



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

JAN 30 2014

Ms. Phyllis Schoof
Property Owner
115 Charlton Rd.
Spencer, MA 01562

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Residential Fuel Oil Spill site located at 115 Charlton Rd.
Spencer, MA 01562, Worcester County; Authorization # MAG910607

Dear Ms. Schoof:

Based on the review of a Notice of Intent (NOI) submitted by Corporate Environmental Advisors, Inc., on your behalf for work related to the oil spill clean up at your home, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Owner and 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 the enclosed checklist includes parameters that exceeded Appendix III limits. Also, please note that the metal included on the checklist is a dilution dependent pollutant and subject to limitations based on a dilution factor range (DFR). With the absence of dilution to Cranberry River tributaries, EPA determined that the DFR for this parameter is in the one and five (1-5) range. (See the RGP Appendix IV for Massachusetts facilities) Therefore, the limit for zinc of 66.6 ug/L is 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 December 31, 2014. 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,



Thelma Murphy, Chief
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Adam D Gaudette, Spencer Town Administrator.
Scott VanderSea, CEA, Inc.

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

NPDES Authorization Number:		MAG910607
Authorization Issued:	January, 2014	
Facility/Site Name:	Residential Fuel Oil Spill	
Facility/Site Address:	115 Charlton Rd., Spencer, MA 01562	
	Email address of owner: pschoof@HMEA.org	
Legal Name of Operator:	Ms. Phyllis Schoof, Property Owner	
Operator contact name, title, and Address:	Same as the owner	
	Email: Same as the owner	
Estimated date of the site's Completion:	December 31, 2014	
Category and Sub-Category:	Category I- Petroleum Related Site Remediation. Subcategory B. Fuel Oils and Other Oils (Including Residential Non-Business Remediation sites)	
RGP Termination Date:	September 10, 2015	
Receiving Water:	Tributary to Cranberry River	

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#160.2/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

	Parameter	Effluent Limit/Method#/ML (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
✓	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
	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

	<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)
	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
	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/ML5ug/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/ML5ug/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 100 ug/L

	Metal parameter	Total Recoverable MA/Metal Limit H¹⁰ = 50 mg/l CaCO₃, Units = ug/l^(11/12)		Minimum level=ML	
		Freshwater Limits			
	39. Antimony	5.6		ML	10
	40. Arsenic **	10		ML	20
	41. Cadmium **	0.2		ML	10
	42. Chromium III (trivalent) **	48.8		ML	15
	43. Chromium VI (hexavalent) **	11.4		ML	10
	44. Copper **	5.2		ML	15
	45. Lead **	1.3		ML	20
	46. Mercury **	0.9		ML	02
	47. Nickel **	29		ML	20
	48. Selenium **	5		ML	20
	49. Silver	1.2		ML	10
√	50. Zinc **	66.6		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.

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

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).

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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.

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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).

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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



Via USPS Tracking and
Electronic Mail: NPDES.Generalpermits@epa.gov

January 9, 2014

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, Massachusetts 02109-3912
ATTN: Remediation General Permit NOI Processing

**RE: EPA Remediation General Permit Notice of Intent
Residential Fuel Oil Spill
115 Charlton Rd
Spencer, Massachusetts
MADEP RTN 2-19065
CEA File No. 7679-13**

To Whom It May Concern:

On behalf of Ms. Phyllis Schoof and Ms. Teresa Johnson, Corporate Environmental Advisors, Inc. (CEA) is submitting this EPA Remediation General Permit (RGP) Notice of Intent (NOI) to temporarily treat and discharge petroleum-impacted groundwater at the above referenced site. This work is proposed as part of remedial activities to remove soil and groundwater contamination at the site. Remedial actions are being performed at the site in accordance with the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000. **Figure 1**, Site Locus Map, shows the property location with respect to surrounding topography. **Figure 2**, Site Layout, depicts pertinent site features.

Based on available information depth to groundwater is approximately 2 to 4 feet below grade at the site. Therefore, groundwater will most likely be encountered during the excavation at the site. A groundwater recovery sump is currently installed and set below the groundwater level as necessary to properly dewater the excavation and recover contaminated groundwater. Groundwater from the excavation is currently being pumped into a 21,000-gallon (frac) holding tank(s) for settling and temporary storage.

Groundwater will be pumped from the frac-tank using a submersible pump through a temporary on-site groundwater treatment system. Recovered groundwater will be pre-treated through two (2), 50-micron particle filtration (bag filter) units in series, and then treated using two (2) 2,000-pound capacity liquid-phase granular activated carbon adsorption (GACA) vessels, piped in series. The groundwater treatment system will be designed to treat and discharge groundwater at a maximum flow rate of 100 gallons per minute (GPM). The treatment system will be equipped with a flow meter and flow totalizer prior to the discharge point. Flow rates will be monitored during groundwater treatment and discharge activities. The total gallons of treated groundwater discharged at the site will be recorded at the end of each day.

Groundwater treated by the temporary treatment system will be discharged into the surface water adjacent to the Site, a tributary of Cranberry River, depicted on **Figures 1 and 3**.

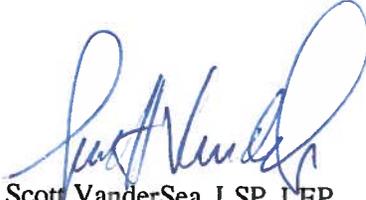
ADDRESS Hartwell Business Park
127 Hartwell Street, Suite 2
West Boylston, MA 01583
TEL 508.835.8822 | 800.358.7960
FAX 508.835.8812
WEB www.cea-inc.com

The treated groundwater discharge will be monitored according to the guidelines described in the RGP. In-line sample ports for sample collection will be installed at the GACA influent, midpoint, and effluent discharge points. In addition, the flow meter and totalizer installed prior to the discharge point of the treatment system will continuously meter the discharge flow total and flow rate. The proposed dewatering and groundwater treatment system components are depicted in the Excavation Dewatering Process and Instrumentation Diagram (P&ID) as **Figure 4**. The dewatering and groundwater treatment system is anticipated to operate as needed to allow the completion of proposed construction activities. The NOI forms and supporting documentation are attached.

