UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

FEB 28 2013

Edward Vydra, Director
Taurus New England Investments, LLC
22 Batterymarch Street
Boston, MA 02109

Re: Authorization to discharge under the Remediation General Permit (RGP) – NHG910000. Walgreens Pharmacy Construction site located at 5-9 Plaistow Road, Plaistow, New Hampshire, Rockingham County, Authorization #NHG910061

Dear Mr. Vydra:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Taurus New England Investments, LLC by the firm EBI Consulting, for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you as the named Owner's Agent 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, recordkeeping, 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/nh.html#dgp.

Please note the enclosed checklist is based on the historic record of pollutant contamination found at the site prior to the submittal of the Notice of Intent (NOI) which indicated no violation of the RGP Appendix III limits.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR). With the absence of dilution to low dilution brooks, EPA determined that the DFR for each parameter is in the one and five (1-5) range. (See the RGP Appendix IV for New Hampshire facilities) Therefore, the limits for copper of 5.2 ug/L and lead of 1.3 ug/L are required to achieve permit compliance at your site.

Finally, please note that 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 operation in accordance with the 2010 RGP requirements.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on June 30, 2013. 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

Thelma Murphy, Manager
Storm Water and Construction
Permits Section

Enclosure

cc: Jeffrey Andrews, NHDES
Philip M. Peterson, EBI

2010 Remediation General Permit
Summary of Monitoring Parameters[1]

NPDES Authorization Number:	**NHG910061**
Date Authorization Issued:	February, 2013
Facility/Site Name:	Walgreens Pharmacy Construction Site
Facility/Site Address:	5-9 Plaistow Road, Plaistow NH, Rockingham County
Legal Name of operator:	Taurus New England Investments, LLC
Operator contact name, title, and Address:	Edward Vydra, Director, 22 Batterymarch Street, Boston, MA 02109
Estimated Date of Completion:	June 31, 2013
Category and Sub-Category:	Category III- Contaminated Construction Dewatering. Sub-Category A. General Urban Fill Sites
Receiving Water:	Kelly and Seaver Brooks

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

	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); Minimum Levels =ML
√	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/l) **, 50 mg/l for hydrostatic testing **, Me#60.2/5mL
√	2. Total Residual Chlorine (TRC) [1]	Freshwater = 11 ug/l ** Saltwater = 7.5 ug/l **/ Me#330.5/ML 20 ug/L
√	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/l/Me# 1664A/ML 5.0 mg/L
	4. Cyanide (CN) [2, 3]	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/l **/ Me#335.4/ML 5ug/L
	5. Benzene (B)	5ug/L /50.0 ug/l for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2 ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2 ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX))/ Me#8260C/ ML 2 ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) [4]	100 ug/l)/ Me#8260C/ ML 2 ug/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); Minimum Levels =ML
√	10. Ethylene Dibromide (EDB) (1,2-Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10 ug/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 10 ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only (ug/L) /Me#8260C/ ML 10 ug/L
	14. Naphthalene [5]	20 ug/l /Me#8260C/ML 2 ug/L
	15. Carbon Tetrachloride	4.4 ug/l /Me#8260C/ML 5 ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/l /Me#8260C/ML 5 ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/l /Me#8260C/ML 5 ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/l /Me#8260C/ML 5 ug/L
	18a. Total dichlorobenzene	763 ug/l - NH only /Me#8260C/ ML5 ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/l /Me#8260C/ML 5 ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/l /Me#8260C/ML 5 ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/l/Me#8260C/ML 5 ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/l /Me#8260C/ML 5 ug/L
	23. Methylene Chloride	4.6 ug/l/Me#8260C/ML 5 ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/l /Me#8260C/ML 5 ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/l/Me#8260C/ML 5 ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/l /Me#8260C/ML 5 ug/L
	27. Trichloroethene (TCE)	5.0 ug/l /Me#8260C/ML 5 ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/l /Me#8260C/ML 5 ug/L
	29. Acetone	Monitor Only (ug/L) /Me#8260C/ML 50 ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50 ug/L
	31. Total Phenols	300 ug/l Me#420.1&420.2/ML 2ug /L/ Me# 420.4 /ML 50 ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/l /Me#8270D/ML 5 ug/L, Me#604 &625/ML 10 ug/L
	33. Total Phthalates (Phthalate esters) [6]	3.0 ug/L ** /Me#8270D/ML 5ug/ L, Me#606/ML 10 ug/L & Me#625/ML 5 ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	6.0 ug/l /Me#8270D/ML5ug/L,Me#606/ML 10 ug/L& Me#625/ML 5 ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/l
√	a. Benzo(a) Anthracene [7]	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5 ug/L
√	b. Benzo(a) Pyrene [7]	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/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); Minimum Levels =ML
		Me#625/ML 5 ug/L
√	c. Benzo(b)Fluoranthene [7]	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
√	d. Benzo(k)Fluoranthene [7]	0.0038 ug/l /Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
√	e. Chrysene [7]	0.0038 ug/l /Me#8270D/ ML 5 ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
√	f. Dibenzo(a,h)anthracene [7]	0.0038 ug/l /Me#8270D/ ML 5ug/ L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
√	g. Indeno(1,2,3-cd) Pyrene [7]	0.0038 ug/l /Me#8270D/ ML 5 ug/L, Me#610/ML 5 ug/L& Me#625/ML 5 ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/l
√	h. Acenaphthene	5 ug/L/Me#8270D/ML 5 ug/L/Me#610/ML 5 ug/L & Me#625/ML 5 ug/L & Me#610 (HPLC)/ ML 2 ug/L
	i. Acenaphthylene	5 ug/L/Me#8270D/ML 5 ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	j. Anthracene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	k. Benzo(ghi) Perylene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	l. Fluoranthene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	m. Fluorene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	n. Naphthalene [5]	20 ug/l / Me#8270D/ ML 5ug/L, Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
√	o. Phenanthrene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	p. Pyrene	X/Me#8270D/ML5ug/L,Me#610/ML 5 ug/L & Me#625/ML 5 ug/L
	37. Total Polychlorinated Biphenyls (PCBs) [8, 9]	0.000064 ug/L /Me# 608/ ML 0.5ug/L
√	38. Chloride	Monitor only/Me# 300.0/ML 0.1 ug/L

	Metal parameter	ML= Minimun Levels		Total Recoverable Metal Limit @ H [10] = 25 mg/l CaCO3 for Discharges in New Hampshire (ug/l) [11]	
				Freshwater	Saltwater
	39. Antimony			5.6/ML 10	
	40. Arsenic **			10/ML 20	36/ML 20
	41. Cadmium **			0.8/ML 10	9.3/ML 10
	42. Chromium III (trivalent) **			27.7/ML 15	100/ML 15
	43. Chromium VI (hexavalent) **			11.4/ML 10	50.3/ML 10
√	44. Copper **			2.9/ML 15	3.7/ML 15
√	45. Lead **			0.5/ML 20	8.5/ML 20
	46. Mercury **			0.9/ML 0.2	1.1/ML 0.2
	47. Nickel **			16.1/ML 20	8.2/ML 20
	48. Selenium **			5.0/ML 20	71/ML 20
	49. Silver			0.4/ML 10	2.2/ML 10
	50. Zinc **			37/ML 15	85.6/ML15
	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 x 1,000ug/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 x 2 =2,000 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).

EBI Consulting
environmental | engineering | due diligence

NPDES REMEDIATION GENERAL PERMIT NHG910000

NOTICE OF INTENT

Project Name:
Walgreens Pharmacy
Map 24 Lot 38
5-9 Plaistow Road
Plaistow, New Hampshire

Prepared for:
Taurus Plaistow Investors Limited Partnership
22 Batterymarch Street
Boston, MA 02109

Prepared by:
EBI Consulting, Inc.
21 B Street
Burlington, MA 01803

February 14, 2013

February 14, 2013

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

Email: NPDES.Generalpermits@epa.gov

Project: Map 24 Lot 38
5-9 Plaistow Road
Plaistow, NH

Re: Notice of Intent of Remediation General Permit (RGP) No. NH91000

On behalf of Taurus New England Investments, LLC, EnviroBusiness, Inc. (EBI Consulting) has prepared this Remediation General Permit (RGP) Notice of Intent (NOI) for authorization to temporarily discharge dewatered groundwater. This authorization is being requested to support temporary construction-dewatering activities planned to occur at the Walgreen Pharmacy located at 5-9 Plaistow Road, Plaistow, New Hampshire. The dewatered groundwater will be treated to meet requirements of NPDES-RGP and will be discharged to existing stormwater drainage system through to Kelly and Seaver Brooks. Refer to Attachment 3, Figure 1 for the general Site Locus.

The Walgreens Pharmacy Project encompasses 873,709 square feet of a 20.39± acre property located at the intersection of Plaistow Road and Hasaltine Street, See Figures 1 and 2 provided in Attachment 3. As discussed in Attachment 1, soil impacted from with metals and Total Petroleum Hydrocarbon (TPH) was found onsite. Recently, a groundwater sample was collected from an area of the site where footings will be placed.

The sample was collected and analyzed in accordance with Remediation General Permit (RGP) contaminants of concern. Analytical results were reported as detectable and above RGP allowable discharge limits without proper treatment for Copper only. Two additional compounds, total residual chlorine and dibromomethane, were reported as Non-Detectable but method detection limits were above RGP criteria. Based on this condition, a dewatered groundwater treatment system was designed and this RGP-NOI has been prepared. Groundwater from the project will be treated prior to discharge. The type of treatment will depend on discharge monitoring and compliance performed by EBI and this RGP NOI. The RGP will be used for the entire project. Due to the fluctuating groundwater table over the entire site the amount of dewatering/treatment is unknown at this time.

EBI Consulting is the Environmental Consultant/Subcontractor to Taurus Plaistow Investor Limited Partnership (TPILP) through its agent Taurus New England Investments, LLC (TNEI), and working in concert with The Torrey Company (Torrey) who is the construction company for the project. TPILP is he owner of the project through its agent Taurus New England Investments, LLC. Below is the contact information for each of the entities listed above. All correspondence related to this submittal should be forwarded to the parties below.

Attachments to this RGP-NOI request include the RGP Plan (Attachment 1), NPDES-RGP Notice of Intent (Attachment 2), Figures (Attachment 3), Laboratory Report (Attachment 4), Proposed Walgreens Pharmacy Stormwater Pollution Prevention Plan, including NPDES Stormwater CGP Permit No. NHR12A639 (Attachment 5), and EPA NPDES RGP Authorization to Discharge – to be issued (Attachment 6).

Preparer of NOI: EBI Consulting, Inc.
21 B Street
Burlington, MA 01803
Attn: Edward F. Giordano, PG, LSP
Tel: 781-418-2316

Operator: Taurus New England Investments, LLC
22 Batterymarch Street
Boston, MA 02109
Attn: Edward Vydra
Tel: 617-357-4440

Owner: Taurus Plaistow Investor Limited Partnership through its agent
Taurus New England Investments, LLC
22 Batterymarch Street
Boston, MA 02109
Attn: Edward Vydra
Tel: 617-357-4440

If you have any questions or require additional information, please do not hesitate to contact me via email at egiordanon@ebiconsulting.com or by telephone at 781-418-2316.

