



eDEP FILING

IMMEDIATE RESPONSE ACTION COMPLETION SUBMITTAL

AND

RESPONSE ACTION OUTCOME SUBMITTAL

4 Springdale Avenue

Dover, Massachusetts

RTN 3-30003

Prepared For:

Town of Dover

P.O. Box 250

Dover, MA 02030

Prepared By:

ADS Environmental Engineering, LLC

Sherborn, Massachusetts

File No. 0146

May 2012

ADS ENVIRONMENTAL ENGINEERING, LLC

May 1, 2012
File No. 0146

Department of Environmental Protection
Northeast Regional Office
Bureau of Waste Site Cleanup
205B Lowell Street
Wilmington, Massachusetts 01887

Attention: Mr. Stephen J. Roberson, Environmental Analyst, BWSC

RE: IRA Completion Report and
Response Action Outcome Submittal
4 Springdale Avenue
Dover, MA 02030
RTN 3-30003

Dear Mr. Roberson:

ADS Environmental Engineering, LLC (ADS) has prepared this IRA Completion Report and Response Action Outcome (RAO) Statement (Class A-2) for the Disposal Site identified at the Department of Environmental Protection (DEP) with Release Tracking Number RTN 3-30003. The Site is located at 4 Springdale Avenue, Dover, Massachusetts. This submittal has been prepared in accordance with the Limitations contained in Appendix A, and the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000.

Based on the findings of assessment activities conducted by ADS, and the analytical soil and groundwater data collected from the site, ADS' Opinion that the Site has achieved a Condition of No Significant Risk, as specified in 310 CMR 40.0900, and the filing of a Class A-2 RAO is appropriate. An Activity and Use Limitation is not required to maintain the Permanent Solution at the site.

Please feel free to contact Ms. Andrea Stiller at 781-727-6646 if there are any questions regarding this submittal.

Sincerely,
ADS ENVIRONMENTAL ENGINEERING, LLC



Andrea Dogon Stiller, LSP
Principal

TABLE OF CONTENTS

	PAGE
1.0 INTRODUCTION	1
2.0 RELEASE HISTORY	2
3.0 IMMEDIATE RESPONSE ACTIONS	2
3.1 Tank Removal	2
3.2 Geoprobe Exploration Program	3
3.3 Limited Soil Excavation Program	5
4.0 SURROUNDING RECEPTORS	5
5.0 REPRESENTATIVENESS EVALUATION AND DATA USABILITY ASSESSMENT	6
6.0 METHOD 1 RISK CHARACTERIZATION	6
7.0 FEASIBILITY OF ACHIEVING OR APPROACHING BACKGROUND	7
8.0 RESPONSE ACTION OUTCOME STATEMENT	7
8.1 Relationship of Class A-2 RAO with other RAOs at the Disposal Site	8
8.2 Application of an Activity and Use Limitation	8
8.3 LSP Opinion and Certification	8
8.4 Upper Concentration Limits	8
8.5 Description of Disposal Site and RAO Documentation	8
8.6 Uncontrolled Sources	8
8.7 Background Feasibility Evaluation	8
8.8 Representativeness Evaluation and Data Usability Assessment	9
8.9 RAO Fee	9
8.10 Notification to Municipal Officials of the Availability of the RAO Statement	9

FIGURES

Figure 1 – Locus Plan

Figure 2 – Site Plan

Figure 3 – Exploration Location Plan

APPENDICES

Appendix A – Limitations

Appendix B – Copies of Manifests

Appendix C – PID Field Screening Results

Appendix D – Analytical Data Reports

Appendix E – Geoprobe Logs

Appendix F – Public Notification Letters

Appendix G – Copies of DEP BWSC 105 and 104

1.0 INTRODUCTION

On behalf of the Town of Dover, ADS Environmental Engineering, LLC (ADS) has prepared this IRA Completion Submittal and Class A-2 Response Action Outcome (RAO) Submittal for the site identified at the Department of Environmental Protection (DEP) with Release Tracking Number (RTN) 3-30003. The site is located at 4 Springdale Avenue in Dover, Massachusetts. ADS' work has been conducted in accordance with the Limitations attached in Appendix A, and the Massachusetts Contingency Plan (MCP) 310 CRM 40.0000.

On May 13, 2011, the Department of Environmental Protection's Northeast Regional office (DEP) was notified orally of a threat of release of #2 fuel oil based on a failed vacuum test on an underground storage tank (UST) system. On August 22, 2011 a Release Notification Form and written IRA Plan were filed with the DEP to address the Site. The objective of the IRA Plan was to remove the UST and complete an assessment of the UST and surrounding environment at the time of removal. The IRA Plan also included a contingency for the excavation and off-site disposal/recycling of up to 100 cubic yards (cy) of potentially impacted soil, and the contingency for the pumping of up to 1,000 gallons of potentially oily groundwater from the excavation by vacuum truck if warranted. A new above ground fuel oil storage tank will be installed outside the northwest side of the building in the near future.

On December 19, 2011, at the time of removal, there were no indications of petroleum contamination associated with the UST (as described further in the IRA Status Report dated December 22, 2100), however an area of petroleum impacted soils was noted where fuel lines run to the boiler room, which is also adjacent to where the tank's vent pipe was located. Due to close proximity of the potentially affected area to an NSTAR electric line that services the building, this area was assessed at a later date as discussed herein.

Based on the findings of the assessment program, only low levels of petroleum hydrocarbons were identified in a localized area. Concentrations of EPH and VPH fractions and target analytes were typically an order of magnitude or more below Method 1 Risk Based soil standards for soil category S-1. Groundwater, encountered at a depth of approximately 34 feet in a monitoring well installed during the assessment program, was not affected. Excavation of three cubic yards of petroleum impacted soils for asphalt batch recycling was conducted on March 27, 2012. It is ADS' Opinion that the site has achieved a Condition of No Significant Risk.

The Locus Plan is attached to this report as Figure 1, and a Site Plan is attached as Figure 2. An Exploration Location Plan is attached as Figure No. 3. Approximate UTM coordinates for the site are: Northing: 4679421.06 meters, and Easting: 688218.02 meters. Longitude and Latitude coordinates are: 71.281369 Longitude and 42.244300 Latitude.

Transmittal Forms for the IRA Completion (BWSC-105) and RAO Submittals (BWSC-104) are attached to this submittal.

2.0 RELEASE HISTORY

The 6,000 gallon underground fuel oil tank reportedly failed its routine tightness test on May 10, 2011. On May 13, 2011, the DEP Northeast Regional office was notified orally of a failed annual UST system tightness test, which was a threat of release of 0.05 gallons per hour of No.2 fuel oil. The tank was immediately taken out of service, and a second round of tightness testing was performed on May 13, 2011 which indicated that the failure was due to a vacuum failure in the lines to the tank. The test showed that there was no leak from the tank itself. DEP assigned Release Tracking Number 3-30003 to the condition. The lines were subsequently disconnected from the tank, and the area around the lines did not exhibit evidence of a release. On June 22, 2011 DEP issued a Notice of Responsibility to the Town of Dover for the threat of release associated with the tank.

On July 14, 2011, The Town of Dover issued a retraction request of the above-referenced oral release notification because the failure of the tightness test was the result of a vacuum failure in the lines to the fuel tank, and the lines had been removed and indications of a release were not found. On July 22, 2011 (received July 25, 2011), DEP issued a Denial of Notification Retraction. DEP indicated that based on information provided by the Town of Dover, the failed vacuum on the ancillary lines associated with the UST in questions constitutes a reportable threat of release pursuant to 310 CMR 40.0314. On August 22, 2011 a Release Notification Form and written IRA Plan were filed with the DEP to address the Site.

3.0 IMMEDIATE RESPONSE ACTIONS

The objective of the IRA Plan was to remove the UST at the property, conduct UST closure assessment, and, if necessary, a contingency was included for the removal of up to 100 c.y. of potentially impacted soil, and the pumping of up to 1,000 gallons of potentially oily groundwater by vacuum truck from the excavation. A new aboveground storage tank will be installed in the near future in the same general area of the property.

3.1 Tank Removal

The tank removal was conducted on December 19, 2011. Cyn Oil Corporation of Stoughton, Massachusetts pumped 3,267 gallons of fuel oil from the tank for removal from the site and recycling on December 15, 2011. The tank was cleaned and the feed lines were vacuumed to remove residual oil. Appendix B contains a copy of the manifest for the disposal of the oil and the tank disposal at the James Grant tank yard in Readville, Massachusetts.

The fiberglass tank was observed to be in good condition at the time of removal; no holes or damaged areas were noted. The tank was surrounded by peastone, beyond which was sand and gravel with little silt. The excavation was roughly 33 feet in the north-south direction and 21 feet in the east-west direction. Field screening of the peastone around the tank and sand and gravel

sidewalls (north, south, east and west walls) for volatile organic compounds (VOCs) showed readings of 0.0 on the field Photoionization Detector (PID). Beneath the tank at the bottom of the excavation (approximately 11.5 feet below ground surface) was a concrete pad. The pad was left in place, and peastone from just above the slab and a soil sample collected from adjacent to the east side of the slab were screened and also exhibited readings of 0.0 on the PID. A composite sample from the sidewalls and bottom of the tank location was submitted for analytical laboratory testing for Extractable Petroleum Hydrocarbons (EPH) and Volatile Petroleum Hydrocarbons (VPH) to document site conditions. Test results of the sample (TANK COMP-1) showed no detection of EPH and VPH fractions and target analytes. Additional information was provided in the IRA Status Report dated December 22, 2011. Analytical data reports are provided in Appendix C.

On December 20, 2011, ADS returned to the site to observe removal of the fuel feed and return lines, and the vent pipe. In addition to the fuel lines for the existing tank, four copper lines presumably from a former tank, had been found in the tank removal excavation, below the tank's lines. An excavation was completed by hand around the tank's vent pipe located adjacent to the building's boiler room, approximately 20 feet east of the tank removal excavation (see Figure 2 for location). Oily soils were noted beneath the pipes.

Due to concerns about the proximity of a high voltage electric line running into the nearby electric room, as well as possibly other utilities underground (telephone line, etc.), the excavation contractor decided it was not safe to conduct exploratory excavations, and it was decided that this area would be best assessed with a test boring program.

3.2 Geoprobe Exploration Program

On February 14, 2012, a Geoprobe exploration program was conducted at the site. New England Geotech, Inc. of Jamestown, Rhode Island conducted the geoprobes. Logs of the explorations are provided in Appendix D. Vacuum pre-excavation was conducted in the upper 5 feet due to the presence of nearby underground utilities. In addition, power to the NSTAR electric line was shut down for the day as a precaution.

Four explorations (MW-1, B-2, B-5 and B-6) were conducted in the immediate area of the potentially oily soils. Efforts were made to find oily soils, although the extent appeared very limited. Boring B-6 was conducted at an angle to get as close to the building as possible.

Borings B-3 and B-4 were conducted adjacent to fuel feed lines. The lines and the soils beneath the lines were visible in the vacuum excavated holes and did not exhibit evidence of leaks or petroleum contamination. Boring B-7 was conducted in the tank removal excavation.

PID readings typically ranged from 0.0 to 1.2 units. A sample from 2 to 5 feet in B-2 near the area of potentially contaminated soils, exhibited a reading of 163 units on the PID. The response from the PID was odd, not typical of a true reading. Nevertheless this sample (B-2/2-5) was submitted for analytical testing for EPH fractions and diesel range target analytes, and for VPH fractions and target analytes. The underlying sample (B-2/5-10) was also tested for EPH fractions and diesel range target analytes.

Sample B-6/S-1 was taken from the upper three feet of soil in the hand excavated pit where the potential oily soils were found, and sample B-6/S-2 was collected from the 5 to 10 foot zone beneath B-6/S-1. Although screening levels were below 2 units, sample B-6/S-1 was analyzed for EPH fractions and diesel range target analytes, and for VPH fractions and target analytes. B-6/S-2 was analyzed for EPH fractions and diesel range target analytes.

Another nearby surface sample (MW-1/0-5) was submitted for EPH fractions and diesel range target analytes to assess the lateral extent of contamination.

Groundwater was encountered at approximately 35 feet below the ground surface in MW-1. The driller had insufficient lengths of drilling rods to go deeper than 35 feet. The liners of the geoprobes were getting lodged in the rods, so sampling beneath about 25 feet was not possible. A temporary microwell was set at MW-1 to 35 feet (using the smaller rods), but this well was replaced later in the week with a two-inch well to about 42 feet so that a groundwater sample could be obtained. Approximately 14 feet of screen was installed for the well.

On February 28, 2012 the groundwater at well MW-1 was sampled for analysis of EPH fractions. The well was purged using a bailer prior to taking the sample. Groundwater was encountered at a depth of 33.7 feet below the ground surface.

Analytical results of the groundwater testing were that no EPH fractions were identified. The only soil sample to have detections was B-6/S-1 where C9-C12 Aliphatics were identified at 3.4 mg/kg (the S-1 & GW-1 soil standard is 1,000 mg/Kg); C9-C18 Aliphatics were identified at 290 mg/Kg (the S-1 & GW-1 standard is 1,000 mg/Kg); C19-C36 Aliphatics were identified at 160 mg/Kg (the S-1 & GW-1 standard is 3,000 mg/Kg); and, C11-C22 Aromatics were identified at 140 mg/Kg (the S-1 & GW-1 standard is 1,000 mg/Kg). The soil sample beneath this sample, B-6/S-2 showed no detection of EPH fractions and target analytes, and the other soil sample results also were below detection.

Subsurface soil conditions consisted typically of ten feet of granular (sand with gravel) fill with occasional asphalt, underlain by tan fine sand with trace silt.

3.3 Limited Soil Excavation Program

On March 27, 2012, DecTam corporation returned to remove the fuel lines and to remove petroleum impacted soils for off-site recycling. A representative of ADS was present and conducted field observation and screening. A localized excavation extended to a depth of approximately 7 feet, and approximately 3 cubic yards of petroleum contaminated soils was excavated. Field screening data using the PID ranged from 0.1 to 1.7 parts per million (ppm). An excavation bottom sample was collected for laboratory testing (EX-1) for EPH fractions and diesel range target analytes. Although the results of the EX-1 sample analysis showed no detectable concentrations of petroleum fractions, there were indications that some soils containing very low levels of petroleum may remain near the building wall, therefore although background concentrations were approached, they may not have been achieved.

Due to the proximity of the excavation to the bottom of the foundation wall, and the caving in of soil (fill) from the walls of the excavation, additional excavation was not deemed necessary; a significant amount of analytical data for this limited release area had been previously collected during the geoprobe exploration program, therefore additional excavation which could jeopardize the building was not deemed necessary.

On April 13, 2012 the soil was removed to Aggregate Recycling Corp. in Stoughton, Massachusetts for asphalt batch recycling. Attached in Appendix B are a copy of the Bill of Lading and the disposal facility acknowledgement of receipt of the waste.

4.0 SURROUNDING RECEPTORS

A review of a Medfield, Massachusetts topographic map published by the United States Geological Survey (USGS) suggests that groundwater may flow in a westerly/northwesterly direction toward Trout Brook, which is located approximately 1,200 feet west of the subject property, and flows in a northerly direction.

According to the Massachusetts Geologic Information Systems (MassGIS) 21e map, the site is situated within a Zone II of a public water supply. The Zone II follows Trout Brook. Community Groundwater Wells 3078006-03G and 3078001-01G are located within one-half mile southwest and southeast of the subject property, respectively. Non Community Groundwater Well 3078000-01G is located within one-half mile northwest of the subject property. Non-Community sources produce less than 10,000 gallons per day, and are considered "transient" sources as the users are seasonal or temporary (a restaurant, e.g.). The subject property appears to be immediately adjacent to land designated as Protected Open Space. There

are no known private water supply wells within 500 feet of the subject property. The downtown area of the Dover is supplied by municipal water supply.

The Caryl Community Center at the subject property, 4 Springdale Avenue, is currently used for office space, a preschool (preschool classes are located centrally in the building and not adjacent to the former UST and boiler/utility rooms), and a meeting place for various organizations. Adjacent to the former UST area (the Site) are basement utility rooms (boiler room, electrical room, etc.). Based on documented information on the regional hydrology, groundwater flow direction is expected to be away from the community center building to the west/northwest.

5.0 REPRESENTATIVENESS EVALUATION AND DATA USABILITY ASSESSMENT

A Representativeness Evaluation and Data Usability Assessment and was conducted pursuant to 310 CMR 40.1056. Based on information reviewed, sampling procedures appear adequate, and are considered representative of site conditions. All data sets were concluded to be usable.

During the tank removals and assessment of the fuel feed lines, field screening was conducted on collected samples for the potential presence of volatile organic compounds using a portable volatile organic vapor meter equipped with a photoionization detector (PID), and general observations were made of the excavation and odors in the environment. The samples exhibiting the highest PID readings were submitted for laboratory testing.

The data are CAM Compliant and meet the criteria for presumptive certainty. Samples were properly preserved, analyzed within required holding times, analyzed with sufficient number and type of surrogate compounds. Relevant QA/QC procedures were followed, and all performance/acceptance standards for the required QA/QC procedures were achieved or otherwise discussed and deemed to not be of concern in relying on the data sets.

6.0 METHOD 1 RISK CHARACTERIZATION

Comparison of Site data to Method 1 Risk Based Standards was conducted. Under current uses of the property, where the site is either covered by pavement, soils at this site may be categorized as S-2 or S-3 depending on depth. A comparison to conservative S-1 residential standards was conducted, however.