If you have any questions or require additional information, please do not hesitate to contact the undersigned at (508)-835-8822.

Sincerely,
CORPORATE ENVIRONMENTAL ADVISORS, INC.


fu/ Adam Guaraldi
Geologist II


Scott VanderSea, LSP, LEP
Principal Hydrogeologist

cc: Conservation Commission, Town of Spencer, 157 Main St., Spencer, MA 01562

**EPA REMEDIATION GENERAL PERMIT
NOTICE OF INTENT FORM**



**Remediation General Permit
Appendix V****Notice of Intent (NOI)
Suggested Forms & Instructions****I. Notice of Intent (NOI) Suggested Form and Instructions**

In order to be covered by the remediation general permit (RGP), applicants must submit a completed Notice of Intent (NOI) to EPA Region I and the appropriate state agency. The owner or operator, as defined by 40 CFR § 122.2, means the owner or operator of any “facility or activity” subject to regulation under the NPDES program.

The following are three general “operator” scenarios (variations on any of these three are possible, especially as the number of owners and contractors increases):

- ▶ *“Owner” as “Operator” - sole permittee.* The property owner designs the structures and control systems for the site, develops and implements the BMPP, and serves as general contractor (or has an on-site representative with full authority to direct day-to-day operations). Under the definition of operator, in this case, the “Owner” would be considered the “operator” and therefore the only party that needs permit coverage. Everyone else working on the site may be considered subcontractors and do not need to apply for permit coverage.
- ▶ *“Contractor” as “Operator” - sole permittee.* The property owner hires a company (e.g., a contractor) to design the project and oversee all aspects, including preparation and implementation of the BMPP and compliance with the permit (e.g., a “turnkey” project). Here, the contractor would likely be the only party needing a permit. Similarly, EPA expects that property owners hiring a contractor or consultant to perform groundwater remediation work (e.g., due to a leaking fuel oil tank) would come under this type of scenario. EPA believes that the contractor, being a professional in the industry, should be the responsible entity rather than the individual. The contractor is better equipped to meet the requirements of both applying for permit coverage and developing and properly implementing the plans needed to comply with the permit. However, property owners would also meet the definition of “operator” and require permit coverage in instances where they perform any of the required tasks on their personal properties.
- ▶ *“Owner” and “Contractor” as “Operators” - co-permittees.* The owner retains control over any changes to site plans, BMPPs, or wastewater conveyance or control designs, but the contractor is responsible for conducting and overseeing the actual activities (e.g., excavation, installation and operation of treatment train, etc.) and daily implementation of BMPP and other permit conditions. In this case, both parties need to apply for coverage.

Generally, a person would not be considered an “operator,” and subsequently would not need permit coverage, if: 1) that person is a subcontractor hired by, and under the supervision of, the owner or a general contractor (e.g., if the contractor directs the

subcontractor's activities on-site, it is probably not an operator); or 2) the person's activities would otherwise result in the need for coverage under the RGP but another operator has legally assumed responsibility for the impacts of project activities.

A. Instructions for the Suggested Notice of Intent (NOI) - At a minimum, the Notice of Intent must include the following for each individual facility or site. Additional information may be attached as needed.

1. General facility/site information.

- a) Provide the facility/site name, mailing address, and telephone and fax numbers. Provide the facility Standard Industrial Classification (SIC) code(s), which can be found online at http://www.osha.gov/pls/imis/sic_manual.html. Provide the site location, including longitude and latitude.
- b) Provide the facility/site owner's name, address, email address, telephone and fax numbers, if different from the site information. Indicate whether the owner is a Federal, State/Tribal, private, or other entity.
- c) Provide the site operator's (e.g., contractor's) name, mailing address, telephone and fax numbers, and email address if different from the owner's information.
- d) For the site for which the application is being submitted, indicate whether:
 - 1) a prior NPDES permit exclusion has been granted for the discharge (if so, provide the tracking number of the exclusion letter);
 - 2) a prior NPDES application (Form 1 & 2C – for reference, please visit http://www.epa.gov/region1/npdes/epa_attach.html) has ever been filed for the discharge (if so, provide the tracking number and date that the application was submitted to EPA);
 - 3) the discharge is a “new discharge” as defined by 40 CFR 122.2; and
 - 4) for sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000 and exempt from state permitting.
- e) Indicate whether there is any ongoing state permitting, licensing, or other action regarding the facility or site which is generating the discharge. If “yes,” provide any site identification number assigned by the state of NH or MA, any permit or license number assigned, and the state agency contact information (e.g. name, location, telephone no.).
- f) Indicate whether or not the facility is covered by other EPA permits including:
 - 1) the Multi-Sector General Permit (MSGP)
<http://cfpub.epa.gov/npdes/stormwater/msgp.cfm>;
 - 2) the Final NPDES General Permit for Dewatering Activity Discharges in Massachusetts and New Hampshire
<http://www.epa.gov/region1/npdes/dewatering.html>;
 - 3) the EPA Construction General Permit
<http://cfpub.epa.gov/npdes/stormwater/cgp.cfm>;
 - 4) an individual NPDES permit; or
 - 5) any other water quality-related individual or general permit.If so, provide permit tracking number(s).
- g) Indicate if the site/facility discharge(s) to an Area of Critical Environmental Concern (ACEC), as shown on the tables and maps in Appendix I.

h) Based on the nature of the facility/site and any historical sampling data, the applicant must indicate which of the sub-categories within which the potential discharge falls.

2. Discharge information.

- a) Describe the discharge activities to be covered by the permit. Attach additional sheets as needed.
- b) Provide the following information about each discharge:
- 1) the number of discharge points;
 - 2) the maximum and average flow rate of the discharge in cubic feet per second. For the average flow magnitude, include the units and appropriate notation if this value is a calculated design value or estimate if technical/design information is not available;
 - 3) the latitude and longitude of each discharge with an accuracy of 100 feet (see EPA's siting tool at: http://www.epa.gov/tri/report/siting_tool);
 - 4) the total volume of potential discharge (gal), only if hydrostatic testing;
 - 5) whether the discharge(s) is intermittent or seasonal and if ongoing.
- c) Provide the expected start and end dates of discharge (month/day/year).
- d) 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.

