



Clean Harbors of Braintree, Inc
1 Hill Avenue
Braintree, MA 02184
781-380-7100
www.cleanharbors.com

MAG 910116

December 3, 2010

Via Certified Mail 7009 0820 0001 2402 4773

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

Dear Sir or Madam,

Attached please find a Notice of Intent to Discharge under the Remediation General permit MAG910000 for:

Clean Harbors of Braintree
1 Hill Ave
Braintree MA 02184.

If you have any questions or require any more information please contact me directly.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including fines and imprisonment.

A handwritten signature in blue ink, appearing to read "Gerald Podlisny", followed by a horizontal line.

Gerald Podlisny
Facility Compliance Manager
Office: 781.380.7134
Fax: 781.380.7193
Email: podlisny.gerald@cleanharbors.com

35 pp inc cover

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:

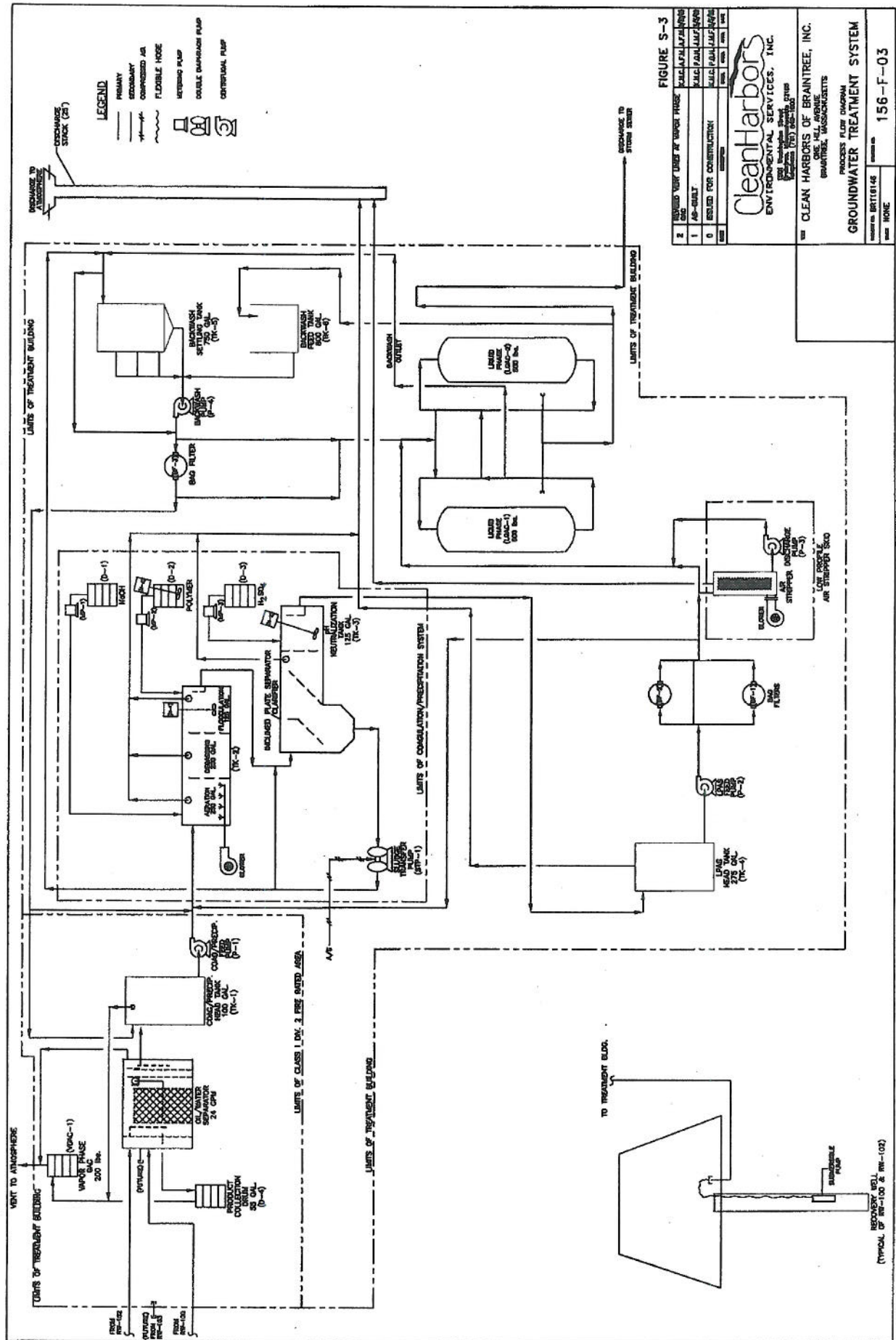
a) Name of facility/site: Clean Harbors of Braintree, Inc.		Facility/site mailing address:	
Location of facility/site:	Facility SIC code(s):	Street:	
longitude: 70 58' 04"	4226	1 Hill Avenue	
latitude: 42 13' 57"			
b) Name of facility/site owner:		Town:	Braintree
Email address of facility/site owner:		State:	MA
cleanharbors.com		Zip:	02184
Telephone no. of facility/site owner:	781-380-7100	County:	Norfolk
Fax no. of facility/site owner:	781-380-7194	Owner is (check one): 1. Federal ☐ 2. State/Tribal ☐	
Address of owner (if different from site):			
3. Private ☒ 4. Other ☐ if so, describe:			
Street:	NA		
Town:		State:	
		Zip:	
c) Legal name of operator:		Operator telephone no.:	781-380-7100
Clean Harbors of Braintree, Inc.		Operator fax no.:	781-380-7194
Operator contact name and title:		Operator email:	
Gerald Podlisy, Compliance Manager		cleanharbors.com	
Address of operator (if different from owner):		Street:	NA
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: <u>99-070</u> 2. Has a prior NPDES application (Form I & 2C) ever been filed for the discharge? Y ☐ N ☒ if Y, date and tracking #: <u> </u> 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y ☐ N ☒ 4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y ☐ N ☒									
e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ☐ N ☒ If Y, please list: 1. site identification # assigned by the state of NH or MA: <u> </u> 2. permit or license # assigned: <u> </u> 3. state agency contact information: name, location, and telephone number: <u> </u>	f) Is the site/facility covered by any other EPA permit, including: 1. Multi-Sector General Permit? Y ☐ N ☒ if Y, number: <u> </u> 2. Final Dewatering General Permit? Y ☐ N ☒ if Y, number: <u> </u> 3. EPA Construction General Permit? Y ☐ N ☒ if Y, number: <u> </u> 4. Individual NPDES permit? Y ☐ N ☒ if Y, number: <u>MA0031551</u> 5. any other water quality related individual or general permit? Y ☐ N ☒ if Y, number: <u> </u>								
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. <table border="1"> <thead> <tr> <th>Activity Category</th> <th>Activity Sub-Category</th> </tr> </thead> <tbody> <tr> <td>I - Petroleum Related Site Remediation</td> <td> A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☒ </td> </tr> <tr> <td>II - Non Petroleum Site Remediation</td> <td> A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐ </td> </tr> <tr> <td>III - Contaminated Construction Dewatering</td> <td> A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐ </td> </tr> </tbody> </table>		Activity Category	Activity Sub-Category	I - Petroleum Related Site Remediation	A. Gasoline Only Sites ☐ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) ☐ C. Petroleum Sites with Additional Contamination ☒	II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐	III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐
Activity Category	Activity Sub-Category								
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II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites ☐ B. VOC Sites with Additional Contamination ☐ C. Primarily Heavy Metal Sites ☐								
III - Contaminated Construction Dewatering	A. General Urban Fill Sites ☐ B. Known Contaminated Sites ☐								

