp. 265-266. *See also* 310 CMR 15.000. Unlike Phillips, Decoulos is a professional civil engineer and an approved soil evaluator with extensive experience in designing septic systems. R-9 and Decoulos Rebuttal PFT p. 43. Additional testing, by both Decoulos and ECS, supported the initial determination that the underlying soils had low permeability. After performing a detailed rising head slug test on February 2 and 3, 2005, Decoulos calculated the hydraulic conductivity to be 10^{-5}

cm/sec. B-50, pp. 15-23. Baran admitted during cross that the conductivity rate was slow. Hearing Day 1, pp. 169-170. She also knew, as a registered sanitarian, the prior Director of Public Health for the town of Eastham, and the Assistant Health Director for the town of Brewster, that the percolation rate was slow. B-2; Hearing Day 1, pp. 168-169; *see also* Title 5, 310 CMR 15.000. In reviewing the prior assessment work of Bennett & O'Reilly, ECS discounted their hydraulic conductivity determination of 10^{-3} cm/sec and agreed with Decoulos' calculations and determination. B-53, p. 28.

21. **The initial soil boring investigation was deficient [D@23].** Phillips also incorrectly asserted that Decoulos did not test for EPH fractions at DCW-2 or DCW-3. The facts show otherwise. B-21, Table 2; Hearing Day 1, pp. 108-109 [admission by Phillips during cross that EPH fractions were analyzed].

22. **Delays in filing the IRA Plan for the outfall release [D@23].** First, the responsibility for filing remedial actions lies with the PRP, not the LSP. Second, the stormwater drainage system contamination was on property owned by the Town of Carver. The Town held the fee simple interest in the Main Street right-of-way and also held an easement on land where the outfall discharged into South Meadow Brook (the former right-of-way which was discontinued). B-30, App. J; B-40, par. 10 and 11; RR-25; RR-30; RR-52 (license agreement negotiated between Decoulos and Town to construct interceptor trench within Main Street). Third, the outfall was on private property owned by Stephen Davis. Decoulos Rebuttal PFT, p. 23; B-30, p. 19 and App. J; B-31; RR-30; RR-50; RR-51.

23. **Petroleum spills discharging to the downgradient catch basin (CB-4) were "theoretical" [D@23-25].** Subsurface analytical data, field screening

data and direct visual observations of stormwater flows identified the first contaminated portion of the storm drain system as catch basin CB-4. Chalk Number 1; B-30; B-42, pp. 7-12; B-53, p. 32; RR-1, pp. 6, 7-8, 9, 24, 26, 40; RR-8. There was clearly "evidence of recent diesel surface releases" to CB-4. Decision, p. 24. One petroleum spill to CB-4 was observed directly by Baran during a field visit on December 10, 2004. Hearing Day 1, pp. 204-209; Photos 93-103; Wright PFT, pp. 3-5. The Carver Fire Department also reported a gasoline spill that threatened CB-4 on November 7, 2005. RR-65. The physical pathway was demonstrated to Lynn Peterson Read and Robert Luhrs at the Eagle Gas site on June 26, 2008. Photos 155-162. It is undisputed that thousands of industry and governmental sources (including DEP itself), have designed web pages, brochures and templates (to be affixed next to catch basins) to educate the public on the significant dangers of surface spills and dumping of oil into stormwater catch basins. RR-20 to RR-24; RR-27; RR-28.

24. **Absorbent pads and booms were not preventing downstream impacts [D@25].** As soon as Decoulos identified the outfall contamination on May 16, 2003, he managed the contamination with absorbent pads and booms. Decoulos Rebuttal PFT, p. 7, 12; B-26. The setting and replacement of pads and booms were continuously maintained by Wright. Wright PFT, p. 2. Baran alleged that the pads and booms "were preventing some but on all of the release from travelling further downstream from the area near the outfall", but could only provide evidence of breakthrough on December 10, 2004. Decision, p. 25. Hearing Day 1, pp. 204-205. Coincidentally, that alleged breakthrough occurred

on the same day she saw a petroleum spill run to CB-4. Photos 93-103; Wright PFT, pp. 3-5.

25. **DEP's continuing position that the outfall contamination was not consistent with stormwater runoff [D@25].** Baran stated in her testimony that the "conditions I observed at the site simply did not support Mr. Decoulos's theory that runoff was the cause of the contamination at the outfall." Baran PFT, p. 23. DEP never asserted that position, and if it did, Decoulos would have gladly provided additional evidence. The immediate steps that Decoulos took to ensure that the diesel release was not causing the outfall contamination were direct visual observations and field screening of the stormwater structures; immediately overseeing a soil boring investigation; and, collecting surface water and sediment samples at the outfall. Photos 40-43. He reported his direct and immediate observations in the IRA Status Report dated July 3, 2003. B-21, p. 20. The gross surface water contamination contained elevated levels of pyrogenic PAHs, which are clearly not a component of pure diesel fuel. B-10, pp. 14-15; B-30, Table 3. The sediment at the outfall also contained elevated pyrogenic PAHs (four of which exceeded the Method 1 standard), in addition to heavy metals, including barium, chromium, lead, mercury and silver, which are clearly not a component of pure diesel fuel. RR-30. The PID readings presented by Decoulos, which the Board admitted were accurate, clearly showed petroleum vapor impacts originating at CB-4. RR-8; B-30; B-21, Fig. 3; Hearing, Day 1, pp. 79 and 81. Baran herself admitted that the "PID screening results provided useful real-time data to make field decisions regarding the release." Baran PFT, p. 15. Decoulos provided substantial, factual evidence to demonstrate that the contaminated

stormwater drainage system he identified on May 16, 2003 was impacted from surface spills, historic and recent dumping and contaminated runoff originating at CB-4. B-21; B-30; RR-30; Decoulos Supp. Rebuttal PFT No. 2, pp. 2-3.