In order to complete the NOI, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for the parameters applicable to the sub-category into which the discharge falls, as listed in Appendix III of the permit and selected in Part 1 of the NOI form, except as noted below.

Permittees shall provide additional sampling results with the NOI if such sampling already exists, or if the permittee has reason to believe the site contains additional contaminants not listed in Appendix III for that sub-category or contains additional contaminants not included in Appendix III.

The applicant may use historical data as a substitute for the new sample if the data was collected no more than 2 years prior to the "Submittal of the NOI" and if collected pursuant to:

- i. for sites in Massachusetts, 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E");
- ii. for sites in New Hampshire, New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act;

a) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is believed present or believed absent in the potential discharge.

Based on the required sampling and analysis, the applicant must fill in the table, or provide a narrative description, with the following additional information for each chemical that is believed present (chemical that violate EPA's criteria limitations):

- 1) the number of samples taken (minimum of one sample for applicable parameters per Appendix III);
- 2) the type of sample (e.g. grab, composite, etc.);
- 3) the analytical method used, including the method number;
- 4) the minimum level (ML) of the method used (based on Appendix VI);
- 5) the maximum daily amount (concentration (ug/l) and mass (kg)) of each pollutant, based on the sampling data
lb/day (pounds per day) equals flow (in million gallons per day, MGD) times concentration in milligrams per liter (mg/l) times 8.34.
Example: 2.5 MGD x 30 mg/l TSS x 8.34 = 625.5 lb TSS/day
MGD = gallons per minute (gpm) x 0.00144
1 kg = 2.2 lbs

And;

- 6) the average daily amount (concentration and mass) of each pollutant, based on the sampling data.

If the results of any sampling indicate that pollutants exist in addition to those listed in Appendix III of the RGP of the permit, the applicant must also describe those contaminants on the NOI in boxes in section I.3.c.) on the line marked "Other," or use additional sheets as needed. Subsequently, EPA may require monitoring for such parameters or will decide if an individual permit is necessary.

c) Determination of Reasonable Potential and Allowable Dilution for Discharges of Metals:

If any *metals* are believed present in the potential discharge to freshwater¹, the applicant must follow the procedures below to determine the dilution factor for each metal.

Step 1: Initial Evaluation

- 1) The applicant must evaluate all metals believed present in the discharge subject to this permit, including "naturally occurring" metals such as dissolved and/or total Iron. Applicants must enter the highest detected concentration of the metal at zero dilution in the "Maximum value" column of the NOI.
- 2) Based on the maximum concentration of each metal, the applicant must perform an initial evaluation assuming zero dilution in the receiving water. The applicant must compare the metals concentrations in the untreated (intake) waters to the effluent limits contained in Appendix III.

¹Dilution factors may be available for discharges to saline waters but only with approval of the flow modeling information from the State prior to the submission of the NOI.

- i. If potential discharges (untreated influent) with metals contain concentrations above the concentration limits listed in Appendix III, applicant must proceed to step 2.
- ii. If potential discharges (untreated influent) with metals contain concentrations below the concentrations listed in Appendix III, the applicant may skip step 2 and those metals will **not** be subject to permit limitations or monitoring requirements.

Step 2: Calculation of Dilution Factor

1) **For applicants in NH:** If a metal concentration in a potential discharge (untreated influent) to **freshwater** exceeds the limits in Appendix III with zero dilution, the applicant shall evaluate the potential concentration considering a dilution factor (DF) using the formula below. **For sites in New Hampshire, the applicant must contact NH DES to determine the 7Q10 and dilution factor.**

$$DF = [(Qd + Qs)/Qd] \times 0.9$$

Where: **DF** = Dilution Factor
Qd = Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 cfs)
Qs = Receiving water 7Q10 flow, in cfs, where 7Q10 is the annual minimum flow for 7 consecutive days with a recurrence interval of 10 years
0.9 = Allowance for reserving 10% of the assets in the receiving stream as per Chapter ENV-Wq 1700, Surface Water Quality Regulations

i. Using the DF calculated from the formula above, the applicant must refer to the corresponding dilution range column in Appendix IV. The applicant then compares the maximum concentration of the metal entered on the NOI to the corresponding total recoverable metals limits listed in Appendix IV. Please note that for this reissuance the applicant will be permitted to determine a limit using any fraction within the 1-5 dilution factor range times the metal limit (for all regulated metals). For example: if the DF is 1.5, the Iron limit is 1,500 ug/L; if the DF is 1.5, the antimony limit is 8.4, etc. All limits above a dilution factor of 5 are maintained.

1. If a metal concentration in the potential discharge (untreated influent) is less than the corresponding limit in Appendix IV, the metal will **not** be subject to permit limitations or monitoring requirements.
2. If a metal concentration in the potential discharge (untreated influent) is equal to or exceeds the corresponding limit in Appendix IV, the applicant must reduce it in the effluent to a concentration below the applicable total recoverable metals limit in Appendix IV prior to discharge.

ii. In either case, the applicant must submit the results of this calculation as part of the NOI. EPA and NH DES will review the proposed effluent limitations for each metal and approve or disapprove the limits in the notification of coverage letter to the applicant.