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ☐ B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites ☐ C. Hydrostatic Testing of Pipelines and Tanks ☐ D. Long-Term Remediation of Contaminated Sumps and Dikes ☐ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ☐
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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: Pump and treat groundwater remediation system designed to contain groundwater at the site as part of a HSWA Consent Order Project (RCRA Docket 1-89-1050).	
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 0.07 Is maximum flow a design value? Y ☒ N ☐ Average flow (include units) 3.5 Is average flow a design value or estimate? design
3) Latitude and longitude of each discharge within 100 feet:	
pt. 1: lat 42 14' 12" long 70 58' 14"	pt. 2: lat long
pt. 3: lat long	pt. 4: lat long
pt. 5: lat long	pt. 6: lat long
pt. 7: lat long	pt. 8: lat long
4) If hydrostatic testing, total volume of the discharge (gals) na	
5) Is the discharge intermittent ☐ or seasonal ☐ ? Is discharge ongoing? Y ☒ N ☐	
c) Expected dates of discharge (mm/dd/yy): start end	
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	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	2	Grab	SM2540-D	4 mg/l	31,000	22,500			
2. Total Residual Chlorine (TRC)		☐	☐									
3. Total Petroleum Hydrocarbons (TPH)		☐	☒	2	Grab	E1664A	5 mg/l	<5,000	<5,000			
4. Cyanide (CN)	57125	☒	☐									
5. Benzene (B)	71432	☐	☒	2	Grab	SW8260B	1 ug/l	87.4	69.3			
6. Toluene (T)	108883	☐	☒	2	Grab	SW8260B	5 ug/l	44.3	34.3			
7. Ethylbenzene (E)	100414	☐	☒	2	Grab	SW8260B	5 ug/l	117	90.5			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☐	☒	2	Grab	SW8260B	5 ug/l	104	88.2			
9. Total BTEX ²	n/a	☐	☒	2	Grab	SW8260B	5 ug/l	352.7	282.3			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934	☐	☒	2	Grab	SW8260B	2 ug/l	10.5	6.83			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☐	☒	2	Grab	SW8260B	5 ug/l	125	79.7			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐									

