

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

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

a) Name of facility/site: Unoccupied Industrial Property		Facility/site address:	
Location of facility/site: Longitude: -71.1 Latitude: 42.4	Facility SIC code(s): 9999	Street: 340 Mystic Avenue	
b) Name of facility/site owner: Navistar Inc.			
Email address of owner: Jack.Shih@Navistar.com		Town: Medford	County: Middlesex
Telephone no. of facility/site owner: 312-836-3921		State: MA	Zip: 02153
Fax no. of facility/site owner:		Owner is (check one): 1. Federal _____ 2. State/Tribal _____	
Address of owner (if different from site):		3. Private ☒ 4. other, if so, describe:	
Street: 4201 Winfield Road			
Town: Warrenville	State: IL	Zip: 60555	County: Du Page
c) Legal name of operator:		Operator telephone no: 508-384-7617	
Dowling Corporation		Operator fax no.: 508-384-8236	Operator email: Dowlingcorp@verizon.net
Operator contact name and title: Lawrence J Hagerty Jr. Operations Manager			
Address of operator (if different from owner):		Street: 713 Dedham Street	
Town: Wrentham	State: MA	Zip: 02093	County: Norfolk
d) Check "yes" or "no" for the following:			
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ☐ No ☒ if "yes," number:			
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes ☐ No ☒ if "yes," date and tracking #:			
3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes ☒ No ☐			
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes ☒ No ☐			

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes <u> </u> No <u>✓</u> If "yes," please list: 1. site identification # assigned by the state of NH or MA: 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number:	f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y <u> </u> N <u>✓</u>, if Y, number: 2. phase I or II construction storm water general permit? Y <u> </u> N <u>✓</u>, if Y, number: 3. individual NPDES permit? Y <u> </u> N <u>✓</u>, if Y, number: 4. any other water quality related permit? Y <u> </u> N <u>✓</u>, if Y, number:
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2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:

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

Contaminated groundwater treatment as part of ongoing soil remediation project

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, ft³/s)? Max. flow <u>1</u> Average flow <u>.06</u> Is maximum flow a design value? Y <u> </u> N <u>✓</u> For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.
3) Latitude and longitude of each discharge within 100 feet: pt.1: long. <u>-71.1</u> lat. <u>42.4</u> ; pt.2: long. <u> </u> lat. <u> </u> ; pt.3: long. <u> </u> lat. <u> </u> ; pt.4: long. <u> </u> lat. <u> </u> ; pt.5: long. <u> </u> lat. <u> </u> ; pt.6: long. <u> </u> lat. <u> </u> ; pt.7: long. <u> </u> lat. <u> </u> ; pt.8: long. <u> </u> lat. <u> </u> ; etc.		
4) If hydrostatic testing, total volume of the discharge (gals): N/A		5) Is the discharge intermittent <u> </u> or seasonal <u> </u>? Is discharge ongoing Yes <u> </u> No <u> </u>?
c) Expected dates of discharge (mm/dd/yy): start <u>11/09/09</u> end <u>12/31/09</u>		
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. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for **all** of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation
		✓	✓			

b) 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. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 minimum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Avg. daily value	
							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids		✓	1	Grab	2540D	5000	44,000	4.0	44,000	2.0
2. Total Residual Chlorine	✓		1	Grab	4500-Cl E	10	0	0	0	0
3. Total Petroleum Hydrocarbons		✓	1	Grab	1664 A	5000	20,400	1.9	20,400	.95
4. Cyanide	✓		1	Grab	4500 CN CE	5	0	0	0	0
5. Benzene		✓	1	Grab	8260 B	1	12.1	.001	12.1	.0006
6. Toluene		✓	1	Grab	8260 B	1	4.7	.0004	4.7	.0002
7. Ethylbenzene	✓		1	Grab	8260 B	1	0	0	0	0
8. (m,p,o) Xylenes		✓	1	Grab	8260 B	3	87.7	.008	87.7	.004
9. Total BTEX ⁴		✓	1	Grab	8260 B	3	104.5	.009	104.5	.005