Respectfully submitted,
EBI CONSULTING

Madeline Soule
Staff Scientist

Edward F. Giordano
Project Manager

cc: Mark Donohoe, Select Real Estate Consulting, Inc.
Tim Doyle, The Torrey Company
Edward Vydra, Taurus New England Investments, LLC
EBI Project File

Attachments:
Attachment 1 - Remediation General Permit (RGP) Plan
Attachment 2 - RGP Notice of Intent (NOI)
Attachment 3 - Figures
Attachment 4 - Laboratory Analytical
Attachment 5 – Proposed Walgreens Pharmacy Stormwater Pollution Prevention Plan, including NPDES Stormwater CGP Permit No. NHR12A639
Attachment 6 - EPA NPDES RGP Authorization to Discharge

Attachment 1
Remediation General Permit (RGP) Plan

1.0 Project Description

The site for the proposed Walgreens Pharmacy encompasses 873,709 square feet of a 20.39± acre property located at the intersection of Plaistow Road and Hasaltine Street, see Attachment 3, Figure 1 (Site Locus). The Project involves the construction of the pharmacy building proper, site access improvements, subsurface utilities and landscaping.

The proposed construction site work will be performed by The Torrey Company (Torrey) for TNEI. This NPDES Remediation General Permit (RGP) Notice of Intent (NOI) has been prepared to address activities associated with dewatering of groundwater to support the site work within 5-9 Plaistow Road, Plaistow, NH (hereinafter the "Site"). Dewatered and treated groundwater discharges will be conveyed via underground drainage from portions of the Site to Kelly and Seaver Brooks., see Attachment 3, Figure 2 for an on-site Catchbasin Plan.

The Site is located 5-9 Plaistow Road, Plaistow, NH. This RGP-NOI covers the proposed construction activities including, but not limited to, the following items and associated scope of work requiring dewatering of groundwater:

- General Site-Civil preparation activities including
- Foundations
- Utility re-locations
- Site drainage and grading
- Landscaping and irrigation
- Construction of building structure

As groundwater is dewatered and discharged to Kelly and Seaver Brooks, treatment will be employed as detailed in this RGP Plan and the NOI found in Attachment 2. Determination of groundwater conditions will be based on location of area to be dewatered, field observations and previously analyzed soil and groundwater samples. Also, monitoring of dewatered groundwater will be performed in accordance with monitoring requirements of NPDES permits, including the RGP Authorization prior to discharge. A dual bag filter system will be used to reduce total suspended solids and copper prior to discharging to the stormwater management system.

2.0 Site History

The Site was included in a previously developed shopping mall. Approximately 165-feet of the existing building was removed to accommodate the proposed pharmacy. The majority of the property and structures will remain unchanged and undisturbed.

Based on data obtained during historical research and/or subsurface investigations, subsurface material within the majority of the project area is generally anticipated to contain contaminant levels that are either non-detected or well below the most stringent New Hampshire Department of Environmental Services (NHDES) standards for soil and groundwater. However, impacted soil conditions may exist at the location as described below.

Along the western boundary of the proposed building, an area of slightly impacted soil was identified. A soil sample (S-1) was collected on December 28, 2012 and analyzed for Total Petroleum Hydrocarbons (TPH) diesel range organics (DRO) and gasoline range organics (GRO), Volatile Organic Compounds (VOCs) via EPA Method 8260B. Samples results reported GRO concentration at 26.8 parts per million (ppm) and DRO at 2,830 ppm. The NHDES standards for TPH is 10,000 ppm. No VOCs were reported above laboratory method detection limits.

EBI personnel oversaw the excavation of the residually impacted soil as well as a concrete structure that was filled with soil. The structure, located proximal to the impacted soil measured four feet high, four feet wide and six feet long. The historic use of the structure is unknown. A sample was collected from the soil within the structure (S-2) and two additional samples (S-3 and S-4) were collected to define the extent of the non-reportable TPH impacts. TPH analytical results were reported as 4,600 ppm for S-2, Non-detect for S-3 and 210 ppm for S-4. With the removal of this soil and defining of the extent by samples S3 and S4, EBI is of the opinion that no additional work is required in this area.

Groundwater was encountered at the site at approximately four to five feet below grade. A groundwater sample was collected and analyzed for RGP parameters. Only copper was reported as detectable and above the RGP standards. Due to the minimal impacts and low suspended solid (15 mg/L), a minimum treatment system, the use of bag filters, is proposed to minimize total suspended solids (TSS) and copper prior to discharge to the stormwater drainage system.

3.0 Active NPDES Permits for this Project Area

3.1 Construction Project, NPDES Stormwater CGP Permit No. NHR12A639

The construction of the pharmacy is identified in NPDES Stormwater Permit (No. NHR12A639), which covers the stormwater outfalls that receive discharges from drainage areas within Project Site, a copy of the permit is attached in Attachment 5.

3.2 Current Groundwater Data

A soil sample was collected on December 28, 2012 to pre-characterization and assess possible impacts to soil. The analysis identified TPH- DRO at 2,830 ppm and TPH-GRO concentration at 26.8 parts per million (ppm). No VOCs were reported above method detection limits. The potential contaminants of concern are identified in the Notice of Intent form (Attachment 2) and are based on available data. In addition, a groundwater sample was obtained on January 4, 2013 from the location of a proposed deep excavation. The analytical data for these samples (identified as RGP 01/13) are presented in Table 1 (below) along with the RGP effluent limits for dewatering within Sub-Category A – General Urban Fill Sites. Attachment 4 includes the Laboratory Reports.

TABLE 1 - Groundwater Data Summary Table

WELL ID **SAMPLING DATE** **LAB SAMPLE ID**	Remediation General Permit - Appendix III Effluent Limits and Monitoring Requirements by Sub-category Category III-Contaminated Construction Dewatering Sub-Category A - General Urban Fill Sites (ug/l)	RGP 01/13 1/4/2013 L1300227-01
General Chemistry	**units as noted**	**units as noted**
Solids, Total Suspended	30 mg/l	15 mg/L
Cyanide, Total	5.2 ug/L	<5.0 ug/L
Chlorine, Total Residual	11 ug/L	***<20 ug/L***
Chloride	Monitor Only	200 mg/L
TPH	5.0 mg/l	<4 mg/L
Phenolics, Total	300 ug/L	<300 ug/L
Chromium, Hexavalent	11.4 ug/L	<10 ug/L
Total Metals		
Antimony, Total	5.6	<1.5
Arsenic, Total	10	1.9
Cadmium, Total	0.8	<0.2
Chromium, Total	27.7	<1.0
Copper, Total	2.9	**3.1**
Iron, Total	1,000	300
Lead, Total	0.5	1.1
Mercury, Total	0.9	<0.2
Nickel, Total	16.1	4.9
Selenium, Total	5.0	<5.0
Silver, Total	0.4	<0.4
Zinc, Total	37	13.7
Pesticides by GC		
1,2-Dibromoethane	0.05	<0.0101
Volatile Organics by GC/MS		
Benzene	100 ug/l (BTEX)	<0.5
Ethylbenzene		<0.5
Toluene		<0.75
Xylene (Total)		<1
Total BTEX		<1
1,1,1-Trichloroethane	200	<0.5
1,1,2-Trichloroethane	5	<0.75
1,1-Dichloroethane	70	<0.75
1,1-Dichloroethene	3.2	<0.5
1,2-Dichlorobenzene	600	<2.5
1,2-Dichloroethane	5	<0.5
1,3-Dichlorobenzene	320	<2.5
1,4-Dichlorobenzene	5	<2.5
1,4-Dioxane	Monitor Only	<3.0
Acetone	Monitor Only	<5.0
Carbon tetrachloride	4.4	<0.5
cis-1,2-Dichloroethene	70	<0.5
Dibromomethane	0.05	***<5***
Methyl tert butyl ether	70	<1
Methylene chloride	4.6	<3
Tert-Butyl Alcohol	Monitor Only	<10

WELL ID **SAMPLING DATE** **LAB SAMPLE ID**	Remediation General Permit - Appendix III Effluent Limits and Monitoring Requirements by Sub-category Category III-Contaminated Construction Dewatering Sub-Category A - General Urban Fill Sites (ug/l)	RGP 01/13 1/4/2013 L1300227-01
Volatile Organics by GC/MS		
Tertiary-Amyl Methyl Ether	Monitor Only	<2
Tetrachloroethene	5	<0.5
Trichloroethene	5	<0.5
Vinyl chloride	2	<1
Semivolatile Organics by GC/MS-SIM		
Naphthalene	20	<2.5
Acenaphthene	100 ug/l (Group II PAHs)	0.24
Acenaphthylene		<0.2
Anthracene		<0.2
Benzo(ghi)perylene		<0.2
Fluoranthene		<0.2
Fluorene		<0.2
Phenanthrene		0.2
Pyrene		<0.2
Benzo(a)anthracene	10.0 ug/l (Group I PAHs)	<0.2
Benzo(a)pyrene		<0.2
Benzo(b)fluoranthene		<0.2
Benzo(k)fluoranthene		<0.2
Chrysene		<0.2
Dibenzo(a,h)anthracene		<0.2
Indeno(1,2,3-cd)Pyrene		<0.2
Polychlorinated Biphenyls by GC		
Aroclor 1016	Method 608 Detection Limit 0.5 ug/L	<0.25
Aroclor 1221		<0.25
Aroclor 1232		<0.25
Aroclor 1242		<0.25
Aroclor 1248		<0.25
Aroclor 1254		<0.25
Aroclor 1260		<0.25
Total PCBs		<0.25

Bold = Exceeds RGP Effluent Limit
Italics and < = Indicates non-detect results with laboratory detection limit exceeding RGP Effluent Limits
< = Not detected above the noted laboratory reporting limit

4.0 Management of Dewatered Groundwater

Dewatering of the construction site will be necessary in certain areas for installation of underground utility lines and deeper foundation excavations. If dewatered groundwater is not recharged on-site and requires discharge to the stormwater drainage system, then dewatered groundwater will be managed and monitored in accordance with the site's NPDES Permit, Project specific Construction General Permit (Tracking Number NHR12A639), and EPA's Authorization Letter to discharge under NPDES-RGP (to be issued as a result of this RGP-NOI).

4.1 General Discharge Monitoring and Compliance

Determination of groundwater conditions will be based on location of area to be dewatered, field observations and screening of both soil and groundwater conditions. Dewatered groundwater will be pumped through bag filters prior to discharge into on-site storm drains. Compliance testing will be perfordmed in accordance withSection 4.11, whichdescribes RGP discharge monitoring and compliance requirements.

4.1.1 RGP Discharge Monitoring and Compliance

Discharge monitoring and compliance will include regular sampling and testing of influent to the system and the treated effluent. This includes chemical testing required within days 1 and 3 of initial discharge and monthly testing to be conducted through the end of the scheduled discharge. Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent. Flow will be maintained by monitoring flow and adjusting the amount of construction dewatering, as needed. Monthly monitoring and compliance reports will be compiled and maintained at the site.

4.2 Dewatered Groundwater Treatment System

Construction dewatering effluent is anticipated to be pumped from localized sumps and trenches within the excavation and directly into the treatment system, and discharged through hoses to the existing stormwater drainage system. At a minimum, dewatered effluent treatment will consist of using bag filters, as required. Treatment scenarios will be determined in the field based on discharge monitoring that includes the discharge limits contained in the EPA's Authorization Letter to discharge under NPDES-RGP.

4.2.1 System Design

The construction dewatering and treatment system has been designed for a continuous throughput of up to 50-gallons per minute. The system is designed to treat water impacted with total suspended solids and copper. At a minimum, the treatment system will include dual bag filters. Additional treatment components shall include pressure gauges and water meter.

The transfer pump will move water from the excavation to the bag filters and/or effluent pipe for discharge. Two sampling ports will be utilized to collect samples from the influent (before bag filters) and effluent (post-treatment, prior to discharge to stormwater system) The effluent pipe from the groundwater treatment system will be suspended in a storm drain that discharges to Kelly Brook/Seaver Brook. Both the influent and effluent monitoring will be carried out to ensure that there will be no

breakthrough of various contaminants. See Figure 3, which includes the schematic of the proposed treatment system process.

