



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

JUN 8 2011

Jon D'Allessandro, President
D'Allessandro Corporation
41 Ledin Drive
Avon, MA 02322

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Boston Water & Sewer Commission (BWSC) site located at 516 East
Second Street, between Dorchester Street and East Second Street in South Boston,
MA02127, Suffolk County; Authorization # MAG910485

Dear Mr. D'Allessandro:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Boston
Water & Sewer Commission (BWSC) by the firm Fay Spofford & Thorndike, for the site
referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes
you, as the named Operator, to discharge in accordance with the provisions of the RGP at
that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are
required to monitor. Also indicated on the checklist are the effluent limits, test methods
and minimum levels (MLs) for each pollutant. Please note that the checklist does not
represent the complete requirements of the RGP. Operators must comply with all of the
applicable requirements of this permit, including influent and effluent monitoring,
narrative water quality standards, record keeping, and reporting requirements, found in
Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete
RGP and other information at: <http://www.epa.gov/region1/npdes/mass.html#dgp>.

Please note that EPA included in the check list all the parameters conforming the activity
categories and sub-categories that you have selected (Category I- Petroleum Related Site
Remediation. Sub-category B. Fuel Oils and Other Oils Sites, and Category III-
Contaminated Construction Dewatering. Sub-category A. General Urban Fill sites and
Sub-category B. Known Contaminated Sites). The primary reason for including all the
parameters of the categories indicated above is to prevent the discharge of pollutants of
contaminated ground water encountered during the excavation of the stretch of land of
the BWSC sewer and work improvement.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. With the absence of dilution of freshwater into tidal water, EPA determined that the Dilution Factor Range (DFR) for each parameter for this site is in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for antimony of 5.6ug/L, arsenic of 36ug/L, cadmium of 8.9ug/l, trivalent chromium of 100ug/L, hexavalent, chromium of 50.3ug/L, copper of 3.7ug/L, lead of 8.5 ug/L, mercury of 1.1ug/l, nickel of 8.2ug/L, selenium of 71ug/L, silver of 2.2ug/L, zinc of 85.6ug/L and iron of 1,000ug/L, are required to achieve permit compliance at your site.

Finally, please note the checklist of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on July 31, 2013. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,



David M. Webster, Chief
Industrial Permits Branch

Enclosure

cc: Kathleen Keohane, MassDEP

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:		MAG910485
Authorization Issued:	June, 2011	
Facility/Site Name:	Boston Water & Sewer Commission	
Facility/Site Address:	516 East Second Street, between Dorchester Street and East Second Street in South Boston, MA 02127, Suffolk County	
	Email address of owner: Not Reported	
Legal Name of Operator:	D'Allessandro Corporation	
Operator contact name, title, and Address:	Jon D'Allessandro, President 41 Ledin Drive, Avon, MA 02322	
	Email: Not Reported	
Estimated Date of Completion:	7/31/2013	
Category and Sub-Category:	Category I. Petroleum Related Site Remediation. Sub-Category B. Fuel Oils and Other Oils Sites (including Residential and Non-Business Remediation Discharges). And Category III. Contaminated Construction Dewatering. Sub-Category A. General Urban Fill Sites and B. Known Contaminated Sites.	
Receiving Water:	Boston Reserved Channel	

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
✓	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing **, Me#60.2/ML5ug/L
✓	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
✓	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
✓	4. Cyanide (CN) ^{2, 3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
✓	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
✓	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
✓	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
✓	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
✓	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes	100 ug/L/ Me#8260C/ ML 2ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	(BTEX) ⁴	
✓	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
✓	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
✓	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
✓	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
✓	14. Naphthalene ⁵	20 ug/L /Me#8260C/ML 2ug/L
✓	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
✓	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
✓	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
✓	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
✓	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
✓	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
✓	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
✓	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
✓	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
✓	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
✓	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
✓	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
✓	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
✓	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
✓	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
✓	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
✓	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
✓	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
✓	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
✓	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
✓	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method# /ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
✓	a. Benzo(a) Anthracene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	b. Benzo(a) Pyrene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	e. Chrysene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
✓	h. Acenaphthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	i. Acenaphthylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	j. Anthracene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	l. Fluoranthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	m. Fluorene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	n. Naphthalene ⁵	20 ug/l / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	o. Phenanthrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	p. Pyrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ ML 0.1ug/L

	<u>Metal parameter</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l)</u> <small>11/12</small>	<u>Minimum level=ML</u>
		<u>Saltwater</u>	
✓	39. Antimony	5.6/ML 10	

	Metal parameter	Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) 11/12		Minimum level=ML
			Saltwater	
✓	40. Arsenic **		36/ML 20	
✓	41. Cadmium **		8.9/ML 10	
	42. Chromium III (trivalent) **		100/ML 15	
✓	43. Chromium VI (hexavalent) **		50.3/ML 10	
✓	44. Copper **		3.7/ML 15	
✓	45. Lead **		8.5/ML 20	
✓	46. Mercury **		1.1/ML 0.2	
✓	47. Nickel **		8.2/ML 20	
✓	48. Selenium **		71/ML 20	
	49. Silver		2.2/ML 10	
✓	50. Zinc **		85.6/ML 15	
✓	51. Iron	1,000		

	Other Parameters	Limit
✓	52. Instantaneous Flow	Site specific in CFS
✓	53. Total Flow	Site specific in CFS
	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab ¹³
✓	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab ¹³
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab ¹⁴
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab ¹⁴
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab ¹⁴
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab ¹⁴
	61. Maximum Change in Temperature in MA - Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab ¹⁴
	62. Maximum Change in Temperature in MA - Any Class SA water body - Coastal	1.5°F; 1/Month/Grab ¹⁴
	63. Maximum Change in Temperature in MA - Any Class SB water body - July to September	1.5°F; 1/Month/Grab ¹⁴
	64. Maximum Change in Temperature in MA -Any Class SB water body - October to June	4°F; 1/Month/Grab ¹⁴

Footnotes:

¹ Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

³ Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).

⁴ BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

⁵ Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

⁶ The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁷ Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

⁸ In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁹ Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).

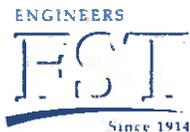
¹⁰ Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

¹¹ For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using $DF \times 1,000 \text{ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ug/L}$, etc. not to exceed the DF=5.

¹² Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).

¹³ pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

¹⁴ Temperature sampling per Method 170.1



**FAY, SPOFFORD &
THORNDIKE**
5 Burlington Woods Drive
Burlington, MA 01803
T: 781.221.1000
F: 781.229.1115
www.fstinc.com

March 28, 2011

Mr. Victor Alvarez
United States Environmental Protection Agency
1 Congress Street
Boston, MA 02114-2-23

Subject: NPDES Remediation General Permit Notice of Intent
Boston Water and Sewer Commission Contract 3B
Drainage, Water and Sewerage Works Improvements
078 & 079 CSO Area Reserved Channel, South Boston

Dear Mr. Alvarez:

Fay, Spofford & Thorndike (FST) is pleased to submit this Notice of Intent (NOI) for a Remediation General Permit on behalf of the Boston Water and Sewer Commission (BWSC). BWSC is implementing a program to minimize discharge of sewerage to the harbor through the existing CSOs. This is part of a larger project to improve the combined sewer over flow system for part of South Boston. The specific area for this permit is shown on the attached figure.

The primary contaminants of concern are petroleum constituents. Two "open" sites with free product observed are adjacent to the sewer separation project site. One open site, used as a Greyhound bus terminal/maintenance facility, is located at the intersection of East First Street and K Street. Light non-aqueous phase liquid (LNAPL) is currently being remediated on-site. A leaking underground storage tank (UST) has been associated with the contamination.

The second open site is located at the intersection of East First Street and Dorchester Street. Previous investigations found dense non-aqueous phase liquid (DNAPL) as coal tar in a monitoring well on site. Historical uses of the surrounding properties include a former manufactured gas plant (MGP). This has been associated to the DNAPL contamination as coal tar. The attached plan shows the locations of the sites with free product.