* 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	☒	☐								
14. Naphthalene	91203	☐	☒	2	Grab	SW8260B	20.0 ug/l	35.7		34.4	
15. Carbon Tetrachloride	56235	☐	☒	2	Grab	SW8260B	2.0 ug/l	<2		<2	
16. 1,2 Dichlorobenzene (o-DCB)	95501	☐	☒	2	Grab	SW8260B	5 ug/l	34.7		28.6	
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐								
18. 1,4 Dichlorobenzene (p-DCB)	106467	☐	☒	2	Grab	SW8260B	5 ug/l	3.74		3.12	
18a. Total dichlorobenzene		☐	☒	2	Grab	SW8260B	5 ug/l	38.4		31.7	
19. 1,1 Dichloroethane (DCA)	75343	☐	☒	2	Grab	SW8260B	500 ug/l	2,400		2,070	
20. 1,2 Dichloroethane (DCA)	107062	☒	☐								
21. 1,1 Dichloroethene (DCE)	75354	☐	☒	2	Grab	SW8260B	2 ug/l	73.2		68.4	
22. cis-1,2 Dichloroethene (DCE)	156592	☐	☒	2	Grab	SW8260B	500 ug/l	16,200		15,350	
23. Methylene Chloride	75092	☐	☒	2	Grab	SW8260B	4.6 ug/l	117		116	
24. Tetrachloroethene (PCE)	127184	☐	☒	2	Grab	SW8260B	500 ug/l	1,760		1,137	
25. 1,1,1 Trichloro-ethane (TCA)	71556	☐	☒	2	Grab	SW8260B	200 ug/l	9,720		8,940	
26. 1,1,2 Trichloro-ethane (TCA)	79005	☐	☒	2	Grab	SW8260B	2 ug/l	6.83		6.20	
27. Trichloroethene (TCE)	79016	☐	☒	2	Grab	SW8260B	500 ug/l	3,090		3,065	

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	☐	☒	2	Grab	SW8260B	200 ug/l	504		385	
29. Acetone	67641	☒	☐								
30. 1,4 Dioxane	123911	☒	☐								
31. Total Phenols	108952	☒	☐								
32. Pentachlorophenol (PCP)	87865	☒	☐								
33. Total Phthalates (Phthalate esters) ⁴		☒	☐								
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐								
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☐	☐								
a. Benzo(a) Anthracene	56553	☒	☐								
b. Benzo(a) Pyrene	50328	☒	☐								
c. Benzo(b) Fluoranthene	205992	☒	☐								
d. Benzo(k) Fluoranthene	207089	☒	☐								
e. Chrysene	21801	☒	☐								
f. Dibenzo(a,h)anthracene	53703	☒	☐								
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐								
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☐	☐								

⁴ The sum of individual phthalate compounds.