Attachment 2
RGP Notice of Intent (NOI)

Print Form

NPDES Permit No. MAG910000
NPDES Permit No. NHG910000

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 freshwater[1], 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.

[1]Dilution 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:** Walgreens Pharmacy		**Facility/site** mailing address:		
Location of **facility/site:** longitude: 42.815315 latitude: -71.102287	Facility SIC code(s):	Street: 5-9 Plaistow Road		
b) Name of **facility/site owner:**		Town: Plaistow		
Email address of facility/site owner: Taurus Plaistow Investor Limited Partnership		State: New Hampshire	Zip: 03865	County: Rockingham
Telephone no. of facility/site **owner:** 617-357-4440				
Fax no. of facility/site **owner:**		**Owner** is (check one): 1. Federal ○ 2. State/Tribal ○ 3. Private ◉ 4. Other ○ if so, describe:		
Address of **owner** (if different from site):				
Street: 22 Batterymarch Street				
Town: Boston	State: MA	Zip: 02109	County: Suffolk	
c) Legal name of **operator:**		**Operator** telephone no: 617-357-4440		
Taurus New England Investments, LLC		**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 ○

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y ○ N ◉
If Y, please list:
1. site identification # assigned by the state of NH or MA:
2. permit or license # assigned:
3. state agency contact information: name, location, and telephone number:

f) Is the site/facility covered by any other EPA permit, including:
1. Multi-Sector General Permit? Y ○ N ◉,
if Y, number:
2. Final Dewatering General Permit? Y ○ N ◉,
if Y, number:
3. EPA Construction General Permit? Y ◉ N ○,
if Y, number: NHR12A639
4. Individual NPDES permit? Y ○ N ◉,
if Y, number:
5. any other water quality related individual or general permit? Y ○ N ◉, if Y, number:

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

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

Activity Category	**Activity Sub-Category**
I - Petroleum Related Site Remediation	A. Gasoline Only Sites ☐ 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 ☐

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) ☐

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 groundwater to be dewatered for construction purposes. Groundwater may have impacts from total suspended solids, copper and petroleum.

b) Provide the following information about each discharge:

1) Number of discharge points: 2

2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)?
Max. flow 0.1114 Is maximum flow a **design value**? Y ◉ N ○
Average flow (include units) 0.0557 Is average flow a design value or estimate? estimate

3) Latitude and longitude of each discharge within 100 feet:

pt.1: lat	42.815315	long	-71.102287	pt.2: lat.	42.815386	long.	-71.101922 ;
pt.3: lat		long		pt.4: lat.		long.	;
pt.5: lat		long		pt.6: lat.		long.	;
pt.7: lat		long		pt.8: lat.		long.	; etc.

4) If hydrostatic testing, total volume of the discharge (gals):

5) Is the discharge intermittent ◉ or seasonal ○ ?
Is discharge ongoing? Y ○ N ◉

c) Expected dates of discharge (mm/dd/yy): start 01/21/2013 end 06/31/2013

d) Please attach a line drawing or flow schematic showing water flow through the facility including:
1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).

3. Contaminant information.

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

Parameter *	CAS Number	Believed Absent	Believed Present	# of Samples	Sample Type (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of Test Method	Maximum daily value		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids (TSS)		☐	☒	1	grab	30,2540D	5mg/l	15mg/l	4.57 kg	15mg/l	4.57kg
2. Total Residual Chlorine (TRC)		☒	☐	1	grab	30,4500CL-D	0.02 mg/l	ND			
3. Total Petroleum Hydrocarbons (TPH)		☒	☐	1	grab	74,1664A	4.00 mg/l	ND			
4. Cyanide (CN)	57125	☒	☐	1	GRAB	30,4500CN-CE	0.005 mg/l	ND			
5. Benzene (B)	71432	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
6. Toluene (T)	108883	☒	☐	1	grab	1,8260C	0.75 ug/l	ND			
7. Ethylbenzene (E)	100414	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207	☒	☐	1	grab	1,8260C	1.0 ug/l	ND			
9. Total BTEX [2]	n/a	☒	☐	1	grab	1,8260C		ND			
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) [3]	106934	☒	☐	1	grab	14,504.1	0.010 ug/l	ND			
11. Methyl-tert-Butyl Ether (MtBE)	1634044	☒	☐	1	grab	1,8260C	1.0 ug/l	ND			
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650	☒	☐	1	grab	1,8260C	10 ug/l	ND			

* 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	☒	☐	1	grab	1,8260C	2.0 ug/l	ND			
14. Naphthalene	91203	☒	☐	1	grab	1,8260C	2.5 ug/l	ND			
15. Carbon Tetrachloride	56235	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
16. 1,2 Dichlorobenzene (o-DCB)	95501	☒	☐	1	grab	1,8260C	2.5 ug/l	ND			
17. 1,3 Dichlorobenzene (m-DCB)	541731	☒	☐	1	grab	1,8260C	2.5 ug/l	ND			
18. 1,4 Dichlorobenzene (p-DCB)	106467	☒	☐	1	grab	1,8260C	2.5 ug/l	ND			
18a. Total dichlorobenzene		☒	☐	1	grab	1,8260C	2.5 ug/l	ND			
19. 1,1 Dichloroethane (DCA)	75343	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
20. 1,2 Dichloroethane (DCA)	107062	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
21. 1,1 Dichloroethene (DCE)	75354	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
22. cis-1,2 Dichloroethene (DCE)	156592	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
23. Methylene Chloride	75092	☒	☐	1	grab	1,8260C	3 ug/l	ND			
24. Tetrachloroethene (PCE)	127184	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
25. 1,1,1 Trichloro-ethane (TCA)	71556	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			
26. 1,1,2 Trichloro-ethane (TCA)	79005	☒	☐	1	grab	1,8260C	0.75 ug/l	ND			
27. Trichloroethene (TCE)	79016	☒	☐	1	grab	1,8260C	0.5 ug/l	ND			

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	☒	☐	1	grab	1,8260C	1.0 ug/l				
29. Acetone	67641	☒	☐	1	grab	1,8260C					
30. 1,4 Dioxane	123911	☒	☐	1	grab	1,8260C					
31. Total Phenols	108952	☒	☐	1	grab						
32. Pentachlorophenol (PCP)	87865	☒	☐	1	grab						
33. Total Phthalates (Phthalate esters) [4]		☒	☐								
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117817	☒	☐	1	grab						
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab						
a. Benzo(a) Anthracene	56553	☒	☐	1	grab						
b. Benzo(a) Pyrene	50328	☒	☐	1	grab						
c. Benzo(b)Fluoranthene	205992	☒	☐	1	grab						
d. Benzo(k)Fluoranthene	207089	☒	☐	1	grab						
e. Chrysene	21801	☒	☐	1	grab						
f. Dibenzo(a,h)anthracene	53703	☒	☐	1	grab						
g. Indeno(1,2,3-cd) Pyrene	193395	☒	☐	1	grab						
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		☒	☐	1	grab						

[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	☒	☐								
i. Acenaphthylene	208968	☒	☐								
j. Anthracene	120127	☒	☐								
k. Benzo(ghi) Perylene	191242	☒	☐								
l. Fluoranthene	206440	☒	☐								
m. Fluorene	86737	☒	☐								
n. Naphthalene	91203	☒	☐								
o. Phenanthrene	85018	☒	☐								
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	☐	☒	1	Grab	1,6020A	1 ug/l	3.1 ug/l	0.000846kg	3.1 ug/l	0.000846kg
45. Lead	7439921	☒	☐								
46. Mercury	7439976	☒	☐								
47. Nickel	7440020	☒	☐								
48. Selenium	7782492	☒	☐								
49. Silver	7440224	☒	☐								
50. Zinc	7440666	☒	☐								
51. Iron	7439896	☒	☐								
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		Average daily value	
								concentration (ug/l)	mass (kg)	concentration (ug/l)	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 ○	If yes, which metals? Copper
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: Copper DF: 1 Metal: DF: Metal: DF: Metal: DF: Etc.	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:

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

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

See attached

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):	Monitoring for petroleum will be performed and if encountered the GAC filter will be place on-line.		

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 25 gpm Maximum flow rate of treatment system 50 gpm
Design flow rate of treatment system _____ gpm

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

None

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):

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Discharge to on-site stormwater system, which discharges to Kelly Brook/Seaver Brook

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 Impaired

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)?
Benthic Macroinvertebrate Bioassessments, dissolved O2, pH
Is there a final TMDL? Y ○ N ◉ If yes, for which pollutant(s)? _____

6. ESA and NHPA Eligibility.

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

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

A ◉ B ○ C ○ D ○ E ○ F ○

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

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

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

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

1 ○ 2 ◉ 3 ○

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

7. Supplemental information.

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

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

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

Facility/Site Name:	
Operator signature:	
Printed Name &Title:	EDWARD VYDRA, DIRECTOR
Date:	15 FEBRUARY 2013

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

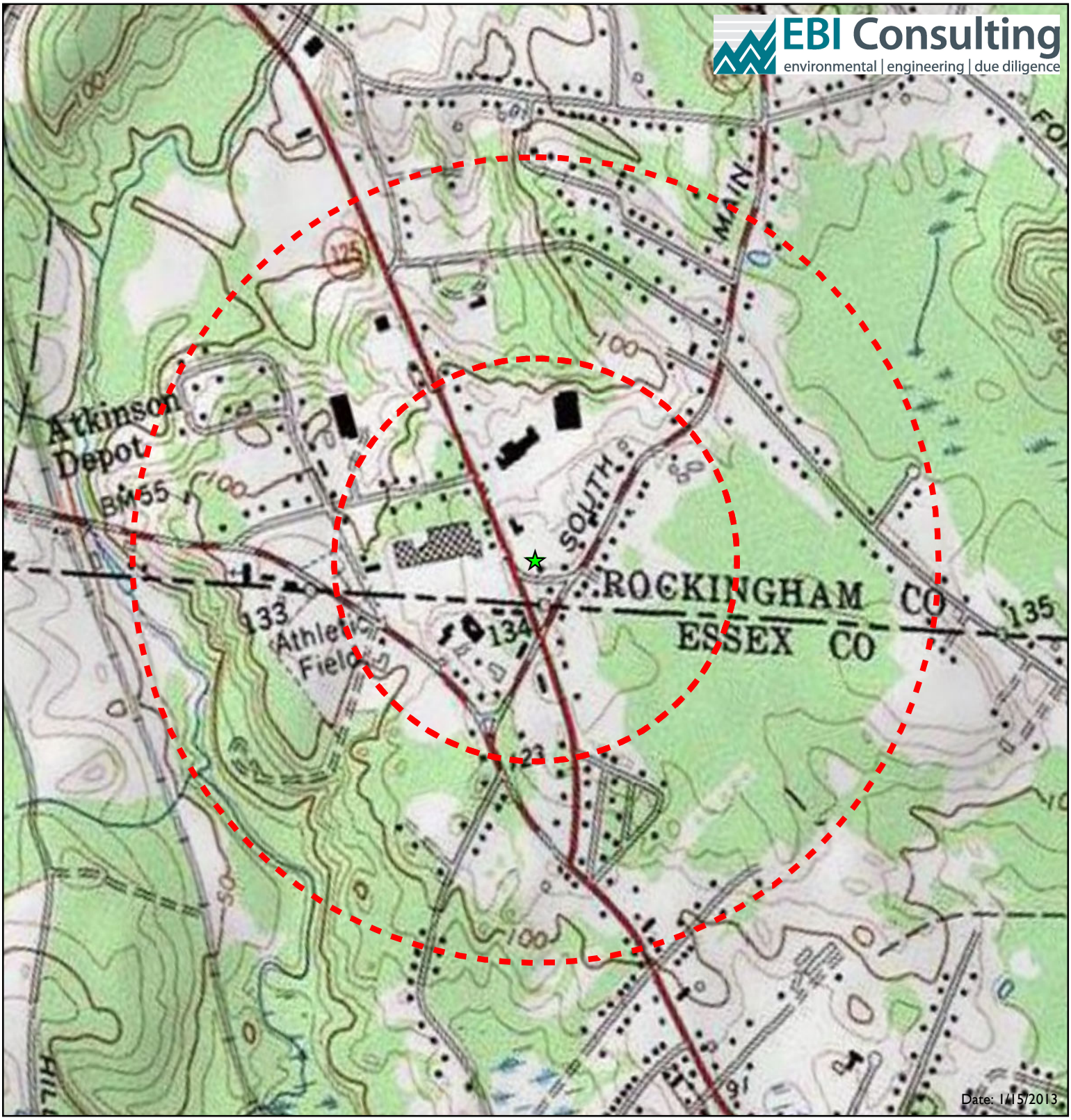
Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are **not** required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

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.