Groundwater at the site is classified as GW-1 because it is within the Zone II of public water supply wells. Groundwater categories GW-2 and GW-3 also apply; the site is within 30 feet of an occupied building, and category GW-3 applies to this site as it does to all sites in Massachusetts where groundwater discharges to a surface water body. Analytical testing of groundwater revealed no detection of EPH fractions.

The site data presented in Appendix C and discussed herein, are below their respective soil and groundwater Method 1 Risk Based Standards. Only one soil sample (B-6/S-1) exhibited low

levels of EPH fractions in soil as follows: C9-C12 Aliphatics were identified at 3.4 mg/kg (the S-1 & GW-1 soil standard is 1,000 mg/Kg); C9-C18 Aliphatics were identified at 290 mg/Kg (the S-1 & GW-1 standard is 1,000 mg/Kg); C19-C36 Aliphatics were identified at 160 mg/Kg (the S-1 & GW-1 standard is 3,000 mg/Kg); and, C11-C22 Aromatics were identified at 140 mg/Kg (the S-1 & GW-1 standard is 1,000 mg/Kg). These concentrations are well below their Method 1 Risk Based Standards. Soil samples beneath and surrounding this sample and a groundwater sample all showed no detection of petroleum hydrocarbons. A post soil excavation sample (EX-1) did not exhibit detectable concentrations of EPH fractions or target analytes. A groundwater sample from monitoring well MW-1 exhibited below detectable concentrations of EPH fractions. Therefore, the risk assessment concludes that the site poses No Significant Risk of harm to human health.

The risk characterization also concludes that the site poses No Significant Risk of Harm to Public Welfare or Harm to Safety.

7.0 FEASIBILITY OF ACHIEVING OR APPROACHING BACKGROUND

A review of Site conditions relative to the feasibility of achieving or approaching background conditions was conducted in accordance with 310 CMR 40.0860 and guidelines presented in DEP's draft document entitled "Conducting Feasibility Evaluations Under the MCP, Policy Number WSC-04-160" dated July 16, 2004. For the Site, background conditions would be concentrations of EPH and VPH fractions and target analytes that approach below detectable concentrations. Although some of the low level petroleum affected soils were removed for recycling, some likely remain. Due to the low concentrations detected and the small amount of affected soils (the geoprobe and analytical testing program demonstrated that the release was localized), and since the fuel oil is readily degradable, background conditions have been approached, and background conditions may be achieved through natural attenuation over time.

8.0 RESPONSE ACTION OUTCOME STATEMENT

ADS Environmental Engineering, LLC has prepared a Response Action Outcome (RAO) Statement (Class A-2) for the disposal site identified at the Department of Environmental Protection (DEP) with Release Tracking Number (RTN) 3-30003. The site is located at 4 Springdale Avenue in Dover, Massachusetts. ADS' work has been conducted in accordance with the Limitations contained in Appendix A, and the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000, et seq. (the Massachusetts Contingency Plan or the "MCP").

Based on the findings of assessment activities conducted by ADS, it is ADS' opinion that the release Site has achieved a Condition of No Significant Risk, as specified in 310 CMR 40.0900, and a Permanent Solution, and the filing of a Class A-2 RAO is appropriate.

8.1 Relationship of Class A-2 RAO with other RAOs at the Disposal Site

The subject A-2 RAO is for one disposal site only, (RTN) 3-30003. No other releases are known for the property.

8.2 Application of an Activity and Use Limitation

It is ADS' Opinion that an Activity and Use Limitation is not required to maintain a Level of No Significant Risk at the site.

8.3 LSP Opinion and Certification

Certifications and opinions concerning this RAO Statement are provided in the appropriate DEP Transmittal Form, which is attached following the text of this report.

8.4 Upper Concentration Limits

Contaminants at the Site have not been identified above applicable Upper Concentration Limits (UCLs) in soil or groundwater, as described at 310 CMR 40.0996.

8.5 Description of Disposal Site and RAO Documentation

This submittal includes documents, plans, and information to support a Class A-2 Response Action Outcome for the Site, including a description of the location and boundaries of the Site and the RAO. Figures No. 2 and 3 show the area delineating the RAO for the Site.

8.6 Uncontrolled Sources

Based on the activities completed and summarized herein, a Permanent Solution has been achieved at the Site and no further response actions are necessary. In accordance with 310 CMR 40.1003(5) and 310 CMR 40.1056(2)(b), there are no uncontrolled sources of oil or hazardous material at the Site.

8.7 Background Feasibility Evaluation

An Evaluation of the Feasibility of achieving or approaching background in accordance with 310 CMR 40.0869 is provided in Section 7.0 of this report. Background conditions appear to have been approached.

8.8 Representativeness Evaluation and Data Usability Assessment

A Representativeness Evaluation and Data Usability Assessment, which includes a discussion of the data that is CAM Compliant, is provided in Section 5.0.

8.9 RAO Fee

Since this RAO is being filed before Tier Classification but after 120 days of notification, an RAO Compliance Fee of \$1,200 is applicable. A check payable to the Commonwealth of Massachusetts was mailed to MassDEP, P.O. Box 4062, Boston, MA 02211-4062.

8.10 Notification to Municipal Officials of the Availability of the RAO Statement

In accordance with 310 CMR 40.1403(3)(f), notification letters regarding the availability of the IRA Completion Submittal and RAO Submittal have been issued to the Dover Town Administrator and the Board of Health. A copy of the letters is provided in Appendix E.

MassDEP - Bureau of Waste Site Cleanup

MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

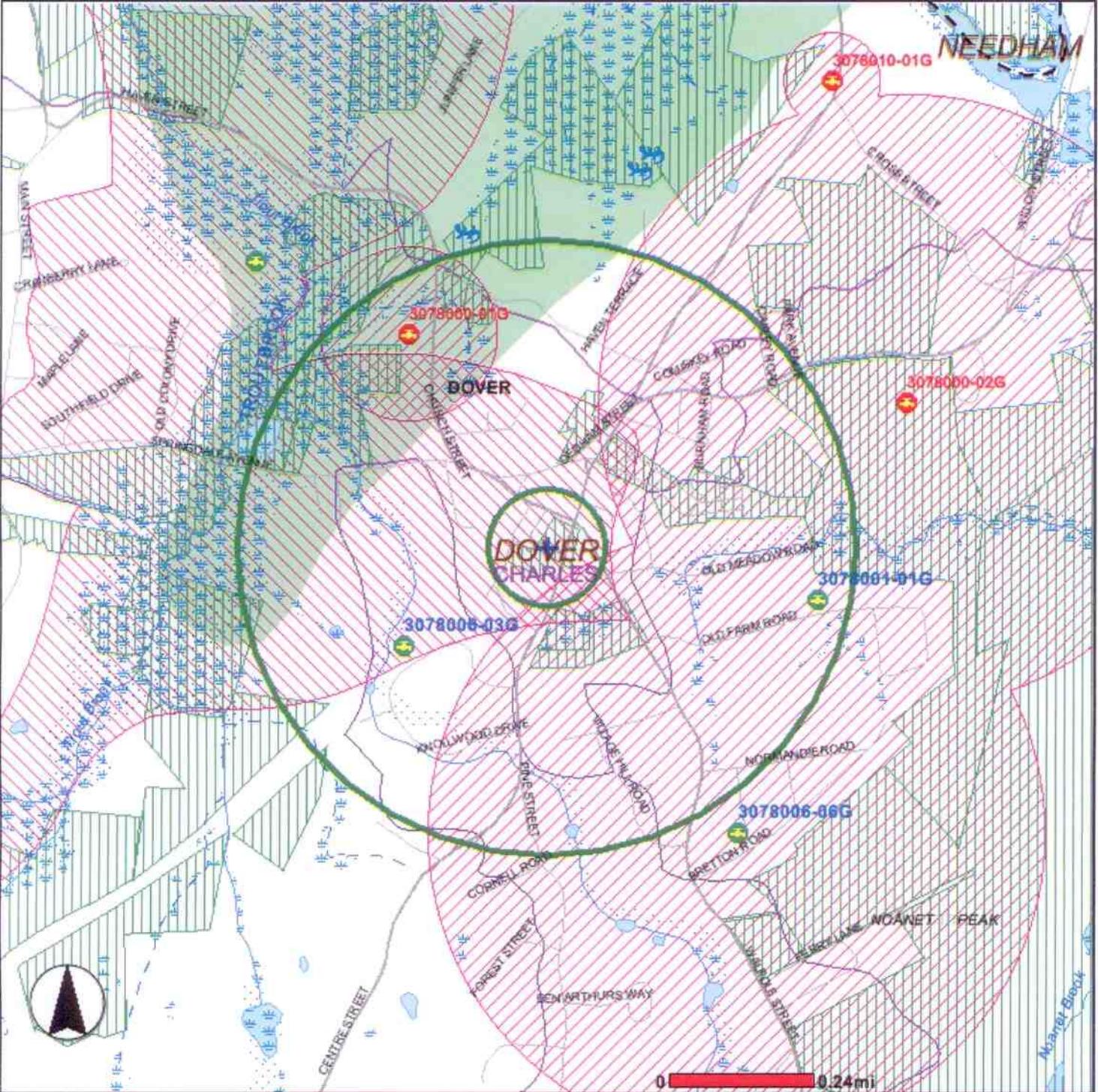
Site Name:
4 Springdale Avenue
4 Springdale Avenue
Dover, MA
RTN: 3-000030003
NAD83 MA Coordinates:
218065mE, 888163mN



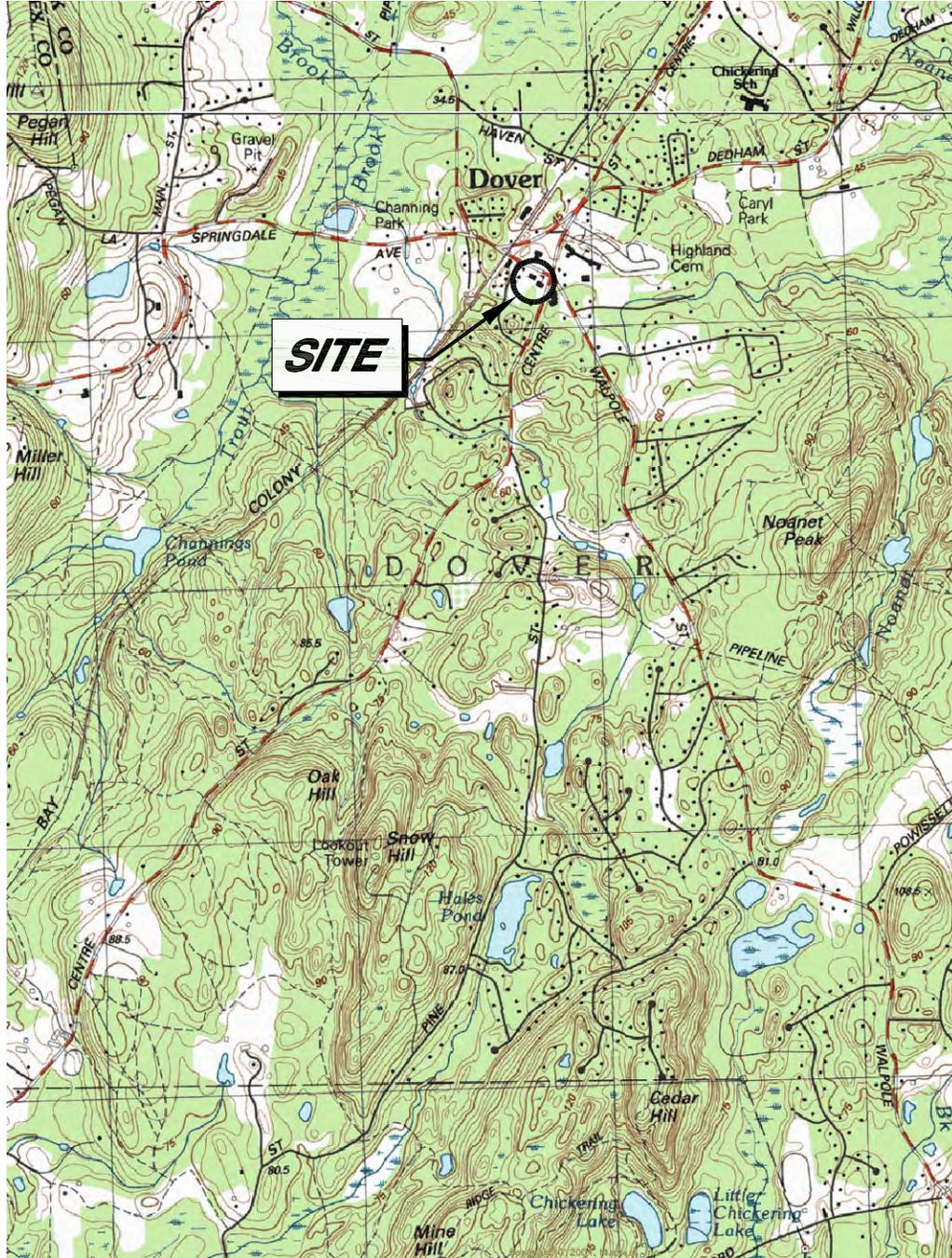
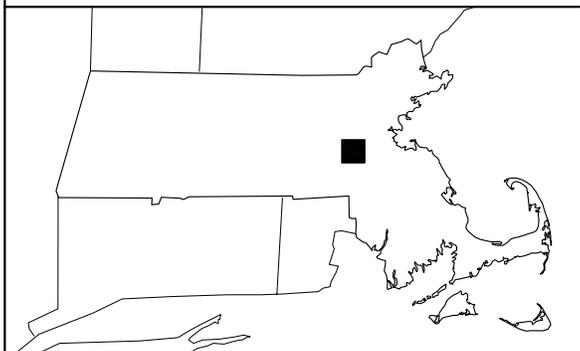
The information shown on this map is the best available at the date of printing. For more information please refer to www.mass.gov/mgis/massgis.htm



August 14, 2011



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail	PWS Protection Areas: Zone II, WPA, Zone A		
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct	Hydrography: Open Water, PWS Reservoir, Tidal Flat		
Basins: Major, Sub; Streams: Perennial, Intermittent, Man Made Shore, Dam	Wetlands: Freshwater, Saltwater, Cranberry Bog		
Aquifers: Medium Yield, High Yield, EPA Sole Source	FEMA 100yr Floodplain; Protected Open Space; ACEC		
Non Potential Drinking Water Source Area: Medium, High (Yield)	NHESP: Est Rare Wetland Habitat, Certified Vernal Pool		
	DEP Permitted Solid Waste Landfill		



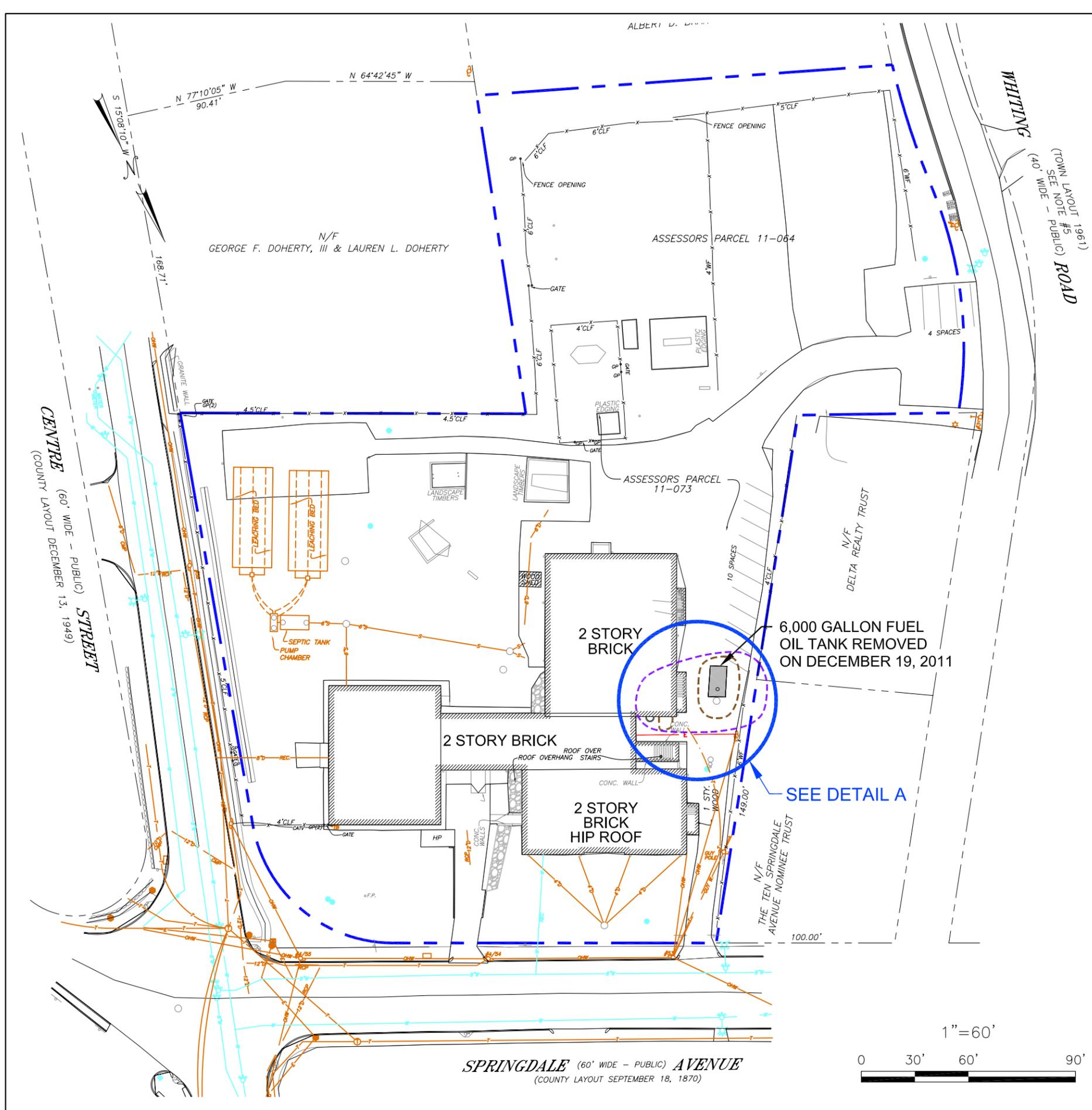
DOVER COMMUNITY CENTER
 4 SPRINGDALE AVENUE DOVER, MASSACHUSETTS
LOCUS PLAN
 SOURCE
 1987 USGS MEDFIELD, MA QUADRANGLE MAP
 (NOT TO SCALE)