26. **Reports of diesel fuel in nearby drinking water wells exceeding GW-1 standards [D@26].** This false allegation has no foundation. Decoulos immediately sampled nearby drinking water wells on May 21, 2003 and June 21, 2003 and found no exceedance of GW-1 standards for diesel fuel constituents. B-21, p. 20, Table 4. He did find exceedances of GW-1 standards for gasoline constituents, which were entirely consistent with the historic gasoline release at the site and acknowledged by DEP. RR-49; RR-54; RR-57; RR-58; RR-59

27. **Wrongful performance in completing IRAs [D@26].** This is another clearly false allegation with no foundation. Decoulos sampled the outfall, wetlands and the storm drainage system as part of numerous IRA responses. B-21; B-30; RR-30. The stormwater flow was immediately sampled as soon as evidence of infiltration was observed. B-49, pp. 19-22. The low concentration of diesel measured in the stormwater system was orders of magnitude below what Decoulos originally found. RR-8.

28. **Inadequate responses based on the problems and risks [D@26].** As a professional civil engineer and certified UST system inspector with extensive experience in modeling, designing, permitting and overseeing the construction of stormwater collection and UST systems, Decoulos understood the problems and risks of the LNAPL release better than any of the Board's witnesses and DEP staff who asserted control over the response actions. R-9; RR-18; RR-28. The responses taken by Decoulos were also affirmed by Doherty. R-6; R-7. Baran, an

epidemiologist; Luhrs, a geologist; and Phillips, a chemist; made speculative assumptions about an LNAPL pathway that had no merit or scientific credibility. B-2; B-5; B-7. After six years of overseeing two gasoline releases in a drinking water aquifer that should have been operating under a Tier 1 Permit, DEP never bothered to check the stormwater collection system structures or outfall during their oversight or site audit. RR-6; RR-7; RR-57; RR-58; RR-59. The initial responses taken by Decoulos and the judgments he made - all while operating with a limited budget and with a client that owed substantial money - all proved completely responsive and commensurate with the risks. RR-12 to RR-17. The IRA and other responses were demonstrated to be entirely adequate with the subsequent data sets collected by ECS and CEA. B-53; RR-36.

29. **Passive collection was unsupported and the LNAPL was migrating [D@27].** DEP was relying on an old "Tank and Pancake" LNAPL conceptual model to justify its demand for active LNAPL collection. RR-38, p. 1; RR-39. Decoulos immediately conducted a baildown test on April 24, 2003 and demonstrated that active LNAPL collection would not be effective. B-21, p. 13; B-53, p. 28; B-30, App. D; B-49, pp. 15-18, App. E. The first LNAPL collection design proposed on June 15, 2004 was a passive collection system with an active collection backup, which was denied by DEP. B-33; B-35. The second LNAPL collection design proposed on November 5, 2004 was an active collection design, which was also was denied by DEP. B-37; B-39. Despite DEP's unreasonable interference, Decoulos oversaw the passive collection of 54.9 gallons of LNAPL in 2004. B-33, p. 1; B-50, Table 2, p. 20. The subsequent consultants, ECS, only demonstrated 12.1 gallons of LNAPL actively collected and CEA actively

recovered only 10 gallons. Decoulos Rebuttal PFT p. 21; RR-36, p. 2; B-53, Table 10. Thus, the "score" was, Decoulos: 55 gallons and DEP: 22 gallons.

30. **Violation of the MCP by collecting LNAPL [D@27].** Decoulos oversaw the additional assessment of soil and groundwater in August of 2004 to further identify the nature and extent of the diesel release. He kept Baran apprised of the assessment work. RR-31. There is no requirement in the MCP to seek permission from DEP to conduct soil or groundwater assessment. While identifying LNAPL in the new wells, DEP and the Board were unreasonable and unjustified in asserting that Decoulos was supposed to leave the LNAPL in the ground.

31. **Indoor air in the second floor residence at the site was a CEP [D@28].** Decoulos demonstrated that the indoor air was <u>not</u> a threat to public health or a Critical Exposure Pathway (CEP). B-37, p. 2; B-53, p. 20. All of the air constituents that were detected (but below risk levels) were associated with the prior gasoline release. Baran herself admitted that the "indoor air appears clean." RR-50.

32. **Passive recovery not sufficient [D@28-29].** Right through the end of his assignment, Decoulos steadfastly maintained, based on the site data, that active LNAPL collection was not appropriate. All of the data collected and the science that was unfolding during that period supported his position. B-50, p. 23. At no time did he "finally" recognize "the need for active recovery," contrary to the Officer's "spin" of the chronology. Decision, pp. 28-29. Decoulos oversaw the collection of more LNAPL passively than either ECS or CEA collected actively.

Decoulos Rebuttal PFT p. 21; B-33, p. 1; B-50, Table 2, p. 20; RR-36, p. 2; B-53, Table 10.

33. **The active recovery system proposed in November of 2004 was in the same location that DEP eventually approved [D@28].** There was no basis for attorney Jones to assert that the system proposed by Decoulos on November 5, 2004 "could pull petroleum product from across the site closer to the stormwater system." Decision, p. 28; B-37. The system was in the same location that DEP eventually approved and used four of the wells that Decoulos established in August of 2004 (ERW-1, ERW-2, ERW-3 and ERW-4). RR-36, Fig. 3. In fact, the design proposed by Decoulos was further away from the stormwater system than the CEA design approved by DEP (Decoulos proposed using ERW-1 and ERW-4 as active collection points, which were further away from the 15 inch stormwater pipe than ERW-2 and ERW-3.) Compare B-37, Fig. 1 with RR-36, Fig. 3.