Where construction requires dewatering, the following approach is proposed:

All groundwater will be pumped to an 18,000-gallon fractionation tank and sampled for petroleum constituents. Subsequent sampling will occur daily for the first three days and weekly thereafter, or if a visual or olfactory indication of contamination is noted. Should sampling detect any contamination, the proposed treatment scheme would consist of:

The 18,000-gallon fractionation tank to collect any free product,

Mr. Victor Alvarez

- 2 -

April 29, 2009

Pumping from the tank at 50-90 gpm through two granular activated carbon (GAC) filters in series,

Discharge from the GAC to a second fractionation tank to allow testing prior too final discharge, and

Discharge to a storm drain leading to the Reserved Channel.

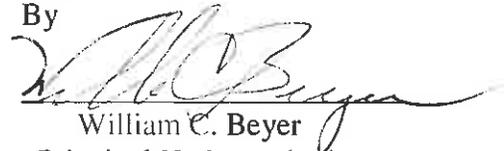
The contractor is D'Allessandro Corporation, at 41 Ledin Drive, Avon, MA 02322.

Attached are the RGP NOI, a location map, and a line drawing of the proposed treatment train.

Please contact at 781-221-1276 if you desire additional information.

Very truly yours,
Fay, Spofford & Thorndike, LLC

By



William C. Beyer
Principal Hydrogeologist

JB-233

WCB/web

Cc: JMT

S:\JB-233 - Reserved Channel\09-309-010-Cont 3B D'Allessandro\Permits\RGP\NOI cover letter.dot



BOSTON WATER AND SEWER COMMISSION

DRAINAGE, WATER, AND SEWERAGE WORKS IMPROVEMENTS

2010 CAPITAL IMPROVEMENT PROGRAM

CONTRACT NO. 09-309-010 (3B)

DEP CWSRF NO. 3320

MWRA CONTRACT NO. 6994D

FOR

INSTALLATION OF NEW

STORM DRAINS, SANITARY SEWERS

AND WATER MAINS

IN

078 & 079 CSO AREA

RESERVED CHANNEL

SOUTH BOSTON

ABANDONMENT OF

OUTFALL BOS 087

IN

DORCHESTER

EXECUTIVE DIRECTOR

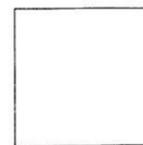
VINCENT G. MANNERING

CHIEF ENGINEER

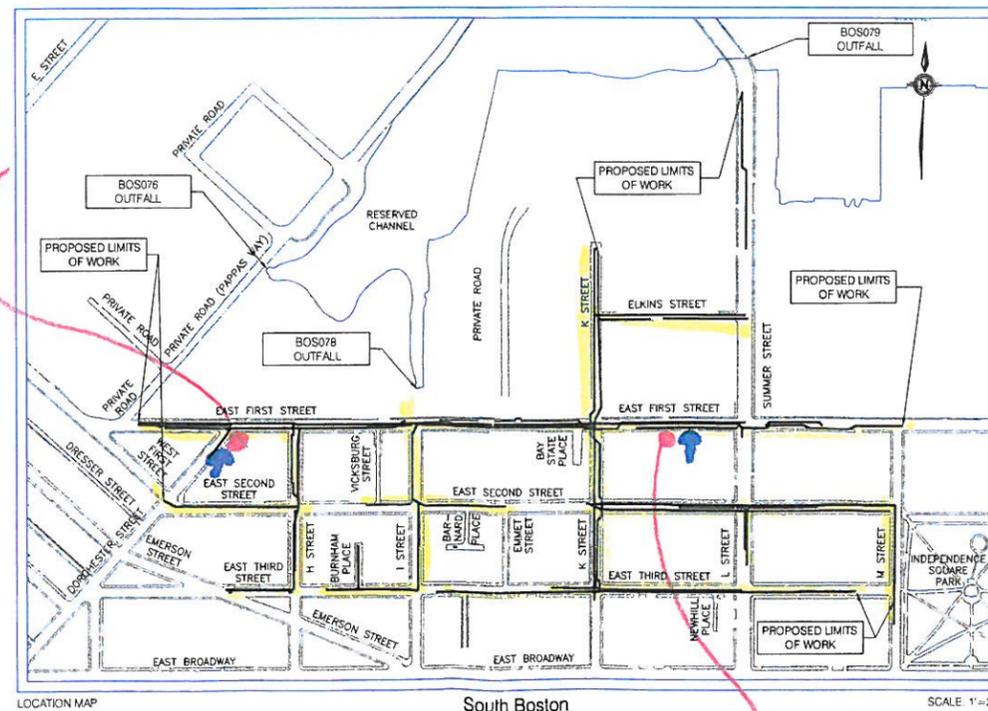
JOHN P. SULLIVAN, Jr., P.E.



One Grant Street
Framingham, MA 01701-9005
508.903.2000
www.tetratechrizzo.com



DNAPL as Coal Tar

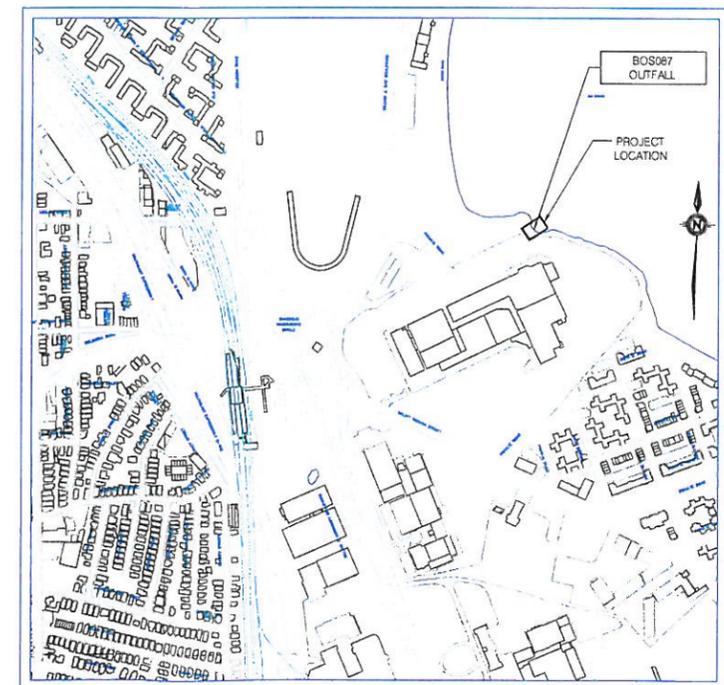


LOCATION MAP

South Boston

SCALE: 1"=250'

LNAPL Diesel



LOCATION MAP

Dorchester

SCALE: 1"=400'

South Boston



Reserved Channel Sewer Separation Project Boston Water and Sewer Commission



B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of facility/site: Reserved Channel		Facility/site mailing address:	
Location of facility/site: Longitude: -71° 2' 23.2794" Latitude: 42° 20' 16.8"		Street: (See Attached Figure)	
b) Name of facility/site owner:		Town: South Boston	County: Suffolk
Email address of facility/site owner: Boston Water and Sewer Commission		State: MA	Zip:
Telephone no. of facility/site owner: (617) 989-7000		Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/>	
Fax no. of facility/site owner:		3. Private <input type="radio"/> 4. Other <input checked="" type="radio"/> if so, describe: Water Commission	
Address of owner (if different from site):			
Street: 980 Harrison Street			
Town: Boston	State: MA	Zip: 02119	County: Suffolk
c) Legal name of operator: D'Alessandro Corporation			
Operator telephone no.: 508-559-6400		Operator email:	
Operator fax no.: 508-559-6432		Operator name and title: Jon D'Alessandro, President	
Address of operator (if different from owner):			
Street: 41 Ledin Drive		Town: Avon	
State: MA		Zip: 02322	County: Suffolk

d) Check Y for "yes" or N for "no" for the following:

1. Has a prior NPDES permit exclusion been granted for the discharge? Y N , if Y, number:

2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y N , if Y, date and tracking #:

3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y N

4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y N

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y N

If Y, please list:

1. site identification # assigned by the state of NH or MA:

2. permit or license # assigned:

3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:

1. Multi-Sector General Permit? Y N , if Y, number:

2. Final Dewatering General Permit? Y N , if Y, number:

3. EPA Construction General Permit? Y N , if Y, number:

4. Individual NPDES permit? Y N , if Y, number:

5. any other water quality related individual or general permit? Y N , if Y, number:

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y N

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

Activity Category	Activity Sub-Category
I - Petroleum Related Site Remediation	A. Gasoline Only Sites <input type="checkbox"/> B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input checked="" type="checkbox"/> C. Petroleum Sites with Additional Contamination <input type="checkbox"/>
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/> B. VOC Sites with Additional Contamination <input type="checkbox"/> C. Primarily Heavy Metal Sites <input type="checkbox"/>
III - Contaminated Construction Dewatering	A. General Urban Fill Sites <input checked="" type="checkbox"/> B. Known Contaminated Sites <input checked="" type="checkbox"/>

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites <input type="checkbox"/> B. Well Development/Rehabilitation at Contaminated/Formely Contaminated Sites <input type="checkbox"/> C. Hydrostatic Testing of Pipelines and Tanks <input type="checkbox"/> D. Long-Term Remediation of Contaminated Sumps and Dikes <input type="checkbox"/> E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) <input type="checkbox"/>
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2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Dewatering for construction of piping for sewer and stormwater.

b) Provide the following information about each discharge:

1) Number of discharge points:	1	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)?			
		Max. flow	0.2	Is maximum flow a design value? Y <input type="checkbox"/> N <input type="checkbox"/>	estimate
		Average flow (include units)	0.15	Is average flow a design value or estimate?	
3) Latitude and longitude of each discharge within 100 feet:					
pt. 1: lat	42° 20' 18.9594"	long	-71° 2' 24"	pt. 2: lat	long
pt. 3: lat		long		pt. 4: lat	long
pt. 5: lat		long		pt. 6: lat	long
pt. 7: lat		long		pt. 8: lat	long
4) If hydrostatic testing, total volume of the discharge (gals):					
5) Is the discharge intermittent <input type="checkbox"/> or seasonal <input type="checkbox"/> ? Is discharge ongoing? Y <input type="checkbox"/> N <input type="checkbox"/>					
c) Expected dates of discharge (mm/dd/yy): start <input type="text"/> end 7/31/2013					
d) Please attach a line drawing or flow schematic showing water flow through the facility including:					
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s)					

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g. grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0012	1	G	SW8270C	0.103	5000	0.6	10
2. Total Residual Chlorine (TRC)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8082	0.674	ND		10	0.012
3. Total Petroleum Hydrocarbons (TPH)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0012	1	G	SW8270C	0.103	1000	0.12	10
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0012	1	G	SW8270C	1.03	1000	0.12	10
5. Benzene (B)	71432	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0012	1	G	SW8270C	1.03	1000	0.12	10
6. Toluene (T)	108883	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0012	1	G	SW8270C	1.03	1000	0.12	10
7. Ethylbenzene (E)	100414	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0012	1	G	SW8270C	1.03	1000	0.12	10
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0012	1	G	SW8270C	1.03	1000	0.12	10
9. Total BTEX ²	n/a	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0012	1	G	SW8270C	1.03	1000	0.12	10
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.0012	1	G	SW8270C	1.03	1000	0.12	10
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1		SW8270C	0.103	1000	0.12	10	0.0012
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	1	G	E200.9	1	ND		0.0012

* Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

² BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
13. tert-Amyl Methyl Ether (TAME)	9940508	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0014	1	G	E200.9	1	20	0.0024	11.8
14. Naphthalene	91203	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1	G	SW6010B	4	ND	10	0.0012
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	1	G	SW6010B	15	ND	10	0.0012
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.6	1	G	SW6010B	10	60	7.2	30
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	1	G	E245.1	0.5	ND		
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>			1	G	SW6010B	100	ND	
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1	G	SW6010B	50	ND	
19. 1,1 Dichloroethane (DCA)	75343	<input type="checkbox"/>	<input type="checkbox"/>	1	1	G	E200.7	7	ND		
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1	G	SW6010B	180	ND	
21. 1,1 Dichloroethene (DCE)	75354	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7280	0.87	1	G	SW6010B	60	15000	
22. cis-1,2 Dichloroethene (DCE)	156592	<input type="checkbox"/>	<input type="checkbox"/>								2
23. Methylene Chloride	75092	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	1	G	E200.7	60	ND		
24. Tetrachloroethene (PCE)	127184	<input type="checkbox"/>	<input type="checkbox"/>	1			G	SW3500	ND		50
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input type="checkbox"/>	<input type="checkbox"/>								
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input type="checkbox"/>	<input type="checkbox"/>								
27. Trichloroethene (TCE)	79016	<input type="checkbox"/>	<input type="checkbox"/>								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
28. Vinyl Chloride (Chloroethene)	75014	<input type="checkbox"/>	<input type="checkbox"/>								
29. Acetone	67641	<input type="checkbox"/>	<input type="checkbox"/>								
30. 1,4 Dioxane	123911	<input type="checkbox"/>	<input type="checkbox"/>								
31. Total Phenols	108952	<input type="checkbox"/>	<input type="checkbox"/>								
32. Pentachlorophenol (PCP)	87865	<input type="checkbox"/>	<input type="checkbox"/>								
33. Total Phthalates (Phthalate esters) ⁴		<input type="checkbox"/>	<input type="checkbox"/>								
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input type="checkbox"/>	<input type="checkbox"/>								
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input type="checkbox"/>								
a. Benzo(a) Anthracene	56553	<input type="checkbox"/>	<input type="checkbox"/>								
b. Benzo(a) Pyrene	50328	<input type="checkbox"/>	<input type="checkbox"/>								
c. Benzo(b)Fluoranthene	205992	<input type="checkbox"/>	<input type="checkbox"/>								
d. Benzo(k)Fluoranthene	207089	<input type="checkbox"/>	<input type="checkbox"/>								
e. Chrysene	21801	<input type="checkbox"/>	<input type="checkbox"/>								
f. Dibenzo(a,h)anthracene	53703	<input type="checkbox"/>	<input type="checkbox"/>								
g. Indeno(1,2,3-cd) Pyrene	193395	<input type="checkbox"/>	<input type="checkbox"/>								
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input type="checkbox"/>								

⁴ The sum of individual phthalate compounds.

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
h. Acenaphthene	83329	<input type="checkbox"/>	<input type="checkbox"/>								
i. Acenaphthylene	208968	<input type="checkbox"/>	<input type="checkbox"/>								
j. Anthracene	120127	<input type="checkbox"/>	<input type="checkbox"/>								
k. Benzo(ghi) Perylene	191242	<input type="checkbox"/>	<input type="checkbox"/>								
l. Fluoranthene	206440	<input type="checkbox"/>	<input type="checkbox"/>								
m. Fluorene	86737	<input type="checkbox"/>	<input type="checkbox"/>								
n. Naphthalene	91203	<input type="checkbox"/>	<input type="checkbox"/>								
o. Phenanthrene	85018	<input type="checkbox"/>	<input type="checkbox"/>								
p. Pyrene	129000	<input type="checkbox"/>	<input type="checkbox"/>								
	85687;										
	84742;										
	117840;	<input type="checkbox"/>	<input type="checkbox"/>								
	84662;										
37. Total Polychlorinated Biphenyls (PCBs)	131113;										
	117817.										
38. Chloride	16887006	<input type="checkbox"/>	<input type="checkbox"/>								
39. Antimony	7440360	<input type="checkbox"/>	<input type="checkbox"/>								
40. Arsenic	7440382	<input type="checkbox"/>	<input type="checkbox"/>								
41. Cadmium	7440439	<input type="checkbox"/>	<input type="checkbox"/>								
42. Chromium III (trivalent)	16065831	<input type="checkbox"/>	<input type="checkbox"/>								
43. Chromium VI (hexavalent)	18540299	<input type="checkbox"/>	<input type="checkbox"/>								
44. Copper	7440508	<input type="checkbox"/>	<input type="checkbox"/>								
45. Lead	7439921	<input type="checkbox"/>	<input type="checkbox"/>								
46. Mercury	7439976	<input type="checkbox"/>	<input type="checkbox"/>								
47. Nickel	7440020	<input type="checkbox"/>	<input type="checkbox"/>								
48. Selenium	7782492	<input type="checkbox"/>	<input type="checkbox"/>								
49. Silver	7440224	<input type="checkbox"/>	<input type="checkbox"/>								
50. Zinc	7440666	<input type="checkbox"/>	<input type="checkbox"/>								
51. Iron	7439896	<input type="checkbox"/>	<input type="checkbox"/>								
Other (describe):		<input type="checkbox"/>	<input type="checkbox"/>								