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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	☐	☒	2	Grab	625	0.515 ug/l	0.742		0.501	
i. Acenaphthylene	208968	☒	☐								
j. Anthracene	120127	☒	☐								
k. Benzo(ghi) Perylene	191242	☒	☐								
l. Fluoranthene	206440	☒	☐								
m. Fluorene	86737	☐	☒	2	Grab	625	0.515 ug/l	0.763		0.512	
n. Naphthalene	91203	☐	☒	2	Grab	625	0.773 ug/l	14.6		13.9	
o. Phenanthrene	85018	☐	☒	2	Grab	625	0.515 ug/l	4.40		3.49	
p. Pyrene	129000	☒	☐								
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.	☒	☐								
38. Chloride	16887006	☐	☐								
39. Antimony	7440360	☐	☐								
40. Arsenic	7440382	☒	☐								
41. Cadmium	7440439	☒	☐								
42. Chromium III (trivalent)	16065831	☒	☐								
43. Chromium VI (hexavalent)	18540299	☒	☐								
44. Copper	7440508	☒	☐								
45. Lead	7439921	☒	☐								
46. Mercury	7439976	☐	☒	2	Grab	SW60108	8.5 ug/l	12.0		8.13	
47. Nickel	7440020	☒	☐								
48. Selenium	7782492	☐	☒	2	Grab	SW60108	8.2 ug/l	17.0		10.5	
49. Silver	7440224	☒	☐								
50. Zinc	7440666	☒	☐								
51. Iron	7439896	☐	☒	2	Grab	SW60108	500 ug/l	23,300		20,150	
Other (describe):		☐	☐								

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 concentration (ug/l)	Maximum daily value mass (kg)	Average daily value concentration (ug/l)	Average daily value mass (kg)
		☐	☐								
		☐	☐								

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

Step 1: Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y ☐ N ☐ Step 2: 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? Metal: Iron DF 18.4 Metal: Lead DF 18.4 Metal: DF Metal: DF Etc.	If yes, which metals? Iron, lead 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 Y, list which metals: Iron and lead
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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:

Groundwater treatment system is a pump and treat system using an oil/water separator, a metals removal system, bag filter units, air stripper and activated carbon units (see attached process drawing).

b) Identify each applicable treatment unit (check all that apply):	Frac. tank ☐	Air stripper ☒	Oil/water separator ☒	Equalization tanks ☒	Bag filter ☒	GAC filter ☒
	Chlorination ☐	De-chlorination ☐	Other (please describe):			

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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 3.5 gpm Maximum flow rate of treatment system 30 gpm
Design flow rate of treatment system 30 gpm

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

Sodium hydroxide and sulfuric acid are used for pH adjustment.
Naiclear 7767 flocculent is used for metals removal/flocculation.

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 ☐	Within facility (sewer) ☐	Storm drain ☒	Wetlands ☐	Other (describe):
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b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:
Treatment system discharges to a 48" storm drain via a 12" SDR underground pipe. The storm drain empties into the Weymouth Fore 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 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 SB, B

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 1.22 cfs
Please attach any calculation sheets used to support stream flow and dilution calculations.

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

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

6. ESA and NHPA Eligibility.

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

- a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?
A ☒ B ☐ C ☐ D ☐ E ☐ F ☐
- b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ☐ N ☐ Underway ☐
- c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y ☐ N ☐
- d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.
- e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?
1 ☒ 2 ☐ 3 ☐
- f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

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

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

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

Facility/Site Name:	Clean Harbors of Braintree, Inc.
Operator signature:	
Printed Name & Title:	Gerald Podlisny, Compliance Manager
Date:	DEC 3, 2010

GeoLabs, Inc.
Reported Date: 08-May-09

CLIENT: Clean Harbors
Lab Order: 0904482
Project: RO 2203790-001
Lab ID: 0904482-005