34. **The LNAPL recovery trench was constructed without approval [D@29].** After two failed attempts to design and collect LNAPL before it had an opportunity to infiltrate the 15 inch stormwater pipe, Decoulos permitted and designed the trench where DEP wanted it. RR-1, pp. 6, 15, 17-18, 25, 30. The design was reviewed by DEP and orally approved before construction. RR-11; RR-47. Decoulos had to obtain a license and road opening permit from the Town, which DEP required. RR-52. Baran's supervisor at DEP, Jonathan Hobill, was at the site on December 17, 2004 during the trench construction to observe the work. RR-40, App. A. Baran admitted that it was "orally approved". B-43.

DEP did not "eventually learn" about this trench. Decision, p. 29. In fact, DEP got what it wanted. RR-51.

35. **LNAPL infiltration to the stormwater system was not ruled out in December of 2004 [D@29].** During 2003 and 2004, there was no evidence of LNAPL entering the storm drainage system. Decoulos made visual inspections of the drain manhole in front of the Eagle Gas site on May 16, 2003, September 4, 2003, June 24, 2004 and December 10, 2004 and did not see any sheen or evidence of diesel fuel impacting the stormwater collection system during that period. RR-1, pp. 6, 40, 41; Photos 25, 80, 81, 82. PID screening of the system occurred on May 16, 2003 on September 4, 2003. RR-40, App. A.

36. **Failure to perform Imminent Hazard Evaluations and assess conditions of Substantial Release Migration and Critical Exposure Pathways [D@29-30].** The immediate actions taken by Decoulos in 2003 to advance soil borings adjacent to the stormwater system, identify and sample the outfall contamination, screen the headspace of the stormwater system and sample the adjacent drinking supply wells were all part of appropriate and necessary actions under the MCP to evaluate IH and CEP conditions, and assess the potential for SRM. RR-1, pp. 6, 36, 38, 44; B-53, p. 34. Nantais, the PRP responsible for the two prior gasoline releases, had been ordered by DEP to conduct similar evaluations and assessments and had never performed them. RR-7; RR-49; RR-53; RR-54. It is well known that gasoline constituents pose a greater threat to public health and the environment than diesel fuel. Hearing Day 1, pp. 227-228; B-10, pp. 34-35; B-53, p. 34 and App. I. Diesel fuel constituents are also "less water soluble, have lower vapor pressures, and in

general sorb significantly to soil organic matter" compared to gasoline. B-53, p. 22.

37. **Failure to evaluate explosive vapors in utilities [D@30].** Due to their lower vapor pressures, it is well known that diesel fuel is not considered an explosive threat compared to gasoline. ECS did not identify any LEL readings in the stormwater drainage manholes. B-53, p. 17. It was unreasonable to demand that the IH evaluations by Decoulos were lacking because he failed to screen for LELs in the drainage system. This was another task that the prior owner and PRP, Nantais, failed to perform in 1997, a significant failure given that the risk associated with his gasoline release was much greater than the diesel release. RR-7.

38. **Failure to evaluate impacts on fish [D@30].** This is another unreasonable demand, particularly since all the data collected by Decoulos showed that the LNAPL had not infiltrated the stormwater system until 2005. Even when some limited amount of infiltration did eventually occur in April of 2005, Decoulos reported that the EPH concentrations were below Method 1 standards and that no adverse impact was expected to "human health or the surrounding environment." B-49, pp. 19-22; B-50, pp. 9-10; RR-8. Subsequently, ECS also did not evaluate for impacts on fish. B-53.

39. **Acknowledgement that LNAPL was infiltrating stormwater system [D@30-31].** The low concentrations of diesel fuel that eventually infiltrated into the stormwater system could have been prevented if DEP had not denied the interceptor trench proposed by Decoulos in June of 2004. RR-1, pp. 15, 3144. The stormwater flow was immediately sampled as soon as evidence of infiltration

was observed. B-49, pp. 19-22. The concentrations of diesel fuel identified in the system were orders of magnitude below the contamination first found at the outfall in May of 2003. B-30, Table 3; RR-8.

40. **Reliance on the USGS monitoring well in Lakeville to evaluate groundwater fluctuations [D@30-31].** Attorney Jones' assertion completely distorts and mischaracterizes the facts and reports. Decoulos measured or oversaw the measurement of groundwater elevations at the Eagle Gas site on the following dates when large amounts of contamination were present at the outfall: May 21, 2003; June 12, 2003; and April 6, 2005. Groundwater elevation data was also collected on June 3, 2004 and October 17, 2004. RR-1, pp. 19-20; RR-35; RR-40; Photos 36 to 42, 52 to 54 and 141. Furthermore, data from the Lakeville station was used because continuous groundwater measurements were recorded and easily available from the U.S. Geological Survey. Based on those continuous readings, the site specific groundwater measurements from the Eagle Gas site could be correlated to provide year round approximations as to when groundwater elevations may top the invert elevation of the stormwater pipe in the vicinity of the LNAPL release. DEP allows these correlations in establishing seasonal high groundwater elevations under Title 5, 310 CMR 15.103(3)(b)(2). ECS's subsequent observations were entirely consistent with those of Decoulos, where they stated that during that the groundwater elevations rose above the stormwater piping inverts in the "later months of 2005 and early months of 2006." B-53, p. 19 and App. F. As noted earlier, Decoulos identified and documented LNAPL infiltration into the stormwater drainage system beginning on April 20, 2005. B-49, pp. 19-22; RR-1, pp. 7, 40; RR-8. The simple rise of

groundwater elevations above the inverts did not correlate to a direct discharge into the stormwater system. It was the actual sampling data collected from the stormwater system that was relevant. The highest EPH concentrations that Decoulos collected from stormwater flow inside the channel of DMH-2 occurred on April 20, 2005, and the detected analytical results from that sampling were 23.1 µg/l of MTBE and 193 µg/l of C_9- C_{18} aliphatic fractions. There were no detectable concentrations of C_{19}-C_{36} aliphatic or C_{11}-C_{22} aromatic fractions. B-49, App. F. The highest EPH concentrations that ECS collected from stormwater flow inside the channel of DMH-2 occurred on October 28, 2005, and the analytical results from that sampling were 6,100 µg/l of C_9- C_{18} aliphatic fractions, 2,400 µg/l of C_{19}-C_{36} aliphatic fractions and 4,000 µg/l of C_{11}-C_{22} aromatic fractions. B-53, Table 6.[58] Prior to April of 2005, there was no evidence whatsoever "that diesel fuel has migrated from the source area into the municipal storm water drainage system beneath Main Street." Decision p. 22, n. 11. B-42, pp. 7-12; RR-1, pp. 6, 7-8, 9, 24, 26, 40.