REV No.	DATE	INT.	- DESCRIPTION -

DRAWN BY: JJP REVIEWED BY: ADS
 DATE: 12/15/2011 JOB No. 0146

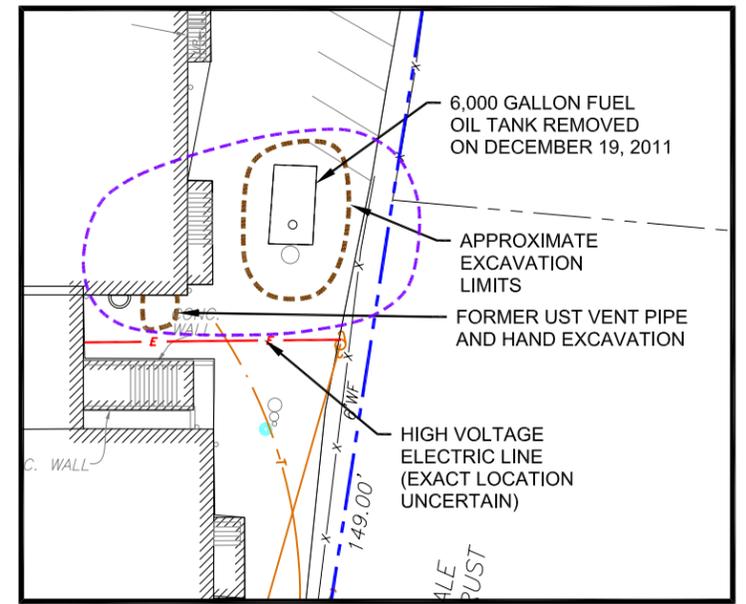
ADS ENVIRONMENTAL ENGINEERING, LLC
 205 Woodland Street
 Sherborn, Ma. 01770
 Tel: (781) 727-6646
 www.adsisp.com

FIGURE No. 1

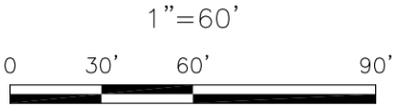


NOTES:
 1. BASE MAP DEVELOPED FROM CADD FILES PROVIDED BY HARRY R. FELDMAN, INC. ENTITLED "EXISTING CONDITIONS PLAN", DATED 12/20/05, ORIGINAL SCALE 1"=30', DRAWING NO. EX-1.

LEGEND:
 INDICATES AREA OF RAO



DETAIL A
 SCALE: 1"=40'



ADS ENVIRONMENTAL ENGINEERING, LLC
 205 Woodland Street
 Sherborn, Ma. 01770
 Tel: (781) 727-6646
 www.adsisp.com

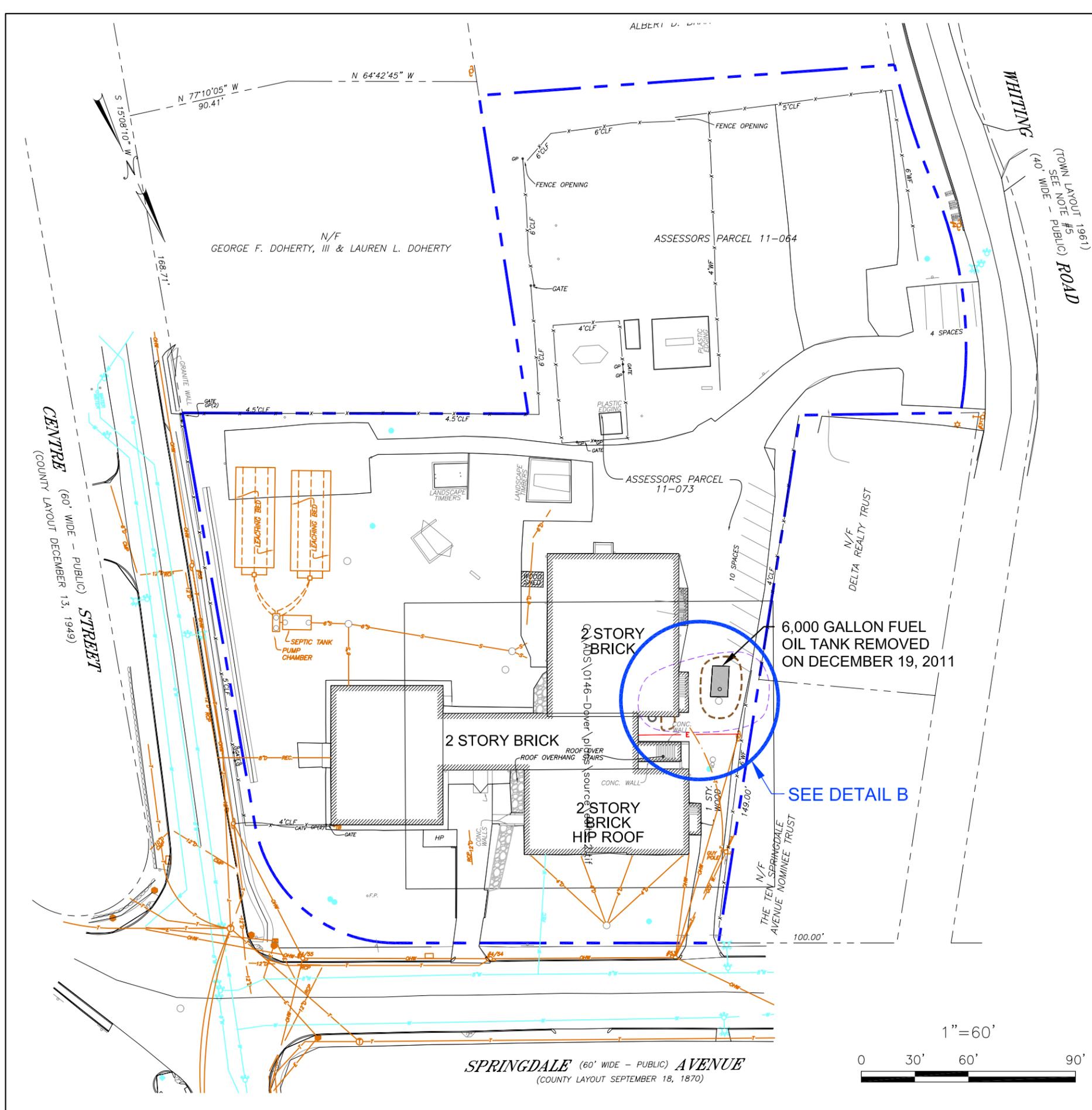
REV No.	DATE	INT.	- DESCRIPTION -

DRAWN BY: JUP REVIEWED BY: ADS
 DATE: 12/15/2011 SCALE: 1"=60' JOB No. 0146

DOVER COMMUNITY CENTER
 4 SPRINGDALE AVENUE DOVER, MASSACHUSETTS

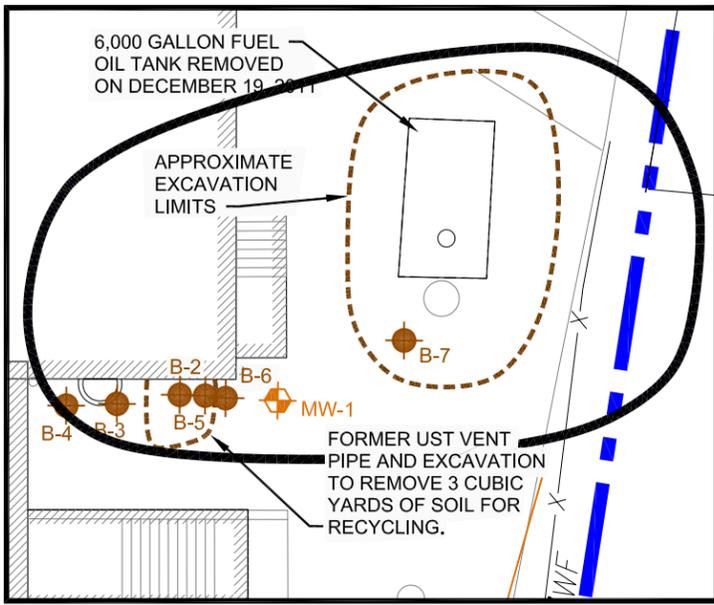
SITE PLAN

FIGURE No. 2



- NOTES:**
1. BASE MAP DEVELOPED FROM CADD FILES PROVIDED BY HARRY R. FELDMAN, INC. ENTITLED "EXISTING CONDITIONS PLAN", DATED 12/20/05, ORIGINAL SCALE 1"=30', DRAWING NO. EX-1.
 2. THE LOCATIONS OF THE BORINGS WERE APPROXIMATELY DETERMINED BY TAPE MEASUREMENTS FROM EXISTING TOPOGRAPHIC FEATURES. THIS DATA SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

- LEGEND:**
- MW-1 MONITORING WELL INSTALLED AT MW-1.
 - B-6 GEOPROBE EXPLORATION PERFORMED ON FEB. 14 2012 BY NEW ENGLAND GEOTECH INC. OF JAMESTOWN, R.I. OBSERVED AND LOGGED BY ADS.
 - INDICATES AREA OF RAO



DETAIL B
SCALE: 1"=20'

ADS ENVIRONMENTAL ENGINEERING, LLC

205 Woodland Street
 Sherborn, Ma. 01770
 Tel: (781) 727-6646
 www.adsisp.com

REV No.	DATE	INT.	- DESCRIPTION -

DRAWN BY: JUP REVIEWED BY: ADS

DATE: 3/8/2012 SCALE: 1"=60' JOB No. 0146

DOVER COMMUNITY CENTER
 4 SPRINGDALE AVENUE DOVER, MASSACHUSETTS

EXPLORATION LOCATION PLAN

FIGURE No. 3

APPENDIX A
LIMITATIONS

LIMITATIONS

1. In preparing this Report, ADS gathered information from interviews with various parties and review of the files of various public agencies. In addition, work completed by others was referenced by ADS. The accuracy of this work cannot be verified by ADS. Due to the potential for errors, omissions or inaccuracies that may exist there is some risk associated with reliance on such information. Although there may have been some corroboration provided by multiple sources, ADS cannot be responsible for the accuracy or completeness of the information reviewed or received during the course of this work
2. Observations were made of the site as indicated within the Report. If areas exist which were inaccessible and therefore not observed, ADS can render no opinion as to the conditions in that area. This includes but is not limited to the areas covered by buildings, stockpiles, construction materials, and vegetation.
3. The conclusions and recommendations contained in this Report are based in part upon the data obtained from soil and groundwater samples collected from subsurface explorations completed at the referenced property. The nature and extent of variations between these explorations may not become evident until additional work is undertaken at the site. If variations or latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
4. Groundwater was encountered in the explorations on-site at the times and under the conditions stated in this report. However, it must be noted that fluctuations in the level of groundwater may occur due to rainfall, temperature, subterranean structures and other factors.
5. The purpose of this Report was to provide environmental services at the subject site with respect to the presence in the environment of hazardous material or oil, as defined in Massachusetts General Laws Chapter 21E. No specific attempt was made to check on the compliance of present or past owners or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.
6. This report was prepared for the exclusive use of the Town of Dover, Massachusetts, solely for use in connection with environmental studies of the property located at 4 Springdale Avenue, Dover, Massachusetts. This report was prepared in accordance with generally accepted environmental engineering practice. No other warranty, expressed or implied, is made.

APPENDIX B
DISPOSAL MANIFESTS

GENERATOR
INTL
TRANSPORTER
DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number MP 5 0 8 7 8 5 0 0 1 0	2. Page 1 of 1	3. Emergency Response Phone 800.899.1008	4. Waste Tracking Number 007499 51 0711
5. Generator's Name and Mailing Address Town of Dover 3 Springdale Ave Dover MA 02038 Generator's Phone: 603 734 8025		Generator's Site Address (if different than mailing address) Site 4 Springdale Ave Dover MA 02038		
6. Transporter 1 Company Name Cyn Oil Corporation		U.S. EPA ID Number MAD08293377		
7. Transporter 2 Company Name		U.S. EPA ID Number		
8. Designated Facility Name and Site Address Cyn Oil Corporation 1771 Washington St Stoughton, MA 02062 Facility's Phone: 781 321-5108		U.S. EPA ID Number MAD08293377		
9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. HAZARDOUS Petroleum 3 DRUM	001	17	3267	L
2.				
3.				
4.				
13. Special Handling Instructions and Additional Information				
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.				
Generator's/Offeror's Printed/Typed Name		Signature		Month Day Year 12 15 11
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Transporter Signature (for exports only): _____ Date leaving U.S.: _____				
16. Transporter Acknowledgment of Receipt of Materials				
Transporter 1 Printed/Typed Name		Signature		Month Day Year 12 15 11
Transporter 2 Printed/Typed Name		Signature		Month Day Year
17. Discrepancy				
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection Manifest Reference Number: _____ U.S. EPA ID Number _____				
17b. Alternate Facility (or Generator)		U.S. EPA ID Number		
Facility's Phone: _____				
17c. Signature of Alternate Facility (or Generator)		Signature		Month Day Year
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a				
Printed/Typed Name		Signature		Month Day Year



AGGREGATE
INDUSTRIES

April 23, 2012
M. Gaffney
Clean Venture Inc
133 Leland St
Framingham, Ma 01702

Re: Soil,

Caryl School
Springdale Ave
Dover, Ma
Tracking # 3-30003

Recyclable soil from the above referenced project was last received at our facility on April 13th, 2012. A total of **3.90 tons** was received. I assume that shipment is complete and have attached a copy of the BOL, along with e-dep form 112A & B, to close the BOL

Thank you for recycling with Aggregate Industries.

Regards,

William R. Reinhardt
Manager

RECEIVED

APR 26 2012

CVI-07

**AGGREGATE INDUSTRIES
NORTHEAST REGION**

1101 Turnpike Street
Stoughton, MA 02072
Telephone (781) 341-1100
Facsimile (781) 341-5523
www.aggregate-us.com

An Equal Opportunity Employer

An AGGREGATE INDUSTRIES company



BILL OF LADING (pursuant to 310 CMR 40.0030)

3 - 30003

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

- 1. Release Name/Location Aid:
- 2. Street Address:
- 3. City/Town: 4. Zip Code:
- 5. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:
 - a. Tier 1A b. Tier 1B c. Tier 1C d. Tier II
- 6. If applicable provide the Permit Number:

B. THIS FORM IS BEING USED TO: (check one: B1-B4):

- 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility.

