



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

BOSTON, MA 02109-3912

CERTIFIED MAIL

MAR 16 2011

William C Beyer,
Principal Hydrogeologist
Fay Spofford & Thorndike
5 Burlington Woods Drive
Burlington, MA01803

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Drainage, Water and Sewer Work Improvements 080 CSO Area
Reserved Channel site located at West First Street, Boston, MA 02119, Suffolk
County; Authorization # MAG910472

Dear Mr. Beyer:

Based on the review of a Notice of Intent (NOI) submitted on behalf of the Boston Water and 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 for 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 the list of pollutants authorized includes pollutants found in excess of the RGP Appendix III limits, and others you have marked "Believed Present" in the NOI application for the BWSC site.

Also, please note that the metals arsenic, lead, iron included on the list are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR).

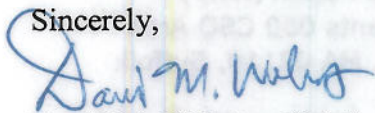
With the absence of dilution for discharges to tidal water, EPA determined that the DFR for each parameter is in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities) Therefore, the limits for arsenic of 36ug/L, lead of 8.5ug/L, and iron of 1,000ug/L, are required to achieve permit compliance at your site.

Finally, please note the list 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 07/31/2013. 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:		MAG910472
Date Authorization Issued:	March, 2011	
Owner's Name & Work Description:	Boston Water & sewer Commission (BWSC). Drainage of Water, and Sewer Work Improvements 080 CSO Area Reserved Channel, South Boston.	
Facility/Site Address:	West First Street, Boston, MA 02119, Suffolk County	
	Email address of owner: Same as the site; Phone n: Not provided.	
Legal Name of Operator:	RJV Construction, Corporation/ Fay Spofford & Thorndike	
Operator contact name, title, and Address:	William C. Beyer 3 Burlington Woods, Burlington MA 01803.	
	Email :fstinc.com	
Estimated Date of Completion:	07/31/2013	
Category and Sub-Category:	Category I- Petroleum Related Site Discharges. Sub-category B. Fuel Oils & Other Oils, and Category III. Contaminated Construction Dewatering. Sub-category B Known Contaminated Sites.	
Receiving Water:	The Boston Reserved Channel in South Boston, MA	

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/ML 5ug/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 5ug/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 (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/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)
	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/ML5ug/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/ML5ug/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
✓	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

	<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)
✓	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 @ H ¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l)</u> ¹¹			
		<u>Freshwater</u>	<u>Saltwater</u>		
	39. Antimony	5.6/ML 10			
✓	40. Arsenic **		36/ML 20		
	41. Cadmium **		8.9/ML 10		
	42. Chromium III (trivalent) **		100/ML 15		

	Metal parameter	Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) ¹¹			
		Freshwater	Saltwater		
	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/ML 20			

	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.

⁹Although 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.



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F: 781.229.1115
www.fstinc.com

February 11, 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
Drainage, Water and Sewerage Works Improvements
080 CSO Area Reserved Channel, South Boston

Dear Mr. Alvarez:

Fay, Spofford & Thorndike (FST) is pleased to submit this Notice off 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 project improves the outfalls for part of South Boston as shown on the attached figure.

The primary contaminants of concern are petroleum constituents. Free product was observed at the intersection of E Street and West First Street. Ryder Transportation Services is located at the intersection of E Street and West First Street. The site has been used commercially since the mid 1800's, and has a history of oil/petroleum contamination in soil and groundwater. Leaking underground storage tanks, above storage tanks, and drums has been associated with the soil and groundwater contamination. The attached plan shows the location of the site and associated free product.

Where construction requires dewatering, the following approach is proposed:

All groundwater will be pumped to an 18,000-gallon frac 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 frac tank to collect any free product,

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

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

Discharge to either the Reserved Channel or a storm drain leading to it.

The contractor is RJV Construction, Corp. at 21 Lincoln Street, Canton, MA 02021.

Attached is the RGP NOI, a location map, a line drawing of the proposed treatment train, and part of a recent report on the Ryder site indicating the contaminants of concern and their concentrations.