41. **Comparison of LNAPL collection results by various consultants [D@31].** The Officer attempts to characterize the "significant" changes to LNAPL collection when the new LSP arrived, claiming that "within one year thousands of gallons of diesel fuel LNAPL and groundwater were extracted." Decision, p. 31. He fails to acknowledge that Decoulos and Wright managed the withdrawal of over 8,000 gallons of diesel LNAPL and groundwater from the site

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[58] Decoulos identified substantial errors in ECS' Table 6 and filed a motion to correct the Table, which was denied. *See* Motion to Correct Exhibit B-53 with a supporting affidavit dated February 4, 2011. http://www.decoulos.com/lsp_complaint/Motion_Correct-ExB53_020411.pdf and http://www.decoulos.com/lsp_complaint/Decoulos_Aff12_020411.pdf

in early 2005. Wright PFT, p. 5; B-49, pp. 18-19. ECS reported that they recovered approximately 13,000 gallons of diesel LNAPL and groundwater between September 22, 2005 and August 15, 2006. B-53, p. 11. Notably, Decoulos oversaw the passive collection of 54.9 gallons of LNAPL in 2004. B-33, p. 1; B-50, Table 2, p. 20. ECS only demonstrated 12.1 gallons of LNAPL actively collected and CEA only actively recovered 10 gallons. Decoulos Rebuttal PFT p. 21; RR-36, p. 2; B-53, Table 10. Again, the "score" was, Decoulos: 55 gallons and DEP: 22 gallons.

42. **The gravity at stake versus evidence presented by Decoulos [D@32-33].** Given the "gravity of what is at stake in this appeal", it is disconcerting, to say the least, that attorney Jones failed to objectively evaluate testimony and evidence proffered by Decoulos and his experienced witnesses. The specific facts and scientific evidence that Decoulos and his witnesses relied upon in forming their opinions were 1) PID measurements; 2) direct visual observations of the stormwater structures; 3) analytical data from direct sampling of water flows within the stormwater system; 4) analytical data from direct sampling of surface water at the stormwater outfall; 5) analytical data of sediment at the stormwater outfall basin; 6) preparation of engineered site plans and cross sections of the entire area showing the correlation of surface elevations and groundwater levels to the stormwater drainage system; 7) rising head slug tests to accurately establish the hydraulic conductivity of the soils impacted by the LNAPL; 8) groundwater elevation data and flow directions; 9) photographic and documentary evidence of past dumping and spills at the site; 10) the advancement of soil borings and characterization of soil and groundwater directly

adjacent to the stormwater system; 11) historic evidence of storage and general operating practices at the gas station during and prior to Najib Badoui's ownership; and 12) scientific and government literature that is designed to warn the public of the dangers of oil and hazardous material dumping and spills that ultimately damage wetlands and waterways.

43. **Forensic analysis was never carried out [D@33].** Decoulos made numerous efforts to characterize the LNAPL and differentiate the various sources at the Eagle Gas site as described above and below. He described his efforts and the problems he encountered to the Complaint Review Team (CRT) in a letter dated January 18, 2008. RR-40. In July of 2002 he attended the LSP Board approved course entitled "Environmental Chemistry and the Emergence of Forensic Geochemistry" taught by Michael J. Wade. See http://www.waderesearch.com The course was intended to demonstrate how petroleum fractions could be fingerprinted using "peak area reports" to obtain detailed information on petroleum constituents. The peak area reports would differentiate between virgin gasoline, weathered gasoline, virgin diesel fuel, weathered diesel fuel and waste oil. Decoulos assumed that since the LSP Board approved the course, the new techniques were available and ready to be used. Despite significant efforts to follow the procedures described by Wade, neither lab was able to provide the peak area reports that Wade described. Various emails describing his efforts were sent to Baran, Mary Davis at Alpha Analytical and Dave Kahler at Geolabs. RR-40, Ex. C. Decoulos did provide fingerprint analysis of the LNAPL from both Alpha and Geolabs. RR-40, Ex. D. This was the same fingerprint analysis that ECS carried out. B-53, p. 16. It was

clear error for attorney Jones to state that the analysis "was never carried out." Decision, p. 33.

44. **Routine or historic runoff caused the egregious degree of contamination at the outfall [D@33].** It was a clear error for attorney Jones to characterize the "astounding" contamination at the outfall as being caused by routine or historic runoff. This is not how Decoulos testified. Based on the historic uses of the Eagle Gas site and the runoff that flows directly to CB-4, Decoulos argued that numerous spills or dumping were washed by surface water runoff to CB-4, or dumped or discharged directly into CB-4. Decoulos Rebuttal PFT, p. 11, 22; Decoulos Supp. PFT #2, pp. 2-3. He demonstrated how surface runoff would transport spills and dumping at the Eagle Gas site to CB-4 to both Luhrs and Read on June 26, 2008. Photos 155-162. There was significant documentation in the record to demonstrate that spills and dumping on ground surfaces flow directly into catch basins and cause significant damage to wetlands and waterways. Much of the material came directly from DEP. RR-20 to RR-27. Decoulos operated under a contract with EPA and the New England Interstate Water Pollution Control Commission to educate members of the Wampanoag Tribe on these exact same problems. RR-28. Due to his expertise on this matter, he was also invited to serve on his town's stormwater committee. RR-18.