Client Sample ID: Post OWS
Collection Date: 4/27/2009 10:45:00 AM
Date Received: 4/28/2009
Matrix: GROUNDWATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
NON-POLAR 1664A - E1664A						
Total Petroleum Hydrocarbons	ND	5.00		mg/L	1	Analyst: FC 5/4/2009
IGNITABILITY - SW1010						
Ignitability	>93	20		°C	1	Analyst: FC 4/29/2009
TOTAL SUSPENDED SOLIDS - SM2540-D						
Total Suspended Solids	31.0	4.00		mg/L	1	Analyst: FC 4/30/2009
TOTAL METALS BY ICP - SW6010B						
Iron	23.3	0.600		mg/L	10	Analyst: QS 4/30/2009
Lead	0.0120	0.00850		mg/L	1	4/30/2009
Nickel	ND	0.00820		mg/L	1	4/30/2009
TOTAL MERCURY - E245.1						
Mercury	ND	0.0005		mg/L	1	Analyst: EC 4/29/2009
SEMIVOLATILES BY 625						
1,2,4-Trichlorobenzene	ND	0.773		µg/L	1	Analyst: MR 4/30/2009 3:48:00 PM
1,2-Dichlorobenzene	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
1,2-Dinitrobenzene	ND	5.15		µg/L	1	4/30/2009 3:48:00 PM
1,3-Dichlorobenzene	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
1,3-Dinitrobenzene	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
1,4-Dichlorobenzene	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
1,4-Dinitrobenzene	ND	5.15		µg/L	1	4/30/2009 3:48:00 PM
2,3,4,6-Tetrachlorophenol	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
2,4,5-Trichlorophenol	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
2,4,6-Trichlorophenol	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
2,4-Dichlorophenol	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
2,4-Dimethylphenol	ND	3.87		µg/L	1	4/30/2009 3:48:00 PM
2,4-Dinitrophenol	ND	0.258		µg/L	1	4/30/2009 3:48:00 PM
2,4-Dinitrotoluene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
2,6-Dinitrotoluene	ND	0.258		µg/L	1	4/30/2009 3:48:00 PM
2-Chloronaphthalene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
2-Chlorophenol	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
2-Methylnaphthalene	9.18	0.773		µg/L	1	4/30/2009 3:48:00 PM
2-Methylphenol	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
2-Nitroaniline	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
2-Nitrophenol	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits

BRL Below Reporting Limit
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

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GeoLabs, Inc.

Reported Date: 08-May-09

CLIENT: Clean Harbors
 Lab Order: 0904482
 Project: RO 2203790-001
 Lab ID: 0904482-005

Client Sample ID: Post OWS
 Collection Date: 4/27/2009 10:45:00 AM
 Date Received: 4/28/2009
 Matrix: GROUNDWATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY 625						Analyst: MR
3,3'-Dichlorobenzidine	ND	2.58		µg/L	1	4/30/2009 3:48:00 PM
3-Methylphenol/4-Methylphenol	ND	1.55		µg/L	1	4/30/2009 3:48:00 PM
3-Nitroaniline	ND	1.55		µg/L	1	4/30/2009 3:48:00 PM
4,6-Dinitro-2-Methylphenol	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
4-Bromophenyl Phenyl Ether	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
4-Chloro-3-Methylphenol	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
4-Chloroaniline	ND	2.58		µg/L	1	4/30/2009 3:48:00 PM
4-Chlorophenyl Phenyl Ether	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
4-Nitroaniline	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
4-Nitrophenol	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Acenaphthene	0.742	0.515		µg/L	1	4/30/2009 3:48:00 PM
Acenaphthylene	ND	0.258		µg/L	1	4/30/2009 3:48:00 PM
Acetophenone	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
Aniline	ND	2.32		µg/L	1	4/30/2009 3:48:00 PM
Anthracene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Azobenzene	8.12	5.15		µg/L	1	4/30/2009 3:48:00 PM
Benz(a)Anthracene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Benzidine	ND	10.3		µg/L	1	4/30/2009 3:48:00 PM
Benzo(a)Pyrene	ND	0.206		µg/L	1	4/30/2009 3:48:00 PM
Benzo(b)Fluoranthene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Benzo(g,h,i)Perylene	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
Benzo(k)Fluoranthene	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
Benzyl Alcohol	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
Bis(2-Chloroethoxy)Methane	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Bis(2-Chloroethyl)Ether	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Bis(2-Chloroisopropyl)Ether	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
Bis(2-Ethylhexyl)Phthalate	ND	2.06		µg/L	1	4/30/2009 3:48:00 PM
Butyl Benzyl Phthalate	ND	1.29		µg/L	1	4/30/2009 3:48:00 PM
Carbazole	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
Chrysene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Dibenz(a,h)Anthracene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Dibenzofuran	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Diethyl Phthalate	ND	1.29		µg/L	1	4/30/2009 3:48:00 PM
Dimethyl Phthalate	ND	1.80		µg/L	1	4/30/2009 3:48:00 PM
Di-n-Butyl Phthalate	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
Di-n-Octyl Phthalate	ND	2.06		µg/L	1	4/30/2009 3:48:00 PM
Fluoranthene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Fluorene	0.763	0.515		µg/L	1	4/30/2009 3:48:00 PM
Hexachlorobenzene	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
Hexachlorobutadiene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM

Qualifiers: B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside recovery limits

BRL Below Reporting Limit
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

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 GPR

GeoLabs, Inc.