Response Actions associated with this BOL (check all that apply):

- a. Immediate Response Action (IRA) e. Comprehensive Response Actions
- b. Release Abatement Measure (RAM) f. Limited Removal Action (LRA):
(must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
- c. Downgradient Property Status (DPS)
- d. Utility Release Abatement Measure (URAM) g. Other:

- 2. Submit an Attestation of Completion of Shipment to Temporary Storage (Sections C, F and J are not required);
- 3. Submit an Attestation of Completion of Shipment to a Receiving Facility (Sections C, F and J are not required);
- 4. Certify that Remediation Waste Was Not Shipped, and the Bill of Lading is Void. (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: b. eDEP Transaction ID:
(mm/dd/yyyy)

6. Period of Generation Associated with this Bill of Lading to
(mm/dd/yyyy) (mm/dd/yyyy)

(All sections of this transmittal form must be filled out unless otherwise noted)

The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

C. DESCRIPTION OF WASTE AND WASTE SOURCE:

1. Contaminated Media /Debris (check all that apply):

- a. Soil b. Groundwater c. Surface Water d. Sediment e. Vegetation or Organic Debris
- f. Demolition/Construction Waste g. Inorganic Absorbent Materials h. Other:

2. Uncontainerized Waste (check all that apply):

- a. Inorganic Absorbent Materials b. Other:



C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):

3. Containerized Waste (check all that apply):

- a. Tank Bottoms/Sludges b. Containers c. Drums d. Engineered Impoundments
 e. Other: _____

4. Estimated Quantity: Tons Cu. Yds. Gallons

5. Contaminant Source (check one):

- a. Transportation Accident b. Underground Storage Tank c. Brownfields Redevelopment
 d. Other: _____

6. Type of Contaminant (check all that apply):

- a. Gasoline b. Diesel Fuel c. #2 Fuel Oil d. #4 Fuel Oil e. #6 Fuel Oil f. Jet Fuel
 g. Waste Oil h. Kerosene i. Chlorinated Solvents j. Urban Fill k. Other: _____

7. Constituents of Concern (check all that apply):

- a. As b. Cd c. Cr d. Pb e. Hg f. EPH/TPH g. VPH
 h. PCBs i. VOCs j. SVOCs k. Other: _____

8. If applicable, check the box for the Reportable Concentration Category of the site:

- a. RCS-1 b. RCS-2 c. RCGW-1 d. RCGW-2

9. Remediation Waste Characterization Documentation (check at least one):

- a. Site History Information b. Sampling Analytical Methods and Procedures c. Laboratory Data
 d. Field Screening Data e. Characterization Documentation previously submitted to the Department

i. Date submitted: ii. Type of Documentation:
 (mm/dd/yyyy)

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

1. Transporter/Common Carrier Name:
 2. Contact First Name: 3. Last Name:
 4. Street: 5. Title: _____
 6. City/Town: 7. State: 8. Zip Code:
 9. Telephone: 10. Ext: _____ 11. Fax: _____



BILL OF LADING (pursuant to 310 CMR 40.0030)

3 - 30003

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

1. Operator/Facility Name: **AGGREGATE INDUSTRIES**

2. Contact First Name: **WILLIAM** 3. Last Name: **REINHARDT**

4. Street: **651 LAKE STREET** 5. Title: **MANAGER**

6. City/Town: **SHREWSBURY** 7. State: **MA** 8. Zip Code: **015450000**

9. Telephone: **781-341-5500** 10. Ext: 11. Fax:

12. Type of Facility: (Check one)

a. Temporary Storage i. Period of Temporary Storage: to
(mm/dd/yyyy) (mm/dd/yyyy)

ii. Reason for Temporary Storage:

b. Asphalt Batch/Hot Mix c. Landfill/Disposal d. Landfill/Structural Fill e. Landfill/Daily Cover

f. Asphalt Batch/Cold Mix g. Thermal Processing h. Incinerator i. Other:

13. Division of Hazardous Waste/Class A Permit Number: **W016169**

14. Division of Solid Waste Permit Number:

15. EPA Identification Number: **MAD985277862**

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: **2893**

2. First Name: **ANDREA D** 3. Last Name: **STILLER**

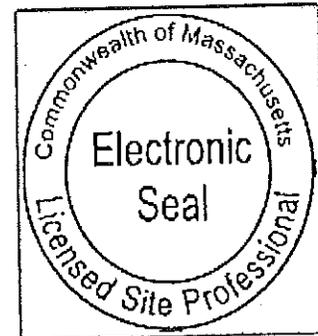
4. Telephone: **7817276646** 5. Ext:

6. FAX:

7. Signature: **Andrea D Stiller**

8. Date: **4/2/2012**
(mm/dd/yyyy)

9. LSP Stamp:





BILL OF LADING (pursuant to 310 CMR 40.0030)

3 - 30003

G. PERSON SUBMITTING BILL OF LADING:

1. Check all that apply: a. change in contact name b. Change of address c. change in person undertaking response actions

2. Name of Organization: **DOVER TOWN OF**

3. Contact First Name: **GREER**

4. Last Name: **PUGATCH**

5. Street: **PO BOX 250**

6. Title: **ASST TOWN ADMINISTRATOR**

7. City/Town: **DOVER**

8. State: **MA**

9. Zip Code: **020300000**

10. Telephone: **5087850032**

11. Ext: **221**

12. Fax: **5087852341**

H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING:

Check here to change relationship

1. RP or PRP: a. Owner b. Operator c. Generator d. Transporter

e. Other RP or PRP Specify: _____

2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

4. Any Other person Undertaking Response Actions: Specify Relationship: _____

I. REQUIRED ATTACHMENTS AND SUBMITTALS :

1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :

1. I, **Town of Dover**, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: **Town of Dover**

3. Title: **ASST TOWN ADMINISTRATOR**

4. For: **DOVER TOWN OF**

(Name of person or entity recorded in Section H)

5. Date: **4/2/2012**

(mm/dd/yyyy)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number

3 - 30003

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.):

6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street:

8. City/Town:

9. State:

10. Zip Code:

11. Telephone:

12. Ext:

13. Fax:

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (MassDEP USE ONLY):

Received by DEP on

4/2/2012 8:35:00 AM



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112B

Release Tracking Number

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET SIGNATURE PAGE

3 - 30003

A. ACKNOWLEDGEMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR TEMPORARY STORAGE:

1. I, William R. Reinhardt, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: William R. Reinhardt 3. Title: Mngr. Env. Svcs.
4. For: Aggregate Industries 5. Date: 4-23-12
(mm/dd/yyyy)
6. Date of Final Shipment associated with this Bill of Lading: 4-13-12
(mm/dd/yyyy)

B. ACKNOWLEDGEMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON CONDUCTING RESPONSE ACTIONS ASSOCIATED WITH THIS BILL OF LADING:

1. I, Town of Dover, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: Erin Pugh 3. Title: Assistant Town Administrator
4. For: Dover Town of 5. Date: 04-27-2012
(Name of person or entity recorded in Section G) (mm/dd/yyyy)

6. Check here if the address of the person providing certification is different from address recorded in BWSC112 Section H.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. Zip Code: _____

11. Telephone: _____ 12. Ext: _____ 13. Fax: _____

14. Check here if attaching optional supporting documentation such as copies of Load Information Summary Sheets

(T)

Customer Ticket Summary

Plant: Stoughton Soil D702
Date: 4/13/12
Customer: Clean Venture 38734

Order: 400115684
Product: Oil Soil 7255
Location: Springvale Ave Dover, Ma
Loads: 1
Total tons: 3.90 Tons

C.V. Box

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING Transport Log Sheet

Release Tracking Number

Page 1 OF 1

3 - 30003

I. LOAD INFORMATION:

Load 1: Signature of Transporter Representative: *[Signature]* Receiving Facility/Temporary Storage Representative: *[Signature]*

Date of Shipment: 4/13/12 Time of Shipment: 9:00 AM PM Date of Receipt: 4-13-12 Time of Receipt: 10:00 AM PM

Truck/Tractor Registration: 72324MA Trailer Registration (if any): _____ Load Size (cu. yds./tons): 115106406 3.90

Load 2: Signature of Transporter Representative: _____ Receiving Facility/Temporary Storage Representative: _____

Date of Shipment: _____ Time of Shipment: _____ AM PM Date of Receipt: _____ Time of Receipt: _____ AM PM

Truck/Tractor Registration: _____ Trailer Registration (if any): _____ Load Size (cu. yds./tons): _____

Load 3: Signature of Transporter Representative: _____ Receiving Facility/Temporary Storage Representative: _____

Date of Shipment: _____ Time of Shipment: _____ AM PM Date of Receipt: _____ Time of Receipt: _____ AM PM

Truck/Tractor Registration: _____ Trailer Registration (if any): _____ Load Size (cu. yds./tons): _____

Load 4: Signature of Transporter Representative: _____ Receiving Facility/Temporary Storage Representative: _____

Date of Shipment: _____ Time of Shipment: _____ AM PM Date of Receipt: _____ Time of Receipt: _____ AM PM

Truck/Tractor Registration: _____ Trailer Registration (if any): _____ Load Size (cu. yds./tons): _____

Load 5: Signature of Transporter Representative: _____ Receiving Facility/Temporary Storage Representative: _____

Date of Shipment: _____ Time of Shipment: _____ AM PM Date of Receipt: _____ Time of Receipt: _____ AM PM

Truck/Tractor Registration: _____ Trailer Registration (if any): _____ Load Size (cu. yds./tons): _____

Load 6: Signature of Transporter Representative: _____ Receiving Facility/Temporary Storage Representative: _____

Date of Shipment: _____ Time of Shipment: _____ AM PM Date of Receipt: _____ Time of Receipt: _____ AM PM

Truck/Tractor Registration: _____ Trailer Registration (if any): _____ Load Size (cu. yds./tons): _____

J. LOG SHEET VOLUME INFORMATION:

CLEAN Total Volume Recorded This Page (cu. yds./tons): _____

Total Carried Forward (cu. yds./tons): _____

Total Carried Forward and This Page (cu. yds./tons): _____

APPENDIX C

PID FIELD SCREENING RESULTS

APPENDIX D
ANALYTICAL DATA REPORTS



CERTIFICATE OF ANALYSIS

ADS Environmental
Attn: Ms. Andrea Stiller
205 Woodland Street
Sherborn, MA 01770

Date Received: 12/20/11
Date Reported: 12/27/11
P.O. #: 0146
Work Order #: 1112-25080

DESCRIPTION: PROJECT# 0146 SPRINGDALE AVE DOVER

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 12/20/11

Work Order #: 1112-25080

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 001

SAMPLE DESCRIPTION: TANK COMP - 1**SAMPLE TYPE:** COMPOSITE**SAMPLE DATE/TIME:** 12/19/2011

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
VPH						
Unadjusted C5-C8 Aliphatics(FID)	<1.8	1.8	mg/kg dry	MADEP	12/21/11	EC
Unadjusted C9-C12 Aliphatics (FID)	<1.8	1.8	mg/kg dry	MADEP	12/21/11	EC
Methyl-tert-butylether	<0.04	0.04	mg/kg dry	MADEP	12/21/11	EC
Benzene	<0.18	0.18	mg/kg dry	MADEP	12/21/11	EC
Toluene	<0.18	0.18	mg/kg dry	MADEP	12/21/11	EC
Ethylbenzene	<0.18	0.18	mg/kg dry	MADEP	12/21/11	EC
m,p-Xylene	<0.18	0.18	mg/kg dry	MADEP	12/21/11	EC
o-Xylene	<0.18	0.18	mg/kg dry	MADEP	12/21/11	EC
Total Xylene	<0.18	0.18	mg/kg dry	MADEP	12/21/11	EC
Naphthalene	<0.18	0.18	mg/kg dry	MADEP	12/21/11	EC
Adjusted C5-C8 Aliphatics(FID)	<1.8	1.8	mg/kg dry	MADEP	12/21/11	EC
Adjusted C9-C12 Aliphatics(FID)	<1.8	1.8	mg/kg dry	MADEP	12/21/11	EC
C9-C10 Aromatics(PID)	<1.8	1.8	mg/kg dry	MADEP	12/21/11	EC
Moisture	6		%	SM2540 G.	12/22/11	KAC
Surrogate			RANGE		12/21/11	EC
2,5-Dibromotoluene(PID)	167*		70-130%	MADEP	12/21/11	EC
2,5-Dibromotoluene(FID)	122		70-130%	MADEP	12/21/11	EC
EPH/PAH						
C9-C18 Aliphatics	<21	21	mg/kg dry	MADEP	12/22/11	JEB
C19-C36 Aliphatics	<21	21	mg/kg dry	MADEP	12/22/11	JEB
C11-C22 Aromatics	<21	21	mg/kg dry	MADEP	12/22/11	JEB
Total EPH	<63		mg/kg dry	MADEP	12/22/11	JEB
Target PAH Analytes						
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	12/22/11	JEB
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	12/22/11	JEB
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	12/22/11	JEB
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	12/22/11	JEB
Moisture	6		%	SM2540 G.	12/22/11	KAC
Extraction Surrogates						
Chloro-octadecane	62		40-140%	MADEP	12/22/11	JEB
Ortho-terphenyl	89		40-140%	MADEP	12/22/11	JEB
Fractionation Surrogates						
2-Fluorobiphenyl	106		40-140%	MADEP	12/22/11	JEB
2-Bromonaphthalene	100		40-140%	MADEP	12/22/11	JEB

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 12/20/11

Work Order #: 1112-25080

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 001

SAMPLE DESCRIPTION: TANK COMP - 1

SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 12/19/2011

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Extraction date	Extracted			MADEP	12/22/11	KAC

All QA/QC procedures required by the VPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

* Surrogate is outside QC Range.

No significant modifications were made to the VPH Method.

All QA/QC procedures required by the EPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the EPH Method.

Customer Name : ADS Environmental

W.O. Number 1112-25080

MassDEP Analytical Protocol Certification Form	
Laboratory Name: R.I. Analytical Laboratories	Work Order No: 1112-25080
Project / Location: PROJECT# 0146 SPRINGDALE AVE DOVER	RTN :
This Form provides certifications for the following data set: list Laboratory Sample ID Number(s): 1112-25080-001 through 1112-25080-001	

Matrices: Groundwater/Surface Water Soil / Sediment Drinking Water Air Other

CAM Protocol (check all that apply below):

8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	MassDEP VPH CAM IV A <input checked="" type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	MassDEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	MassDEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide /PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM V111 B <input type="checkbox"/>	

Affirmative responses to Questions A through F are required for "Presumptive Certainty" status

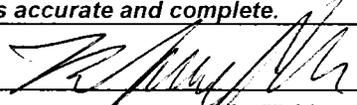
A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical methods(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s) ? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Responses to Questions G,H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
<small>Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40.1056 (2)(k) and WSC-07-350.</small>		
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹

¹ All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature 
 Printed Name: Mike Hobin

Position: QA/QC Director
 Date: 12-29-11

QA/QC Report

Client: ADS Environmental

WO #: 1112-25080

Date: 12/27/2011

-Method Blanks Results-

Parameter	Units	Results	Date Analyzed
Extractable Petroleum Hydrocarbons with PAH (Soil)			
C9-C18 Aliphatics	mg/kg dry	<20	12/22/2011
C19-C36 Aliphatics	mg/kg dry	<20	12/22/2011
C11-C22 Aromatics	mg/kg dry	<20	12/22/2011
Total EPH	mg/kg dry	<60	12/22/2011
Target PAH Analytes			12/22/2011
Naphthalene	mg/kg dry	<0.4	12/22/2011
2-Methylnaphthalene	mg/kg dry	<0.4	12/22/2011
Acenaphthene	mg/kg dry	<0.4	12/22/2011
Phenanthrene	mg/kg dry	<0.4	12/22/2011
Extraction Surrogates	RANGE		12/22/2011
Chloro-octadecane	40-140%	79	12/22/2011
Ortho-terphenyl	40-140%	93	12/22/2011
Fractionation Surrogates	RANGE		12/22/2011
2-Fluorobiphenyl	40-140%	97	12/22/2011
2-Bromonaphthalene	40-140%	92	12/22/2011

Volatile Petroleum Hydrocarbons (Soil)

Unadj C5-C8 Aliphatics(FID)	mg/kg dry	<2.5	12/21/2011
Unadj C9-C12 Aliphatic(FID)	mg/kg dry	<2.5	12/21/2011
Methyl-tert-butylether	mg/kg dry	<0.10	12/21/2011
Benzene	mg/kg dry	<0.25	12/21/2011
Toluene	mg/kg dry	<0.25	12/21/2011
Ethylbenzene	mg/kg dry	<0.25	12/21/2011
m,p-Xylene	mg/kg dry	<0.25	12/21/2011
o-Xylene	mg/kg dry	<0.25	12/21/2011
Naphthalene	mg/kg dry	<0.25	12/21/2011
Adj C5-C8 Aliphatics(FID)	mg/kg dry	<2.5	12/21/2011
Adj C9-C12 Aliphatics(FID)	mg/kg dry	<2.5	12/21/2011
C9-C10 Aromatics(PID)	mg/kg dry	<2.5	12/21/2011
Surrogate	RANGE		12/21/2011
2,5-Dibromotoluene(PID)	70-130%	107	12/21/2011
2,5-Dibromotoluene(FID)	70-130%	93	12/21/2011

-LCS/LCS Duplicate Data Results-

Parameter	CRM Acceptance Limits	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
-----------	-----------------------	------------	----------	-----------	--------------	---------------	-------	---------------

Extractable Petroleum Hydrocarbons with PAH (Soil)

-LCS/LCS Duplicate Data Results-

Parameter	CRM Acceptance Limits	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
-----------	--------------------------	---------------	-------------	--------------	-----------------	------------------	-------	---------------

Extractable Petroleum Hydrocarbons with PAH (Soil) (cont'd)

C9-C18 Aliphatics		20	15.0	75	14.9	75	1	12/22/2011
C19-C36 Aliphatics		27	24.1	89	24.7	91	2	12/22/2011
C11-C22 Aromatics		57	53.5	94	53.5	94	0	12/22/2011

Target PAH Analytes

Naphthalene		3.33	2.67	80	2.39	72	11	12/22/2011
2-Methylnaphthalene		3.33	2.69	81	2.57	77	5	12/22/2011
Acenaphthene		3.33	2.88	86	2.83	85	2	12/22/2011
Phenanthrene		3.33	3.19	96	3.23	97	1	12/22/2011

Extraction Surrogates

Chloro-octadecane			72		79			
Ortho-terphenyl			99		100			

Fractionation Surrogates

2-Fluorobiphenyl			101		96			
2-Bromonaphthalene			97		95			

Volatile Petroleum Hydrocarbons (Soil)

Methyl-tert-butylether		2.5	2.35	94	2.43	97	3	12/21/2011
Benzene		2.5	2.02	81	2.10	84	4	12/21/2011
Toluene		2.5	2.01	80	2.09	84	4	12/21/2011
Ethylbenzene		2.5	2.07	83	2.16	86	4	12/21/2011
m,p-Xylene		5.0	4.28	86	4.46	89	4	12/21/2011
o-Xylene		2.5	2.09	84	2.17	87	4	12/21/2011
Naphthalene		2.5	2.04	82	1.99	80	2	12/21/2011
Adj C5-C8 Aliphatics(FID)		7.5	7.67	102	7.95	106	4	12/21/2011
Adj C9-C12 Aliphatics(FID)		5.0	4.34	87	4.54	91	5	12/21/2011
C9-C10 Aromatics(PID)		2.5	2.07	83	2.15	86	4	12/21/2011

Surrogate

2,5-Dibromotoluene(PID)			125		115			
2,5-Dibromotoluene(FID)			127		112			

Case Narrative

Date: 12/27/2011

ADS Environmental
Attn: Ms. Andrea Stiller
205 Woodland Street
Sherborn, MA 01770

Project: PROJECT# 0146 SPRINGDALE AVEDOVER

RIAL WO#: 1112-25080

All QA/QC procedures required by the EPH Method were followed. All performance/acceptance standards for the required QA/QC procedures were achieved or otherwise stated in this case narrative. A fractionation check was performed on the silica gel lot associated with this sample and found to pass the method criteria unless otherwise stated here. The data reported for this sample was not corrected for instrument/solvent baseline effects. No significant modifications were made to the EPH Method.