45. **The eventual accumulation of LNAPL at DCW-1 proved that egregious outfall contamination originated from diesel LNAPL [D@34].** At the time DCW-1 was constructed and sampled in June of 2003, the predominant contaminants found in the groundwater were VPH constituents, petroleum fractions that are associated with gasoline. B-21, Table 3. The "eventual"

occurrence of diesel LNAPL in the well is one line of evidence that Decoulos relied upon to demonstrate that the diesel LNAPL did not cause the gross contamination at the stormwater outfall in May of 2003. Within twelve days of observing diesel LNAPL in DCW-1, Decoulos proposed that the area impacted by diesel LNAPL be immediately excavated before it migrated to the stormwater system. B-33, p. 1. Nine months after DEP denied the IRA Plan, Decoulos – for the first time - identified diesel constituents in the stormwater system. RR-1, pp. 40-41; B-35; B-49; Photos 148-149. Even with the infiltration first identified in the spring of 2005, the concentrations of diesel constituents did not exceed any risk based standard in the MCP necessary to protect public health or the environment and was orders of magnitude below what was found in May of 2003. RR-8.

46. **LNAPL required hydraulic control [D@34].** As Decoulos demonstrated, the hydraulic control of LNAPL is only one method to remediate a petroleum release. At this site, the underlying permeability of the soils rendered hydraulic control of LNAPL to be ineffective and unnecessarily costly. RR-38; RR-39; B-30, App. D; B-49, pp. 15-18, App. E; B-50, pp. 17-24, App. C; B-53, p. 28. If the IRA Plan was approved in June of 2004, Decoulos and Wright could have removed the LNAPL impacted soil cheaper than what was spent on electricity alone for the active remedial system. Wright PFT p. 3; R-16. Furthermore, the stormwater system would have never been impacted from the subsurface diesel release. Decoulos Rebuttal PFT p. 6. Given the significant amount of greenhouse gases emitted from the active recovery system, together with the electricity which

was generated to operate the active system, active recovery also desecrated sustainable remediation principles which have been recently embraced. R-17.

47. **Failure to provide adequate boring logs [D@35].** Clear error. B-30, App. K; B-49, App. B.

48. **Failure to conduct a baildown test [D@35].** Clear error. B-21, pp. 13-14.

49. **Failure to conduct a pump test [D@35].** Clear error. B-49, pp. 15-17, App. E.

50. **Active recovery was successful [D@35].** Decoulos oversaw the passive collection of 54.9 gallons of LNAPL in 2004. B-33, p. 1; B-50, Table 2, p. 20. ECS only demonstrated 12.1 gallons of LNAPL actively collected and CEA only actively recovered 10 gallons. Decoulos Rebuttal PFT p. 21; RR-36, p. 2; B-53, Table 10. The Board should be able to determine which process was more successful.

51. **Failure to delineate the extent of the LNAPL release [D@36].** Throughout his assignment, Decoulos worked to assess, delineate and refine the full nature and extent of the diesel release. The extent of the diesel LNAPL that he delineated in December of 2004 proved to be similar to the extent finally determined by ECS. B-41; B-53; Hearing Day 1, pp. 181-183 [where Baran measured the area of Decoulos' LNAPL extent as 35' x 46' and ECS had reported an LNAPL extent of 30' x 60']. It was clear error for attorney Jones to conclude that Decoulos failed to "implement MassDEP's repeated IRA requirements to delineate sufficiently the extent of the LNAPL release."

B. Speedy Lube Site.

[Author's note: "D@ x" in the following paragraphs refers to the Recommended Decision at page x.]

1. The Board's assertion that alleged residual soil contamination constituted a "source" of contamination was not supported by substantial evidence in the record. [D@39, 41].

The record evidence demonstrates that the sources of the petroleum release at Speedy Lube were eliminated. The sources were three USTs that were removed in 1997, as reported by SAGE Environmental in its Phase I report in 1998 and cited in the RAO filed by Decoulos in June 2002. (RR-41, p. 8; B-55, p. 26.) The replacement 12,000 gallon double-walled, fiberglass UST and the associated piping were continuously monitored and automatically gauged with an electronic monitoring system, with no evidence of any leaks from the system. Decoulos identified a secondary source of petroleum as monitoring well MW-3, which had a destroyed cover and a compromised surface seal. Petroleum contaminated surface stormwater runoff was flowing directly into the well and impacting the groundwater resource. (Decoulos Rebuttal PFT, pp. 33, 45, 48; B-55, p. 11; RR-3, Photos 5-8 (*all photos subsequently cited for the Speedy Lube site refer to RR-3*).)

There is no credible technical evidence to support the Board's and Officer's contentions that that the residual soil contamination from the original UST failures was an additional source. As an initial matter, the uncontested record evidence clearly

demonstrated that 275 tons of petroleum-impacted soil had been excavated and properly disposed of when the tanks were removed in 1997. (RR-41, pp. 8-9; B-55, p. 10) In addition, the residual soil contamination had been characterized, capped with asphalt pavement, and protected from exposure through the use of an activity and use limitation (AUL). (B-58, App. D.) AULs are the appropriate institutional control mechanism to restrict exposure, reduce risk and achieve a permanent solution.

2. **Substantial evidence does not support the Officer's contention that Decoulos wrongfully attributed an increase in concentrations to "groundwater fluctuations"[D@39].**

Decoulos attributed the increasing concentration of gasoline constituents to the compromised monitoring well MW-3 – not groundwater fluctuations. (Decoulos Rebuttal PFT, pp. 33, 48; B-55, p. 11.) He eliminated this secondary "source" posed by MW-3 by abandoning the well and sealing the cover at the surface. (Photos 5-8.)