2) **For applicants in MA:** If a metal concentration in a potential discharge (untreated influent) to **freshwater** exceeds the limits in Appendix III with zero dilution, the applicant must evaluate the potential concentration considering a dilution factor (DF) using the formula below.

$$DF = (Qd + Qs)/Qd$$

Where: DF = Dilution Factor
Qd = Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 cfs)
Qs = Receiving water 7Q10 flow (cfs) where 7Q10 is the minimum flow (cfs) for 7 consecutive days with a recurrence interval of 10 years

i. The applicant may estimate the 7Q10 for receiving water by using available information such as nearby USGS stream gauging stations directly or by application of certain "flow factors," using historic streamflow publication information, calculations based on drainage area, information from state water quality offices, or other means. In many cases Massachusetts has calculated 7Q10 information using "flow factors" for a number of streams in the state. The source of the low flow value(s) used by the applicant must be included on NOI application form. Flow data can also be obtained from web applications such as the one located at: <http://ma.water.usgs.gov/streamstats/>.

ii. Using the DF calculated from the formula above, the applicant must refer to the corresponding dilution range column in Appendix IV. The applicant then shall compare the maximum concentration of each metal entered on the NOI to the corresponding total recoverable metals limit listed in Appendix IV. Please note that for this reissuance the applicant will be permitted to determine a limit using any fraction of the 0-5 of DF times the metal limit (for all regulated metals). For example: if the DF is 1.5, the Iron limit is 1,500 ug/L; if the DF is 1.5, the antimony limit is 8.4, etc. Not to exceed DF of 5.

1. If a metal concentration in the potential discharge (untreated influent) is less than the corresponding limit in Appendix IV, the metal will **not** be subject to permit limitations or monitoring requirements.
2. If a metal concentration in a potential discharge (untreated influent) is equal to or exceeds the corresponding limit in Appendix IV, the applicant must reduce it in the effluent to a concentration below the applicable total recoverable metals limit in Appendix IV prior to discharge.

iii. The applicant must submit the results of this calculation as part of the NOI. EPA (and MassDEP where the discharge is not covered by 310 CMR 40.0000) will review the proposed effluent limitations for each metal and approve or disapprove the limits in the notification of coverage letter to the applicant.

4. Treatment system information.

- a) Provide a written description of the treatment train and how the system will be set up for each discharge and attach a schematic of the proposed or existing treatment system(s).
- b) Identify each major treatment unit (e.g. frac tanks, filters, air stripper, liquid phase/vapor phase activated carbon, oil/water separators, etc.) by checking all that apply and describing any additional equipment not listed. Attach additional sheets as needed.
- c) Provide the proposed average and maximum flow rates (in gallons per minute, gpm) for the discharge and the design flow rates (in gpm) of the treatment system. Clearly identify the component of the treatment with the most limited flow, i.e., the part of the treatment train that establishes the design flow.
- d) Describe any chemical additives being used, or planned to be used, and attach MSDS sheets for each. EPA may request further information regarding the chemical composition of the additive, potential toxic effects, or other information to insure that approval of the use of the additive will not cause or contribute to a violation of State water quality standards. Approval of coverage under the RGP will constitute approval of the use of the chemical additive(s). If coverage of the discharge under the RGP has already been granted and the use of a chemical additive becomes necessary, the permittee must submit a Notice of Change (NOC).

5. Receiving surface water(s) information.

- a) Identify the discharge pathway by checking whether it is discharged: directly to the receiving water (river, stream, or brook), within the facility (e.g., through a sewer drain), to a storm drain, to a wetland, or other receiving body.
- b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters into which discharge will occur.
- c) Provide a detailed map(s) indicating the location of the site and outfall(s) to the receiving water(s):
 - 1) For multiple discharges, the discharges should be numbered sequentially.
 - 2) In the case of indirect dischargers (to municipal storm sewer, etc) the map(s) must be sufficient to indicate the location of the discharge to the indirect conveyance and the discharge to the state classified 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 and the basin (for Massachusetts, the Surface Water Quality Standards (314 CMR 4.00) are available at <http://www.mass.gov/dep/water/laws/regulati.htm#wqual>) (for New Hampshire, contact the NH DES at (603) 271-2984).
- e) Specify the reported seven day-ten year low flow (7Q10) of the receiving water (see Section I.A.3) c. above). In New Hampshire, the 7Q10 must be provided by to the applicant by the New Hampshire Department of Environmental Services.

f) Indicate whether the receiving water is a listed 303(d) water quality impaired or limited water and if so, for which pollutants (see Section IX of the Fact Sheet for additional information).

For MA, the most updated integrated list of waters (CWA 303(d) and 305(b)) is available at <http://www.mass.gov/dep/water/resources/tmdls.htm#info>.

For NH, the most updated integrated list of waters (CWA 303(d) and 305(b)) is available at <http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>.

Also, indicate if there is a final TMDL for any of the listed pollutants. For MA, final TMDLs can be found at: <http://www.mass.gov/dep/water/resources/tmdls.htm> and for NH, final TMDLs can be found at

<http://des.nh.gov/organization/divisions/water/wmb/tmdl/index.htm>. For more information, contact the states at: New Hampshire Department of Environmental Services, Watershed Management Bureau at 603-271-3503 or the Massachusetts Department of Environmental Protection at 508-767-2796 or 508-767-2873.

6. ESA and NHPA Eligibility.

As required in Parts I.A.4 and Appendix VII the operator of a site/facility must ensure that the potential discharge will not adversely affect endangered species, designated critical habitat, or national historic places that are in proximity to the potential discharge. If the potential discharge is to certain water bodies, the applicant must also submit a formal certification with the NOI that indicates the consultation, with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (the Services), resulted in either a no jeopardy opinion or a written concurrence on a finding that the discharge is not likely to adversely affect any endangered species or critical habitat. Facilities should begin the consultation as early in the process as possible.

- a) Using the instructions in Appendix VII and information in Appendix II, indicate under which criterion listed you are eligible for coverage under this general permit.
- b) If you selected criterion D or F, indicate if consultation with the federal services has been completed or if it is underway.
- c) If consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, indicate if a written concurrence finding that the discharge is “not likely to adversely affect” listed species or critical habitat was received.
- d) Attach documentation of ESA eligibility as described below and required in Appendix VII, Part I.C, Step 4.

Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B – Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS and/or NOAA Fisheries, as appropriate, biological opinion or concurrence on a finding of “unlikely to adversely effect” regarding the ESA Section 7 consultation.

Criterion C – Activities are covered by a Section 10 Permit: A copy of the USFWS and/or the NOAA Fisheries, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I): A copy of the USFWS and/or the NOAA Fisheries, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.