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method		Maximum daily value		Average daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)		
		<input type="checkbox"/>	<input type="checkbox"/>									
		<input type="checkbox"/>	<input type="checkbox"/>									

b) For discharges where metals are believed present, please fill out the following (attach results of any calculations):

<p><i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y <input type="radio"/> N <input type="radio"/></p> <p><i>Step 2:</i> For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals?</p> <p>Metal: _____ DF _____</p> <p>Metal: _____ DF _____</p> <p>Metal: _____ DF _____</p> <p>Metal: _____ DF _____</p> <p>Etc. _____</p>	<p>If yes, which metals?</p> <p>Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?</p> <p>Y <input type="radio"/> N <input type="radio"/> If Y, list which metals:</p>
---	---

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

See Attached Figure

b) Identify each applicable treatment unit (check all that apply):

Frac. tank <input checked="" type="checkbox"/>	Air stripper <input type="checkbox"/>	Oil/water separator <input type="checkbox"/>	Equalization tanks <input type="checkbox"/>	Bag filter <input checked="" type="checkbox"/>	GAC filter <input checked="" type="checkbox"/>
Chlorination <input type="checkbox"/>	De-chlorination <input type="checkbox"/>	Other (please describe):			

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate(s)** (gallons per minute) of the treatment system:

Average flow rate of discharge gpm Maximum flow rate of treatment system gpm
 Design flow rate of treatment system gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water <input type="checkbox"/>	Within facility (sewer) <input type="checkbox"/>	Storm drain <input checked="" type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe): <input type="text"/>
------------------------------------	--	--	---	-----------------------------------	--

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
 Storm drain to Reserved Channel in Boston Harbor

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:

- For multiple discharges, number the discharges sequentially.
- For indirect discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface water. The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water cfs
 Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y N If yes, for which pollutant(s)?

Is there a final TMDL? Y N If yes, for which pollutant(s)?

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?

A B C D E F

b) If you selected Criterion D or F, has consultation with the federal services been completed? Y N Underway

c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y N

d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.

e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?

1 2 3

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

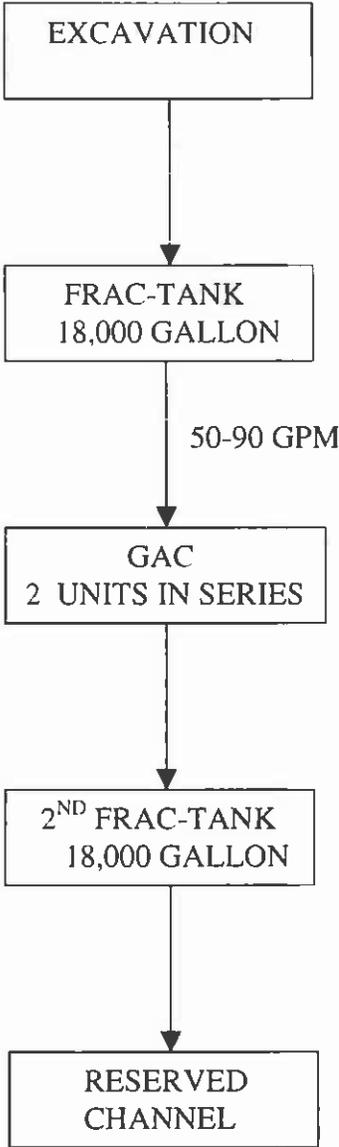
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	
Operator signature:	
Printed Name & Title:	C. FRED HASTINGS FIELD ENG
Date:	

Proposed Treatment for Construction Dewatering
Drainage, Water and Sewerage Improvements
Reserved Channel, South Boston



Relevant Reports

1.0 INTRODUCTION

On behalf of FirstGroup America, Inc. (FGA), ATC Associates Inc. (ATC) has completed this Remedy Operation Status (ROS) Monitoring Report to present operational and monitoring data for the remedial action alternative implemented at the former Greyhound bus terminal/maintenance facility located at 571 East First Street, in Boston, Massachusetts (the "Site"). This status report has been prepared in accordance with the Massachusetts Contingency Plan (MCP) 310 CMR 40.0893(2), for the monitoring period March through August 2010. Bureau of Waste Site Cleanup (BWSC) Transmittal Form 108 was submitted concurrently with this report to the Massachusetts Department of Environmental Protection (DEP) through eDEP. A copy of the form, including the Remedial Monitoring Report (RMR), is included in Appendix A.

2.0 SITE DESCRIPTION AND SURROUNDING RECEPTORS

The Site is an active, 24-hour per day bus terminal/maintenance facility located at 571 East First Street in South Boston, Massachusetts. The Universal Transverse Mercator (UTM) and latitude and longitude coordinates for the Site, Boston South Massachusetts (1987), USGS, 7.5 x 15 minute series, Topographic Quadrangle Map (Figure 1) are as follows:

UTM Coordinates	Latitude and Longitude Coordinates
N 4,691,109	N 42° 20' 15"
E 332,240	W 71° 02' 13"

Current Site activities include bus maintenance, fueling, washing and sanitary pump-outs. The property covers approximately 1.7 acres (including approximately one acre of building area) and is located in an area of residential, commercial, and industrial usage. The property is bordered by industrial and commercially zoned land and more specifically is bordered on the north and south by East First and East Second Streets, respectively. A vacant lot is located east of the property and private residences and a small deli are located to the west and southwest.

The Site is comprised of a maintenance building, including office space, exterior parking, and a 12,000-gallon diesel underground storage tank (UST) located in the exterior parking area, to the east of the building. Figure 2, Site Information Map, illustrates the location of pertinent on-Site features.

There are no institutions or natural resource areas, as defined in 310 CMR 40.0006, within a 500-foot radius of the Site. Boston obtains all public water from the Massachusetts Water Resource Authority (MWRA) reservoirs located outside of the immediate area. There are no known public or private wells within a ¼ - mile of the Site.

No Areas of Critical Environmental Concern (ACEC); local, state and/or federally protected open space; or threatened or endangered species have been identified within 500 feet of the Site.

3.0 REGULATORY STATUS

Between February 1991 and December 1993, a series of subsurface investigations were conducted to determine the extent of contamination associated with the past operation of USTs and associated fuel piping

and dispensing system. A total of 16 soil samples and two groundwater samples were collected during this time period. These samples were collected under and around three USTs closed in place and one removed UST, all under the existing maintenance building. The samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons (TPH), and metals. Groundwater samples were also collected from two temporary monitoring wells installed in 1993. One was near the closed-in-place USTs (DW-2) and the other was upgradient (VW-1). TPH concentrations in the vicinity of the motor oil lines and the USTs closed in place ranged from 18 milligrams per liter (mg/l) to 21,000 mg/l. TPH was detected in groundwater at the downgradient temporary well at a concentration of 230 mg/l.