Reported Date: 08-May-09

CLIENT: Clean Harbors
 Lab Order: 0904482
 Project: RO 2203790-001
 Lab ID: 0904482-005

Client Sample ID: Post OWS
 Collection Date: 4/27/2009 10:45:00 AM
 Date Received: 4/28/2009
 Matrix: GROUNDWATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY 625						Analyst: MR
Hexachlorocyclopentadiene	ND	10.3		µg/L	1	4/30/2009 3:48:00 PM
Hexachloroethane	14.3	2.06		µg/L	1	4/30/2009 3:48:00 PM
Indeno(1,2,3-cd)Pyrene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Isophorone	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Naphthalene	14.6	0.773		µg/L	1	4/30/2009 3:48:00 PM
Nitrobenzene	ND	0.773		µg/L	1	4/30/2009 3:48:00 PM
N-Nitrosodimethylamine	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
N-Nitrosodi-n-Propylamine	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
N-Nitrosodiphenylamine	ND	5.15		µg/L	1	4/30/2009 3:48:00 PM
Pentachlorophenol	ND	1.03		µg/L	1	4/30/2009 3:48:00 PM
Phenanthrene	ND	0.515		µg/L	1	4/30/2009 3:48:00 PM
Phenol	ND	0.258		µg/L	1	4/30/2009 3:48:00 PM
Pyrene	ND	1.29		µg/L	1	4/30/2009 3:48:00 PM
Pyridine	ND	1.29		µg/L	1	4/30/2009 3:48:00 PM
Surr: 2,4,6-Tribromophenol	7.55	15-110	S	%REC	1	4/30/2009 3:48:00 PM
Surr: 2-Fluorobiphenyl	69.7	30-130		%REC	1	4/30/2009 3:48:00 PM
Surr: 2-Fluorophenol	2.67	15-110	S	%REC	1	4/30/2009 3:48:00 PM
Surr: 4-Terphenyl-d14	85.5	30-130		%REC	1	4/30/2009 3:48:00 PM
Surr: Nitrobenzene-d5	55.8	30-130		%REC	1	4/30/2009 3:48:00 PM
Surr: Phenol-d6	0.120	15-110	S	%REC	1	4/30/2009 3:48:00 PM

NOTES:

Surrogates fail due to matrix interference.

VOLATILE ORGANIC COMPOUNDS - SW8260B

Analyst: ZYZ

1,1,1,2-Tetrachloroethane	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,1,1-Trichloroethane	9720	500		µg/L	100	5/4/2009 11:06:00 PM
1,1,2,2-Tetrachloroethane	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
1,1,2-Trichloroethane	6.83	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,1-Dichloroethane	1740	500		µg/L	100	5/4/2009 11:06:00 PM
1,1-Dichloroethene	73.2	3.20		µg/L	1	5/4/2009 4:41:00 AM
1,1-Dichloropropene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,2,3-Trichlorobenzene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,2,3-Trichloropropane	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,2,4-Trichlorobenzene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,2,4-Trimethylbenzene	70.9	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,2-Dibromo-3-Chloropropane	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,2-Dibromoethane	10.5	2.00		µg/L	1	5/4/2009 4:41:00 AM
1,2-Dichlorobenzene	22.5	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,2-Dichloroethane	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
1,2-Dichloropropane	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
1,3,5-Trimethylbenzene	9.22	5.00		µg/L	1	5/4/2009 4:41:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside recovery limits

BRL Below Reporting Limit
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

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GPP

GeoLabs, Inc.