All QA/QC procedures required by the VPH Method were followed. All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated. No significant modifications were made to the VPH Method.

The following exceptions were noted for this Work Order:

Volatile Petroleum Hydrocarbons

Question H - Sample -001(TANK COMP - 1): The PID surrogate is outside the QC Range. It exhibited high recovery and the sample had no reportable targets or range concentrations. Per the method, the sample was not re-analyzed.

Extractable Petroleum Hydrocarbons

Question I - The EPH Method limited PAH list was reported as requested on the Chain of Custody.

There were no additional exceptions or analytical issues to discuss concerning the testing requirements for the project.



Mike Hobin
QA/QC Director



CERTIFICATE OF ANALYSIS

ADS Environmental
Attn: Ms. Andrea Stiller
205 Woodland Street
Sherborn, MA 01770

Date Received: 2/15/12
Date Reported: 2/22/12
Date Revised: 2/29/2012
P.O. #: 0146
Work Order #: 1202-03162

DESCRIPTION: PROJECT# 0146 SPRINGDALE AVE DOVER

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 2/15/12

Work Order #: 1202-03162

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 001

SAMPLE DESCRIPTION: B-6/S-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 2/14/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
VPH						
Unadjusted C5-C8 Aliphatics(FID)	<2.2	2.2	mg/kg dry	MADEP	2/16/12	KAC
Unadjusted C9-C12 Aliphatics (FID)	3.4	2.2	mg/kg dry	MADEP	2/16/12	KAC
Methyl-tert-butylether	<0.1	0.1	mg/kg dry	MADEP	2/16/12	KAC
Benzene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Toluene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Ethylbenzene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
m,p-Xylene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
o-Xylene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Total Xylene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Naphthalene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Adjusted C5-C8 Aliphatics(FID)	<2.2	2.2	mg/kg dry	MADEP	2/16/12	KAC
Adjusted C9-C12 Aliphatics(FID)	3.4	2.2	mg/kg dry	MADEP	2/16/12	KAC
C9-C10 Aromatics(PID)	<2.2	2.2	mg/kg dry	MADEP	2/16/12	KAC
Moisture	7		%	SM2540 G.	2/16/12	KAC
Surrogate			RANGE		2/16/12	KAC
2,5-Dibromotoluene(PID)	130		70-130%	MADEP	2/16/12	KAC
2,5-Dibromotoluene(FID)	126		70-130%	MADEP	2/16/12	KAC
EPH/PAH						
C9-C18 Aliphatics	290	21	mg/kg dry	MADEP	2/21/12	JEB
C19-C36 Aliphatics	160	21	mg/kg dry	MADEP	2/21/12	JEB
C11-C22 Aromatics	140	21	mg/kg dry	MADEP	2/21/12	JEB
Total EPH	590		mg/kg dry	MADEP	2/21/12	JEB
Target PAH Analytes					2/21/12	JEB
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Moisture	7		%	SM2540 G.	2/16/12	KAC
Extraction Surrogates			RANGE		2/21/12	JEB
Chloro-octadecane	51		40-140%	MADEP	2/21/12	JEB
Ortho-terphenyl	56		40-140%	MADEP	2/21/12	JEB
Fractionation Surrogates			RANGE		2/21/12	JEB
2-Fluorobiphenyl	77		40-140%	MADEP	2/21/12	JEB
2-Bromonaphthalene	77		40-140%	MADEP	2/21/12	JEB

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 2/15/12

Work Order #: 1202-03162

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 001

SAMPLE DESCRIPTION: B-6/S-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 2/14/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Extraction date	Extracted			MADEP	2/16/12	THP

All QA/QC procedures required by the VPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the VPH Method.

All QA/QC procedures required by the EPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the EPH Method.

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 2/15/12

Work Order #: 1202-03162

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 002

SAMPLE DESCRIPTION: B-6/S-2**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 2/14/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
EPH/PAH						
C9-C18 Aliphatics	<21	21	mg/kg dry	MADEP	2/21/12	JEB
C19-C36 Aliphatics	<21	21	mg/kg dry	MADEP	2/21/12	JEB
C11-C22 Aromatics	<21	21	mg/kg dry	MADEP	2/21/12	JEB
Total EPH	<63		mg/kg dry	MADEP	2/21/12	JEB
Target PAH Analytes					2/21/12	JEB
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Moisture	4		%	SM2540 G.	2/16/12	KAC
Extraction Surrogates			RANGE		2/21/12	JEB
Chloro-octadecane	71		40-140%	MADEP	2/21/12	JEB
Ortho-terphenyl	61		40-140%	MADEP	2/21/12	JEB
Fractionation Surrogates			RANGE		2/21/12	JEB
2-Fluorobiphenyl	80		40-140%	MADEP	2/21/12	JEB
2-Bromonaphthalene	77		40-140%	MADEP	2/21/12	JEB
Extraction date	Extracted			MADEP	2/16/12	THP

All QA/QC procedures required by the EPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the EPH Method.

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 2/15/12

Work Order #: 1202-03162

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 003

SAMPLE DESCRIPTION: MW-1/0-5**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 2/14/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
EPH/PAH						
C9-C18 Aliphatics	<22	22	mg/kg dry	MADEP	2/21/12	JEB
C19-C36 Aliphatics	<22	22	mg/kg dry	MADEP	2/21/12	JEB
C11-C22 Aromatics	<22	22	mg/kg dry	MADEP	2/21/12	JEB
Total EPH	<66		mg/kg dry	MADEP	2/21/12	JEB
Target PAH Analytes					2/21/12	JEB
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Moisture	8		%	SM2540 G.	2/16/12	KAC
Extraction Surrogates			RANGE		2/21/12	JEB
Chloro-octadecane	76		40-140%	MADEP	2/21/12	JEB
Ortho-terphenyl	64		40-140%	MADEP	2/21/12	JEB
Fractionation Surrogates			RANGE		2/21/12	JEB
2-Fluorobiphenyl	79		40-140%	MADEP	2/21/12	JEB
2-Bromonaphthalene	78		40-140%	MADEP	2/21/12	JEB
Extraction date	Extracted			MADEP	2/16/12	THP

All QA/QC procedures required by the EPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the EPH Method.

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 2/15/12

Work Order #: 1202-03162

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 004

SAMPLE DESCRIPTION: B-2/5-10

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 2/14/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
EPH/PAH						
C9-C18 Aliphatics	<20	20	mg/kg dry	MADEP	2/21/12	JEB
C19-C36 Aliphatics	<20	20	mg/kg dry	MADEP	2/21/12	JEB
C11-C22 Aromatics	<20	20	mg/kg dry	MADEP	2/21/12	JEB
Total EPH	<60		mg/kg dry	MADEP	2/21/12	JEB
Target PAH Analytes					2/21/12	JEB
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Moisture	3		%	SM2540 G.	2/16/12	KAC
Extraction Surrogates			RANGE		2/21/12	JEB
Chloro-octadecane	68		40-140%	MADEP	2/21/12	JEB
Ortho-terphenyl	62		40-140%	MADEP	2/21/12	JEB
Fractionation Surrogates			RANGE		2/21/12	JEB
2-Fluorobiphenyl	77		40-140%	MADEP	2/21/12	JEB
2-Bromonaphthalene	76		40-140%	MADEP	2/21/12	JEB
Extraction date	Extracted			MADEP	2/16/12	THP

All QA/QC procedures required by the EPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the EPH Method.

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 2/15/12

Work Order #: 1202-03162

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 005

SAMPLE DESCRIPTION: B-2/2-5

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 2/14/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
VPH						
Unadjusted C5-C8 Aliphatics(FID)	<1.8	1.8	mg/kg dry	MADEP	2/16/12	KAC
Unadjusted C9-C12 Aliphatics (FID)	<1.8	1.8	mg/kg dry	MADEP	2/16/12	KAC
Methyl-tert-butylether	<0.1	0.1	mg/kg dry	MADEP	2/16/12	KAC
Benzene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Toluene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Ethylbenzenc	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
m,p-Xylene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
o-Xylene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Total Xylene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Naphthalene	<0.2	0.2	mg/kg dry	MADEP	2/16/12	KAC
Adjusted C5-C8 Aliphatics(FID)	<1.8	1.8	mg/kg dry	MADEP	2/16/12	KAC
Adjusted C9-C12 Aliphatics(FID)	<1.8	1.8	mg/kg dry	MADEP	2/16/12	KAC
C9-C10 Aromatics(PID)	<1.8	1.8	mg/kg dry	MADEP	2/16/12	KAC
Moisture	6		%	SM2540 G.	2/16/12	KAC
Surrogate			RANGE		2/16/12	KAC
2,5-Dibromotoluene(PID)	121		70-130%	MADEP	2/16/12	KAC
2,5-Dibromotoluene(FID)	128		70-130%	MADEP	2/16/12	KAC
EPH/PAH						
C9-C18 Aliphatics	<21	21	mg/kg dry	MADEP	2/21/12	JEB
C19-C36 Aliphatics	<21	21	mg/kg dry	MADEP	2/21/12	JEB
C11-C22 Aromatics	<21	21	mg/kg dry	MADEP	2/21/12	JEB
Total EPH	<63		mg/kg dry	MADEP	2/21/12	JEB
Target PAH Analytes					2/21/12	JEB
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	2/21/12	JEB
Moisture	6		%	SM2540 G.	2/16/12	KAC
Extraction Surrogates			RANGE		2/21/12	JEB
Chloro-octadecane	81		40-140%	MADEP	2/21/12	JEB
Ortho-terphenyl	66		40-140%	MADEP	2/21/12	JEB
Fractionation Surrogates			RANGE		2/21/12	JEB
2-Fluorobiphenyl	68		40-140%	MADEP	2/21/12	JEB
2-Bromonaphthalene	66		40-140%	MADEP	2/21/12	JEB

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 2/15/12

Work Order #: 1202-03162

PROJECT# 0146 SPRINGDALE AVE DOVER

Sample # 005

SAMPLE DESCRIPTION: B-2/2-5

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 2/14/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Extraction date	Extracted			MADEP	2/16/12	THP

All QA/QC procedures required by the VPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the VPH Method.

All QA/QC procedures required by the EPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the EPH Method.

Customer Name : ADS Environmental

W.O. Number 1202-03162

MassDEP Analytical Protocol Certification Form	
Laboratory Name: R.I. Analytical Laboratories	Work Order No: 1202-03162
Project / Location: PROJECT# 0146 SPRINGDALE AVE DOVER	RTN :
This Form provides certifications for the following data set: list Laboratory Sample ID Number(s):	
1202-03162-001 through 1202-03162-005	

Matrices: Groundwater/Surface Water Soil / Sediment Drinking Water Air Other

CAM Protocol (check all that apply below):

8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	MassDEP VPH CAM IV A <input checked="" type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	MassDEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	MassDEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide /PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VII B <input type="checkbox"/>	

Affirmative responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical methods(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s) ? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Responses to Questions G,H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
<small>Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.</small>		
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹

¹ All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature _____
Printed Name: Mike Hobin

Position: QC/QC Director _____
Date: 3-1-12 _____

QA/QC Report

Client: ADS Environmental

WO #: 1202-03162

Date: 2/22/2012

-Method Blanks Results-

Parameter	Units	Results	Date Analyzed
-----------	-------	---------	---------------

Extractable Petroleum Hydrocarbons with PAH (Soil)

C9-C18 Aliphatics	mg/kg dry	<20	2/21/2012
C19-C36 Aliphatics	mg/kg dry	<20	2/21/2012
C11-C22 Aromatics	mg/kg dry	<20	2/21/2012
Target PAH Analytes			2/21/2012
Naphthalene	mg/kg dry	<0.4	2/21/2012
2-Methylnaphthalene	mg/kg dry	<0.4	2/21/2012
Acenaphthene	mg/kg dry	<0.4	2/21/2012
Phenanthrene	mg/kg dry	<0.4	2/21/2012
Extraction Surrogates	RANGE		2/21/2012
Chloro-octadecane	40-140%	82	2/21/2012
Ortho-terphenyl	40-140%	71	2/21/2012
Fractionation Surrogates	RANGE		2/21/2012
2-Fluorobiphenyl	40-140%	81	2/21/2012
2-Bromonaphthalene	40-140%	80	2/21/2012

Volatile Petroleum Hydrocarbons (Soil)

Unadj C5-C8 Aliphatics(FID)	mg/kg dry	<2.5	2/16/2012
Unadj C9-C12 Aliphatic(FID)	mg/kg dry	<2.5	2/16/2012
Methyl-tert-butylether	mg/kg dry	<0.10	2/16/2012
Benzene	mg/kg dry	<0.25	2/16/2012
Toluene	mg/kg dry	<0.25	2/16/2012
Ethylbenzene	mg/kg dry	<0.25	2/16/2012
m,p-Xylene	mg/kg dry	<0.25	2/16/2012
o-Xylene	mg/kg dry	<0.25	2/16/2012
Naphthalene	mg/kg dry	<0.25	2/16/2012
Adj C5-C8 Aliphatics(FID)	mg/kg dry	<2.5	2/16/2012
Adj C9-C12 Aliphatics(FID)	mg/kg dry	<2.5	2/16/2012
C9-C10 Aromatics(PID)	mg/kg dry	<2.5	2/16/2012
Surrogate	RANGE		2/16/2012
2,5-Dibromotoluene(PID)	70-130%	99	2/16/2012
2,5-Dibromotoluene(FID)	70-130%	107	2/16/2012

-LCS/LCS Duplicate Data Results-

Parameter	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
-----------	------------	----------	-----------	--------------	---------------	-------	---------------

Volatile Petroleum Hydrocarbons (Soil)

-LCS/LCS Duplicate Data Results-

Parameter	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
Volatile Petroleum Hydrocarbons (Soil) (cont'd)							
Methyl-tert-butylether	2.5	2.72	109	2.77	111	2	2/16/2012
Benzene	2.5	2.25	90	2.28	91	1	2/16/2012
Toluene	2.5	2.22	89	2.31	92	4	2/16/2012
Ethylbenzene	2.5	2.28	91	2.37	95	4	2/16/2012
m,p-Xylene	5.0	4.76	95	4.94	99	4	2/16/2012
o-Xylene	2.5	2.37	95	2.41	96	2	2/16/2012
Naphthalene	2.5	1.99	80	1.94	78	3	2/16/2012
Adj C5-C8 Aliphatics(FID)	7.5	8.02	107	8.01	107	0	2/16/2012
Adj C9-C12 Aliphatics(FID)	5.0	4.81	96	5.02	100	4	2/16/2012
C9-C10 Aromatics(PID)	2.5	2.42	97	2.43	97	0	2/16/2012
Surrogate							
2,5-Dibromotoluene(PID)		84		91			
2,5-Dibromotoluene(FID)		86		94			
Extractable Petroleum Hydrocarbons with PAH (Soil)							
C9-C18 Aliphatics	20	12.9	65	13.7	69	6	2/21/2012
C19-C36 Aliphatics	27	22.8	84	24.5	91	7	2/21/2012
C11-C22 Aromatics	57	40.1	70	39.6	69	1	2/21/2012
Target PAH Analytes							
Naphthalene	3.33	1.73	52	1.38	41	23	2/21/2012
2-Methylnaphthalene	3.33	1.80	54	1.50	45	18	2/21/2012
Acenaphthene	3.33	1.90	57	1.70	51	11	2/21/2012
Phenanthrene	3.33	2.14	64	2.20	66	3	2/21/2012
Extraction Surrogates							
Chloro-octadecane		76		85			
Ortho-terphenyl		71		71			
Fractionation Surrogates							
2-Fluorobiphenyl		79		67			
2-Bromonaphthalene		77		67			

Case Narrative

Date: 2/22/2012

ADS Environmental
Attn: Ms. Andrea Stiller
205 Woodland Street
Sherborn, MA 01770

Project: PROJECT# 0146 SPRINGDALE AVEDOVER

RIAL WO#: 1202-03162

All QA/QC procedures required by the EPH Method were followed. All performance/acceptance standards for the required QA/QC procedures were achieved or otherwise stated in this case narrative. A fractionation check was performed on the silica gel lot associated with this sample and found to pass the method criteria unless otherwise stated here. The data reported for this sample was not corrected for instrument/solvent baseline effects. No significant modifications were made to the EPH Method.

All QA/QC procedures required by the VPH Method were followed. All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated. No significant modifications were made to the VPH Method.

The following exceptions were noted for this Work Order:

Revised Sample ID for Sample -005 to read B-2/2-5 per February 29, 2012 email request.

Extractable Petroleum Hydrocarbons

Question I - The EPH Method limited PAH list Diesel Targets were reported as requested on the Chain of Custody.