The DEP issued a Notice of Responsibility (NOR) to Greyhound in April 1993. As requested by the DEP, Greyhound subsequently issued a Release Categorization Response as part of a December 1993 Underground Storage Tank Closure Report. In April 1994, Greyhound was notified that the Site was to be listed as a Location-To-Be-Investigated (LTBI) under the transition requirements of the Massachusetts Contingency Plan (MCP). Release Tracking Number (RTN) 3-4431 was assigned to the Site.

In March 1995, a Phase I Initial Site Investigation Report and Tier Classification were submitted. Based upon the results of the Numerical Ranking Scoresheet completed as part of the Tier Classification, the Site was classified as a Tier II disposal site.

In October 1997, a Phase II Comprehensive Site Assessment (CSA) Report was submitted. The conclusion of the Phase II CSA was that additional Comprehensive Response Actions (CRA) were required at the Site. In addition, light non-aqueous phase liquid (LNAPL) was observed in monitoring well MW-7 greater than 2-inches in thickness. As a result of the detection of LNAPL greater than a half-inch, the DEP was notified of the reporting condition during the Phase II CSA field investigation and subsequently issued RTN 3-15431. Additionally, the DEP verbally approved the Immediate Response Action (IRA), which called for the recovery of the LNAPL via passive oil recovery skimmers in monitoring wells MW-1 and MW-7.

Reportedly, in September 1997, an IRA Completion Statement was filed with DEP indicating that all future response actions would be addressed under RTN 3-4431, the original RTN listed for the Site.

In February 2000, Parsons Engineering Science, Inc., (Parsons) of Liverpool, New York prepared and submitted a combined Phase III – Remedial Action Plan (RAP) and Phase IV – Remedy Implementation Plan (RIP). In the RAP portion of the report, the evaluation determined that Enhanced Fluid Recovery (EFR) was the most feasible remedial option and was selected based upon considerations outlined in 310 CMR 40.0850. In addition, it was reported that natural attenuation would be relied upon to assist in the remediation of the petroleum hydrocarbons at the Site. The RIP outlined the procedures, performance requirements, and management of waste materials generated.

In December 2000, the DEP issued a NOR based on a November 6, 2000, verbal notification of a surface spill at the Site. The Site was issued RTN 3-20094 for this release. A Class A-1 RAO Statement was submitted to the DEP for this release in February 2001. No further work regarding this RTN was necessary.

On March 15, 2004, a Tier II Extension Request was submitted to the DEP.

On March 30, 2005, a Phase IV Final Inspection Report and a Completion Statement were submitted to the DEP. The March 2005 Phase IV Final Inspection Report and Completion Statement outlined the implementation of CRA completed in accordance with the February 2000 Phase III – RAP and Phase IV –

0.66-gallon of LNAPL was bailed and/or passively recovered from absorbent socks in MW-7. The well gauging data collected on July 9, 2010, was used to construct the groundwater elevation contours presented in Figure 2. The groundwater flow was observed to be to the north and is consistent with historical data.

Manually recovered LNAPL/water mixture has been stored on Site in a secured, 55-gallon drum. Additionally, hydrocarbon absorbent 'socks' have been deployed in the wells and are checked at each visit. During product removal activities, the amount of LNAPL recovered from each absorbent sock is measured by subtracting the initial dry sock weight from the weight of the spent absorbent sock. The difference in weight reflects the weight of LNAPL absorbed which is converted to gallons based on a density of 0.805 grams per milliliter (g/ml) (or 3.04 kilograms per gallon). The used absorbent socks were transferred to a 55-gallon drum on-Site. At the completion of each LNAPL recovery activity, if a new hydrocarbon absorbent sock is needed, it was deployed in the wells. Prior to sampling events, the absorbent socks are removed from MW-6 and MW-7.

7.2 Groundwater Sampling

On June 9, and August 27, 2010, groundwater samples were collected from selected Site monitoring wells. A minimum of three well volumes of groundwater was purged from each well prior to sampling. Groundwater samples were collected with dedicated disposable polyethylene bailers and placed in pre-cleaned laboratory containers, preserved with hydrochloric acid, sealed, and placed on ice. Groundwater samples were submitted for EPH analyses in accordance with DEP methodology to Southern Petroleum Laboratories, Inc. (SPL) in Scott, Louisiana.

Current and historical groundwater EPH analytical results are summarized in Table 2. Copies of the laboratory analytical reports for the groundwater samples collected during this monitoring period are provided in Appendix B. In June and August 2010, none of the analytes were detected above the MCP Method 1 GW-2/3 standards.

7.3 Monitored Natural Attenuation

The current state of the natural attenuation processes is discussed here in accordance with the American Society for Testing and Materials (ASTM) document E 1943-98(04). Monitored natural attenuation groundwater data was collected from select monitoring wells on June 9, 2010, and is summarized in Table 3. As is observed with the EPH data in Table 2, concentrations of petroleum hydrocarbons in the impacted areas are exhibiting relatively stable trends with some seasonal variation. It is hypothesized that biodegradation is occurring as evidenced by the periods of decreasing or stable concentrations.

In order for groundwater to be exhibiting a stable or declining plume, remediation through natural attenuation is evident, as the rate of natural attenuation is equal to or exceeds the rate at which any additional mass is added to the system from any potential remaining source. This is considered the primary line of evidence that natural attenuation is occurring.

The secondary line of evidence includes the use of biodegradation indicators to draw conclusions about the natural attenuation processes at work. In the subsurface, bacteria use petroleum contaminants as a carbon source to grow and sustain. In order for this degradation to occur the microorganisms use oxidative-reduction reactions to produce the energy needed for the degradation and for their own survival. The reaction processes

RIP. These remedial response actions included monthly gauging of Site monitoring wells for the presence of LNAPL, quarterly groundwater gauging and sampling of Site monitoring wells MW-1 through MW-7 for volatile petroleum hydrocarbon (VPH) and extractable petroleum hydrocarbon (EPH) analyses, and the removal of LNAPL (when detected during gauging events) through manual bailing and/or passive recovery. Additionally, the RIP provided for the use of EFR to remove LNAPL and contaminated groundwater, and was to be used for a period of 6-8 hours per Site visit.

On March 30, 2005, a Remedy Operation Status Submittal was filed with DEP. ROS Status Reports were also filed with DEP in October 2005, March and September 2006, April and October 2007, March and September 2008, March and October 2009, and March 2010.

4.0 STATUS OF OPERATIONS

Remedial activities for the Site include groundwater gauging for the presence of LNAPL, sampling of Site monitoring wells for EPH; and when detected, the removal of LNAPL through manual bailing and/or passive recovery. These activities are currently ongoing. EFR is no longer performed as it was determined to be cost-ineffective.

5.0 INSPECTION AND/OR MONITORING ACTIVITIES CONDUCTED

During the period of March through August 2010, Site activities included the following:

- Groundwater sampling of monitoring wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8 for EPH in June and August 2010.
- Groundwater sampling of monitoring wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8 for natural attenuation parameters in June 2010.
- Monthly gauging of monitoring wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8 to determine depth to water and thickness of LNAPL and to perform LNAPL recovery, as needed.

6.0 SIGNIFICANT MODIFICATIONS TO THE MONITORING PROGRAM

No significant modifications to the monitoring program were made during this monitoring period.

7.0 MONITORING ACTIVITIES RESULTS

7.1 Groundwater Gauging and Product Bailing

Select monitoring wells are gauged on a routine basis (monthly) to determine depth to water and the thickness of LNAPL, if present. Recent groundwater gauging data are presented in Table 1. Absorbent 'socks' were used in MW-7 during the entire monitoring period. An absorbent sock was deployed in MW-6 at the end of the monitoring period (August 27, 2010) when the detected thickness of LNAPL increased to 0.02 foot. No absorbents had been present in MW-6 since removal on January 27, 2010, due to lack of recovery. Measurable LNAPL was only detected in MW-6 on one occasion during the monitoring period consisting of six monitoring events. During this monitoring period approximately

require an electron acceptor and the most efficient of potential electron acceptors, and thus the one which is preferred, is oxygen. Other electron acceptors can also be used but are not as efficient as oxygen. In order of descending efficiency they are: nitrate, manganese, ferric iron, sulfate, and carbon dioxide. To determine which of the processes, if any, are at work in the system, the parameters described above, are used. Dissolved oxygen is measured in the field, whereas nitrate, manganese, ferrous iron, sulfate, and methane data are obtained through laboratory analysis.