Decoulos testified that the elevated concentrations in the second round of sampling were due to this secondary source. (Decoulos Rebuttal PFT, pp. 45, 48.) Decoulos' additional, follow-up sampling in 2003 and 2004 confirmed that his elimination of the secondary source significantly reduced contaminant concentrations and that his original RAO opinion in 2002 adequately represented groundwater conditions and exposure point concentrations. (B-58.)

Based upon the foregoing, the Officer was wrong to assert that Decoulos argued that "groundwater fluctuations were to blame for increasing concentrations."

3. **Substantial evidence supports Decoulos position that he complied with available guidance issued by DEP [D@39].**

The only available guidance of DEP to calculate Method 2 standards at the time Decoulos filed the RAO in June 2002 was the DEP policy entitled "Characterizing Risks

posed by Petroleum Contaminated Sites: Implementation of the MADEP VPH/EPH Approach, Final Draft, June 2001." (B-10.) The record evidence demonstrates that Decoulos used that DEP guidance. (Decoulos Rebuttal PFT pp. 33, 46.) The MCP itself has never directed LSPs on how to calculate Method 2 standards. (B-3; B-11.) In fact, neither the VPH/EPH policy nor the MCP provide instructions on how to specifically establish Method 2 standards. (Hearing Day 2, pp. 356-361.) Thus, there is no factual or legal support for the contention that Decoulos did not comply with the MCP or applicable guidance on this point.

4. **The Board's and Officer's contentions that Decoulos failed to calculate exposure point concentrations (EPCs) at each individual monitoring point are not supported by substantial evidence in the record. [D@39].**

The record evidence demonstrates that Decoulos calculated EPCs by averaging groundwater concentrations at each individual monitoring well. (B-55, Table 3, pp. 16, 19.) Notably, the Board's witness, John Fitzgerald of DEP admitted that the term "AVG" as documented in Table 3 of Decoulos' 2002 RAO stood for "average." (Hearing Day 2, pp. 348-349.) Therefore, Decoulos properly analyzed, and disclosed, this information.

5. **Substantial evidence demonstrates that Decoulos included benzene and MTBE in his the risk assessment for indoor air, contrary to the assertions of the Board and Officer [D@39].**

Benzene and MTBE were assessed as potential risks in the risk characterization of the RAO and identified as contaminants of concern. (B-55, pp. 17-22.) The Exposure Point Concentration (EPC) for benzene exceeded Method 1 GW-2 standards at DMW-1 only. Groundwater monitoring well DMW-4 and soil gas well DG-1 were between DMW-1 and the building. (B-55, Fig. 2.) The EPC for benzene at DMW-4 was 1234

µg/l, which was below the GW-2 standard. The EPC for MTBE at DMW-4 was 52,000 µg/l, which was just above the GW-2 standard of 50,000 µg/l.

However, the direct, actual soil gas measurement at DG-1 had no detectable concentration of either benzene or MTBE in the APH sample. (B-55, Table 4.) The GW-2 standards are estimates of how petroleum fractions "could" partition from groundwater. B-10, p. 19. It is a theoretical standard based on assumptions of subsurface conditions. The direct soil gas measurement at DG-2 was a far more accurate indicator of potential indoor air impacts at the site building from either benzene or MTBE. B-10, p. 28. Fitzgerald testified under cross that MTBE is an additive to gasoline that was designed to reduce air emissions. Hearing Day 2, p. 361.

6. **Decoulos' calculated Method 2 standards were adequate to rule out future vapor migration to buildings or discharge to surface water [D@42].**

Possible future exposures resulting from potential change in land uses at the site were clearly restricted by the limitations contained in the AUL filed at the Norfolk Registry of Deeds on June 14, 2002. (B-55, p. 25, App. D.) Eliminating possible future exposures is a fundamental purpose of an AUL. In addition, the potential discharge of petroleum contaminated groundwater to surface waters was also clearly addressed in the RAO. (B-55, pp. 21-22, Table 5.) It was clear error for the Officer to ignore these important facts.

7. **At the time Decoulos filed the RAO in June 2002, the applicable DEP Policy allowed filing an RAO after collecting two rounds of groundwater samples less than four weeks apart [D@42].**

At the time Decoulos filed the RAO on June 14, 2002, the applicable DEP policy entitled "Characterizing Risks posed by Petroleum Contaminated Sites: Implementation of the MADEP VPH/EPH Approach, Final Draft, June 2001", provided for a minimum

of two sampling rounds for sites controlled by the GW-2 category. (B-10, pp. 36-37, Table 4-14.) Further, in June 2002, there was no regulatory, guidance or policy document from DEP which proscribed the separation time between the two sampling rounds. In addition, Decoulos relied on the data and information in SAGE's Phase I Report. (Decoulos Rebuttal PFT pp. 32, 34, 45-49.) Therefore, Decoulos complied with the applicable DEP policy and MCP provisions.

Notably, DEP changed its policy four months after the RAO was filed. The "Implementation of MADEP VPH/EPH Approach", issued on October 31, 2002, changed the recommended groundwater sampling approach, added a new section 4.1 to specifically address calculating Exposure Point Concentrations, and stated the following at page 20:

> It is important to stress that the recommendations provided above are for q*uarterly* sampling efforts, with each quarter comprising a 3-month time period coinciding with spring, summer, fall, and/or winter conditions. Multiple sampling rounds in any given season, while providing potentially useful site data, cannot be considered equivalent to multiple samples over multiple seasonal conditions.
>
> http://www.mass.gov/dep/cleanup/laws/02-411.pdf

Of course, DEP's new policy did not apply to the RAO filed by Decoulos four months prior.