There were no additional exceptions or analytical issues to discuss concerning the testing requirements for the project.



Mike Hobin
Director of Quality

CHAIN OF CUSTODY RECORD

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888-3007
Tel: 800-937-2580
Fax: 401-738-1970

131 Coolidge St, Suite 105
Hudson, MA 01749-1331
Tel: 800-937-2580
Fax: 978-568-0078

Date Collected	Time Collected	Field Sample Identification	Grab or Composite	# of Containers & Type	Preservation Code ¹	Matrix Code ^M	EPH + Dieldrugs	VPH + Toxrets
2/14/12	PM	B-6/S-1	G	10	H	S	X	X
	PM	B-6/S-2	G	10	S	S	X	X
	AM	MW-1/0-5	G	10	S	S	X	X
	AM	B-2/S-10	G	10	S	S	X	X
	PM	B-2/S-5	G	10	M	S	X	X
	PM	B-2/S-5	G	10	S	S	X	X

7

Client Information	Project Information
Company Name: ADS Environmental Engineering, LLC	Project Name: Sprydale Ave, Dover
Address: 205 Woodland Street	P.O. Number: 0146
City / State / Zip: Sherborn, MA 01770	Report To: Andrea Stiller
Telephone: 781-727-6646	Phone: 781-727-6646
Contact Person: Andrea Stiller	Fax: 0146
	Sampled by: AS
	Quote No:
	Email address: Astiller@comcast.com
	Workorder No: ADLSLSP.COM

Relinquished By Signatures	Date	Time	Received By Signatures	Date	Time
<i>[Signature]</i>	2/15/12	13:04	<i>[Signature]</i>	2/15/12	13:01
<i>[Signature]</i>	2/15/12	16:01	<i>[Signature]</i>	2/15/12	16:01
<i>[Signature]</i>	2/15/12	17:37	<i>[Signature]</i>	2/15/12	17:37

Circle if applicable: GW-1, GW-2, GW-3, S-1, S-2, S-3 MCP Data Enhancement OC Package? Yes No

Temp. Upon Receipt: 22c

Lab Use Only
 Sample Pick Up Only
 RIAL sampled; attach field hours
 Shipped on ice
 Workorder No: 202-03162

Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, S=Sterile Preservatives: A=Ascorbic Acid, NH4=NH4Cl, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SB=NaHSO4, SH=NaOH, T=Na2S2O3, Z=ZnOAC
 Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=



CERTIFICATE OF ANALYSIS

ADS Environmental
Attn: Ms. Andrea Stiller
205 Woodland Street
Sherborn, MA 01770

Date Received: 2/29/12
Date Reported: 3/7/12
P.O. #: 0146
Work Order #: 1203-04238

DESCRIPTION: PROJECT #0146 SPRINGDALE AVE, DOVER

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 2/29/12

Work Order #: 1203-04238

PROJECT #0146 SPRINGDALE AVE, DOVER

Sample # 001

SAMPLE DESCRIPTION: MW-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 2/28/2012 @ 14:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
EPH						
C9-C18 Aliphatics	<100	100	ug/l	MADEP	3/7/12	JEB
C19-C36 Aliphatics	<100	100	ug/l	MADEP	3/7/12	JEB
C11-C22 Aromatics	<100	100	ug/l	MADEP	3/7/12	JEB
Extraction Surrogates			RANGE		3/7/12	JEB
Chloro-octadecane	42		40-140%	MADEP	3/7/12	JEB
Ortho-terphenyl	90		40-140%	MADEP	3/7/12	JEB
Fractionation Surrogates			RANGE		3/7/12	JEB
2-Fluorobiphenyl	90		40-140%	MADEP	3/7/12	JEB
2-Bromonaphthalene	90		40-140%	MADEP	3/7/12	JEB
Extraction date	Extracted			MADEP	3/6/12	RLI

All QA/QC procedures required by the EPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the EPH Method.

Customer Name : ADS Environmental

W.O. Number 1203-04238

MassDEP Analytical Protocol Certification Form	
Laboratory Name: R.I. Analytical Laboratories	Work Order No: 1203-04238
Project / Location: PROJECT #0146 SPRINGDALE AVE, DOVER	RTN :
This Form provides certifications for the following data set: list Laboratory Sample ID Number(s):	
1203-04238-001 through 1203-04238-001	

Matrices: Groundwater/Surface Water Soil / Sediment Drinking Water Air Other

CAM Protocol (check all that apply below):

8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	MassDEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	MassDEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	MassDEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide /PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VI11 B <input type="checkbox"/>	

Affirmative responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical methods(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s) ? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Responses to Questions G,H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
<small>Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.</small>		
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹

¹ All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: 
 Printed Name: Mike Hobin

Position: QA/QC Director
 Date: 3/7/12

QA/QC Report

Client: ADS Environmental

WO #: 1203-04238

Date: 3/7/2012

-Method Blanks Results-

Parameter	Units	Results	Date Analyzed
Extractable Petroleum Hydrocarbons (Aqueous)			
C9-C18 Aliphatics	ug/l	<100	3/7/2012
C19-C36 Aliphatics	ug/l	<100	3/7/2012
C11-C22 Aromatics	ug/l	<100	3/7/2012
Extraction Surrogates	RANGE		
Chloro-octadecane	40-140%	72	3/7/2012
Ortho-terphenyl	40-140%	102	3/7/2012
Fractionation Surrogates	RANGE		
2-Fluorobiphenyl	40-140%	91	3/7/2012
2-Bromonaphthalene	40-140%	88	3/7/2012

-LCS/LCS Duplicate Data Results-

Parameter	CRM Acceptance Limits	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
Extractable Petroleum Hydrocarbons (Aqueous)								
C9-C18 Aliphatics		300	237	79	248	83	5	3/7/2012
C19-C36 Aliphatics		400	387	97	386	97	0	3/7/2012
C11-C22 Aromatics		850	857	101	1056	124	21	3/7/2012
Extraction Surrogates								
Chloro-octadecane			72		74			
Ortho-terphenyl			97		124			
Fractionation Surrogates								
2-Fluorobiphenyl			89		103			
2-Bromonaphthalene			85		102			

Case Narrative

Date: 3/7/2012

ADS Environmental
Attn: Ms. Andrea Stiller
205 Woodland Street
Sherborn, MA 01770

Project: PROJECT #0146 SPRINGDALE AVE,DOVER

RIAL WO#: 1203-04238

All QA/QC procedures required by the EPH Method were followed. All performance/acceptance standards for the required QA/QC procedures were achieved or otherwise stated in this case narrative. A fractionation check was performed on the silica gel lot associated with this sample and found to pass the method criteria unless otherwise stated here. The data reported for this sample was not corrected for instrument/solvent baseline effects. No significant modifications were made to the EPH Method.

The following exceptions were noted for this Work Order:

Extractable Petroleum Hydrocarbons

Question I - The EPH Method list without PAH's was reported as requested on the Chain of Custody.

There were no additional exceptions or analytical issues to discuss concerning the testing requirements for the project.



Mike Hobin
QA/QC Director



CERTIFICATE OF ANALYSIS

ADS Environmental
Attn: Ms. Andrea Stiller
205 Woodland Street
Sherborn, MA 01770

Date Received: 3/28/12
Date Reported: 3/30/12
Date Revised: 4/2/2012
P.O. #:
Work Order #: 1203-06114

DESCRIPTION: PROJECT# 0146 4 SPRINGDALE AVE

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844

This Certificate represents all data associated with the referenced work order and is paginated for completeness. The complete Certificate includes one attachment; the original Chain of Custody.

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:

Data Reporting

enc: Chain of Custody

R.I. Analytical Laboratories, Inc.
CERTIFICATE OF ANALYSIS

ADS Environmental

Date Received: 3/28/12

Work Order #: 1203-06114

PROJECT# 0146 4 SPRINGDALE AVE

Sample # 001

SAMPLE DESCRIPTION: EX-1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/27/2012

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
EPH/PAH						
C9-C18 Aliphatics	<20	20	mg/kg dry	MADEP	3/30/12	JEB
C19-C36 Aliphatics	<20	20	mg/kg dry	MADEP	3/30/12	JEB
C11-C22 Aromatics	<20	20	mg/kg dry	MADEP	3/30/12	JEB
Target PAH Analytes					3/30/12	JEB
Naphthalene	<0.4	0.4	mg/kg dry	MADEP	3/30/12	JEB
2-Methylnaphthalene	<0.4	0.4	mg/kg dry	MADEP	3/30/12	JEB
Acenaphthene	<0.4	0.4	mg/kg dry	MADEP	3/30/12	JEB
Phenanthrene	<0.4	0.4	mg/kg dry	MADEP	3/30/12	JEB
Moisture	1		%	SM2540 G.	3/29/12	BJK
Extraction Surrogates			RANGE		3/30/12	JEB
Chloro-octadecane	53		40-140%	MADEP	3/30/12	JEB
Ortho-terphenyl	68		40-140%	MADEP	3/30/12	JEB
Fractionation Surrogates			RANGE		3/30/12	JEB
2-Fluorobiphenyl	83		40-140%	MADEP	3/30/12	JEB
2-Bromonaphthalene	83		40-140%	MADEP	3/30/12	JEB
Extraction date	Extracted			MADEP	3/28/12	THP

All QA/QC procedures required by the EPH Method were followed.

All Performance/Acceptance Standards for the required QA/QC procedures were achieved or otherwise stated.

No significant modifications were made to the EPH Method.

Customer Name : ADS Environmental

W.O. Number 1203-06114

MassDEP Analytical Protocol Certification Form	
Laboratory Name: R.I. Analytical Laboratories	Work Order No: 1203-06114
Project / Location: PROJECT# 0146 4 SPRINGDALE AVE	RTN :
This Form provides certifications for the following data set: list Laboratory Sample ID Number(s):	
1203-06114-001 through 1203-06114-001	

Matrices: Groundwater/Surface Water Soil / Sediment Drinking Water Air Other

CAM Protocol (check all that apply below):

8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	MassDEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	MassDEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	MassDEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide /PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM V111 B <input type="checkbox"/>	

Affirmative responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical methods(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s) ? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Responses to Questions G,H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
<small>Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.</small>		
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹

¹ All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature 
 Printed Name: Mike Hobin

Position: QC/QC Director
 Date: 4-2-12

QA/QC Report

Client: ADS Environmental

WO #: 1203-06114

Date: 3/30/2012

-Method Blanks Results-

Parameter	Units	Results	Date Analyzed
-----------	-------	---------	---------------

Extractable Petroleum Hydrocarbons with PAH (Soil)

C9-C18 Aliphatics	mg/kg dry	<20	3/29/2012
C19-C36 Aliphatics	mg/kg dry	<20	3/29/2012
C11-C22 Aromatics	mg/kg dry	<20	3/29/2012
Target PAH Analytes			3/29/2012
Naphthalene	mg/kg dry	<0.4	3/29/2012
2-Methylnaphthalene	mg/kg dry	<0.4	3/29/2012
Acenaphthene	mg/kg dry	<0.4	3/29/2012
Phenanthrene	mg/kg dry	<0.4	3/29/2012
Extraction Surrogates	RANGE		3/29/2012
Chloro-octadecane	40-140%	58	3/29/2012
Ortho-terphenyl	40-140%	95	3/29/2012
Fractionation Surrogates	RANGE		3/29/2012
2-Fluorobiphenyl	40-140%	103	3/29/2012
2-Bromonaphthalene	40-140%	100	3/29/2012

-LCS/LCS Duplicate Data Results-

Parameter	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
-----------	------------	----------	-----------	--------------	---------------	-------	---------------

Extractable Petroleum Hydrocarbons with PAH (Soil)

C9-C18 Aliphatics	20	12.1	61	13.7	69	12	3/30/2012
C19-C36 Aliphatics	27	20.3	75	23.3	86	14	3/30/2012
C11-C22 Aromatics	57	42.6	75	41.8	73	2	3/30/2012
Target PAH Analytes							
Naphthalene	3.33	2.12	64	2.09	63	1	3/30/2012
2-Methylnaphthalene	3.33	2.09	63	2.08	62	0	3/30/2012
Acenaphthene	3.33	2.23	67	2.23	67	0	3/30/2012
Phenanthrene	3.33	2.53	76	2.54	76	0	3/30/2012
Extraction Surrogates							
Chloro-octadecane		52		66			
Ortho-terphenyl		90		78			
Fractionation Surrogates							
2-Fluorobiphenyl		90		80			
2-Bromonaphthalene		90		80			

Case Narrative

Date: 3/30/2012

ADS Environmental
Attn: Ms. Andrea Stiller
205 Woodland Street
Sherborn, MA 01770

Project:

RIAL WO#: 1203-06114

All QA/QC procedures required by the EPH Method were followed. All performance/acceptance standards for the required QA/QC procedures were achieved or otherwise stated in this case narrative. A fractionation check was performed on the silica gel lot associated with this sample and found to pass the method criteria unless otherwise stated here. The data reported for this sample was not corrected for instrument/solvent baseline effects. No significant modifications were made to the EPH Method.

The following exceptions were noted for this Work Order:

Project Description has been revised to read PROJECT# 0146 4 SPRINGDALE AVE

Extractable Petroleum Hydrocarbons

Question I - The EPH Method limited PAH list was reported as requested on the Chain of Custody.

There were no additional exceptions or analytical issues to discuss concerning the testing requirements for the project.



Mike Hobin
Director of Quality

APPENDIX E
GEOPROBE LOGS

ADS Environmental Engineering, LLC					SOIL BORING LOG			Boring No.:	MW-1		
205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)					Project Name: Caryl School			Page:	1 of 1		
					Project Location: 4 Springdale Avenue, Dover, MA			Project No.:	NA		
								Checked By:	dg		
Drilling Company: New England Geotech					Soil Boring Location: UST Fuel Line						
Drilling Foreman: Hayes Rembijas					Ground Surface Elevation: NA			Datum:	NA		
ADS Inspector(s): A. Stiller / D. Gorden					Date Started: 02/14/12			Date Completed: 2/14/12			
DRILLING METHOD					SAMPLER		GROUND WATER DEPTH				
VEHICLE: F550 XLT Super Duty					TYPE: 5-foot macrocore		DATE		DEPTH (feet)	REFERENCE	METHOD
MODEL: Geoprobe 6600					HAMMER: NA		February 14, 2012		NA	Ground	Soil
METHOD: Direct push					FALL: NA		February 28, 2012		33.70	Ground	Well
SAMPLE					SOIL SAMPLE DESCRIPTION			GRAPHIC LOG	PID (ppm)	NOTES	
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT							
1	S-1	20	0-5		0-20" Brown fine to medium SAND; trace silt; dry.				0.1		
2											
3											
4											
5					Material was vacuum excavated. Sampled by hand.						
6	S-2	41	5-10		0-41" Tan to dark tan fine to coarse SAND; little 1/4 to 1/2" subrounded gravel; dry.				0.7		
7											
8									0		
9											
10											
11	S-3	24	10-15		0-24" Light tan very fine to fine SAND; little banding of tan coarse silt at 4-7'; dry.				0.1		
12											
13											
14											
15											
16	S-4	NA	15-20		Tan very fine SAND; dry; changing to light orange tan very fine sand (dry to moist) at 20 feet.				0		
17											
18											
19											
20					Liner lodged in macrocore.						

Notes:

- Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%)
- Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8), stiff (8-15), very stiff (15-30), hard (>30)
- Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30), dense (30-50), very dense (50)

Legend

s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular; sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003".
 USCS must include: group symbol, color, group name, particle size range, soil type/consistency, moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving, sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.

ADS Environmental Engineering, LLC					SOIL BORING LOG			Boring No.:	B-1	
205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)					Project Name: Caryl School			Page:	1 of 1	
					Project Location: 4 Springdale Avenue, Dover, MA			Project No.:	NA	
								Checked By:	dg	
Drilling Company: New England Geotech					Soil Boring Location: UST Fuel Line					
Drilling Foreman: Hayes Rembijas					Ground Surface Elevation: NA			Datum: NA		
ADS Inspector(s): A. Stiller / D. Gorden					Date Started: 02/14/12			Date Completed: 2/14/12		
DRILLING METHOD					SAMPLER		GROUND WATER DEPTH			
VEHICLE: F550 XLT Super Duty					TYPE: 5-foot macrocore		DEPTH (feet)		REFERENCE	METHOD
MODEL: Geoprobe 6600					HAMMER: NA		February 14, 2012		Ground	Soil
METHOD: Direct push					FALL: NA		February 28, 2012		Ground	Well
SAMPLE					SOIL SAMPLE DESCRIPTION			GRAPHIC LOG	PID (ppm)	NOTES
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT						
21	S-5	28	20-23		0-28" Light orange tan very fine to fine SAND; little horizontal banding of light orange tan coarse silt; dry.				0	
22										
23										
24	S-6	NA	23-25		Light orange tan very fine to fine SAND; little horizontal banding of light orange tan coarse silt; dry.				0	
25					Liner lodged in macrocore. End of boring.					
26					Two-inch diameter PVC monitoring well installed to 41.8' below ground surface. 14 feet of slotted screen, riser to surface, bentonite seal, roadway box cemented in place.					
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										

Notes:

- Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%)
- Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8), stiff (8-15), very stiff (15-30), hard (>30)
- Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30), dense (30-50), very dense (50)

Legend

s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular; sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003".
 USCS must include: group symbol, color, group name, particle size range, soil type/consistency, moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving, sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.