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/wcb

Cc: JMT

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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 :		Facility SIC code(s):		Street:	
longitude: -71° 2' 53.8794"		1623		West First Street (See Attached Figure)	
latitude: 42° 20' 24.72"					
b) Name of facility/site owner :					
Email address of facility/site owner:				Town: South Boston	
Boston Water and Sewer Commission				State: MA	
Telephone no. of facility/site owner:		(617) 989-7000		Zip:	
Fax no. of facility/site owner:				County: Suffolk	
Address of owner (if different from site):					
Street: 980 Harrison Street					
Town: Boston		State: MA		Zip: 02119	
				County: Suffolk	
c) Legal name of operator :					
RJV Construction, Corp.		Operator telephone no:		781-821-1469	
		Operator fax no.:		781-828-5116	
				Operator email:	
Operator contact name and title: Joseph Pacella, President					
Address of operator (if different from owner):		Street:		21 Lincoln Street	
Town: Canton		State: MA		Zip: 02021	
				County: Suffolk	

<p>d) Check Y for "yes" or N for "no" for the following:</p> <p>1. Has a prior NPDES permit exclusion been granted for the discharge? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> <p>2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y <input checked="" type="radio"/> N <input type="radio"/>, if Y, date and tracking #: <input type="text"/></p> <p>3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y <input type="radio"/> N <input checked="" type="radio"/></p> <p>4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y <input type="radio"/> N <input checked="" type="radio"/></p>	
<p>e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y <input type="radio"/> N <input checked="" type="radio"/></p> <p>If Y, please list:</p> <p>1. site identification # assigned by the state of NH or MA: <input type="text"/></p> <p>2. permit or license # assigned: <input type="text"/></p> <p>3. state agency contact information: name, location, and telephone number: <input type="text"/></p>	<p>f) Is the site/facility covered by any other EPA permit, including:</p> <p>1. Multi-Sector General Permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> <p>2. Final Dewatering General Permit? Y <input type="radio"/> N <input type="radio"/>, if Y, number: <input type="text"/></p> <p>3. EPA Construction General Permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> <p>4. Individual NPDES permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/></p> <p>5. any other water quality related individual or general permit? Y <input type="radio"/> N <input type="radio"/>, if Y, number: <input type="text"/></p>
<p>g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y <input type="radio"/> N <input checked="" type="radio"/></p>	
<p>h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.</p>	
<p>Activity Category</p> <p>I - Petroleum Related Site Remediation</p>	<p>Activity Sub-Category</p> <p>A. Gasoline Only Sites <input type="checkbox"/></p> <p>B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input checked="" type="checkbox"/></p> <p>C. Petroleum Sites with Additional Contamination <input type="checkbox"/></p> <p>A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/></p> <p>B. VOC Sites with Additional Contamination <input type="checkbox"/></p> <p>C. Primarily Heavy Metal Sites <input type="checkbox"/></p> <p>A. General Urban Fill Sites <input type="checkbox"/></p> <p>B. Known Contaminated Sites <input checked="" type="checkbox"/></p>
<p>II - Non Petroleum Site Remediation</p>	
<p>III - Contaminated Construction Dewatering</p>	

IV - Miscellaneous Related Discharges	<p>A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites <input type="checkbox"/></p> <p>B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites <input type="checkbox"/></p> <p>C. Hydrostatic Testing of Pipelines and Tanks <input type="checkbox"/></p> <p>D. Long-Term Remediation of Contaminated Sumps and Dikes <input type="checkbox"/></p> <p>E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) <input type="checkbox"/></p>
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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 outfalls and piping for sewer and water.	
b) Provide the following information about each discharge:	
1) Number of discharge points: 1	<p>2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft³/s)?</p> <p>Max. flow 0.2 Is maximum flow a design value? Y <input type="radio"/> N <input type="radio"/> estimate</p> <p>Average flow (include units) 0.15 Is average flow a design value or estimate?</p>
3) Latitude and longitude of each discharge within 100 feet:	
pt. 1: lat 42° 20' 22.2" long -71° 2' 29.0394"	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. etc.
4) If hydrostatic testing, total volume of the discharge (gals):	5) Is the discharge intermittent <input type="radio"/> or seasonal <input type="radio"/> ? Is discharge ongoing? Y <input type="radio"/> N <input type="radio"/>
c) Expected dates of discharge (mm/dd/yy): start 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 type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SM2540-D	4000	20000	2.4	10000	1.2
2. Total Residual Chlorine (TRC)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	HACH 8167	200	ND			
3. Total Petroleum Hydrocarbons (TPH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	8100M	750	20000	2.4	6650	0.8
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SM 4500	19.7	ND		ND	
5. Benzene (B)	71432	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	EPA 8260	2	10	0.0012	ND	
6. Toluene (T)	108883	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	EPA 8260	2	10	0.0012	ND	
7. Ethylbenzene (E)	100414	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	EPA 8260	2	10	0.0012	ND	
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	EPA 8260	2	10	0.0012	ND	
9. Total BTEX ²	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1							
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SIM	0.02	ND			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>								