Attachment 3
Figures



Project Site

Site Radius at 1/4 & 1/2 mile

Source: Selected data from NWI, ESRI and EBI.

N
W E
S

Figure 1 - Site Locus

WALGREENS PHARMACY
5-9 PLAISTOW ROAD
PLAISTOW, NH 03865

0 500 1,000 2,000 Feet

PN: 35120041

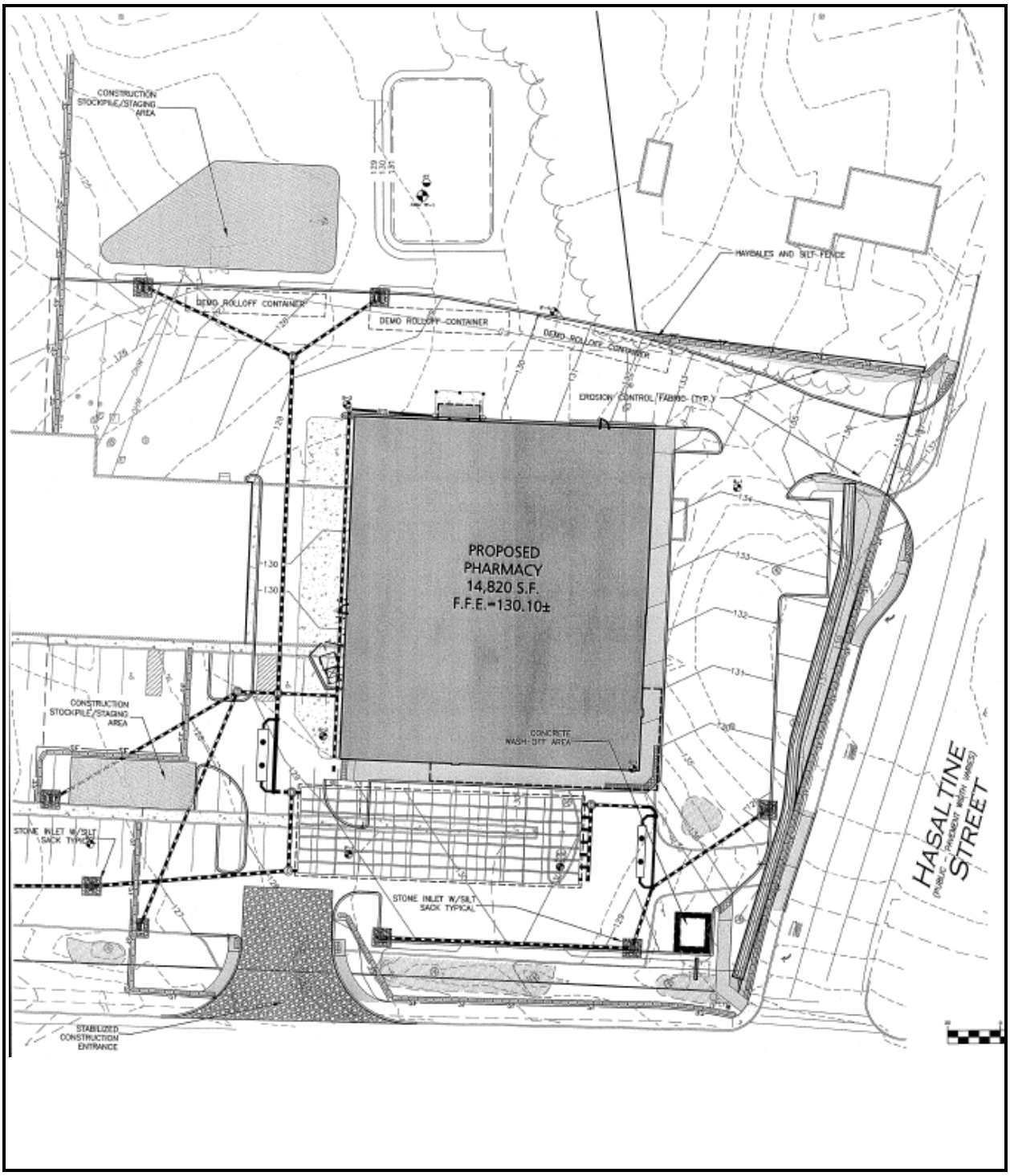


FIGURE 2 – CATCHBASIN PLAN

FROM STORMWATER POLLUTION PREVENTION PLAN, SWPPP 3,
PREPARED BY ALLEN & MAJOR ASSOCIATES, INC.

N

Not to scale

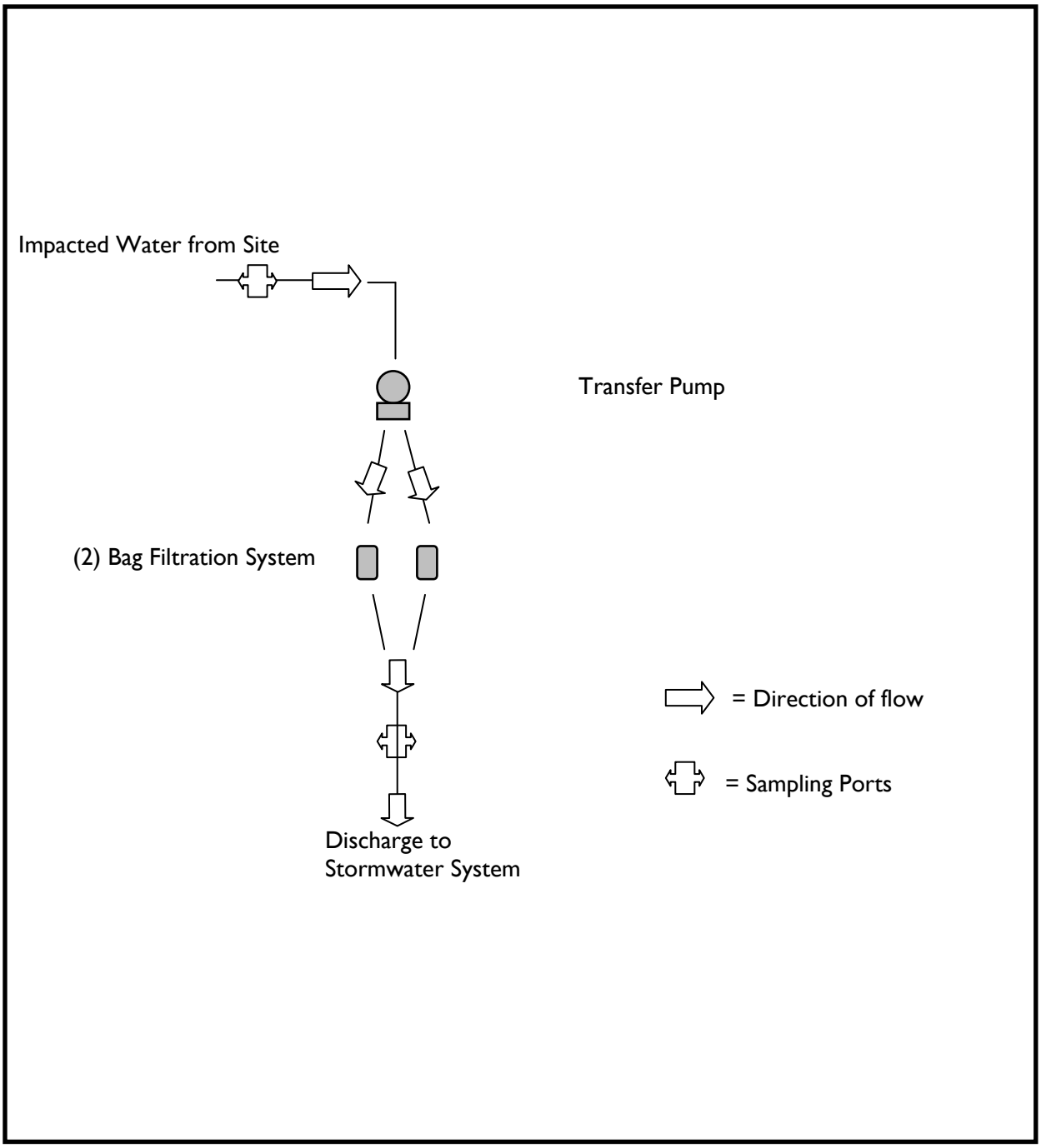


FIGURE 3 – GROUNDWATER TREATMENT SYSTEM LAYOUT

N

Not to scale

Attachment 4
Laboratory Analytical

New England ACCUTEST LABORATORIES

01/02/13

Technical Report for

EBI Consulting

5 Plaistow Road, Plaistow NH

35120041

Accutest Job Number: MC17204

Sampling Date: 12/28/12

Report to:

EBI Consulting
21 B Street
Burlington, MA
egiordano@ebiconsulting.com

ATTN: Ed Giordano

Total number of pages in report: **33**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Client Service contact: Jeremy Vienneau 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) ISO 17025:2005 (L2235)

Test results relate only to samples analyzed.

Sections: 1 2 3 4 5 6 7 8

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Sample Summary

EBI Consulting

Job No: MC17204

5 Plaistow Road, Plaistow NH
Project No: 35120041

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
MC17204-1	12/28/12	13:20	EG	12/28/12	SO	Soil	S1

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	EBI Consulting	**Job No**	MC17204
Site:	5 Plaistow Road, Plaistow NH	**Report Date**	1/2/2013 4:14:51 PM

1 Sample was collected on 12/28/2012 and were received at Accutest on 12/28/2012 properly preserved, at 10.4 Deg. C and intact. These Samples received an Accutest job number of MC17204. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix SO **Batch ID:** MSG4900

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Dichlorodifluoromethane are outside control limits. Blank Spike meets program technical requirements.
- Continuing calibration check standard MSG4900-CC4894 for dichlorodifluoromethane, acetone, 1,4-dioxane exceed 20% Difference. This check standard met MCP criteria.
- Initial calibration verification standard MSG4894-ICV4894 for acetone, 2-butanone, 2-hexanone exceeds 30% Difference

Volatiles by GC By Method SW846 8015

Matrix SO **Batch ID:** GBH1655

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- MC17204-1 for 2,5-Dibromotoluene: Outside control limits due to possible matrix interference.

Extractables by GC By Method SW846-8015

Matrix SO **Batch ID:** OP31561

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Accutest may not have met all requested limits due to methodology limitations, sample matrix, dilutions, or percents solids.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety.The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC17204).