ADS Environmental Engineering, LLC					SOIL BORING LOG			Boring No.: B-2			
205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)					Project Name: Caryl School			Page: 1 of 1			
					Project Location: 4 Springdale Avenue, Dover, MA			Project No.: NA			
Drilling Company: New England Geotech					Soil Boring Location: UST Fuel Line			Datum: NA			
Drilling Foreman: Hayes Rembijas					Ground Surface Elevation: NA			Date Completed: 2/14/12			
ADS Inspector(s): A. Stiller / D. Gorden					Date Started: 02/14/12						
DRILLING METHOD					SAMPLER		GROUND WATER DEPTH				
VEHICLE: F550 XLT Super Duty					TYPE: 5-foot macrocore		DATE		DEPTH (feet)	REFERENCE	METHOD
MODEL: Geoprobe 6600					HAMMER: NA		February 14, 2012		NA	Ground	Soil
METHOD: Direct push					FALL: NA						
SAMPLE					SOIL SAMPLE DESCRIPTION			GRAPHIC LOG	PID (ppm)	NOTES	
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT							
1	S-1	14	0-5		0-14" Brown fine to medium SAND; trace silt; with three layers of black asphalt over gray concrete; dry.				163	(vacuum)	
2									0	(boring)	
3										Sample	
4										B-2, S-1 to	
5					Material was vacuum excavated. Interval sampled by hand.					laboratory	
6	S-2	23	5-10		0-23" Brown medium to coarse SAND; trace 1/4' subangular gravel; moist (precipitation); dry at 20".				0		
7											
8											
9											
10											
11	S-3	28	10-15		0-3" Brown fine-med. SAND; little 1/2" subrounded gravel; little silt; dry.				0.2		
12					3-5" Black fine SAND; little silt; dry.						
13					5-16" Brown medium-coarse SAND and GRAVEL (1/4" subrounded); dry.					native	
14					16-22" Light tan 1/4" to 1" probe-crushed GRAVEL; dry.						
15					22-28" Tan very fine SAND; dry.						
16	S-4	34	15-20		0-34" Light tan to light orange brown very fine SAND; little silt - horizontal banding; dry.				0		
17											
18											
19											
20											

- Notes:**
- Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%)
 - Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8), stiff (8-15), very stiff (15-30), hard (>30)
 - Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30), dense (30-50), very dense (50)

Legend

s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular; sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003".

USCS must include: group symbol, color, group name, particle size range, soil type/consistency, moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving, sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.

ADS Environmental Engineering, LLC <small>205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)</small>	SOIL BORING LOG		Boring No.:	B-2
	Project Name: Caryl School		Page:	1 of 1
	Project Location: 4 Springdale Avenue, Dover, MA		Project No.:	NA
			Checked By:	dg

Drilling Company: New England Geotech	Soil Boring Location: UST Fuel Line
Drilling Foreman: Hayes Rembijas	Ground Surface Elevation: NA
ADS Inspector(s): A. Stiller / D. Gorden	Date Started: 02/14/12
	Datum: NA
	Date Completed: 2/14/12

DRILLING METHOD		SAMPLER		GROUND WATER DEPTH		
VEHICLE:	F550 XLT Super Duty	TYPE:	5-foot macrocore	DATE	DEPTH (feet)	REFERENCE
MODEL:	Geoprobe 6600	HAMMER:	NA	February 14, 2012	NA	Ground
METHOD:	Direct push	FALL:	NA			Soil

SAMPLE					SOIL SAMPLE DESCRIPTION	GRAPHIC LOG	PID (ppm)	NOTES
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT				
21	S-5	19	20-25		0-19" Light tan to light orange brown very fine SAND; little silt - horizontal banding; dry.		0	
22								
23								
24	S-6		23-25					
25					End of boring.			
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								

Notes: 1. Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%) 2. Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8), stiff (8-15), very stiff (15-30), hard (>30) 4. Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30), dense (30-50), very dense (50)	Legend s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular; sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003". USCS must include: group symbol, color, group name, particle size range, soil type/consistency, moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving, sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.
---	--

ADS Environmental Engineering, LLC					SOIL BORING LOG			Boring No.:	B-3		
205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)					Project Name: Caryl School			Page:	1 of 1		
					Project Location: 4 Springdale Avenue, Dover, MA			Project No.:		NA	
								Checked By:		dg	
Drilling Company: New England Geotech				Soil Boring Location: UST Fuel Line							
Drilling Foreman: Hayes Rembijas				Ground Surface Elevation: NA		Datum: NA					
ADS Inspector(s): A. Stiller / D. Gorden				Date Started: 02/14/12		Date Completed: 2/14/12					
DRILLING METHOD				SAMPLER		GROUND WATER DEPTH					
VEHICLE: F550 XLT Super Duty				TYPE: 5-foot macrocore		DATE		DEPTH (feet)		REFERENCE	METHOD
MODEL: Geoprobe 6600				HAMMER: NA		February 14, 2012		NA		Ground	Soil
METHOD: Direct push				FALL: NA							
SAMPLE					SOIL SAMPLE DESCRIPTION			GRAPHIC LOG	PID (ppm)	NOTES	
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT							
1	S-1	NA	0-4.5						0		
2					Sample collected by hand from sidewalls of hole.					No leaks from piping visible	
3					Sand with gravel fill.						
4											
5					Material was vacuum excavated. Pipes visible south end of hole.						
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Notes:		Legend	
1. Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%)		s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular;	
2. Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8),		sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003".	
3. stiff (8-15), very stiff (15-30), hard (>30)		USCS must include: group symbol, color, group name, particle size range, soil type/consistency,	
4. Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30),		moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving,	
5. dense (30-50), very dense (50)		sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.	

ADS Environmental Engineering, LLC					SOIL BORING LOG			Boring No.: B-4		
205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)					Project Name: Caryl School			Page: 1 of 1		
					Project Location: 4 Springdale Avenue, Dover, MA			Project No.: NA		
Drilling Company: New England Geotech					Soil Boring Location: UST Fuel Line			Datum: NA		
Drilling Foreman: Hayes Rembijas					Ground Surface Elevation: NA			Date Completed: 2/14/12		
ADS Inspector(s): A. Stiller / D. Gorden					Date Started: 02/14/12					
DRILLING METHOD					SAMPLER		GROUND WATER DEPTH			
VEHICLE: F550 XLT Super Duty					TYPE: 5-foot macrocore		DATE	DEPTH (feet)	REFERENCE	METHOD
MODEL: Geoprobe 6600					HAMMER: NA		February 14, 2012	NA	Ground	Soil
METHOD: Direct push					FALL: NA					
SAMPLE					SOIL SAMPLE DESCRIPTION			GRAPHIC LOG	PID (ppm)	NOTES
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT						
1	S-1	NA	0-5						0	
2					Sample collected by hand from sidewalls of hole.					No leaks from piping visible
3					Sand with gravel fill.					
4										
5					Material was vacuum excavated. Pipes visible south end of hole.					
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
Notes:					Legend					
1. Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%)					s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular;					
2. Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8),					sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003".					
3. stiff (8-15), very stiff (15-30), hard (>30)					USCS must include: group symbol, color, group name, particle size range, soil type/consistency,					
4. Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30),					moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving,					
5. dense (30-50), very dense (50)					sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.					

ADS Environmental Engineering, LLC					SOIL BORING LOG			Boring No.:	B-5		
205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)					Project Name: Caryl School			Page:	1 of 1		
					Project Location: 4 Springdale Avenue, Dover, MA			Project No.:	NA		
Drilling Company: New England Geotech					Soil Boring Location: UST Fuel Line			Checked By: dg			
Drilling Foreman: Hayes Rembijas					Ground Surface Elevation: NA			Datum: NA			
ADS Inspector(s): A. Stiller / D. Gorden					Date Started: 02/14/12			Date Completed: 2/14/12			
DRILLING METHOD					SAMPLER		GROUND WATER DEPTH				
VEHICLE: F550 XLT Super Duty					TYPE: 5-foot macrocore		DATE	DEPTH (feet)	REFERENCE	METHOD	
MODEL: Geoprobe 6600					HAMMER: NA		February 14, 2012	NA	Ground	Soil	
METHOD: Direct push					FALL: NA						
SAMPLE					SOIL SAMPLE DESCRIPTION			GRAPHIC LOG	PID (ppm)	NOTES	
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT							
1	S-1	4	0-5		0-4"	Brown medium SAND; trace silt; moist (precipitation).				0	
2											
3											
4											
5						Material was vacuum excavated. Sample collected by hand.					
6	S-2	30	5-10		0-30"	Brown medium to coarse SAND; little 1/4' subangular gravel; trace probe-fractured gravel >2"; dry.				0	
7											
8											
9											
10											
11	S-3	19	10-15		0-19"	Tan very fine to fine SAND; dry.				0	native
12											
13											
14											
15											
16						End of boring.					
17											
18											
19											
20											

Notes: 1. Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%) 2. Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8), stiff (8-15), very stiff (15-30), hard (>30) 3. Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30), dense (30-50), very dense (50)	Legend s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular; sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003". USCS must include: group symbol, color, group name, particle size range, soil type/consistency, moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving, sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.
---	--

ADS Environmental Engineering, LLC					SOIL BORING LOG			Boring No.: B-6	
205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)					Project Name: Caryl School			Page: 1 of 1	
					Project Location: 4 Springdale Avenue, Dover, MA			Project No.: NA	
Drilling Company: New England Geotech					Soil Boring Location: UST Fuel Line			Checked By: dg	
Drilling Foreman: Hayes Rembijas					Ground Surface Elevation: NA			Datum: NA	
ADS Inspector(s): A. Stiller / D. Gorden					Date Started: 02/14/12			Date Completed: 2/14/12	
DRILLING METHOD					SAMPLER			GROUND WATER DEPTH	
VEHICLE: F550 XLT Super Duty					TYPE: 5-foot macrocore			DATE	
MODEL: Geoprobe 6600					HAMMER: NA			DEPTH (feet)	
METHOD: Direct push					FALL: NA			REFERENCE	
					DATE			METHOD	
					February 14, 2012			Ground	
								Soil	
SAMPLE					SOIL SAMPLE DESCRIPTION			GRAPHIC LOG	
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT				PID (ppm)	NOTES
1	S-1	24	0-10		0-24" Tan-brown fine to coarse SAND; moist (precipitation).			1.2	
2									
3									
4									
5									
6								0.8	
7									
8									
9									
10					Due to slough, 5-foot macrocore probe advanced to 10 feet.				
11					End of boring.				
12									
13									
14									
15									
16									
17									
18									
19									
20									
Notes:					Legend				
1. Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%)					s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular;				
2. Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8),					sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003".				
3. stiff (8-15), very stiff (15-30), hard (>30)					USCS must include: group symbol, color, group name, particle size range, soil type/consistency,				
4. Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30),					moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving,				
5. dense (30-50), very dense (50)					sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.				

ADS Environmental Engineering, LLC					SOIL BORING LOG			Boring No.:	B-7	
205 Woodland St., Sherborn, MA, 01770 (P: 781.727.6646)					Project Name: Caryl School			Page:	1 of 1	
					Project Location: 4 Springdale Avenue, Dover, MA			Project No.:	NA	
Drilling Company: New England Geotech					Soil Boring Location: UST Fuel Line			Checked By: dg		
Drilling Foreman: Hayes Rembijas					Ground Surface Elevation: NA			Datum: NA		
ADS Inspector(s): A. Stiller / D. Gorden					Date Started: 02/14/12			Date Completed: 2/14/12		
DRILLING METHOD					SAMPLER		GROUND WATER DEPTH			
VEHICLE: F550 XLT Super Duty					TYPE: 5-foot macrocore		DATE	DEPTH (feet)	REFERENCE	METHOD
MODEL: Geoprobe 6600					HAMMER: NA		February 14, 2012	NA	Ground	Soil
METHOD: Direct push					FALL: NA					
SAMPLE					SOIL SAMPLE DESCRIPTION			GRAPHIC LOG	PID (ppm)	NOTES
DEPTH (feet)	SAMPLE No.	Recovery (inches)	INTERVAL (feet)	BLOW COUNT						
1	S-1	NA	0-5		Soil material not collected or described - assumed fill material Tank removal backfill tested previously.				NA	
2					0-40" Brown fine to coarse SAND; single grain; little 1/2' subangular gravel; little probe-fractured gravel >2"; dry.					
3										
4										
5										
6	S-2	NA	5-10		No recovery. Sampler pushed a rock.				NA	
7										
8										
9										
10										
11	S-3	33	10-15		0-33" Tan very fine to medium SAND (horizontally banded); dry; slight aromatic odor in upper portion, none below.					
12										
13									0.3	
14										
15										
16					End of boring.					
17										
18										
19										
20										

Notes:		Legend	
1. Proportions: trace (<10%), little (10-20%), some (20-35%), and (35-50%)		s = sand; si = silt; cl = clay; l = loam; f = fine; m = medium; c = coarse; a = angular; sa = subangular;	
2. Blow Counts, Clay: very soft (<2), soft (2-4), medium stiff (4-8),		sr = subrounded; r = rounded; cobbles = >3"; gravel = 1/4 to 3"; sand = 0.003 to 1/4"; fines = <0.003".	
3. stiff (8-15), very stiff (15-30), hard (>30)		USCS must include: group symbol, color, group name, particle size range, soil type/consistency,	
4. Blow Counts, Sand: very loose (4), loose (4-10), medium dense (10-30),		moisture, structure, and origin. Additionally, discuss organics, root holes, mica, gypsum, caving,	
5. dense (30-50), very dense (50)		sloughing, loss of drilling water, contamination, etc. Descriptions based on split spoon observations.	

APPENDIX F

COPIES OF PUBLIC NOTIFICATION LETTERS

ADS ENVIRONMENTAL ENGINEERING, LLC

May 1, 2012
File No. 0146

Town of Dover
P.O. Box 250
Dover, MA 02030

Attention: Mr. David Ramsay, Town Administrator

RE: IRA Completion and RAO Submittal
Caryl Community Center
4 Springdale Avenue
Dover, MA
RTN 3-30003

Dear Mr. Ramsay:

The purpose of this letter is to notify the Town officials of the availability of an Immediate Response Action (IRA) Completion Report and Response Action Outcome (RAO) Submittal for the above referenced release site, filed at the Department of Environmental Protection (DEP) on behalf of the Town of Dover. This written notification is intended to satisfy the public notification requirements of the Massachusetts Contingency Plan (MCP) 310 CMR 40.1403(3)(f). Ms. Andrea Stiller of ADS Environmental Engineering, LLC (ADS) is the Licensed Site Professional of Record for this site.

The underground storage tank at the Caryl Community Center was removed, and assessment around the tank grave and along the underground fuel lines was conducted. Petroleum concentrations were well below risk based standards, and Site conditions were judged to not present a significant risk. Removal of a limited amount of petroleum affected soils (3 cubic yards) for recycling was conducted under the IRA Plan. Additional information relative to the site conditions are summarized in the RAO Report which can be reviewed at the Northeast Regional Office of the DEP by calling 978-694-3200, or by using DEP's online site viewer capabilities. The Northeast Regional Office of the DEP is located at 205B Lowell Street, in Wilmington, Massachusetts, 01887.

If you have any questions, please feel free to call us at (781) 727-6646.

Sincerely,

ADS ENVIRONMENTAL ENGINEERING, LLC



Andrea Dogon Stiller, LSP
Principal

cc: Ms. Greer Pugatch, Town of Dover

ADS ENVIRONMENTAL ENGINEERING, LLC

May 1, 2012
File No. 0146

Town of Dover
Board of Health
P.O. Box 250
Dover, MA 02030

Attention: Ms. Dianne Fielding, Manager

RE: IRA Completion and RAO Submittal
Caryl Community Center
4 Springdale Avenue
Dover, MA
RTN 3-30003

Dear Ms. Fielding:

The purpose of this letter is to notify the Board of Health officials of the availability of an Immediate Response Action (IRA) Completion Report and Response Action Outcome (RAO) Submittal for the above referenced release site, filed at the Department of Environmental Protection (DEP) on behalf of the Town of Dover. This written notification is intended to satisfy the public notification requirements of the Massachusetts Contingency Plan (MCP) 310 CMR 40.1403(3)(f). Ms. Andrea Stiller of ADS Environmental Engineering, LLC (ADS) is the Licensed Site Professional of Record for this site.

The underground storage tank at the Caryl Community Center was removed, and assessment around the tank grave and along the underground fuel lines was conducted. Petroleum concentrations were well below risk based standards, and Site conditions were judged to not present a significant risk. Removal of a limited amount of petroleum affected soils (3 cubic yards) for recycling was conducted under the IRA Plan. Additional information relative to the site conditions are summarized in the RAO Report which can be reviewed at the Northeast Regional Office of the DEP by calling 978-694-3200, or by using DEP's online site viewer capabilities. The Northeast Regional Office of the DEP is located at 205B Lowell Street, in Wilmington, Massachusetts, 01887.

If you have any questions, please feel free to call us at (781) 727-6646.

Sincerely,

ADS ENVIRONMENTAL ENGINEERING, LLC



Andrea Dogon Stiller, LSP
Principal

cc: Ms. Greer Pugatch, Town of Dover

APPENDIX G

COPIES OF BWSC FORMS 104 AND 105



RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number

-

For sites with multiple RTNs, enter the Primary RTN above.

A. SITE LOCATION:

1. Site Name/Location Aid: _____

2. Street Address: _____

3. City/Town: _____ 4. ZIP Code: _____

5. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.