⁴BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide ⁵ (1,2- Dibromo-methane)	✓		1	Grab	8011	.015	0	0	0	0
11. Methyl-tert-Butyl Ether (MtBE)		✓	1	Grab	8260 B	1	3.7	.0003	3.7	.0002
12. tert-Butyl Alcohol (TBA)	✓		1	Grab	8260 B	25	0	0	0	0
13. tert-Amyl Methyl Ether (TAME)	✓		1	Grab	8260 B	1	0	0	0	0
14. Naphthalene		✓	1	Grab	8260 B	1	10.9	.001	10.9	.0005
15. Carbon Tetra-chloride	✓		1	Grab	8260 B	1	0	0	0	0
16. 1,4 Dichlorobenzene	✓		1	Grab	8260 B	1	0	0	0	0
17. 1,2 Dichlorobenzene	✓		1	Grab	8260 B	1	0	0	0	0
18. 1,3 Dichlorobenzene	✓		1	Grab	8260 B	1	0	0	0	0
19. 1,1 Dichloroethane	✓		1	Grab	8260 B	1	0	0	0	0
20. 1,2 Dichloroethane	✓		1	Grab	8260 B	1	0	0	0	0
21. 1,1 Dichloroethylene	✓		1	Grab	8260 B	1	0	0	0	0
22. cis-1,2 Dichloro-ethylene	✓		1	Grab	8260 B	1	0	0	0	0
23. Dichloromethane (Methylene Chloride)	✓		1	Grab	8260 B	4	0	0	0	0
24. Tetrachloroethylene	✓		1	Grab	8260 B	1	0	0	0	0

⁵EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		1	Grab	8260 B	1	0	0	0	0
26. 1,1,2 Trichloroethane	✓		1	Grab	8260 B	1	0	0	0	0
27. Trichloroethylene	✓		1	Grab	8260 B	1	0	0	0	0
28. Vinyl Chloride	✓		1	Grab	8260 B	1	0	0	0	0
29. Acetone		✓	1	Grab	8260 B	25	27.1	.003	27.1	.001
30. 1,4 Dioxane	✓		1	Grab	8260 B	500	0	0	0	0
31. Total Phenols	✓		1	Grab	8270 C	10	0	0	0	0
32. Pentachlorophenol	✓		1	Grab	8270 C	50	0	0	0	0
33. Total Phthalates ⁶ (Phthalate esters)	✓		1	Grab	8270 C	10	0	0	0	0
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]		✓	1	Grab	8270 C	6	26.9	.003	26.9	.001
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	Grab	8270 C	10	0	0	0	0
a. Benzo(a) Anthracene	✓		1	Grab	8270 C	10	0	0	0	0
b. Benzo(a) Pyrene	✓		1	Grab	8270 C	10	0	0	0	0
c. Benzo(b)Fluoranthene	✓		1	Grab	8270 C	10	0	0	0	0
d. Benzo(k) Fluoranthene	✓		1	Grab	8270 C	10	0	0	0	0
e. Chrysene	✓		1	Grab	8270 C	10	0	0	0	0

⁶The sum of individual phthalate compounds.

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	✓		1	Grab	8270 C	10	0	0	0	0
g. Indeno(1,2,3-cd) Pyrene	✓		1	Grab	8270 C	10	0	0	0	0
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	✓		1	Grab	8270 C	10	0	0	0	0
h. Acenaphthene	✓		1	Grab	8270 C	10	0	0	0	0
i. Acenaphthylene	✓		1	Grab	8270 C	10	0	0	0	0
j. Anthracene	✓		1	Grab	8270 C	10	0	0	0	0
k. Benzo(ghi) Perylene	✓		1	Grab	8270 C	10	0	0	0	0
l. Fluoranthene	✓		1	Grab	8270 C	10	0	0	0	0
m. Fluorene	✓		1	Grab	8270 C	10	0	0	0	0
n. Naphthalene-	✓		1	Grab	8270 C	10	0	0	0	0
o. Phenanthrene	✓		1	Grab	8270 C	10	0	0	0	0
p. Pyrene	✓		1	Grab	8270 C	10	0	0	0	0
37. Total Polychlorinated Biphenyls (PCBs)		✓	1	Grab	608	.11	.23	.00002	.23	.00001
38. Antimony	✓		1	Grab	3113 B	5	0	0	0	0
39. Arsenic		✓	1	Grab	3113 B	2	18.4	.002	18.4	.001
40. Cadmium	✓		1	Grab	200.7	5	0	0	0	0
41. Chromium III	✓		1	Grab	200.7&35004	20	0	0	0	0
42. Chromium VI	✓		1	Grab	200.7	20	0	0	0	0

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							concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper		✓	1	Grab	3113 B	3.0	36.1	.003	36.1	.002
44. Lead		✓	1	Grab	3113 B	25.0	102	.009	102	.005
45. Mercury	✓		1	Grab	245.1	.2	0	0	0	0
46. Nickel		✓	1	Grab	200.7	10	38	.004	38	.002
47. Selenium	✓		1	Grab	3113 B	10.0	0	0	0	0
48. Silver	✓		1	Grab	3113 B	.5	0	0	0	0
49. Zinc		✓	1	Grab	200.7	50	216	.02	216	.01
50. Iron		✓	1	Grab	200.7	100	3730	.34	3730	.17
Other (describe):										

c) For discharges where **metals** are believed present, please fill out the following:

<i>Step 1:</i> Do any of the metals in the influent have a reasonable potential to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y ☒ N ☐ If yes, which metals? Arsenic, Copper, Lead, Nickel, Zinc, Iron	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)? Y ☐ N ☒ If "Yes," list which metals:
<i>Step 2:</i> For any metals which have reasonable potential to exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.e) (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? Metals: Arsenic, Copper, Lead, Nickel, Zinc, Iron DF: 132	

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:					
b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☒	Air stripper	Oil/water separator	Equalization tanks	GAC filter ☒
	Chlorination	Dechlorination	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 <u>25 Gpm</u> Maximum flow rate of treatment system <u>50 Gpm</u> Design flow rate of treatment system <u>100 Gpm</u>					
d) A description of chemical additives being used or planned to be used (attach MSDS sheets): <u>N/A</u>					

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

a) Identify the discharge pathway:	Direct ☐	Within facility ☐	Storm drain ☒	River/brook ☐	Wetlands ☐	Other (describe): ☐
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:						
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 discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface water The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.						
d) Provide the state water quality classification of the receiving water <u>B</u>						
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water <u>14.66</u> 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? Yes ☒ No ☐ If yes, for which pollutant(s)? Is there a TMDL? Yes ☒ No ☐ If yes, for which pollutant(s)? <u>Metals/Nutrients/Pathogens (Category 5 Waters)</u>						

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes ☒ No ☒ Has any consultation with the federal services been completed? Yes ☒ No ☒ or is consultation underway? Yes ☒ No ☒ What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one): a "no jeopardy" opinion? ☐ or written concurrence ☐ on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?	b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge? Yes ☒ No ☒ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes ☒ No ☒
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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:	Industrial Property (340 Mystic Avenue Medford,MA)
Operator signature:	
Title:	Dowling Corporation Lawrence J Hagerty Jr. (Operations Manager)
Date:	10/22/09

DOWLING CORPORATION

713 DEDHAM ST. WRENTHAM, MA 02093
TEL. (508) 384-7617 FAX (508) 384-8236
ENVIRONMENTAL REMEDIATION SERVICES

Industrial Property
340 Mystic Avenue
Medford, Ma
Remediation General Permit (RGP) Under the National Pollutant Discharge Elimination System (NPDES)

Sec 2d Discharge Information- Facility Flow Schematic

Influent from excavation-Frac Tank-Bag Filter-GAC Units-Totalizer-Effluent

Sec 4a Treatment System Information -Schematic

Influent from Excavation-21k Frac Tank-10 Micron bag filter- 1st 1,000# GAC unit-2nd 1,000# GAC Unit-Flow totalizer-Onsite CB-Municipal storm drain system-Mystic River

Sec 5b Receiving Surface Waters- Discharge Pathway

Treatment system effluent will be discharged into an on site catch basin. Effluent discharge flows toward the front of the property, subsequently connecting to the municipal storm drain system flowing south along Mystic Avenue, eventually discharging to the Mystic River near Shore Drive.

Industrial Property
340 Mystic Avenue
Medford, MA
Remediation General Permit (RGP) Under the National Pollutant Discharge Elimination System (NPDES)

The 7Q10 {the minimum flow (cfs) for 7 consecutive days with a recurrence interval of 10 years) for the portion of the Mystic River where discharge is anticipated under the NPDES RGP permit submitted for the 340 Mystic Avenue site in Medford, Massachusetts has been calculated using the average of the 7Q10 recorded at nine continuous-record gaging stations located on the Aberjona and Mystic River subbasins located within the Coastal Drainage Basin of Northeastern Massachusetts, as documented by "Hydrology and Water Resources of the Coastal Drainage Basin of Northeastern Massachusetts, From Castle Neck, Ipswich, To Mystic River, Boston", by David F. Delaney and Frederick B. Gay, Hydrologic Investigations Atlas HA-589 (Sheet 3 of 4) in the published by The Department of the Interior, United States Geological Survey.

The drainage area of the Aberjona and Mystic River Subbasin is documented in the above referenced government publication as 62.9 square miles at the Amelia Earhart Dam on the Mystic River. The Amelia Earhart Dam is downstream from the proposed discharge point. The estimated tributary drainage area upstream of the discharge point is 50 square miles.