Criterion E - Activities are covered by certification of eligibility: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I: A copy of the USFWS and/or the NOAA Fisheries, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.

- e) Using the instructions in Appendix VII, identify which criterion listed in Part C makes you eligible for coverage under this general permit.
- 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. Applicants should provide any supplemental information needed to meet the requirements of the permit, including any analytical data used to support the application, and any certification(s) required.

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.

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: Schoof Residential Fuel Oil Spill		Facility/site mailing address:			
Location of facility/site:		Facility SIC code(s):	Street:		
longitude: 71 59' 12.457"		8811	115 Charlton Rd Spencer, MA 01562		
latitude: 42 13' 48.055"					
b) Name of facility/site owner:		Town: Spencer			
Email address of facility/site owner:		State:	Zip:	County:	
		MA	01562	Worcester	
Telephone no. of facility/site owner: (508)735-4319					
Fax no. of facility/site owner:		Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/>			
Address of owner (if different from site):		3. Private <input checked="" type="radio"/> 4. Other <input type="radio"/> if so, describe:			
Street:					
Town:		State:	Zip:	County:	
c) Legal name of operator:		Operator telephone no:			
		Operator fax no.:		Operator email:	
Operator contact name and title:					
Address of operator (if different from owner):		Street:			
Town:	State:	Zip:	County:		

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

<p>e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y <input checked="" type="radio"/> N <input type="radio"/></p> <p>If Y, please list:</p> <ol style="list-style-type: none"> 1. site identification # assigned by the state of NH or MA: <input type="text"/> <small>MassDEP Release Tracking Number (RTN) 2-19065</small> 2. permit or license # assigned: <input type="text"/> 3. state agency contact information: name, location, and telephone number: <input type="text"/> <p>MassDEP - CERO, 792 Main Street, Worcester MA 01605 (508)792-7650</p>	<p>f) Is the site/facility covered by any other EPA permit, including:</p> <ol style="list-style-type: none"> 1. Multi-Sector General Permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/> 2. Final Dewatering General Permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/> 3. EPA Construction General Permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/> 4. Individual NPDES permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/> 5. any other water quality related individual or general permit? Y <input type="radio"/> N <input checked="" type="radio"/>, if Y, number: <input type="text"/>
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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 type="checkbox"/> B. Known Contaminated Sites <input 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:	
Discharge of treated groundwater generated during Immediate Response Actions (IRA) performed under the MCP	
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 0.223 ft ³ /s Is maximum flow a design value ? Y <input type="radio"/> N <input checked="" type="radio"/> Average flow (include units) 0.111 ft ³ /s Is average flow a design value or estimate ? estimate
3) Latitude and longitude of each discharge within 100 feet:	
pt.1: lat 42° 13' 47.44" long 71° 59' 12.72"	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): N/A	5) Is the discharge intermittent <input checked="" type="radio"/> or seasonal <input type="radio"/> ? Is discharge ongoing? Y <input type="radio"/> N <input checked="" type="radio"/>
c) Expected dates of discharge (mm/dd/yy): start Jan 13, 2014 end Dec 31, 2014	
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	Grab	SM21 2540D	4 mg/l				
2. Total Residual Chlorine (TRC)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	SM21 4500Cl ₂	0.050 mg/l				
3. Total Petroleum Hydrocarbons (TPH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	1664	5 mg/l				
4. Cyanide (CN)	57125	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	EPA 335.4	0.010 mg/l				
5. Benzene (B)	71432	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8260c	0.50 ug/l				
6. Toluene (T)	108883	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8260c	1 ug/l				
7. Ethylbenzene (E)	100414	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8260c	1 ug/l				
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8260c	2 ug/l				
9. Total BTEX ²	n/a	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8260c	5 ug/l				
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	2 ug/l				
11. Methyl-tert-Butyl Ether (MtBE)	1634044	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8260c	1 ug/l				
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	20 ug/l				

* 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 type="checkbox"/>	1	Grab	8260c	2 ug/l				
14. Naphthalene	91203	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8260c	100 ug/l				
15. Carbon Tetrachloride	56235	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
16. 1,2 Dichlorobenzene (o-DCB)	95501	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
17. 1,3 Dichlorobenzene (m-DCB)	541731	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
18. 1,4 Dichlorobenzene (p-DCB)	106467	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
18a. Total dichlorobenzene		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	3 ug/l				
19. 1,1 Dichloroethane (DCA)	75343	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
20. 1,2 Dichloroethane (DCA)	107062	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
21. 1,1 Dichloroethene (DCE)	75354	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
22. cis-1,2 Dichloroethene (DCE)	156592	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
23. Methylene Chloride	75092	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	2 ug/l				
24. Tetrachloroethene (PCE)	127184	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
25. 1,1,1 Trichloro-ethane (TCA)	71556	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
26. 1,1,2 Trichloro-ethane (TCA)	79005	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
27. Trichloroethene (TCE)	79016	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				

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 checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	1 ug/l				
29. Acetone	67641	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	10 ug/l				
30. 1,4 Dioxane	123911	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8260c	25 ug/l				
31. Total Phenols	108952	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	420.1	0.05 mg/l				
32. Pentachlorophenol (PCP)	87865	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	1 mg/l				
33. Total Phthalates (Phthalate esters) ⁴		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	5 ug/l				
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	2 ug/l				
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270					
a. Benzo(a) Anthracene	56553	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8270	.050 ug/l				
b. Benzo(a) Pyrene	50328	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	0.1 ug/l				
c. Benzo(b)Fluoranthene	205992	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	0.050 ug/l				
d. Benzo(k)Fluoranthene	207089	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	0.1 ug/l				
e. Chrysene	21801	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8270	0.1 ug/l				
f. Dibenzo(a,h)anthracene	53703	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	0.1 ug/l				
g. Indeno(1,2,3-cd) Pyrene	193395	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	0.1 ug/l				
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8270					