Using MW-4 as the upgradient well and comparing the data from the impacted wells, MW-6 and MW-7, the following observations are noted.

- Dissolved Oxygen (DO) is lowest in the impacted wells at a concentrations ranging from 1.37 to 1.51 milligrams per liter (mg/l) versus the upgradient wells which ranged from 1.91 (MW-4) to 2.30 mg/l (MW-3), which is evidence that aerobic degradation is occurring, although not all of the oxygen is being consumed.
- Nitrate concentrations are low to non-detect in the impacted area, indicating nitrate reduction is occurring.
- Ferrous iron (Fe^{+2}) concentrations are higher in the impacted area indicating the use of ferric iron (Fe^{+3}) as an electron acceptor.
- Dissolved manganese (Mn^{+2}) concentrations are also higher in the impacted area, indicating that manganese (Mn^{+4}) is being used as an electron acceptor.
- Sulfate concentrations are low to non-detect in the impacted area as compared to concentrations of 30.5 to 62.2 mg/l in the non-impacted wells, indicating sulfate reduction.
- Methane is observed in the samples collected from MW-6 and MW-7 at concentrations that are two orders of magnitude higher than all other samples collected, indicating that methanogenesis, the least favorable reaction in terms of energy production, is occurring in the impacted area.

In summary, the data indicate that both aerobic and anaerobic respiration is occurring at the site from the highest to the lowest energy production levels, with the exception of manganese, but is clearly biased towards a reducing environment, given the laboratory results and the ORP measurements indicated on Table 3.

8.0 FUTURE SITE ACTIVITIES

Continued operation, maintenance and/or monitoring of the selected remedial alternative for the Site are required to achieve a permanent solution and submit a RAO Statement. ATC has reviewed other remedial alternatives to determine if there is another method to more expediently achieve a permanent solution. A Phase III Remedial Action Plan Addendum and a Phase IV Remedy Implementation Plan Addendum are both pending at this time and are expected to be submitted soon. Under ROS, ATC will continue to conduct remedial activities and monitor groundwater quality at the Site. ROS monitoring reports will be submitted to the DEP every six months in accordance with 310 CMR 40.0893 (2). Activities planned for the next monitoring period include the following:

1. Continued quarterly groundwater sample collection in November 2010 and February 2011;
2. Continued monthly gauging of Site monitoring wells and performing manual LNAPL recovery via bailing, and deployment of absorbent socks in monitoring wells when LNAPL is detected; and
3. Submittal of the next ROS Status Report by March 30, 2011, and continuing semi-annually until such time as a permanent solution is achieved.

9.0 PUBLIC INVOLVEMENT

Public involvement activities relevant to the completion of ROS activities are being conducted in accordance with 310 CMR 40.1403. Specifically, the Mayor and Principal Health Inspector were notified of the ROS Status Report. Refer to Appendix C for copies of public involvement notices.

LEGEND

◆ MONITORING WELL LOCATION
 EX. MW-1: WELL IDENTIFICATION
 92.29: WATER TABLE ELEVATION IN FEET (07/09/10)
 NM: NOT MEASURED

● TEMPORARY/DISTROYED
 MONITORING WELL IDENTIFICATION
 EX. MW-1: WELL IDENTIFICATION
 92.29: WATER TABLE ELEVATION
 NM: NOT MEASURED

○ OIL/WATER SEPARATOR LOCATION

□ VAULT LOCATION

— PIPE LOCATION

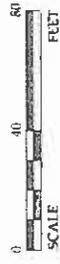
92.50 — WATER TABLE ELEVATION
 (CONTINUES IN SHEET)

--- G --- GAS

--- W --- WATER LINE LOCATION

--- E/T --- ELECTRIC UTILITIES

NOTES
 UTILITY LOCATIONS ARE APPROXIMATE

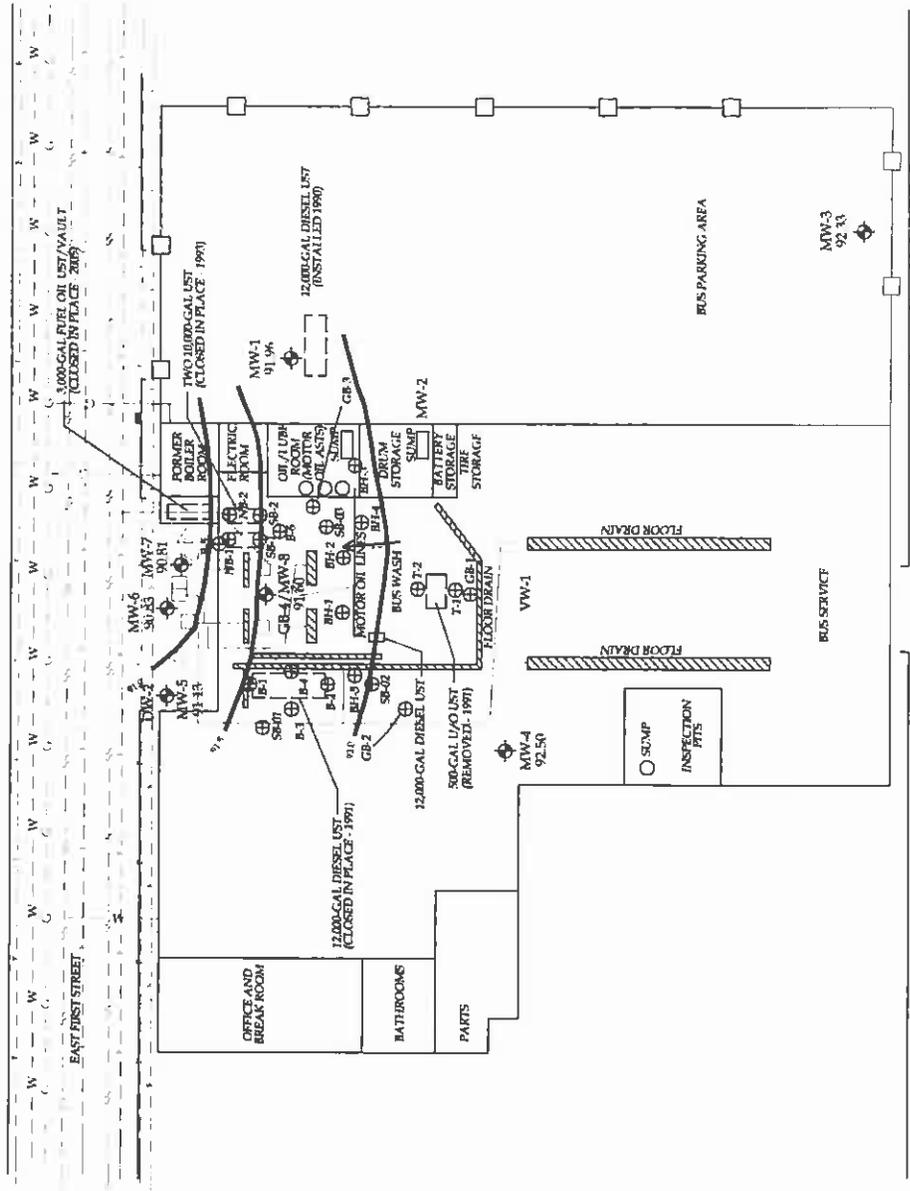


150 Zebra Road, Unit 1
 Mattapa, MA 01907
 Tel: 603.647.7077 Fax: 603.647.7134

SCALE: DRAWING DATE: 07/28/10 ACAD FILE: GREYHOUND SITE D-10

SITE INFORMATION MAP

CLIENT	GREYHOUND LINES, INC.	PM	AMG
LOCATION	GREYHOUND BUS TERMINAL 571 EAST FIRST STREET BOSTON, MASSACHUSETTS 02127	PE	
DESIGNED	PROJECT NO. DC 74.75433.0011	FIGURE	2