* 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.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
14. Naphthalene	91203	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8260	10	1000	1.2	10	0.012
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8270C	1.03	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8270C	1.03	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8270C	1.03	ND			
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8270C	1.03	ND			
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1		SW8260	2	ND			
21. 1,1 Dichloroethene (DCE)	75354	<input type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
22. cis-1,2 Dichloroethene (DCE)	156592	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8260	2	10	0.012	2.77	0.003
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	5	ND			
24. Tetrachloroethene (PCE)	127184	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
27. Trichloroethene (TCE)	79016	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
29. Acetone	67641	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
30. 1,4 Dioxane	123911	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8260	2	ND			
31. Total Phenols	108952	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8270C	1.03	ND			
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8270C	2.56	ND			
33. Total Phthalates (Phthalate esters) ⁴		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8270C	1.03	ND			
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8270C	1.03	ND			
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	1.03	5000	0.6	10	0.0012
a. Benzo(a) Anthracene	56553	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	1000	0.12	10	0.0012
b. Benzo(a) Pyrene	50328	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	1000	0.12	10	0.0012
c. Benzo(b)Fluoranthene	205992	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	1000	0.12	10	0.0012
d. Benzo(k)Fluoranthene	207089	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	1000	0.12	10	0.0012
e. Chrysene	21801	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	1000	0.12	10	0.0012
f. Dibenzo(a,h)anthracene	53703	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	1000	0.12	10	0.0012
g. Indeno(1,2,3-cd) Pyrene	193395	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	1000	0.12	10	0.0012
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	5000	0.6	10	0.0012

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 checked="" type="checkbox"/>	1	G	SW8270C	0.103	5000	0.6	10	0.0012
i. Acenaphthylene	208968	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	0.103	1000	0.12	10	0.0012
j. Anthracene	120127	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	1.03	1000	0.12	10	0.0012
k. Benzo(ghi) Perylene	191242	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	1.03	1000	0.12	10	0.0012
l. Fluoranthene	206440	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	1.03	1000	0.12	10	0.0012
m. Fluorene	86737	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	1.03	1000	0.12	10	0.0012
n. Naphthalene	91203	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	1.03	1000	0.12	10	0.0012
o. Phenanthrene	85018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	1.03	1000	0.12	10	0.0012
p. Pyrene	129000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW8270C	1.03	1000	0.12	10	0.0012
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW8082	0.674	ND			
	38. Chloride	<input type="checkbox"/>	<input type="checkbox"/>								
	39. Antimony	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	E200.9	1	ND			
	40. Arsenic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	E200.9	1	20	0.0024	11.8	0.0014
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW6010B	4	ND			
42. Chromium III (trivalent)	16065831	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	E200.7	60	ND			
43. Chromium VI (hexavalent)	18540299	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW3500	50	ND			
44. Copper	7440508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW6010B	15	ND			
45. Lead	7439921	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW6010B	10	60	7.2	30	3.6
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	E245.1	0.5	ND			
47. Nickel	7440020	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW6010B	100	ND			
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW6010B	50	ND			
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	E200.7	7	ND			
50. Zinc	7440666	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	G	SW6010B	180	ND			
51. Iron	7439896	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	G	SW6010B	60	15000	2	7280	0.87
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 checked="" type="radio"/></p>		<p>If yes, which metals?</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: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Metal: <input type="text"/> DF: <input type="text"/></p> <p>Etc.</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 checked="" type="radio"/> If Y, list which metals:</p>

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

<p>a) A description of the treatment system, including a schematic of the proposed or existing treatment system:</p> <p>See Attached Figure</p>					
<p>b) Identify each applicable treatment unit (check all that apply):</p>	<p>Frac. tank <input checked="" type="checkbox"/></p> <p>Chlorination <input type="checkbox"/></p>	<p>Air stripper <input type="checkbox"/></p> <p>De-chlorination <input type="checkbox"/></p>	<p>Oil/water separator <input type="checkbox"/></p> <p>Other (please describe):</p>	<p>Equalization tanks <input type="checkbox"/></p>	<p>Bag filter <input checked="" type="checkbox"/></p> <p>GAC filter <input checked="" type="checkbox"/></p>