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	Grab	8270	0.1 ug/l				
i. Acenaphthylene	208968	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8270	0.1 ug/l				
j. Anthracene	120127	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	0.1 ug/l				
k. Benzo(ghi) Perylene	191242	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	0.1 ug/l				
l. Fluoranthene	206440	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	8270	0.1 ug/l				
m. Fluorene	86737	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8270	0.1 ug/l				
n. Naphthalene	91203	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8270	1 ug/l				
o. Phenanthrene	85018	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8270	0.050 ug/l				
p. Pyrene	129000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	8270	0.1 ug/l				
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	608	0.26 ug/l				
38. Chloride	16887006	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	SM21 4500CL C	1 ug/l				
39. Antimony	7440360	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	6 ug/l				
40. Arsenic	7440382	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	4 ug/l				
41. Cadmium	7440439	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	4 ug/l				
42. Chromium III (trivalent)	16065831	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	10 ug/l				
43. Chromium VI (hexavalent)	18540299	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	10 ug/l				
44. Copper	7440508	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	25 ug/l				
45. Lead	7439921	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	5 ug/l				
46. Mercury	7439976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	0.2 ug/l				
47. Nickel	7440020	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	40 ug/l				
48. Selenium	7782492	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	10 ug/l				
49. Silver	7440224	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	5 ug/l				
50. Zinc	7440666	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	Grab	200.7	20 ug/l				
51. Iron	7439896	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	Grab	200.7	100 ug/l				
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: _____ DF: _____</p> <p>Metal: _____ DF: _____</p> <p>Metal: _____ DF: _____</p> <p>Metal: _____ DF: _____</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 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:

Recovered groundwater will be pumped into a holding (frac) tank, then pre-treated through particle filtration (bag filter) units in series, and then treated using two (2) ~1,000-pound capacity liquid-phase granular activated carbon adsorption (GACA) vessels, piped in series. See attached Excavation Dewatering Process and Instrumentation Diagram (P & ID) depicting the proposed treatment system layout.

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):

Not Applicable.

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 checked="" type="checkbox"/>	Within facility (sewer) <input type="checkbox"/>	Storm drain <input type="checkbox"/>	Wetlands <input type="checkbox"/>	Other (describe): <input type="text"/>
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b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
 Discharge to surface water of an unnamed tributary to Cranberry River.

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

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)?

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:	Schoof Residential Fuel Oil Spill
Operator signature:	
Printed Name & Title:	Scott VanderSchoof, Principal Hydrogeologist, CEA, Inc. - Agent for Phyllis Schoof, Teresa Johnson
Date:	1/9/14

B. Submission of NOI to EPA - All operators applying for coverage under this General Permit must submit a completed Notice of Intent (NOI) to EPA. Signed and completed NOI forms and attachments must be submitted to EPA-NE at:

U.S. Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code OEP06-4
Boston, MA 02109-3912
ATTN: Remediation General Permit NOI Processing

or electronically mailed to NPDES.Generalpermits@epa.gov

or faxed to the EPA Office at 617-918-0505

If filling out the suggested NOI form electronically on EPA's website, the signature page must be signed and faxed or mailed to EPA at the fax number and/or address listed above.

1. Filing with the states - A copy of any NOI form filed with EPA-NE must also be filed with state agencies. The state agency may elect to develop a state specific form or other information requirements.

a) Discharges in Massachusetts - In addition to the NOI, permit applicants must submit copies of the State Application Form BRPWM 12, Request for General Permit coverage for the RGP. The application form and the Transmittal Form for Permit Application and Payment may be obtained from the Massachusetts Department of Environmental Protection (MassDEP) website at www.state.ma.us/dep. Municipalities are fee-exempt, but should send a copy of the transmittal form to that address for project tracking purposes. All applicants should keep a copy of the transmittal form and a copy of the application package for their records.

1) A copy of the NOI, the transmittal form, a copy of the check, and Form BRPWM 12 should be sent to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd floor
Worcester, MA 01608

2) A copy of the transmittal form and the appropriate fee should be sent to:

Massachusetts Department of Environmental Protection
P.O. Box 4062
Boston, MA 02111

Please note: Applicants for discharges in Massachusetts should note that under 310 CMR 40.000, *as a matter of state law*, the general permit only applies to discharges that are **not** subject to the

Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are **not** required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

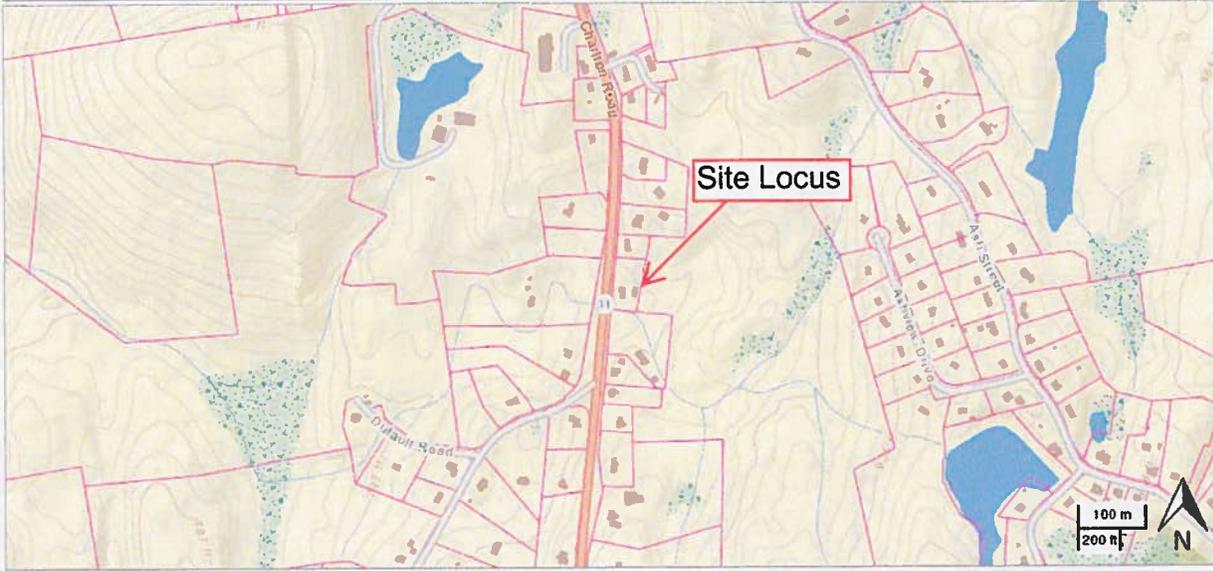
b) Discharges in New Hampshire - applicants must provide a copy of the Notice of Intent to:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
P.O. Box 95
Concord, New Hampshire 03302-0095.