EAST SECOND STREET



184 High Street
Suite 502
Boston, MA 02110
Telephone 617-728-0070
Facsimile 617-728-0080

December 17, 2010

Massachusetts Department of Environmental Protection
Northeast Regional Office
205B Lowell Street
Wilmington, Massachusetts 01887

**Re: Tier II Extension Submittal
516 East Second Street
South Boston, Massachusetts
RTN 3 - 24537**

Dear Sir/Madam:

On behalf of Second Street Associates, LLC, Apex Companies, LLC (Apex) is pleased to submit this Tier II Extension Submittal for the property located at 516 East Second Street in South Boston, Massachusetts (the "Site"). This Tier II Extension Submittal was prepared in accordance with the Massachusetts Contingency Plan 310 CMR 40.0000 (MCP) and specifically Section 40.0560(7) of the MCP. The Department of Environmental Protection (DEP) Bureau of Waste Site Cleanup (BWSC) Transmittal Forms BWSC-107A and 107B have been submitted electronically using eDEP. Certification as required by 310 CMR 40.0009 is attached.

A Tier II Extension was previously submitted to the Department in November of 2009.

Site Background & Release History

The Site is located at the intersection of Dorchester Street and East First Street in South Boston. Portions of the site are located within a former shipping channel. According to historical information reviewed by Apex, the channel was filled by the City of Boston in 1914. Historical uses of the surrounding properties include a former manufactured gas plant (MGP). The Site property was formerly a brewery, which was later converted into a distillery, and currently has artist lofts, light manufacturing and other commercial uses. A detailed Site history including Sanborn maps has been provided in the MCP Phase I Initial Site Investigation. The Disposal Site is a small area on the northwest corner of the property, at the corner of East First Street and Dorchester Street as shown on **Figure 1**. This northwest corner of the property and Site area is paved and used for parking. A one-story, concrete block building for light industrial use occupies a portion of the Site.

The Site is located at the foot of the north side of Telegraph Hill. The property is located in a mixed-use neighborhood. Residential homes are located south (upgradient and topographically higher) of the Site. Industrial warehouses are located to the north and down gradient of the Site. The neighboring area to the south is currently undergoing a transformation from industrial to

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residential use, but the area to the north, along the First Street truck route, will remain as commercial and industrial, under current Boston Redevelopment Authority plans. The former distillery is currently used as artists' lofts, light industrial and commercial space, with some of the lofts residential artist live-work space. A Mass GIS map accompanies this submittal and is attached as **Figure 2**.

This submittal presents data that has been generated by Apex and by previous consultants. Apex used existing monitoring wells, borings, and soil and groundwater data previously generated as part of either property transfer investigations or MCP activities associated with another RTN 3-11965. RTN 3-11965 is associated with a former No. 6 fuel oil tank located in the center of the property. A Response Action Outcome Statement (Class A3) was submitted for RTN 3-11965 in February of 1999. In order to further define the extent of coal tar contamination, Apex advanced four borings and installed three additional wells as part of the MCP Phase II Comprehensive Site Assessment (CSA) that was submitted to DEP in December 2007.

There are no hospitals, schools, or other institutions, which provide overnight housing within 500 feet of the Site.

Regulatory Status

The Site was originally reported to the DEP on December 23, 2004 and Release Tracking Number (RTN) 3-24537 was issued. The reporting condition associated with this RTN was the detection of approximately 12 inches of dense non-aqueous phase liquid (DNAPL) in an existing monitoring well (MW-3). Subsequent analytical testing identified the DNAPL as coal tar. An Immediate Response Action (IRA) Completion Statement was prepared by Apex and filed with the DEP in December 2005. The assessment-only IRA monitored the DNAPL over a one-year period. Apex concluded that the DNAPL thickness decreased during the monitoring period and was not persistent.

Another RTN was previously issued for reportable concentrations of coal tar constituents in soil, previously collected from the borings adjacent to MW-3. This RTN is 3-18069. RTN 3-18069 will be linked to RTN 3-24537 in the future.

A Phase II CSA and a Phase III-Selection of Comprehensive Remedial Action Alternatives was submitted to the DEP in December of 2007.

On behalf of Second Street Associates, Apex submitted a Notice of Delay to DEP in December, 2008. As reported in the Notice of Delay, at the time Second Street Associates was going through the permitting process to redevelop the property. A Chapter 80 Permit has been issued by the Boston Redevelopment Authority. Permits from the City of Boston Zoning Board of Appeals have also been granted.

The project is currently in the design phase. The development will be built in two stages. The foundation plan for Phase I is attached as Figure 5. In order to limit the handling and offsite

Apex Companies, LLC

disposal of coal tar impacted soil, a Geopier system has been proposed instead of the more traditional slab-on-grade floor with spread footing foundation. The Geopier foundation is a displacement-type impact pier system; rammed aggregate piers are constructed with no drill cuttings except for the first three feet of surface material.

As part of the Phase II CSA, a Method 3 risk characterization was completed that supported a conclusion that a Condition of No Significant Risk had been achieved under current conditions but not for future conditions. An Activity and Use Limitation (AUL) filed for RTN 3-11965, currently serves to maintain the asphalt and prevent access to the underlying soils. Potential indoor air impacts were not considered in the risk assessment for a future building over the site, therefore the placement of a vapor barrier is being proposed as part of a Phase IV.

Relevant Contacts

The current Site owner and contact person for this submittal is:

Current Owner and Contact:

Second Street Associates, LLC
516 East Second Street
South Boston, MA 02127
Mr. Frederick M. Gordon/President
Tel: (617)-269-8430

The LSP overseeing the response action is:

Mr. Geoffrey R. May, (LSP # 5775)
Apex Companies, LLC
184 High Street, Boston, Massachusetts 02110
Tel: (617) 728-0070 extension 114

As a Response Action Outcome (RAO) has not been achieved for the Site within the 5-year timeframe; an extension to the Tier II Classification is being requested.

Current Site Status

The site has remained unchanged since the Method 3 risk assessment was conducted as part of the Phase II CSA. The AUL has been maintained and currently there is no exposure to the underlying soils.

The AUL includes provisions require a soil management plan, and a health and safety plan if the underlying soils are disturbed. These plans will be prepared prior to initiation of any Site construction work. It is anticipated that all the soil generated as part of construction grading will be reused on the property. Any soil that is reused will be placed back at the approximate original depth. Landscaped areas will have a minimum of three feet of imported clean soil. Grossly

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contaminated soil will be handled in accordance with DEP soil policies. The limits of the AUL are shown on **Figure 3**.

An evaluation of the requirements of Section 40.1067 of the MCP (*Remedial Actions After a Response Action Outcome has been Submitted to the Department*) will be conducted prior to any construction in the area of the existing AUL.

The portion of the property at the corner of Dorchester Street and East First Street is currently at the approximate proposed finished grade for the new building; however a minimal amount of soil will be removed from this area. The soil to be removed will include 6 inches of the surface soil just beneath the existing asphalt and soil generated from the first three feet for each Geopier. A Release Abatement Measure Plan will be submitted prior to commencement of any site construction activities. The proposed footprint of the entire future building is shown on **Figure 4**.

The building will be built in two phases. The current design considerations are for Phase I. The Activity and Use limitation will be modified so that the vapor barrier and associated piping as discussed in the Phase IV will be required when the Phase II portion of the development is constructed in the future. Parking will occupy the lowest two floors of the Phase I building.