In addition, the additional, follow-up sampling performed by Decoulos confirmed and supported his original 2002 RAO. Decoulos' two subsequent groundwater sampling rounds completed on November 12, 2003 and March 15, 2004, demonstrated that the VPH fractions, BTEX and MTBE constituents were nearly all lower than the earlier two, supporting the waste site cleanup opinion that Decoulos originally rendered in June 2002. (B-58.)

8. **Substantial evidence demonstrates that Decoulos properly defined the horizontal and vertical extent of the contamination [D@40-41].**

As described in the RAO and rebuttal testimony, the Speedy Lube site was located in a bedrock bowl. In particular, the site assessment by SAGE Environmental and the borings advanced on May 8, 2002 demonstrated that the site was in a bedrock bowl. (Decoulos Rebuttal PFT pp. 34, 47-48.) As a result, the horizontal and vertical extent of remaining dissolved phase gasoline constituents were constrained by the bedrock and demonstrated to be of no significant risk.

9. **The Board's and Officer's assertions that Decoulos incorrectly placed soil gas probes on the site were not supported by substantial evidence. [D@39].**

Soil gas probes were placed in appropriate areas to evaluate pathways for partitioned VOC vapors from groundwater to potentially impact indoor air at the small, commercial building on-site that was used for the retail sale of gasoline and automotive repair. (Decoulos Rebuttal PFT, pp. 49-50.) Under these site conditions, Decoulos reasonably determined that it was not necessary or appropriate to place soil gas probes inside the building or closer to the structure due to the potential for false positive bias of products used by the business.

10. **The Board and Officer's allegations that Decoulos improperly averaged soil gas results were not supported by substantial evidence in the record. [D@41].**

At the time Decoulos filed the RAO in June 2002, the MCP and DEP policy and guidance provided that soil samples could be averaged within a disposal site (as long as they were not in a hot spot) whereas individual groundwater samples could only be averaged at each individual well point. (310 CMR 40.0924(a); B-10, p. 22, the CMR in

effect in June 2002.) The record demonstrates that Decoulos followed these well understood requirements. (RAO, B-55, p. 18-21.)

At the time the RAO was filed in 2002, there were no regulatory, policy or guidance documents from DEP, or MCP provisions, on how soil gas samples should be addressed. Given that soil gas can be highly mobile and diffuse, Decoulos reasonably believed that it would be appropriate to average soil gas results to estimate potential indoor air impact at the small commercial building on the site that was used for the retail sale of gasoline and automotive repair. (B-10, pp. 25-26.) Notably, the additional soil gas wells that Decoulos constructed and sampled on June 9, 2004 confirmed that his original approach was safe and protective. (B-58, p. 18, Table 4.)

11. **Substantial evidence demonstrates that Decoulos properly used groundwater filtering under the site conditions. [D@39].**

Decoulos believed it was appropriate to filter certain groundwater samples "due to the sediment withdrawn with the water." (B-55, p. 11.) The wells were sampled using low-flow sampling techniques, and Decoulos reported "A gray/ brown sediment and a slight/mild petroleum odor was observed in all the wells sampled." (B-55, p. 13.) Decoulos properly exercised his professional judgment to filter the groundwater samples due to the amount of sediment that was withdrawn during low-flow sampling from the newly constructed wells. (Decoulos Rebuttal PFT p. 45, 47.) Filtering is permitted under those conditions. (B-10, p. 39.)

Notably, two subsequent groundwater sampling rounds were made on November 12, 2003 and March 15, 2004, without filtering. The VPH fractions, BTEX and MTBE constituents were nearly all lower than the earlier two rounds that were filtered. (B-58, Table 3.) This demonstrates that Decoulos' original decision to filter was appropriate.

12. **Substantial evidence supports Decoulos' determination that LNAPL gauging was not necessary under site conditions. [D@39].**

Decoulos oversaw the soil boring investigation on May 8, 2002, logging the soils, screening the soils at intermittent depths with a PID, and visually observing any unusual conditions. He also directed the low-flow sampling of the groundwater on May 10, 2002 and June 4, 2002. (B-55, pp. 10-13, App. A; Photos 9-21.) During the first round of groundwater sampling, it was noted that a "slight sheen" was evident during withdrawal from one well, DMW-2. However, no other wells exhibited a sheen. Decoulos reasonably determined that LNAPL gauging was not necessary because the leaking USTs had been removed; 275.05 tons of petroleum contaminated soil were disposed off-site; there was no evidence of LNAPL in the soil cores; and, the low-flow sampling did not reveal any separate phase product during sampling. (B-55, p. 10).

VII. CONCLUSIONS

The record evidence demonstrates that the Respondent, James Decoulos, P.E., LSP, has had a long, successful career as an experienced and responsible Professional Engineer and Licensed Site Professional. There is no evidence of prior violations, noncompliance, misdeeds, or unprofessionalism committed by Decoulos, other than the unsupported allegations and assertions in the complaint concerning the Eagle Gas and Speedy Lube sites. Notably, the complaint began as a bad faith complaint filed by his client Eagle Gas who was seeking leverage to avoid paying $79,100 in unpaid services. Once the Court ruled against Eagle Gas , the client agreed to pay Decoulos and to drop its baseless complaint. However, in what appears to be a rare if not unique decision,

the Board chose to pursue the LSP complaint even though the purported complainant dropped it and DEP had not initiated it.