2. Filing with Municipalities - A copy of the NOI must be submitted to the municipality in which the proposed discharge would be located.

FIGURES

Site Locus

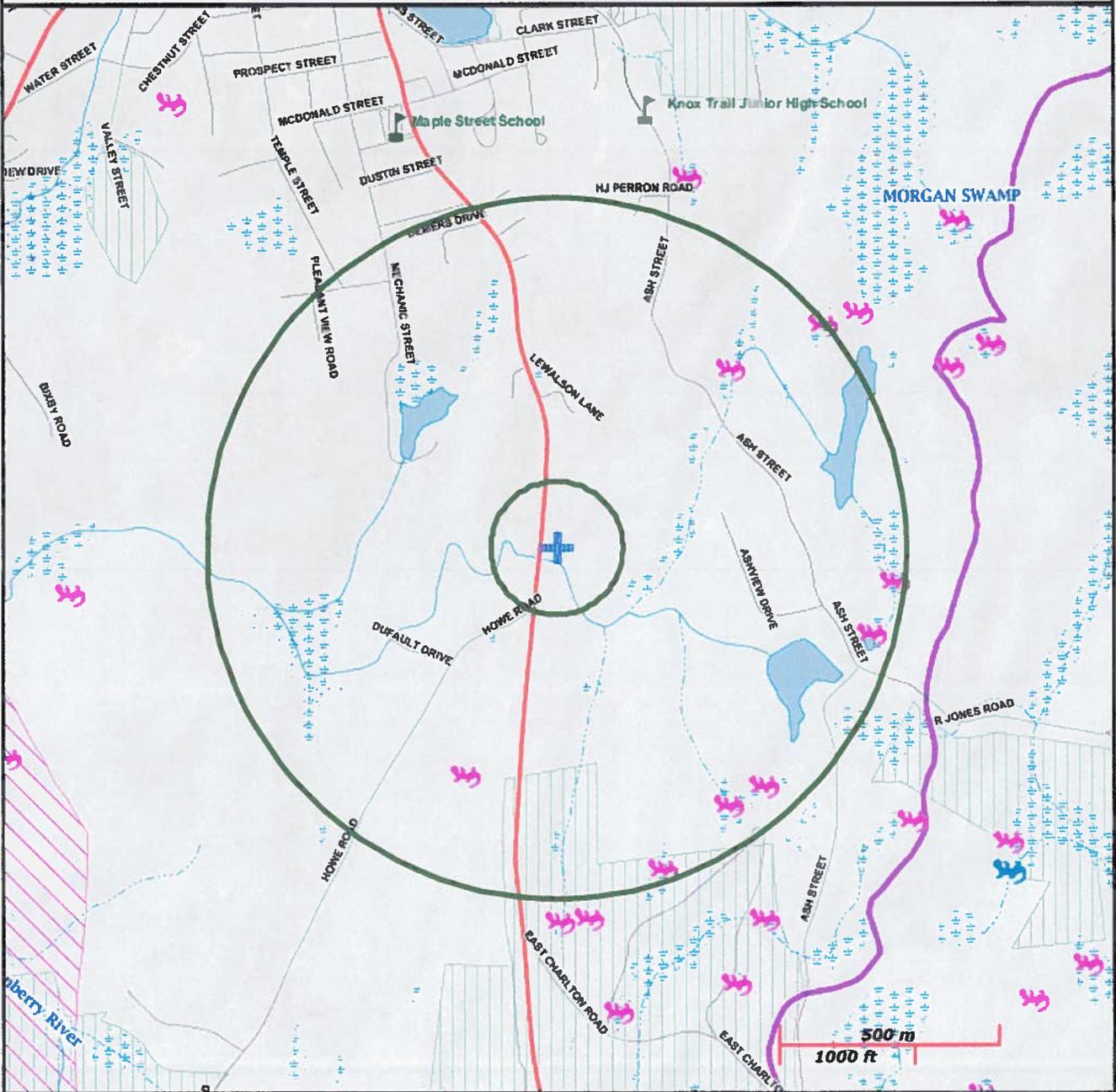


MassDEP - Bureau of Waste Site Cleanup

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

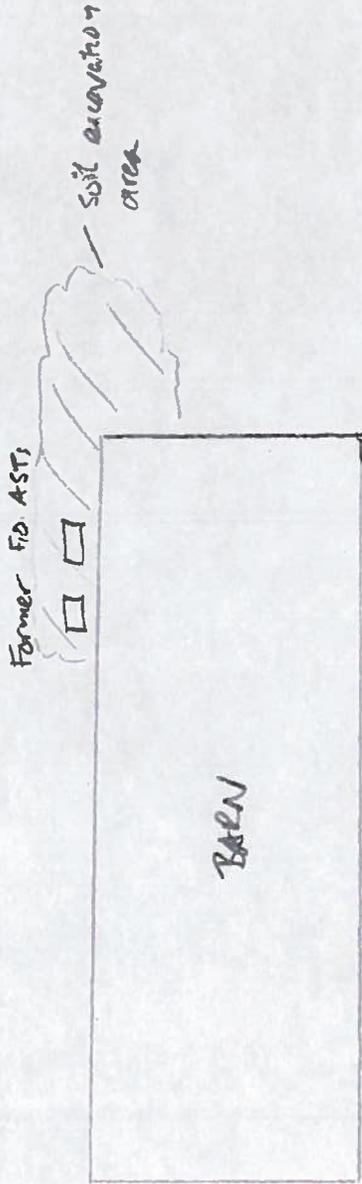
RESIDENTIAL FUEL OIL SPILL
 115 CHARLTON ROAD SPENCER, MA
 2-000019085
 NAD83 UTM Meters:
 4879643mN , 253523mE (Zone: 19)
 December 11, 2013