7Q10 : Calculated from average of nine continuous-record gaging stations in the Aberjona and Mystic River Subbasin

Average of nine stations = 0.293 cubic feet per second per square mile

$0.293 * 50 \text{ (sq. miles)} = 14.66 \text{ cubic feet per second}$

7Q10 = 14.66

DF: $(Q_d + Q_s)/Q_D$

Where: DF : Dilution Factor

Qd : Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = 0.00223 cfs)

Qs = Receiving water 7Q10 (cfs) where,

7Q10 = The minimum flow {cfs} for 7 consecutive days with a recurrence interval of 10 years

DF: $(0.1115 + 14.66)/0.1115$

DF= 132

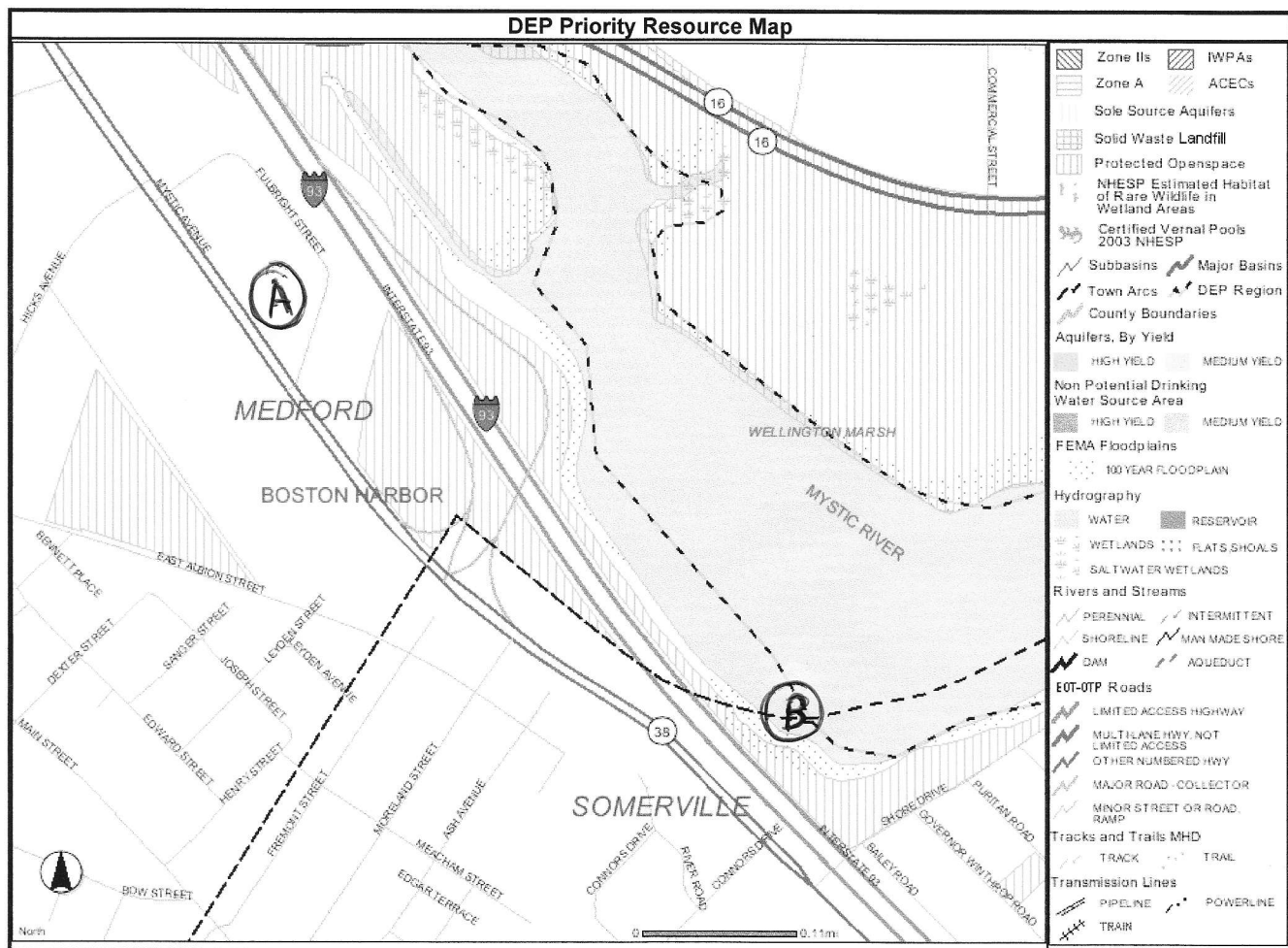
Therefore, with a Dilution Factor of 132, utilize column with Dilution Range Concentration of >100 in Appendix IV in the NPDES RGP.

Google maps Address



Ⓐ 340 mystic ave, medford, ma (SITE)

Ⓑ Discharge Point - Mystic River



Ⓐ 340 mystic Ave (SITE)

Ⓑ Discharge point - mystic River