Summary of Hits

Job Number: MC17204
Account: EBI Consulting
Project: 5 Plaistow Road, Plaistow NH
Collected: 12/28/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC17204-1	**S1**					
TPH-GRO (VOA)		26.8	8.1		mg/kg	SW846 8015
TPH-DRO (Semi-VOA)		2830	19		mg/kg	SW846-8015

New England ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: S1
Lab Sample ID: MC17204-1
Matrix: SO - Soil
Method: SW846 8260B
Project: 5 Plaistow Road, Plaistow NH

Date Sampled: 12/28/12
Date Received: 12/28/12
Percent Solids: 87.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G123332.D	1	12/31/12	AMY	n/a	n/a	MSG4900
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.50 g	10.0 ml	100 ul
Run #2			

VOA 8260 List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	410	ug/kg	
71-43-2	Benzene	ND	41	ug/kg	
108-86-1	Bromobenzene	ND	410	ug/kg	
74-97-5	Bromochloromethane	ND	410	ug/kg	
75-27-4	Bromodichloromethane	ND	170	ug/kg	
75-25-2	Bromoform	ND	170	ug/kg	
74-83-9	Bromomethane	ND	170	ug/kg	
78-93-3	2-Butanone (MEK)	ND	410	ug/kg	
104-51-8	n-Butylbenzene	ND	410	ug/kg	
135-98-8	sec-Butylbenzene	ND	410	ug/kg	
98-06-6	tert-Butylbenzene	ND	410	ug/kg	
75-15-0	Carbon disulfide	ND	410	ug/kg	
56-23-5	Carbon tetrachloride	ND	170	ug/kg	
108-90-7	Chlorobenzene	ND	170	ug/kg	
75-00-3	Chloroethane	ND	410	ug/kg	
67-66-3	Chloroform	ND	170	ug/kg	
74-87-3	Chloromethane	ND	410	ug/kg	
95-49-8	o-Chlorotoluene	ND	410	ug/kg	
106-43-4	p-Chlorotoluene	ND	410	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	410	ug/kg	
124-48-1	Dibromochloromethane	ND	170	ug/kg	
106-93-4	1,2-Dibromoethane	ND	170	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	170	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	170	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	170	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	170	ug/kg	
75-34-3	1,1-Dichloroethane	ND	170	ug/kg	
107-06-2	1,2-Dichloroethane	ND	170	ug/kg	
75-35-4	1,1-Dichloroethene	ND	170	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	170	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	170	ug/kg	
78-87-5	1,2-Dichloropropane	ND	170	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S1
Lab Sample ID: MC17204-1
Matrix: SO - Soil
Method: SW846 8260B
Project: 5 Plaistow Road, Plaistow NH

Date Sampled: 12/28/12
Date Received: 12/28/12
Percent Solids: 87.9

VOA 8260 List

CAS No.	Compound	Result	RL	Units	Q
142-28-9	1,3-Dichloropropane	ND	410	ug/kg	
594-20-7	2,2-Dichloropropane	ND	410	ug/kg	
563-58-6	1,1-Dichloropropene	ND	410	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	170	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	170	ug/kg	
100-41-4	Ethylbenzene	ND	170	ug/kg	
87-68-3	Hexachlorobutadiene	ND	410	ug/kg	
591-78-6	2-Hexanone	ND	410	ug/kg	
74-88-4	Iodomethane	ND	410	ug/kg	
98-82-8	Isopropylbenzene	ND	410	ug/kg	
99-87-6	p-Isopropyltoluene	ND	410	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	170	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	410	ug/kg	
74-95-3	Methylene bromide	ND	410	ug/kg	
75-09-2	Methylene chloride	ND	170	ug/kg	
91-20-3	Naphthalene	ND	410	ug/kg	
103-65-1	n-Propylbenzene	ND	410	ug/kg	
100-42-5	Styrene	ND	410	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	410	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	170	ug/kg	
127-18-4	Tetrachloroethene	ND	170	ug/kg	
108-88-3	Toluene	ND	410	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	410	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	410	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	170	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	170	ug/kg	
79-01-6	Trichloroethene	ND	170	ug/kg	
75-69-4	Trichlorofluoromethane	ND	170	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	410	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	410	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	410	ug/kg	
108-05-4	Vinyl Acetate	ND	410	ug/kg	
75-01-4	Vinyl chloride	ND	170	ug/kg	
	m,p-Xylene	ND	170	ug/kg	
95-47-6	o-Xylene	ND	170	ug/kg	
1330-20-7	Xylene (total)	ND	170	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S1		
Lab Sample ID:	MC17204-1	**Date Sampled:**	12/28/12
Matrix:	SO - Soil	**Date Received:**	12/28/12
Method:	SW846 8260B	**Percent Solids:**	87.9
Project:	5 Plaistow Road, Plaistow NH		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	83%		70-130%
460-00-4	4-Bromofluorobenzene	87%		70-130%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S1		
Lab Sample ID:	MC17204-1	**Date Sampled:**	12/28/12
Matrix:	SO - Soil	**Date Received:**	12/28/12
Method:	SW846 8015	**Percent Solids:**	87.9
Project:	5 Plaistow Road, Plaistow NH		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BH29026.D	1	12/29/12	AP	n/a	n/a	GBH1655
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	7.70 g	10.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	26.8	8.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
615-59-8	2,5-Dibromotoluene	243% [a]		36-148%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: S1
Lab Sample ID: MC17204-1
Matrix: SO - Soil
Method: SW846-8015 SW846 3546
Project: 5 Plaistow Road, Plaistow NH

Date Sampled: 12/28/12
Date Received: 12/28/12
Percent Solids: 87.9

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BC651274.D	1	01/02/13	KN	12/28/12	OP31561	GBC3261
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	2830	19	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		40-140%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

New England ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- MCP Form
- Sample Tracking Chronicle

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
Accutest Quote #: | Accutest Job #: MC17204

Client / Reporting Information

Company Name: EBI Inc.
Street Address: 21B Street
City: Burlington State: MA Zip:
Project Contact: E-mail: EGiordano@EBIConsulting.com
Phone #: 781-418-2316 Fax #:
Sampler(s) Name(s): E. Giordano Phone #:

Project Information

Project Name: Select Real Estate
Street: 5 Plaistow Rd
City: Plaistow State: NH
Project#: 35120041
Client PO#:
Project Manager: E. Giordano

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by:	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	TPH GRO 8015B	TPH DRO 8015B	VOC 8260B
-1	S1		12/28/12	1320	EBI	SO	6					1		3		2	X	X	X

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

LAB USE ONLY: 10B4,12E

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [x] 1 Day *EMERGENCY* wednesday 9AM 1/2/12

Emergency & Rush T/A data available VIA Labilink

Approved By (Accutest PM): / Date:

RUSH!

Data Deliverable Information

- [x] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

SAMPLES RECEIVED DIRECTLY FROM FIELD SAMPLING

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time: 12/28/12 14:45	Received By: 1	Relinquished By: 2	Date Time:	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	[ ] Intact [ ] Not Intact	Preserved where applicable [ ] On Ice [x] Cooler Temp. 10.4

MC17204: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC17204 **Client:** EBI **Immediate Client Services Action Required:** No

Date / Time Received: 12/28/2012 **Delivery Method:** **Client Service Action Required at Login:** No

Project: SELECT REAL ESTATE **No. Coolers:** 1 **Airbill #'s:**

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	Infared gun		
3. Cooler media:	Ice (bag)		

Quality Control Preservatio	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☐	☑
2. Trip Blank listed on COC:	☐		☐	☑
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Exhibit VII A-2: MassDEP Analytical Protocol Certification Form

MassDEP Analytical Protocol Certification Form

Laboratory Name:	Accutest Laboratories of New England	Project #:	MC17204
Project Location:	5 Plaistow Road, Plaistow NH	MADEP RTN	None

This form provides certifications for the following data set: list Laboratory Sample ID Numbers(s)
MC17204-1

Matrices: Groundwater/Surface Water ( ) Soil/Sediment (X) Drinking Water ( ) Air ( ) Other ( )

CAM Protocol (check all that apply below):

8260 VOC (X) CAM IIA	7470/7471 Hg ( ) CAM III B	MassDEP VPH ( ) CAM IV A	8081 Pesticides ( ) CAM V B	7196 Hex Cr ( ) CAM VI B	Mass DEP APH ( ) CAM IX A
8270 SVOC ( ) CAM II B	7010 Metals ( ) CAM III C	MassDEP EPH ( ) CAM IV B	8151 Herbicides ( ) CAM V C	8330 Explosives ( ) CAM VIII A	TO-15 VOC ( ) CAM IX B
6010 Metals ( ) CAM III A	6020 Metals ( ) CAM III D	8082 PCB ( ) CAM V A	9014 Total Cyanide/PAC ( ) CAM VI A	6860 Perchlorate ( ) CAM VIII B	

Affirmative Responses to Questions A Through F are required for "Presumptive Certainty status

A	Were all samples received in a condition consistent with those described on the Chain-of Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	☑ Yes	☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☑ Yes	☐ No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	☑ Yes	☐ No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	☑ Yes	☐ No
E	VPH, EPH, APH, and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	☑ Yes	☐ No
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	☑ Yes	☐ No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	☑ Yes	☐ No

Responses to questions G, H, and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols	☐ Yes	☑ No [1]

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data useability and representativeness requirements described in 310 CMR 40.1056(2)(k) and WSC-07-350.

H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	☐ Yes	☑ No [1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☑ Yes	☐ No [1]

[1] ***All Negative responses must be addressed in an attached Environmental Laboratory case narrative.***

I the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: _____ **Position:** **Laboratory Director**

Printed Name: **Reza Tand** **Date:** **01/02/2013**

Internal Sample Tracking Chronicle

EBI Consulting

Job No: MC17204

5 Plaistow Road, Plaistow NH
Project No: 35120041

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
MC17204-1 S1	Collected: 28-DEC-12 13:20 By: EG		Received: 28-DEC-12 By:			
MC17204-1	SW846 8015	29-DEC-12 14:17	AP			V8015GRO
MC17204-1	SM21 2540 B MOD.	31-DEC-12	BF			%SOL
MC17204-1	SW846 8260B	31-DEC-12 12:28	AMY			V8260STD
MC17204-1	SW846-8015	02-JAN-13 11:10	KN	28-DEC-12	MR	B8015DRO

New England ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4900-MB	G123331.D	1	12/31/12	AMY	n/a	n/a	MSG4900

The QC reported here applies to the following samples: **Method:** SW846 8260B

MC17204-1

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/kg	
71-43-2	Benzene	ND	25	ug/kg	
108-86-1	Bromobenzene	ND	250	ug/kg	
74-97-5	Bromochloromethane	ND	250	ug/kg	
75-27-4	Bromodichloromethane	ND	100	ug/kg	
75-25-2	Bromoform	ND	100	ug/kg	
74-83-9	Bromomethane	ND	100	ug/kg	
78-93-3	2-Butanone (MEK)	ND	250	ug/kg	
104-51-8	n-Butylbenzene	ND	250	ug/kg	
135-98-8	sec-Butylbenzene	ND	250	ug/kg	
98-06-6	tert-Butylbenzene	ND	250	ug/kg	
75-15-0	Carbon disulfide	ND	250	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	ug/kg	
108-90-7	Chlorobenzene	ND	100	ug/kg	
75-00-3	Chloroethane	ND	250	ug/kg	
67-66-3	Chloroform	ND	100	ug/kg	
74-87-3	Chloromethane	ND	250	ug/kg	
95-49-8	o-Chlorotoluene	ND	250	ug/kg	
106-43-4	p-Chlorotoluene	ND	250	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	250	ug/kg	
124-48-1	Dibromochloromethane	ND	100	ug/kg	
106-93-4	1,2-Dibromoethane	ND	100	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	100	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	100	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	100	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	100	ug/kg	
75-34-3	1,1-Dichloroethane	ND	100	ug/kg	
107-06-2	1,2-Dichloroethane	ND	100	ug/kg	
75-35-4	1,1-Dichloroethene	ND	100	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	100	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	ug/kg	
142-28-9	1,3-Dichloropropane	ND	250	ug/kg	
594-20-7	2,2-Dichloropropane	ND	250	ug/kg	
563-58-6	1,1-Dichloropropene	ND	250	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	ug/kg	