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:
<http://www.mass.gov/mgis/>

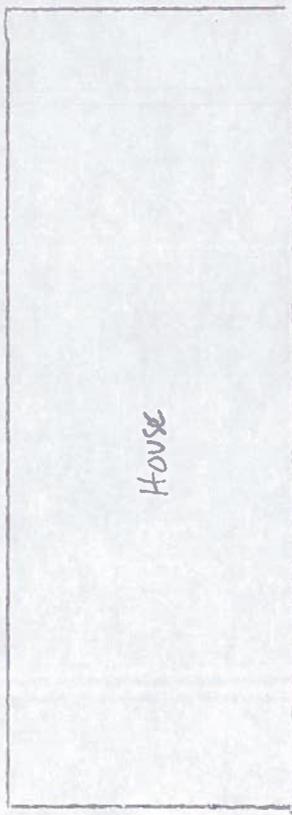


Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail	PWS Protection Areas: Zone II, IWPA, Zone A
Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct	Hydrography: Open Water, PWS Reservoir, Tidal Flat
Basins: Major, PWS; Streams: Perennial, Intermittent,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

Surface Water

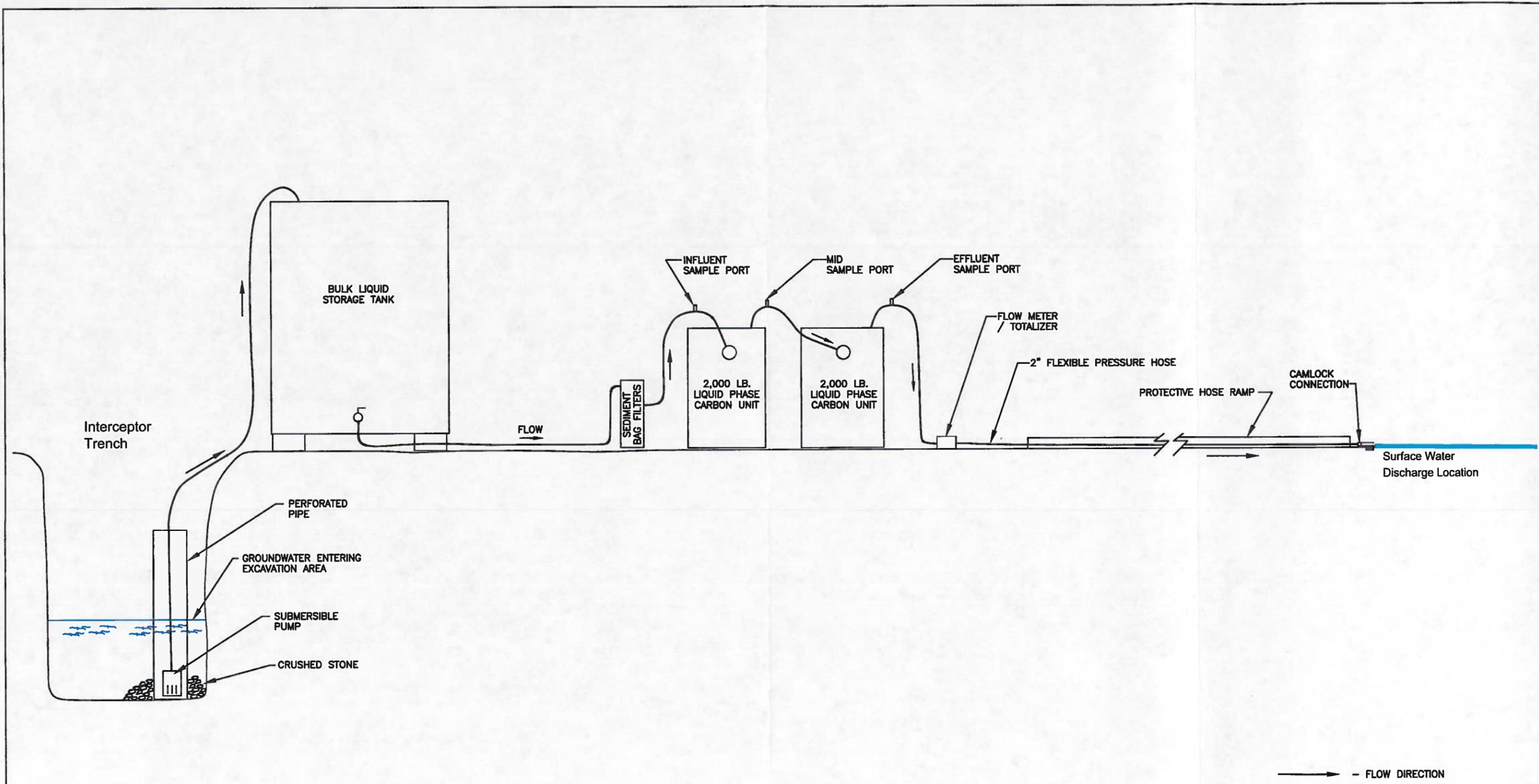


FID AST



NOT TO SCALE

Charlton Rd, Spencer MA



→ - FLOW DIRECTION

CEA CORPORATE ENVIRONMENTAL ADVISORS, INC.
 Assessments - Remediation - Emergency Response
 127 HARTWELL ST. W. BOYLSTON, MA.

SCALE: NOT TO SCALE		DR. BY: K. HAZEL
DATE: 1/9/14	APP. BY: SEV	JOB NO.: 7679-13

**EXCAVATION DEWATERING
 PROCESS & INSTRUMENTATION DIAGRAM**

Schoof Residential Fuel Oil Spill 115 Charlton Rd, Spencer, MA	FIGURE-4
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