Reported Date: 08-May-09

CLIENT: Clean Harbors
 Lab Order: 0904482
 Project: RO 2203790-001
 Lab ID: 0904482-005

Client Sample ID: Post OWS
 Collection Date: 4/27/2009 10:45:00 AM
 Date Received: 4/28/2009
 Matrix: GROUNDWATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS - SW8260B						Analyst: ZYZ
1,3-Dichlorobenzene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,3-Dichloropropane	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
1,4-Dichlorobenzene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
2,2-Dichloropropane	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
2-Butanone	ND	10.0		µg/L	1	5/4/2009 4:41:00 AM
2-Chloroethyl Vinyl Ether	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
2-Chlorotoluene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
2-Hexanone	ND	10.0		µg/L	1	5/4/2009 4:41:00 AM
4-Chlorotoluene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
4-Isopropyltoluene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
4-Methyl-2-Pentanone	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
Acetone	ND	50.0		µg/L	1	5/4/2009 4:41:00 AM
Acrolein	ND	50.0		µg/L	1	5/4/2009 4:41:00 AM
Acrylonitrile	ND	50.0		µg/L	1	5/4/2009 4:41:00 AM
Benzene	51.1	1.00		µg/L	1	5/4/2009 4:41:00 AM
Bromobenzene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
Bromochloromethane	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
Bromodichloromethane	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
Bromoform	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
Bromomethane	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
Carbon Disulfide	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
Carbon Tetrachloride	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
Chlorobenzene	17.6	5.00		µg/L	1	5/4/2009 4:41:00 AM
Chloroethane	161	5.00		µg/L	1	5/4/2009 4:41:00 AM
Chloroform	6.69	5.00		µg/L	1	5/4/2009 4:41:00 AM
Chloromethane	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
cis-1,2-Dichloroethene	16200	1250		µg/L	250	5/6/2009 10:35:00 AM
cis-1,3-Dichloropropene	ND	0.500		µg/L	1	5/4/2009 4:41:00 AM
Dibromochloromethane	ND	2.00		µg/L	1	5/4/2009 4:41:00 AM
Dibromomethane	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
Dichlorodifluoromethane	32.8	5.00		µg/L	1	5/4/2009 4:41:00 AM
Ethylbenzene	63.9	5.00		µg/L	1	5/4/2009 4:41:00 AM
Hexachlorobutadiene	ND	0.500		µg/L	1	5/4/2009 4:41:00 AM
Isopropylbenzene	13.1	5.00		µg/L	1	5/4/2009 4:41:00 AM
Methyl Tert-Butyl Ether	34.4	5.00		µg/L	1	5/4/2009 4:41:00 AM
Methylene Chloride	116	4.60		µg/L	1	5/4/2009 4:41:00 AM
Naphthalene	35.7	20.0		µg/L	1	5/4/2009 4:41:00 AM
n-Butylbenzene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
n-Propylbenzene	10.0	5.00		µg/L	1	5/4/2009 4:41:00 AM
sec-Butylbenzene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
 E Value above quantitation range
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 S Spike Recovery outside recovery limits

BRL Below Reporting Limit
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

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 GTP

GeoLabs, Inc.
Reported Date: 08-May-09

CLIENT: Clean Harbors
Lab Order: 0904482
Project: RO 2203790-001
Lab ID: 0904482-005

Client Sample ID: Post OWS
Collection Date: 4/27/2009 10:45:00 AM
Date Received: 4/28/2009
Matrix: GROUNDWATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VOLATILE ORGANIC COMPOUNDS - SW8260B						Analyst: ZYZ
Styrene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
tert-Butylbenzene	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
Tetrachloroethene	514	500		µg/L	100	5/4/2009 11:06:00 PM
Toluene	24.2	5.00		µg/L	1	5/4/2009 4:41:00 AM
trans-1,2-Dichloroethene	24.6	5.00		µg/L	1	5/4/2009 4:41:00 AM
trans-1,3-Dichloropropene	ND	0.500		µg/L	1	5/4/2009 4:41:00 AM
Trichloroethene	3090	500		µg/L	100	5/4/2009 11:06:00 PM
Trichlorofluoromethane	ND	5.00		µg/L	1	5/4/2009 4:41:00 AM
Vinyl Chloride	266	200		µg/L	100	5/4/2009 11:06:00 PM
Xylenes, Total	72.4	5.00		µg/L	1	5/4/2009 4:41:00 AM
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%REC	1	5/4/2009 4:41:00 AM
Surr: 4-Bromofluorobenzene	106	70-130		%REC	1	5/4/2009 4:41:00 AM
Surr: Dibromofluoromethane	110	70-130		%REC	1	5/4/2009 4:41:00 AM
Surr: Toluene-d8	100	70-130		%REC	1	5/4/2009 4:41:00 AM

Qualifiers: B Analyte detected in the associated Method Blank
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BRL Below Reporting Limit
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

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 GPP