Method Blank Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4900-MB	G123331.D	1	12/31/12	AMY	n/a	n/a	MSG4900

The QC reported here applies to the following samples: **Method:** SW846 8260B

MC17204-1

CAS No.	Compound	Result	RL	Units	Q
10061-02-6	trans-1,3-Dichloropropene	ND	100	ug/kg	
100-41-4	Ethylbenzene	ND	100	ug/kg	
87-68-3	Hexachlorobutadiene	ND	250	ug/kg	
591-78-6	2-Hexanone	ND	250	ug/kg	
74-88-4	Iodomethane	ND	250	ug/kg	
98-82-8	Isopropylbenzene	ND	250	ug/kg	
99-87-6	p-Isopropyltoluene	ND	250	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	100	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	250	ug/kg	
74-95-3	Methylene bromide	ND	250	ug/kg	
75-09-2	Methylene chloride	ND	100	ug/kg	
91-20-3	Naphthalene	ND	250	ug/kg	
103-65-1	n-Propylbenzene	ND	250	ug/kg	
100-42-5	Styrene	ND	250	ug/kg	
630-20-6	1,1,1,2-Tetrachloroethane	ND	250	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/kg	
127-18-4	Tetrachloroethene	ND	100	ug/kg	
108-88-3	Toluene	ND	250	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	ug/kg	
79-01-6	Trichloroethene	ND	100	ug/kg	
75-69-4	Trichlorofluoromethane	ND	100	ug/kg	
96-18-4	1,2,3-Trichloropropane	ND	250	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	250	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	250	ug/kg	
108-05-4	Vinyl Acetate	ND	250	ug/kg	
75-01-4	Vinyl chloride	ND	100	ug/kg	
	m,p-Xylene	ND	100	ug/kg	
95-47-6	o-Xylene	ND	100	ug/kg	
1330-20-7	Xylene (total)	ND	100	ug/kg	

Method Blank Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4900-MB	G123331.D	1	12/31/12	AMY	n/a	n/a	MSG4900

The QC reported here applies to the following samples: **Method:** SW846 8260B

MC17204-1

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	96%	70-130%
2037-26-5	Toluene-D8	90%	70-130%
460-00-4	4-Bromofluorobenzene	88%	70-130%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4900-BS	G123328.D	1	12/31/12	AMY	n/a	n/a	MSG4900
MSG4900-BSD	G123329.D	1	12/31/12	AMY	n/a	n/a	MSG4900

The QC reported here applies to the following samples: **Method:** SW846 8260B

MC17204-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	2500	3210	128	3060	122	5	70-130/25
71-43-2	Benzene	2500	2570	103	2540	102	1	70-130/25
108-86-1	Bromobenzene	2500	2720	109	2720	109	0	70-130/25
74-97-5	Bromochloromethane	2500	2670	107	2720	109	2	70-130/25
75-27-4	Bromodichloromethane	2500	2720	109	2720	109	0	70-130/25
75-25-2	Bromoform	2500	2450	98	2510	100	2	70-130/25
74-83-9	Bromomethane	2500	2630	105	2660	106	1	70-130/25
78-93-3	2-Butanone (MEK)	2500	3000	120	2720	109	10	70-130/25
104-51-8	n-Butylbenzene	2500	2650	106	2640	106	0	70-130/25
135-98-8	sec-Butylbenzene	2500	2540	102	2540	102	0	70-130/25
98-06-6	tert-Butylbenzene	2500	2520	101	2520	101	0	70-130/25
75-15-0	Carbon disulfide	2500	2610	104	2590	104	1	70-130/25
56-23-5	Carbon tetrachloride	2500	2680	107	2600	104	3	70-130/25
108-90-7	Chlorobenzene	2500	2610	104	2580	103	1	70-130/25
75-00-3	Chloroethane	2500	2560	102	2550	102	0	70-130/25
67-66-3	Chloroform	2500	2670	107	2650	106	1	70-130/25
74-87-3	Chloromethane	2500	2920	117	2940	118	1	70-130/25
95-49-8	o-Chlorotoluene	2500	2520	101	2500	100	1	70-130/25
106-43-4	p-Chlorotoluene	2500	2610	104	2600	104	0	70-130/25
96-12-8	1,2-Dibromo-3-chloropropane	2500	2540	102	2590	104	2	70-130/25
124-48-1	Dibromochloromethane	2500	2650	106	2660	106	0	70-130/25
106-93-4	1,2-Dibromoethane	2500	2620	105	2680	107	2	70-130/25
95-50-1	1,2-Dichlorobenzene	2500	2650	106	2610	104	2	70-130/25
541-73-1	1,3-Dichlorobenzene	2500	2610	104	2600	104	0	70-130/25
106-46-7	1,4-Dichlorobenzene	2500	2780	111	2760	110	1	70-130/25
75-71-8	Dichlorodifluoromethane	2500	3270	131* [a]	3110	124	5	70-130/25
75-34-3	1,1-Dichloroethane	2500	2700	108	2680	107	1	70-130/25
107-06-2	1,2-Dichloroethane	2500	2640	106	2650	106	0	70-130/25
75-35-4	1,1-Dichloroethene	2500	2650	106	2710	108	2	70-130/25
156-59-2	cis-1,2-Dichloroethene	2500	2630	105	2640	106	0	70-130/25
156-60-5	trans-1,2-Dichloroethene	2500	2650	106	2650	106	0	70-130/25
78-87-5	1,2-Dichloropropane	2500	2620	105	2630	105	0	70-130/25
142-28-9	1,3-Dichloropropane	2500	2550	102	2570	103	1	70-130/25
594-20-7	2,2-Dichloropropane	2500	2840	114	2830	113	0	70-130/25
563-58-6	1,1-Dichloropropene	2500	2580	103	2540	102	2	70-130/25
10061-01-5	cis-1,3-Dichloropropene	2500	2600	104	2610	104	0	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4900-BS	G123328.D	1	12/31/12	AMY	n/a	n/a	MSG4900
MSG4900-BSD	G123329.D	1	12/31/12	AMY	n/a	n/a	MSG4900

The QC reported here applies to the following samples: **Method:** SW846 8260B

MC17204-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
10061-02-6	trans-1,3-Dichloropropene	2500	2780	111	2770	111	0	70-130/25
100-41-4	Ethylbenzene	2500	2660	106	2630	105	1	70-130/25
87-68-3	Hexachlorobutadiene	2500	2770	111	2830	113	2	70-130/25
591-78-6	2-Hexanone	2500	2710	108	2560	102	6	70-130/25
74-88-4	Iodomethane	2500	2670	107	2640	106	1	70-130/25
98-82-8	Isopropylbenzene	2500	2510	100	2490	100	1	70-130/25
99-87-6	p-Isopropyltoluene	2500	2750	110	2730	109	1	70-130/25
1634-04-4	Methyl Tert Butyl Ether	2500	2630	105	2640	106	0	70-130/25
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	2250	90	2260	90	0	70-130/25
74-95-3	Methylene bromide	2500	2600	104	2600	104	0	70-130/25
75-09-2	Methylene chloride	2500	2740	110	2760	110	1	70-130/25
91-20-3	Naphthalene	2500	2650	106	2690	108	1	70-130/25
103-65-1	n-Propylbenzene	2500	2510	100	2480	99	1	70-130/25
100-42-5	Styrene	2500	2580	103	2580	103	0	70-130/25
630-20-6	1,1,1,2-Tetrachloroethane	2500	2670	107	2640	106	1	70-130/25
79-34-5	1,1,2,2-Tetrachloroethane	2500	2640	106	2660	106	1	70-130/25
127-18-4	Tetrachloroethene	2500	2680	107	2640	106	2	70-130/25
108-88-3	Toluene	2500	2630	105	2620	105	0	70-130/25
87-61-6	1,2,3-Trichlorobenzene	2500	2690	108	2690	108	0	70-130/25
120-82-1	1,2,4-Trichlorobenzene	2500	2700	108	2690	108	0	70-130/25
71-55-6	1,1,1-Trichloroethane	2500	2660	106	2660	106	0	70-130/25
79-00-5	1,1,2-Trichloroethane	2500	2670	107	2640	106	1	70-130/25
79-01-6	Trichloroethene	2500	2590	104	2560	102	1	70-130/25
75-69-4	Trichlorofluoromethane	2500	2710	108	2670	107	1	70-130/25
96-18-4	1,2,3-Trichloropropane	2500	2560	102	2570	103	0	70-130/25
95-63-6	1,2,4-Trimethylbenzene	2500	2600	104	2580	103	1	70-130/25
108-67-8	1,3,5-Trimethylbenzene	2500	2600	104	2570	103	1	70-130/25
108-05-4	Vinyl Acetate	2500	2910	116	2970	119	2	70-130/25
75-01-4	Vinyl chloride	2500	2760	110	2800	112	1	70-130/25
	m,p-Xylene	5000	5270	105	5220	104	1	70-130/25
95-47-6	o-Xylene	2500	2580	103	2570	103	0	70-130/25
1330-20-7	Xylene (total)	7500	7850	105	7790	104	1	70-130/25

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
MSG4900-BS	G123328.D	1	12/31/12	AMY	n/a	n/a	MSG4900
MSG4900-BSD	G123329.D	1	12/31/12	AMY	n/a	n/a	MSG4900

The QC reported here applies to the following samples: **Method:** SW846 8260B

MC17204-1

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
1868-53-7	Dibromofluoromethane	101%	99%	70-130%
2037-26-5	Toluene-D8	95%	94%	70-130%
460-00-4	4-Bromofluorobenzene	91%	91%	70-130%

(a) Outside control limits. Blank Spike meets program technical requirements.

* = Outside of Control Limits.