At the Eagle Gas site, the record evidence clearly demonstrates that Decoulos took all necessary and appropriate response actions in a timely manner, including Imminent Hazard evaluations, as opposed to prior LSPs. The evidence also demonstrates that Decoulos' remedy for the diesel LNAPL (i.e., "passive" recovery, excavation of impacted soil, an interceptor trench, and other remedial measures) was, and would have been, far more effective, and far less expensive, than DEP's required remedy using "active" recovery (e.g., high vacuum extraction) given tight soil conditions. For instance, Decoulos recovered 55 gallons of LNAPL product over a short period of time whereas DEP's method only recovered 22 gallons of product over a longer period of time, and DEP's approach cost more than $30,000 in electrical costs alone. Further, the evidence demonstrates that the recent diesel LNAPL release never infiltrated the storm drain pipe in any meaningful way and that the recent diesel LNAPL was not the cause of the historic impact that was observed at the Brook, despite DEP's stubborn and unfounded fears to the contrary.

With respect to the Speedy Lube site, the evidence demonstrates that Decoulos' RAO in June 2002 complied with all applicable regulations and policies that were in effect at that time. Further, following repair of one compromised surface well cover that provided inaccurate results the follow-up sampling that Decoulos performed in 2003 and 2004 confirmed his findings from 2002, including that his 2002 RAO was appropriate and accurate. DEP accepted the revised RAO and never found errors with any other findings and conclusions made by Decoulos at this Site.

In contrast, substantial evidence in the record fails to support the Board's assertions in its Order to Show Cause. The evidence also fails to support the proposed findings and rulings in the Recommended Decision.

Accordingly, the Board should find that at both Sites: (i) Decoulos conducted response actions in compliance with G.L. c.21E and the MCP as well as the LSPs' Rules of Professional Conduct at 309 CMR 4.00 et seq.; (ii) Decoulos acted with reasonable care and diligence and applied the knowledge and skill ordinarily exercised by LSPs in good standing at the time he performed his services; and, (iii) Decoulos complied with the requirements and procedures set forth in G.L. c.21E and the MCP. The complaint against Decoulos should be dismissed with prejudice.

Decoulos requests a hearing before the Board on these objections.

Respectfully submitted,
JAMES J. DECOULOS, P.E., LSP
By his attorneys,

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Dated: January 4, 2013

I hereby certify that a true copy of the above document was served upon the attorney of record for each other party by ~~mail~~ hand on 1/4/13

COMMONWEALTH OF MASSACHUSETTS
BOARD OF REGISTRATION OF
HAZARDOUS WASTE SITE PROFESSIONALS

In the Matter of James J. Decoulos	**Docket No. LSP 10AP 01**

FIRST APPENDIX TO OBJECTIONS OF JAMES J. DECOULOS, P.E., LSP

EAGLE GAS SITE, CARVER

The Respondent, James J. Decoulos, P.E., LSP, files this Appendix to his Objections, filed this date:

Exhibit A. Existing Conditions Plan, Ex. RR-8 (Revised to identify the relevant drain manholes and catch basins and EPA authorized NPDES discharge).

Exhibit B. DEP's Release Log Form and NON to prior owner of Eagle Gas, March 12, 1997 to August 11, 1997.

Exhibit C. Minutes of LSP Board interviewing Tim Jones dated October 29, 2009.

Exhibit D. Photographs of repair shop and dump site.

Exhibit E. Decoulos' written IRA Plan for NAPL Release (4-17582) dated March 17, 2003.

Exhibit F. Decoulos' IRA Status Report dated July 3, 2003.

Exhibit G. Decoulos' IRA Plan #2 dated January 21, 2004.

Exhibit H. Decoulos' IRA Modification Plan dated April 21, 2004.

Exhibit I. Decoulos' IRA Modification Plan dated May 26, 2004.

Exhibit J. Decoulos' IRA Modification plan Response dated June 15, 2004.

Exhibit K. DEP IRA Plan Modification Denial dated July 7, 2004.

Exhibit L. Decoulos' IRA Status Report Modification Plan dated November 5, 2004.

Exhibit M. DEP IRA Plan Modification Plan Denial dated November 26, 2004.

Exhibit N. Decoulos' IRA Modification Plan #3 dated December 22, 2004.

Exhibit O. Decoulos' IRA Plan Modification Plan #4 dated January 18, 2005.

Exhibit P. ECS Phase II Comprehensive Site Assessment dated November 2006.

Exhibit Q. EPA and DEP Approval for NOI for the Remediation General Permit, Auditioning Discharge Through DMH-1, DMH-2 and Storm Pipe.

Exhibit R. ITRAC Training on LNAPL.

Exhibit S. ASTM Guide to Estimate LNAPL.

Exhibit T. "Don't Dump" Catch-Basin Markers.

Exhibit U. LSP Board Minutes, dated July 26, 2012.

Exhibit V. Respondent's Summary of EPH Concentrations at DMH-2 and the Outfall.

Respectfully submitted,
JAMES J. DECOULOS, P.E., LSP
By his attorneys,

_____

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Dated: _____

COMMONWEALTH OF MASSACHUSETTS
BOARD OF REGISTRATION OF
HAZARDOUS WASTE SITE PROFESSIONALS

In the Matter of James J. Decoulos	**Docket No. LSP 10AP 01**

SECOND APPENDIX TO OBJECTIONS OF JAMES J. DECOULOS, P.E., LSP

SPEEDY LUBE SITE, RANDOLPH

The Respondent, James J. Decoulos, P.E., LSP, files this Appendix to his Objections, filed this date:

Exhibit A. Decoulos' Response Action Outcome dated June 14, 2002.

Exhibit B. Memorandum from Decoulos to DEP Bureau of Waste Site Cleanup, dated August 21, 2002.

Exhibit C. Notice of Audit Findings/Notice of Noncompliance dated November 6, 2003.

Exhibit D. Decoulos' Response Action Outcome dated June 18, 2004.

Exhibit E. Letter from Decoulos to DEP Bureau of Waste Site Cleanup, dated June 22, 2004.

Respectfully submitted,
JAMES J. DECOULOS, P.E., LSP
By his attorneys,

_____

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