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: 1. For multiple discharges, number the discharges sequentially. 2. For indirect dischargers, 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 <input type="text" value="N/A"/>					
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water <input type="text"/> 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 <input type="radio"/> N <input checked="" type="radio"/> If yes, for which pollutant(s)?					
Is there a final TMDL? Y <input type="radio"/> N <input checked="" type="radio"/> If yes, for which pollutant(s)? <input type="text"/>					

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 <input checked="" type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E <input type="radio"/> F <input type="radio"/>	b) If you selected Criterion D or F, has consultation with the federal services been completed? Y <input type="radio"/> N <input type="radio"/> Underway <input type="radio"/>
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 <input type="radio"/> N <input type="radio"/>	
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 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/>	
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.

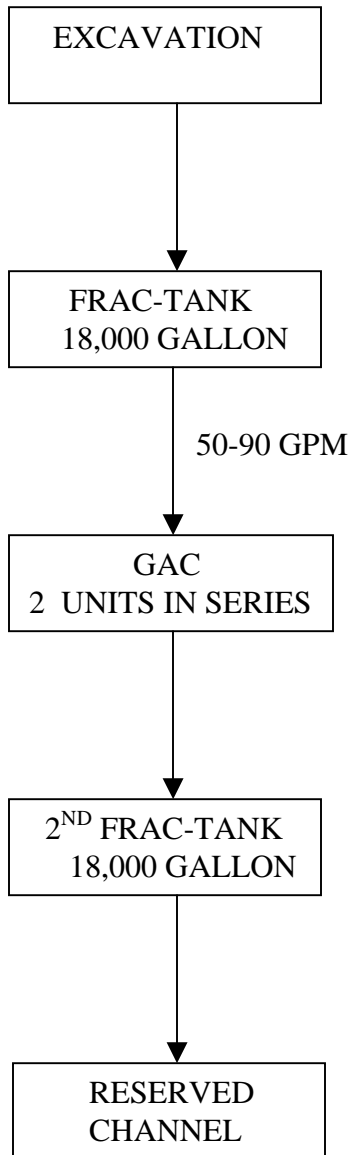
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

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:	RESERVED LANDFILL SEPARATION PROJECT
Operator signature:	
Printed Name & Title:	William C. Becker, Principal Hydrogeologist, LSP
Date:	2/14/11