Volatile Internal Standard Area Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Check Std: MSG4900-CC4894 **Injection Date:** 12/31/12
Lab File ID: G123328.D **Injection Time:** 10:33
Instrument ID: GCMSG **Method:** SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	213181	5.13	290699	6.27	143115	9.62	148665	12.25	40413	3.10
Upper Limit [a]	426362	5.63	581398	6.77	286230	10.12	297330	12.75	80826	3.60
Lower Limit [b]	106591	4.63	145350	5.77	71558	9.12	74333	11.75	20207	2.60

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
MSG4900-BS	213181	5.13	290699	6.27	143115	9.62	148665	12.25	40413	3.10
MSG4900-BSD	207210	5.13	284536	6.27	140865	9.62	146846	12.25	39777	3.10
MSG4900-MB	203671	5.13	280929	6.27	138154	9.62	136865	12.25	36576	3.10
MC17204-1	205188	5.13	281630	6.27	139519	9.62	144044	12.25	41274	3.10
ZZZZZZ	211127	5.13	292179	6.27	141213	9.62	141176	12.25	35477	3.09
ZZZZZZ	210255	5.13	300707	6.27	180917	9.63	158460	12.25	30901	3.09
MC17098-24	210411	5.13	287215	6.27	139956	9.62	141781	12.25	29876	3.09
ZZZZZZ	209836	5.13	290836	6.27	144417	9.62	147392	12.25	28961	3.09
ZZZZZZ	210113	5.13	285991	6.27	140202	9.62	141518	12.25	32765	3.09
ZZZZZZ	206303	5.13	280862	6.27	139489	9.62	143315	12.25	36438	3.09
ZZZZZZ	202290	5.13	274747	6.27	136314	9.62	140563	12.25	36843	3.10
ZZZZZZ	207157	5.13	282318	6.27	142210	9.62	143271	12.25	35577	3.09
ZZZZZZ	206878	5.13	281199	6.27	146869	9.63	153174	12.26	36677	3.09
ZZZZZZ	206884	5.13	281365	6.27	141564	9.62	140931	12.25	38188	3.09
MC17098-24MS	207099	5.13	282078	6.27	140365	9.62	146733	12.25	38591	3.09
MC17098-24MSD	207963	5.13	284320	6.27	140410	9.62	150079	12.25	38477	3.09

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Tert Butyl Alcohol-D9

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Method: SW846 8260B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
MC17204-1	G123332.D	89.0	83.0	87.0
MSG4900-BS	G123328.D	101.0	95.0	91.0
MSG4900-BSD	G123329.D	99.0	94.0	91.0
MSG4900-MB	G123331.D	96.0	90.0	88.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	70-130%
S3 = 4-Bromofluorobenzene	70-130%

New England ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH1655-MB	BH29024B.D	1	12/29/12	AP	n/a	n/a	GBH1655

The QC reported here applies to the following samples: **Method:** SW846 8015

MC17204-1

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (VOA)	ND	5.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
615-59-8	2,5-Dibromotoluene	104%	36-148%

Blank Spike Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBH1655-BSP	BH29025.D	1	12/29/12	AP	n/a	n/a	GBH1655

The QC reported here applies to the following samples: **Method:** SW846 8015

MC17204-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (VOA)	20	19.3	97	67-133

CAS No.	Surrogate Recoveries	BSP	Limits
615-59-8	2,5-Dibromotoluene	102%	36-148%

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Method: SW846 8015 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC17204-1	BH29026.D	243.0* [b]
GBH1655-BSP	BH29025.D	102.0
GBH1655-MB	BH29024B.D	104.0

Surrogate Compounds	Recovery Limits
S1 = 2,5-Dibromotoluene	36-148%

(a) Recovery from GC signal #1
(b) Outside control limits due to possible matrix interference.

New England ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31561-MB	BC651270.D	1	01/02/13	KN	12/27/12	OP31561	GBC3261

The QC reported here applies to the following samples: **Method:** SW846-8015

MC17204-1

CAS No.	Compound	Result	RL	Units	Q
	TPH-DRO (Semi-VOA)	ND	16	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	65%	40-140%

Blank Spike/Blank Spike Duplicate Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31561-BS	BC651272.D	1	01/02/13	KN	12/27/12	OP31561	GBC3261
OP31561-BSD	BC651280.D	1	01/02/13	KN	12/27/12	OP31561	GBC3261

The QC reported here applies to the following samples: **Method:** SW846-8015

MC17204-1

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	BSD mg/kg	BSD %	RPD	Limits Rec/RPD
	TPH-DRO (Semi-VOA)	157	151	96	127	77	17	45-127/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	67%	72%	40-140%

* = Outside of Control Limits.

Semivolatile Surrogate Recovery Summary

Job Number: MC17204
Account: EBIMAB EBI Consulting
Project: 5 Plaistow Road, Plaistow NH

Method: SW846-8015 **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
MC17204-1	BC651274.D	67.0
OP31561-BS	BC651272.D	67.0
OP31561-BSD	BC651280.D	72.0
OP31561-MB	BC651270.D	65.0

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	40-140%

(a) Recovery from GC signal #1

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

January 9, 2013

Ed Giordano
EBI Consultants
21 B Street
Burlington, MA 01803

Project Location: Plaistow, NH
Client Job Number:
Project Number: 35120041
Laboratory Work Order Number: 13A0099

Enclosed are results of analyses for samples received by the laboratory on January 4, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Meghan E. Kelley
Project Manager

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Ed Giordano

REPORT DATE: 1/9/2013

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 35120041

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13A0099

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Plaistow, NH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
S2	13A0099-01	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1010	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
S3	13A0099-02	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1010	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
S4	13A0099-03	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1010	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EBI Consultants
21 B Street
Burlington, MA 01803
ATTN: Ed Giordano

REPORT DATE: 1/9/2013

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 35120041

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13A0099

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Plaistow, NH

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Septic	13A0099-04	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1010	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	
Top Soil	13A0099-05	Soil		SM 2540G	
				SM18-20 2510B	
				SW-846 1010	
				SW-846 1030	
				SW-846 6010C	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8100 Modified	
				SW-846 8260C	
				SW-846 8270D	
				SW-846 9014	
				SW-846 9030A	
				SW-846 9045C	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SW-846 8100 Modified

Qualifications:

The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.

Analyte & Samples(s) Qualified:

o-Terphenyl

13A0099-01[S2]

SW-846 8260C

Qualifications:

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Diisopropyl Ether (DIPE)

B065790-BS1, B065790-BSD1

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:

1,2-Dibromo-3-chloropropane (DBCP), 1,4-Dioxane, Acrylonitrile, tert-Butyl Alcohol (TBA), Tetrahydrofuran

13A0099-01[S2], 13A0099-02[S3], 13A0099-03[S4], 13A0099-04[Septic], 13A0099-05[Top Soil], B065790-BLK1, B065790-BS1, B065790-BSD1

SW-846 8270D

Qualifications:

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

N-Nitrosodiphenylamine

B065692-BS1, B065692-BSD1

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Benzoic Acid

13A0099-01[S2], 13A0099-02[S3], 13A0099-03[S4], 13A0099-04[Septic], 13A0099-05[Top Soil], B065692-BLK1, B065692-BS1, B065692-BSD1

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

Benzidine, Hexachlorocyclopentadiene

13A0099-04[Septic], B065692-MS1, B065692-MSD1

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

3,3-Dichlorobenzidine

B065692-MS1

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol, 3,3-Dichlorobenzidine, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Chloroaniline, Hexachlorocyclopentadiene

13A0099-04[Septic], B065692-MS1, B065692-MSD1

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:

2,4,6-Tribromophenol

B065692-BS1, B065692-BSD1

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol

13A0099-01[S2], 13A0099-02[S3], 13A0099-03[S4], 13A0099-04[Septic], 13A0099-05[Top Soil], B065692-BLK1, B065692-BS1, B065692-BSD1, B065692-MS1, B065692-MSD1

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Benzidine, Hexachlorocyclopentadiene

13A0099-01[S2], 13A0099-02[S3], 13A0099-03[S4], 13A0099-04[Septic], 13A0099-05[Top Soil], B065692-BLK1, B065692-BS1, B065692-BSD1, B065692-MS1, B065692-MSD1

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:

Pentachloronitrobenzene

13A0099-01[S2], 13A0099-02[S3], 13A0099-03[S4], 13A0099-04[Septic], 13A0099-05[Top Soil], B065692-BLK1, B065692-BS1, B065692-BSD1, B065692-MS1, B065692-MSD1

SW-846 9045C

Qualifications:

Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.

Analyte & Samples(s) Qualified:

pH

13A0099-01[S2], 13A0099-02[S3], 13A0099-03[S4], 13A0099-04[Septic], 13A0099-05[Top Soil], B065722-DUP1

SW-846 8100 Modified

TPH (C9-C36) is quantitated against a calibration made with a diesel standard.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian
Laboratory Manager

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S2 | Sampled: 1/4/2013 09:30

Sample ID: 13A0099-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Acrylonitrile	ND	0.0021	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 8:58	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Benzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Bromobenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Bromochloromethane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Bromodichloromethane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Bromoform	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Bromomethane	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
2-Butanone (MEK)	ND	0.014	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
tert-Butyl Alcohol (TBA)	ND	0.014	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 8:58	MFF
n-Butylbenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
sec-Butylbenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
tert-Butylbenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Carbon Disulfide	ND	0.0021	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Carbon Tetrachloride	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Chlorobenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Chlorodibromomethane	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Chloroethane	ND	0.0070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Chloroform	ND	0.0014	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Chloromethane	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
2-Chlorotoluene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
4-Chlorotoluene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.00070	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2-Dibromoethane (EDB)	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Dibromomethane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2-Dichlorobenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,3-Dichlorobenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,4-Dichlorobenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
trans-1,4-Dichloro-2-butene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,1-Dichloroethane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2-Dichloroethane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,1-Dichloroethylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
cis-1,2-Dichloroethylene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
trans-1,2-Dichloroethylene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2-Dichloropropane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,3-Dichloropropane	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
2,2-Dichloropropane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,1-Dichloropropene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
cis-1,3-Dichloropropene	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
trans-1,3-Dichloropropene	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Diethyl Ether	ND	0.0070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S2 | Sampled: 1/4/2013 09:30

Sample ID: 13A0099-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,4-Dioxane	ND	0.035	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Ethylbenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Hexachlorobutadiene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
2-Hexanone (MBK)	ND	0.0070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Isopropylbenzene (Cumene)	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0014	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Methylene Chloride	ND	0.0070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.0070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Naphthalene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
n-Propylbenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Styrene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,1,1,2-Tetrachloroethane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,1,2,2-Tetrachloroethane	ND	0.00035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Tetrachloroethylene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Tetrahydrofuran	ND	0.0035	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Toluene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2,3-Trichlorobenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2,4-Trichlorobenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,3,5-Trichlorobenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,1,1-Trichloroethane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,1,2-Trichloroethane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Trichloroethylene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2,3-Trichloropropane	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,2,4-Trimethylbenzene	0.0013	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
1,3,5-Trimethylbenzene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
Vinyl Chloride	ND	0.0035	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
m+p Xylene	ND	0.0014	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF
o-Xylene	ND	0.00070	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 8:58	MFF

Surrogates	% Recovery	Recovery Limits	Flag		
1,2-Dichloroethane-d4	87.5	70-130		1/8/13	8:58
Toluene-d8	98.0	70-130		1/8/13	8:58
4-Bromofluorobenzene	94.0	70-130		1/8/13	8:58

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S2 | Sampled: 1/4/2013 09:30

Sample ID: 13A0099-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Acetophenone	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Aniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Benzidine	ND	0.38	mg/Kg dry	1	V-05	SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Benzoic Acid	ND	1.1	mg/Kg dry	1	L-04	SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Bis(2-chloroethoxy)methane	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Bis(2-chloroethyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Bis(2-chloroisopropyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
4-Bromophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Butylbenzylphthalate	ND	0.74	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
4-Chloroaniline	ND	0.74	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
4-Chloro-3-methylphenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2-Chloronaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2-Chlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
4-Chlorophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Dibenzofuran	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Di-n-butylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
1,2-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
1,3-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
1,4-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2,4-Dichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Diethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2,4-Dimethylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Dimethylphthalate	ND	0.74	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
4,6-Dinitro-2-methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2,4-Dinitrophenol	ND	0.74	mg/Kg dry	1	V-04	SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2,4-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2,6-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Di-n-octylphthalate	ND	0.74	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S2 | Sampled: 1/4/2013 09:30