- a. Tier IA
- b. Tier IB
- c. Tier IC
- d. Tier II

6. If a Tier I Permit has been issued, provide Permit Number: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of RAO Statement (if previously submitted): _____
mm/dd/yyyy

2. Submit a **Response Action Outcome (RAO) Statement**

a. Check here if this RAO Statement covers additional Release Tracking Numbers (RTNs). RTNs that have been previously linked to a Tier Classified Primary RTN do not need to be listed here.

b. Provide additional Release Tracking Number(s) covered by this RAO Statement. - -

3. Submit a **Revised Response Action Outcome Statement**

a. Check here if this Revised RAO Statement covers additional Release Tracking Numbers (RTNs), not listed on the RAO Statement or previously submitted Revised RAO Statements. RTNs that have been previously linked to a Tier Classified Primary RTN do not need to be listed here.

b. Provide additional Release Tracking Number(s) covered by this RAO Statement. - -

4. Submit a **Response Action Outcome Partial (RAO-P) Statement**

Check above box, if any Response Actions remain to be taken to address conditions associated with this disposal site having the Primary RTN listed in the header section of this transmittal form. This RAO Statement will record only an RAO-Partial Statement for that RTN. A final RAO Statement will need to be submitted that references all RAO-Partial Statements and, if applicable, covers any remaining conditions not covered by the RAO-Partial Statements.

Also, specify if you are an Eligible Person or Tenant pursuant to M.G.L. c. 21E s.2, and have no further obligation to conduct response actions on the remaining portion(s) of the disposal site:

- a. Eligible Person
- b. Eligible Tenant

5. Submit an optional **Phase I Completion Statement** supporting an RAO Statement

6. Submit a **Periodic Review Opinion evaluating the status of a Temporary Solution** for a Class C-1 RAO Statement, as specified in 310 CMR 40.1051 (Section F is optional)

7. Submit a **Retraction** of a previously submitted **Response Action Outcome Statement** (Sections E & F are not required)

(All sections of this transmittal form must be filled out unless otherwise noted above)



RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number

-

C. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply; for volumes, list cumulative amounts)

- 1. Assessment and/or Monitoring Only
- 2. Temporary Covers or Caps
- 3. Deployment of Absorbent or Containment Materials
- 4. Treatment of Water Supplies
- 5. Structure Venting System
- 6. Engineered Barrier
- 7. Product or NAPL Recovery
- 8. Fencing and Sign Posting
- 9. Groundwater Treatment Systems
- 10. Soil Vapor Extraction
- 11. Bioremediation
- 12. Air Sparging
- 13. Monitored Natural Attenuation
- 14. In-situ Chemical Oxidation

15. Removal of Contaminated Soils

a. Re-use, Recycling or Treatment i. On Site Estimated volume in cubic yards _____

ii. Off Site Estimated volume in cubic yards _____

ii.a. Facility Name: _____ Town: _____ State: _____

ii.b. Facility Name: _____ Town: _____ State: _____

iii. Describe: _____

b. Landfill

i. Cover Estimated volume in cubic yards _____

Facility Name: _____ Town: _____ State: _____

ii. Disposal Estimated volume in cubic yards _____

Facility Name: _____ Town: _____ State: _____

16. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Facility Name: _____ Town: _____ State: _____

c. Facility Name: _____ Town: _____ State: _____

17. Removal of Other Contaminated Media:

a. Specify Type and Volume: _____

b. Facility Name: _____ Town: _____ State: _____

c. Facility Name: _____ Town: _____ State: _____



RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number

-

C. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply; for volumes, list cumulative amounts)

18. Other Response Actions:

Describe: _____

19. Use of Innovative Technologies:

Describe: _____

D. SITE USE:

1. Are the response actions that are the subject of this submittal associated with the *redevelopment*, *reuse* or the *major expansion of the current use* of property(ies) impacted by the presence of oil and/or hazardous materials?

a. Yes b. No c. Don't know

2. Is the property a *vacant or under-utilized commercial or industrial* property ("a brownfield property")?

a. Yes b. No c. Don't know

3. Will funds from a state or federal brownfield incentive program be used on one or more of the property(ies) within the disposal site?

a. Yes b. No c. Don't know If Yes, identify program(s): _____

4. Has a Covenant Not to Sue been obtained or sought?

a. Yes b. No c. Don't know

5. Check all applicable categories that apply to the person making this submittal: a. Redevelopment Agency or Authority

b. Community Development Corporation c. Economic Development and Industrial Corporation

d. Private Developer e. Fiduciary f. Secured Lender g. Municipality

h. Potential Buyer (non-owner) i. Other, describe: _____

This data will be used by MassDEP for information purposes only, and does not represent or create any legal commitment, obligation or liability on the part of the party or person providing this data to MassDEP.

E. RESPONSE ACTION OUTCOME CLASS:

Specify the Class of Response Action Outcome that applies to the disposal site, or site of the Threat of Release.

Select **ONLY** one Class.

1. **Class A-1 RAO:** Specify one of the following:

a. Contamination has been reduced to background levels. b. A Threat of Release has been eliminated.

2. **Class A-2 RAO:** You **MUST** provide justification that reducing contamination to or approaching background levels is infeasible.

3. **Class A-3 RAO:** You **MUST** provide an implemented Activity and Use Limitation (AUL) and justification that reducing contamination to or approaching background levels is infeasible.

4. **Class A-4 RAO:** You **MUST** provide an implemented AUL, justification that reducing contamination to or approaching background levels is infeasible, and justification that reducing contamination to less than Upper Concentration Limits (UCLs) 15 feet below ground surface or below an Engineered Barrier is infeasible. If the Permanent Solution relies upon an Engineered Barrier, you must provide or have previously provided a Phase III Remedial Action Plan that justifies the selection of the Engineered Barrier.



RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number

-

E. RESPONSE ACTION OUTCOME CLASS (cont.):

5. Class B-1 RAO: Specify one of the following:

- a. Contamination is consistent with background levels
- b. Contamination is **NOT** consistent with background levels.

6. Class B-2 RAO: You **MUST** provide an implemented AUL.

7. Class B-3 RAO: You **MUST** provide an implemented AUL and justification that reducing contamination to less than Upper Concentration Limits (UCLs) 15 feet below ground surface is infeasible.

8. Class C-1 RAO: You must submit a plan as specified at 310 CMR 40.0861(2)(h). Indicate type of ongoing response actions.

- a. Active Remedial System
- b. Active Remedial Monitoring Program
- c. None
- d. Other Specify: _____

9. Class C-2 RAO: You must hold a valid Tier I Permit or Tier II Classification to continue response actions toward a Permanent Solution.

F. RESPONSE ACTION OUTCOME INFORMATION:

1. Specify the Risk Characterization Method(s) used to achieve the RAO described above:

- a. Method 1
- b. Method 2
- c. Method 3
- d. Method Not Applicable-Contamination reduced to or consistent with background, or Threat of Release abated

2. Specify all Soil Category(ies) applicable. More than one Soil Category may apply at a Site. Be sure to check off all **APPLICABLE** categories:

- a. S-1/GW-1
- b. S-1/GW-2
- c. S-1/GW-3
- d. S-2/GW-1
- e. S-2/GW-2
- f. S-2/GW-3
- g. S-3/GW-1
- h. S-3/GW-2
- i. S-3/GW-3

3. Specify all Groundwater Category(ies) impacted. A site may impact more than one Groundwater Category. Be sure to check off all **IMPACTED** categories:

- a. GW-1
- b. GW-2
- c. GW-3
- d. No Groundwater Impacted

4. Specify remediation conducted:

- a. Check here if soil remediation was conducted.
- b. Check here if groundwater remediation was conducted.

5. Specify whether the analytical data used to support the Response Action Outcome was generated pursuant to the Department's Compendium of Analytical Methods (CAM) and 310 CMR 40.1056:

- a. CAM used to support all analytical data.
- b. CAM used to support some of the analytical data.
- c. CAM not used.

6. Check here to certify that the Class A, B or C Response Action Outcome includes a Data Usability Assessment and Data Representativeness Evaluation pursuant to 310 CMR 40.1056.

7. Estimate the number of acres this RAO Statement applies to: _____



RESPONSE ACTION OUTCOME (RAO) STATEMENT

Release Tracking Number

-

Pursuant to 310 CMR 40.1000 (Subpart J)

G. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B indicates that either an **RAO Statement, Phase I Completion Statement and/or Periodic Review Opinion** is being provided, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: _____

2. First Name: _____ 3. Last Name: _____

4. Telephone: _____ 5. Ext.: _____ 6. FAX: _____

7. Signature: _____

8. Date: _____
mm/dd/yyyy

9. LSP Stamp:



H. PERSON MAKING SUBMITTAL:

1. Check all that apply: a. change in contact name b. change of address c. change in the person undertaking response actions

2. Name of Organization: _____

3. Contact First Name: _____ 4. Last Name: _____

5. Street: _____ 6. Title: _____

7. City/Town: _____ 8. State: _____ 9. ZIP Code: _____

10. Telephone: _____ 11. Ext.: _____ 12. FAX: _____



RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number

-

I. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON MAKING SUBMITTAL:

- 1. RP or PRP a. Owner b. Operator c. Generator d. Transporter
- e. Other RP or PRP Specify: _____
- 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- 4. Any Other Person Making Submittal Specify Relationship: _____

J. REQUIRED ATTACHMENT AND SUBMITTALS:

- 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of an RAO Statement that relies on the public way/rail right-of-way exemption from the requirements of an AUL.
- 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of a RAO Statement with instructions on how to obtain a full copy of the report.
- 4. Check here to certify that documentation is attached specifying the location of the Site, or the location and boundaries of the Disposal Site subject to this RAO Statement. If submitting an RAO Statement for a PORTION of a Disposal Site, you must document the location and boundaries for both the portion subject to this submittal and, to the extent defined, the entire Disposal Site.
- 5. Check here to certify that, pursuant to 310 CMR 40.1406, notice was provided to the owner(s) of each property within the disposal site boundaries, or notice was not required because the disposal site boundaries are limited to property owned by the party conducting response actions. (check all that apply)
 - a. Notice was provided prior to, or concurrent with the submittal of a Phase II Completion Statement to the Department.
 - b. Notice was provided prior to, or concurrent with the submittal of this RAO Statement to the Department.
 - c. Notice not required. d. Total number of property owners notified, if applicable: _____
- 6. Check here if required to submit one or more AULs. You must submit an AUL Transmittal Form (BWSC113) and a copy of each implemented AUL related to this RAO Statement. Specify the type of AUL(s) below: (required for Class A-3, A-4, B-2, B-3 RAO Statements)
 - a. Notice of Activity and Use Limitation b. Number of Notices submitted: _____
 - c. Grant of Environmental Restriction d. Number of Grants submitted: _____
- 7. If an RAO Compliance Fee is required for any of the RTNs listed on this transmittal form, check here to certify that an RAO Compliance Fee was submitted to DEP, P. O. Box 4062, Boston, MA 02211.
- 8. Check here if any non-updatable information provided on this form is incorrect, e.g. Site Address/Location Aid. Send corrections to the DEP Regional Office.
- 9. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



RESPONSE ACTION OUTCOME (RAO) STATEMENT

Pursuant to 310 CMR 40.1000 (Subpart J)

Release Tracking Number

-

K. CERTIFICATION OF PERSON MAKING SUBMITTAL:

1. I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ 3. Title: _____
Signature

4. For: _____ 5. Date: _____
(Name of person or entity recorded in Section H) mm/dd/yyyy

6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

-

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: _____
2. Street Address: _____
3. City/Town: _____ 4. ZIP Code: _____
5. UTM Coordinates: a. UTM N: _____ b. UTM E: _____
6. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
 a. Tier IA b. Tier IB c. Tier IC d. Tier II
7. Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114. Specify Program (check one):
 a. CERCLA b. HSWA Corrective Action c. Solid Waste Management
 d. RCRA State Program (21C Facilities)

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial IRA Written Plan (if previously submitted): _____
(mm/dd/yyyy)
2. Submit an **Initial IRA Plan**.
3. Submit a **Modified IRA Plan** of a previously submitted written IRA Plan.
4. Submit an **Imminent Hazard Evaluation**. (check one)
 a. An Imminent Hazard exists in connection with this Release or Threat of Release.
 b. An Imminent Hazard does not exist in connection with this Release or Threat of Release.
 c. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
 d. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.
5. Submit a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard**.
6. Submit an **IRA Status Report**.
7. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)
a. Type of Report: (check one) i. Initial Report ii. Interim Report iii. Final Report
b. Frequency of Submittal: (check all that apply)
 i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.
 ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.
 iii. A Remedial Monitoring Report(s) submitted concurrent with a IRA Status Report.
- c. Number of Remedial Systems and/or Monitoring Programs: _____

A separate BWSC105A, IRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

-

B. THIS FORM IS BEING USED TO (cont.): (check all that apply)

8. Submit an **IRA Completion Statement**.

a. Check here if future response actions addressing this Release or Threat of Release notification condition will be conducted as part of the Response Actions planned or ongoing at a Site that has already been Tier Classified under a different Release Tracking Number (RTN) . When linking RTNs, rescoring via the NRS is required if there is a reasonable likelihood that the addition of the new RTN(s) would change the classification of the site.

b. Provide Release Tracking Number of Tier Classified Site (Primary RTN): -

These additional response actions must occur according to the deadlines applicable to the Primary RTN. Use the Primary RTN when making all future submittals for the site unless specifically relating to this Immediate Response Action.

9. Submit a **Revised IRA Completion Statement**.

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

1. Identify Media Impacted and Receptors Affected: (check all that apply)

- a. Air b. Basement c. Critical Exposure Pathway d. Groundwater e. Residence
- f. Paved Surface g. Private Well h. Public Water Supply i. School j. Sediments
- k. Soil l. Storm Drain m. Surface Water n. Unknown o. Wetland p. Zone 2
- q. Others Specify: _____

2. Identify Oils and Hazardous Materials Released: (check all that apply)

- a. Oils b. Chlorinated Solvents c. Heavy Metals
- d. Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- 1. Assessment and/or Monitoring Only
- 2. Temporary Covers or Caps
- 3. Deployment of Absorbent or Containment Materials
- 4. Temporary Water Supplies
- 5. Structure Venting System
- 6. Temporary Evacuation or Relocation of Residents
- 7. Product or NAPL Recovery
- 8. Fencing and Sign Posting
- 9. Groundwater Treatment Systems
- 10. Soil Vapor Extraction
- 11. Bioremediation
- 12. Air Sparging



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

-

E. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that an **Immediate Response Action Plan** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Imminent Hazard Evaluation** is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and the assessment activity(ies) undertaken to support this Imminent Hazard Evaluation comply(ies) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

> if Section B of this form indicates that an **Immediate Response Action Status Report** and/or a **Remedial Monitoring Report** is(are) being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Immediate Response Action Completion Statement** or a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: _____

2. First Name: _____ 3. Last Name: _____

4. Telephone: _____ 5. Ext.: _____ 6. FAX: _____

7. Signature: _____

8. Date: _____

(mm/dd/yyyy)

9. LSP Stamp:



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

-

F. PERSON UNDERTAKING IRA:

1. Check all that apply: a. change in contact name b. change of address c. change in the person undertaking response actions
2. Name of Organization: _____
3. Contact First Name: _____ 4. Last Name: _____
5. Street: _____ 6. Title: _____
7. City/Town: _____ 8. State: _____ 9. ZIP Code: _____
10. Telephone: _____ 11. Ext.: _____ 12. FAX: _____

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA:

1. RP or PRP a. Owner b. Operator c. Generator d. Transporter
 e. Other RP or PRP Specify: _____
2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
4. Any Other Person Undertaking IRA Specify Relationship: _____

H. REQUIRED ATTACHMENT AND SUBMITTALS:

1. Check here if any Remediation Waste, generated as a result of this IRA, will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement. If this box is checked, you must submit one of the following plans, along with the appropriate transmittal form.
 a. A Release Abatement Measure (RAM) Plan (BWSC106) b. Phase IV Remedy Implementation Plan (BWSC108)
2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
3. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the implementation of an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.
4. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the submittal of a Completion Statement for an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.
5. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.
6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

-

I. CERTIFICATION OF PERSON UNDERTAKING IRA:

1. I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ 3. Title: _____
Signature

4. For: _____ 5. Date: _____
(Name of person or entity recorded in Section F) (mm/dd/yyyy)

6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)



TOWN OF DOVER

BOARD OF SELECTMEN

5 SPRINGDALE AVENUE

P.O. BOX 250

DOVER, MASSACHUSETTS 02030

David W. Ramsay
Town Administrator

TELEPHONE (508) 785-0032 EXT 221
FAX (508) 785-2341
www.doverma.org

August 15, 2011

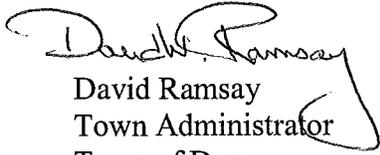
Andrea Stiller, LSP
ADS Environmental Engineering, LLC
205 Woodland Street
Sherborn, MA 01770

RE: Authority to Electronically Sign DEP Submittal Forms
4 Springdale Avenue
Dover, Massachusetts

Dear Ms. Stiller:

The Town of Dover, Massachusetts has requested that, as a Licensed Site Professional, you make the appropriate filings with the Department of Environmental Protection (DEP), including a Release Notification Form, Immediate Response Action (IRA) Plan, and subsequent documents. The Town of Dover, Massachusetts hereby authorizes you to electronically sign the DEP transmittal forms on our behalf.

Sincerely,


David Ramsay
Town Administrator
Town of Dover