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





Reserved Channel Sewer Separation Project
Boston Water and Sewer Commission



Fay, Spofford & Thorndike

**POST-CLASS C RESPONSE ACTION OUTCOME STATUS
AND
REMEDIAL MONITORING REPORT**

JANUARY 2011

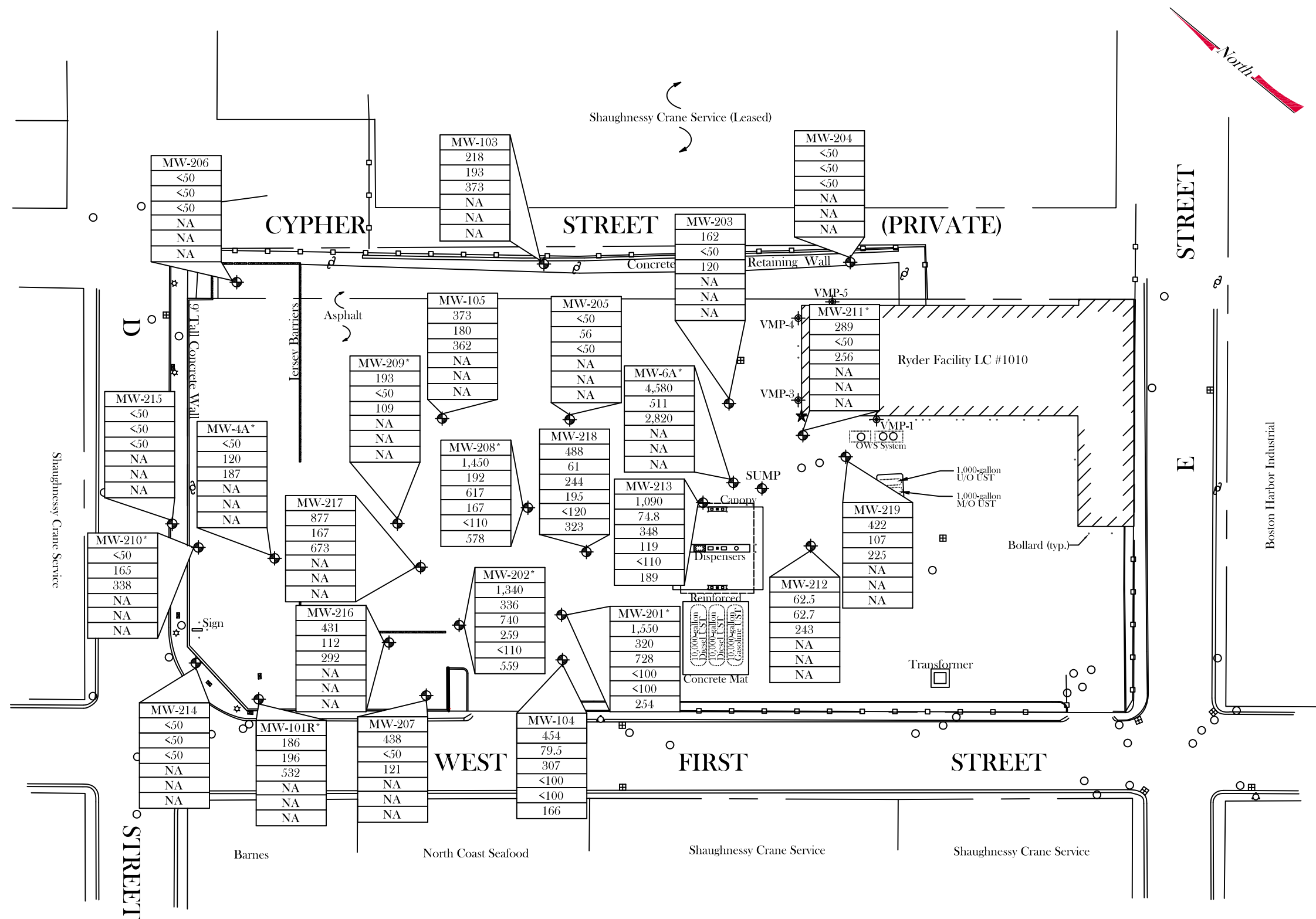
**RYDER FACILITY LOCATION CODE #1010
280 WEST FIRST STREET
SOUTH BOSTON
MASSACHUSETTS 02127
RTN 3-2401**

Prepared for:
Ryder Transportation Services
Attn: Ms. Carrie Anne Vinch
160 Lawrenceville-Pemington Road
Suite 16 - PMB 119
Lawrenceville, NJ 08648
(609) 895-8500

Prepared by:
CARRIAGEHOUSE CONSULTING, INC.
8 Pleasant Street
South Natick, MA 01760
(508) 315-3146

Supervising Professional:
Brian D. Moore
P.G., L.S.P.

CHCI Project #:MA040106B



KEY

Monitoring Well

Property Boundary(ies)

Catch Basin

Fire Hydrant

Manhole Cover

Utility Pole

Street Lamp

Traffic Control Box

Location of Local Benchmark
(Elevation of 11.44 feet)

UST
Underground Storage Tank

OWS
Oil Water Separator

M/O
Motor Oil

U/O
Used Oil

Chain Link Fence

MW-215

Well Identification

<50

C5 - C8 Aliphatics (ug/l) - adjusted

<50

C9 - C12 Aliphatics (ug/l) - adjusted

<50

C9 - C10 Aromatics (ug/l)

NA

C9 - C18 Aliphatics (ug/l) - adjusted

NA

C19 - C36 Aliphatics (ug/l) - adjusted

NA

C11 - C22 Aromatics (ug/l) - adjusted

ug/l

micrograms per liter

<

Not detected
(method detection limit provided)

*

indicates non-aqueous phase liquid
(NAPL) typically present in well.

WI

Well Inaccessible

NA

Not Analyzed

Data obtained on 08/12/10 except for the
following wells obtained on 08/13/10:
MW-6A, MW-103, MW-205, MW-211,
MW-212, MW-213, and MW-219.

FIGURE 5
HYDROCARBON DISTRIBUTION PLAN - 08/12/10
 Ryder Facility Location Code #1010
 280 West First Street
 South Boston, Massachusetts

Ref.: 2010 08 12 HDP	Checked By:
Drafted By: ECS	Date: 08/20/10
Revised By: BDM	Date: 12/14/10
Source: BRA, GSC, GZA, Kimball Chase, NEL, Ransom, and Alpha Surveying Site Plans, and CHCI Reconnaissance	