Evaluation of No Significant Risk

The Phase II risk assessment concluded that under current site conditions a Condition of No Significant Risk has been achieved. The existing AUL prohibits contact with the underlying soils and therefore address future exposure considerations but does not address future buildings. The risk assessment did not evaluate the construction of a building over the site. It is anticipated that a vapor barrier under the building slab and two levels of parking over the site will allow for submittal of a Class A-3 RAO. There will be excavation of contaminated soil with the installation of the spread footings as well as surface preparation for a concrete slab. Extensive soil excavation within the site boundaries is not being proposed. Once the building is constructed and the contaminated soil has been removed from the site a Condition of No Significant Risk will have been achieved.

Schedule

The Tier II Extension will take effect 45 days after submission to the DEP, unless the DEP issues a written denial within the 45 day period. The anticipated start of construction is Spring 2011 with initial activities being the grading and demolition of the small building along Dorchester Avenue that has the address of 510 East First street.

Progress Toward a Temporary or Permanent Solution

A Temporary or Permanent Solution has not been achieved at the Site. Based on the current development plans, which includes the construction of a residential building with two-levels of parking garage, the conditions for a Permanent Solution will have been met after construction has been completed. The parking levels will be at grade along East First street(the Phase I building), and will be below street grade as the site is redeveloped into the hillside along

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Dorchester Street (the Phase II building). Please note that the limits of the site as define for RTN 3-24537 is limited to the corner of Dorchester Street and East First Street. The AUL (RTN 3-11965) encompasses a portion of this area as well as the interior section of the property.

LSP Opinion

The AUL for a portion of the property requires that a soil management plan and a health and safety plan be developed prior to commencing earthwork activities. This requirement will allow construction to occur at the Site and for remediation waste to be managed following the provisions contained in the MCP. At the completion of the Site activities, we anticipate that conditions to achieve a Permanent Solution will have been met for RTN 3-24537. The AUL will be amended and a Response Action Outcome statement will be prepared.

Limitations

Apex has prepared this report for the exclusive use of its Client. This report and the findings it contains shall not be disseminated or conveyed, in whole or in part, to any other party except as required by law without the prior written consent of Apex.

Apex has provided professional services in accordance with generally accepted practices in the field of environmental engineering. No other warranty, expressed or implied is made. Apex is not responsible for any independent opinions, conclusion, or recommendations, which may be made by others on the basis of information contained in this report.

The observations described in this report were made under the conditions stated in the report. The conclusions reached were based only upon the work performed, and not upon tasks or procedures which were beyond the scope of services or budget approved by the Client.

Apex has relied upon certain information provided by other sources in preparing this report. Apex does not assume responsibility for the accuracy of information provided by others about the Site, including its history; its physical, chemical and ecological conditions; and its regulatory or environmental status.

If you have any questions, please call me at 617-728-0070, extension 114.

Very truly yours,
APEX COMPANIES, LLC



Geoffrey R. May, PG, LSP
Project Manager

attachments

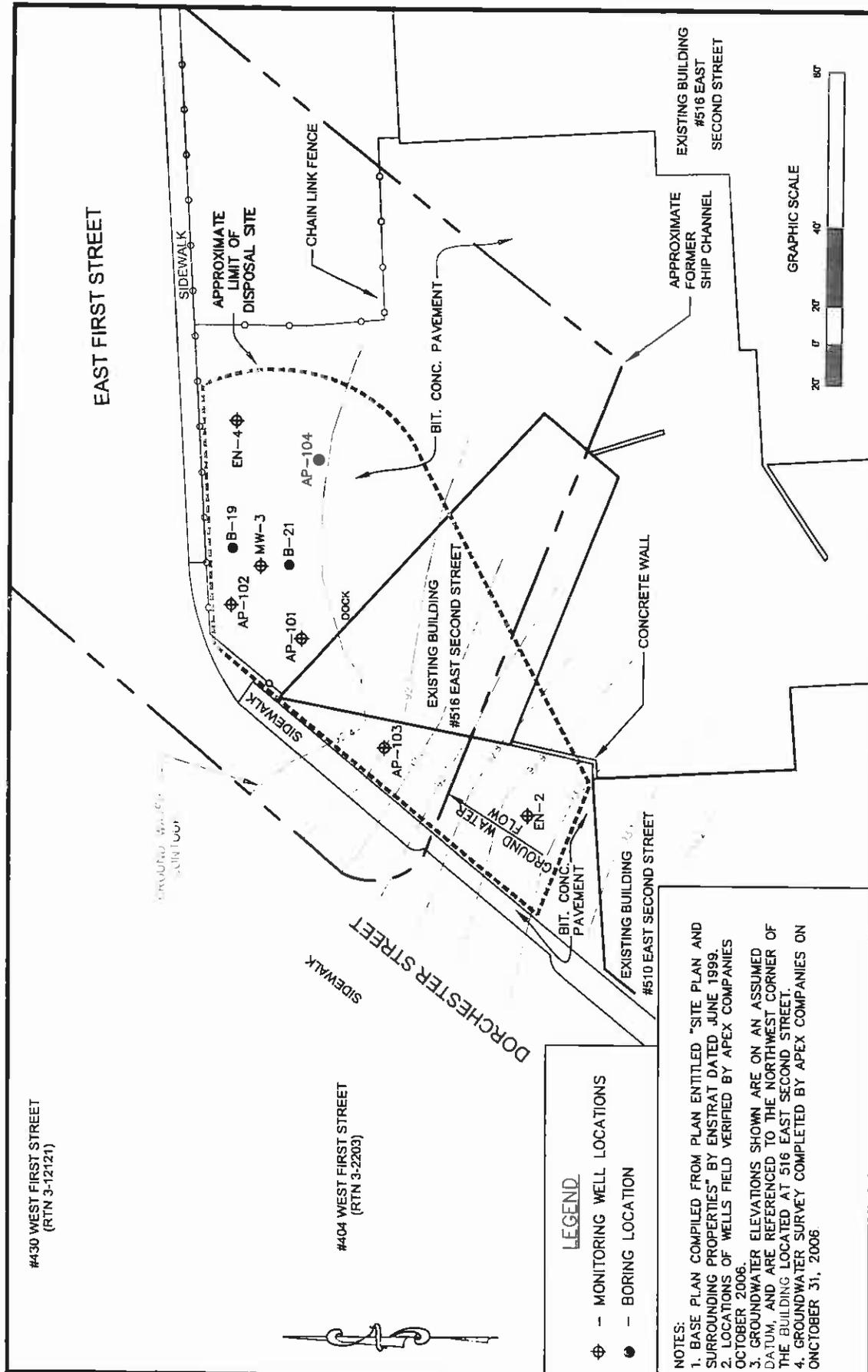


Figure <h1 style="font-size: 48px; margin: 0;">2</h1>	115 BROAD STREET SUITE 200 BOSTON MA 02110 (617) 728-0070		DATE DEC. 2007	MONITORING WELL/BORING LOCATIONS		JOB NO. 6563.003	PROPERTY AT 516 EAST SECOND STREET SOUTH BOSTON, MA RTN = 3-24537
			DESIGNED GM TECHNICIAN DB CHECKED CM	DRAWING FILE: APEX\JOBS\6563\FIGURES\6563.001		6563.003.DWG	

- LEGEND**
- ◆ - MONITORING WELL LOCATIONS
 - - BORING LOCATION

NOTES:

1. BASE PLAN COMPILED FROM PLAN ENTITLED "SITE PLAN AND SURROUNDING PROPERTIES" BY ENSTRAT DATED JUNE 1999.
2. LOCATIONS OF WELLS FIELD VERIFIED BY APEX COMPANIES OCTOBER 2006.
3. GROUNDWATER ELEVATIONS SHOWN ARE ON AN ASSUMED DATUM, AND ARE REFERENCED TO THE NORTHWEST CORNER OF THE BUILDING LOCATED AT 516 EAST SECOND STREET.
4. GROUNDWATER SURVEY COMPLETED BY APEX COMPANIES ON OCTOBER 31, 2006