Sample ID: 13A0099-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Hexachlorobutadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Hexachlorocyclopentadiene	ND	0.74	mg/Kg dry	1	V-05	SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Hexachloroethane	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Isophorone	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
1-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
3/4-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
3-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
4-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Nitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2-Nitrophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
4-Nitrophenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
N-Nitrosodimethylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
N-Nitrosodiphenylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
N-Nitrosodi-n-propylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Pentachloronitrobenzene	ND	0.38	mg/Kg dry	1	V-16	SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Pentachlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Phenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Pyrene	0.20	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
Pyridine	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2,4,5-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL
2,4,6-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:13	BGL

Surrogates	% Recovery	Recovery Limits	Flag	
2-Fluorophenol	74.5	30-130		1/5/13 12:13
Phenol-d6	81.4	30-130		1/5/13 12:13
Nitrobenzene-d5	81.4	30-130		1/5/13 12:13
2-Fluorobiphenyl	83.8	30-130		1/5/13 12:13
2,4,6-Tribromophenol	91.5	30-130		1/5/13 12:13
Terphenyl-d14	59.8	30-130		1/5/13 12:13

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S2 | Sampled: 1/4/2013 09:30

Sample ID: 13A0099-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:23	JMB

Surrogates	% Recovery	Recovery Limits	Flag	
Decachlorobiphenyl [1]	83.6	30-150		1/8/13 14:23
Decachlorobiphenyl [2]	83.4	30-150		1/8/13 14:23
Tetrachloro-m-xylene [1]	54.8	30-150		1/8/13 14:23
Tetrachloro-m-xylene [2]	54.1	30-150		1/8/13 14:23

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S2 | Sampled: 1/4/2013 09:30

Sample ID: 13A0099-01

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	4600	930	mg/Kg dry	100		SW-846 8100 Modified	1/4/13	1/8/13 10:55	SCS

Surrogates	% Recovery	Recovery Limits	Flag	
o-Terphenyl	*	40-140	S-01	1/8/13 10:55

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S2 | Sampled: 1/4/2013 09:30

Sample ID: 13A0099-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	15	2.7	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:39	AMP
Barium	22	2.7	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:39	AMP
Cadmium	0.29	0.27	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:39	AMP
Chromium	9.8	0.55	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:39	AMP
Lead	10	0.82	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:39	AMP
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	1/7/13	1/7/13 12:58	SAJ
Selenium	ND	5.5	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:39	AMP
Silver	ND	0.55	mg/Kg dry	1		SW-846 6010C	1/5/13	1/8/13 8:42	OP

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S2 | Sampled: 1/4/2013 09:30

Sample ID: 13A0099-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1		SW-846 1010	1/8/13	1/8/13 17:44	AED
Ignitability	Absent		present/absent	1		SW-846 1030	1/8/13	1/8/13 8:00	LL
pH @22.5°C	6.9		pH Units	1	H-01	SW-846 9045C	1/5/13	1/5/13 13:15	AED
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	1/8/13	1/9/13 11:00	LL
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	1/8/13	1/9/13 12:30	LL
Specific conductance	3.7	2.0	µmhos/cm	1		SM18-20 2510B	1/8/13	1/8/13 10:30	LL
% Solids	88.7		% Wt	1		SM 2540G	1/4/13	1/5/13 15:57	RH

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S3 | Sampled: 1/4/2013 09:00

Sample ID: 13A0099-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Acrylonitrile	ND	0.0018	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 9:25	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Benzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Bromobenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Bromochloromethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Bromodichloromethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Bromoform	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Bromomethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
2-Butanone (MEK)	ND	0.012	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
tert-Butyl Alcohol (TBA)	ND	0.012	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 9:25	MFF
n-Butylbenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
sec-Butylbenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
tert-Butylbenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Carbon Disulfide	ND	0.0018	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Carbon Tetrachloride	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Chlorobenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Chlorodibromomethane	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Chloroethane	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Chloroform	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Chloromethane	ND	0.0030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
2-Chlorotoluene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
4-Chlorotoluene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.00061	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2-Dibromoethane (EDB)	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Dibromomethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2-Dichlorobenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,3-Dichlorobenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,4-Dichlorobenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
trans-1,4-Dichloro-2-butene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,1-Dichloroethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2-Dichloroethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,1-Dichloroethylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
cis-1,2-Dichloroethylene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
trans-1,2-Dichloroethylene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2-Dichloropropane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,3-Dichloropropane	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
2,2-Dichloropropane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,1-Dichloropropene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
cis-1,3-Dichloropropene	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
trans-1,3-Dichloropropene	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Diethyl Ether	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S3 | Sampled: 1/4/2013 09:00

Sample ID: 13A0099-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,4-Dioxane	ND	0.030	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Ethylbenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Hexachlorobutadiene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
2-Hexanone (MBK)	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Isopropylbenzene (Cumene)	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Methylene Chloride	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.0061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Naphthalene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
n-Propylbenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Styrene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,1,1,2-Tetrachloroethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,1,2,2-Tetrachloroethane	ND	0.00030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Tetrachloroethylene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Tetrahydrofuran	ND	0.0030	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Toluene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2,3-Trichlorobenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2,4-Trichlorobenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,3,5-Trichlorobenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,1,1-Trichloroethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,1,2-Trichloroethane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Trichloroethylene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2,3-Trichloropropane	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,2,4-Trimethylbenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
1,3,5-Trimethylbenzene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
Vinyl Chloride	ND	0.0030	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
m+p Xylene	ND	0.0012	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF
o-Xylene	ND	0.00061	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 9:25	MFF

Surrogates	% Recovery	Recovery Limits	Flag		
1,2-Dichloroethane-d4	82.3	70-130		1/8/13	9:25
Toluene-d8	102	70-130		1/8/13	9:25
4-Bromofluorobenzene	105	70-130		1/8/13	9:25

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S3 | Sampled: 1/4/2013 09:00

Sample ID: 13A0099-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Acetophenone	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Aniline	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Benzidine	ND	0.37	mg/Kg dry	1	V-05	SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Benzoic Acid	ND	1.1	mg/Kg dry	1	L-04	SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Bis(2-chloroethoxy)methane	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Bis(2-chloroethyl)ether	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Bis(2-chloroisopropyl)ether	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
4-Bromophenylphenylether	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Butylbenzylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
4-Chloroaniline	ND	0.72	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
4-Chloro-3-methylphenol	ND	0.72	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2-Chloronaphthalene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2-Chlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
4-Chlorophenylphenylether	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Dibenzofuran	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Di-n-butylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
1,2-Dichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
1,3-Dichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
1,4-Dichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2,4-Dichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Diethylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2,4-Dimethylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Dimethylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
4,6-Dinitro-2-methylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2,4-Dinitrophenol	ND	0.72	mg/Kg dry	1	V-04	SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2,4-Dinitrotoluene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2,6-Dinitrotoluene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Di-n-octylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S3 | Sampled: 1/4/2013 09:00

Sample ID: 13A0099-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Hexachlorobutadiene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Hexachlorocyclopentadiene	ND	0.72	mg/Kg dry	1	V-05	SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Hexachloroethane	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Isophorone	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
1-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2-Methylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
3/4-Methylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2-Nitroaniline	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
3-Nitroaniline	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
4-Nitroaniline	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Nitrobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2-Nitrophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
4-Nitrophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
N-Nitrosodimethylamine	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
N-Nitrosodiphenylamine	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
N-Nitrosodi-n-propylamine	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Pentachloronitrobenzene	ND	0.37	mg/Kg dry	1	V-16	SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Pentachlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Phenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
Pyridine	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
1,2,4-Trichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2,4,5-Trichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL
2,4,6-Trichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 12:40	BGL

Surrogates	% Recovery	Recovery Limits	Flag	
2-Fluorophenol	86.2	30-130		1/5/13 12:40
Phenol-d6	90.0	30-130		1/5/13 12:40
Nitrobenzene-d5	84.5	30-130		1/5/13 12:40
2-Fluorobiphenyl	85.3	30-130		1/5/13 12:40
2,4,6-Tribromophenol	84.9	30-130		1/5/13 12:40
Terphenyl-d14	91.7	30-130		1/5/13 12:40

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S3 | Sampled: 1/4/2013 09:00

Sample ID: 13A0099-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:36	JMB

Surrogates	% Recovery	Recovery Limits	Flag	
Decachlorobiphenyl [1]	74.4	30-150		1/8/13 14:36
Decachlorobiphenyl [2]	73.2	30-150		1/8/13 14:36
Tetrachloro-m-xylene [1]	69.7	30-150		1/8/13 14:36
Tetrachloro-m-xylene [2]	68.4	30-150		1/8/13 14:36

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S3 | Sampled: 1/4/2013 09:00

Sample ID: 13A0099-02

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	ND	9.2	mg/Kg dry	1		SW-846 8100 Modified	1/4/13	1/7/13 19:34	SCS

Surrogates	% Recovery	Recovery Limits	Flag	
o-Terphenyl	74.3	40-140		1/7/13 19:34

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S3 | Sampled: 1/4/2013 09:00

Sample ID: 13A0099-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	7.5	2.6	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:44	AMP
Barium	55	2.6	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:44	AMP
Cadmium	0.30	0.26	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:44	AMP
Chromium	44	0.52	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:44	AMP
Lead	5.5	0.79	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:44	AMP
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	1/7/13	1/7/13 12:59	SAJ
Selenium	ND	5.2	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 17:44	AMP
Silver	ND	0.52	mg/Kg dry	1		SW-846 6010C	1/5/13	1/8/13 8:47	OP

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S3 | Sampled: 1/4/2013 09:00

Sample ID: 13A0099-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1		SW-846 1010	1/8/13	1/8/13 17:44	AED
Ignitability	Absent		present/absent	1		SW-846 1030	1/8/13	1/8/13 8:00	LL
pH @24.1°C	6.9		pH Units	1	H-01	SW-846 9045C	1/5/13	1/5/13 13:15	AED
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	1/8/13	1/9/13 11:00	LL
Reactive Sulfide	ND	19	mg/Kg	1		SW-846 9030A	1/8/13	1/9/13 12:30	LL
Specific conductance	4.8	2.0	µmhos/cm	1		SM18-20 2510B	1/8/13	1/8/13 10:30	LL
% Solids	90.2		% Wt	1		SM 2540G	1/4/13	1/5/13 15:57	RH

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S4 | Sampled: 1/4/2013 10:00

Sample ID: 13A0099-03

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Acrylonitrile	ND	0.0020	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 10:47	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Benzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Bromobenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Bromochloromethane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Bromodichloromethane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Bromoform	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Bromomethane	ND	0.0033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
2-Butanone (MEK)	ND	0.013	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
tert-Butyl Alcohol (TBA)	ND	0.013	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 10:47	MFF
n-Butylbenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
sec-Butylbenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
tert-Butylbenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Carbon Disulfide	ND	0.0020	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Carbon Tetrachloride	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Chlorobenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Chlorodibromomethane	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Chloroethane	ND	0.0065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Chloroform	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Chloromethane	ND	0.0033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
2-Chlorotoluene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
4-Chlorotoluene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.00065	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2-Dibromoethane (EDB)	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Dibromomethane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2-Dichlorobenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,3-Dichlorobenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,4-Dichlorobenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
trans-1,4-Dichloro-2-butene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,1-Dichloroethane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2-Dichloroethane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,1-Dichloroethylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
cis-1,2-Dichloroethylene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
trans-1,2-Dichloroethylene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2-Dichloropropane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,3-Dichloropropane	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
2,2-Dichloropropane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,1-Dichloropropene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
cis-1,3-Dichloropropene	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
trans-1,3-Dichloropropene	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Diethyl Ether	ND	0.0065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S4 | Sampled: 1/4/2013 10:00

Sample ID: 13A0099-03

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,4-Dioxane	ND	0.033	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Ethylbenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Hexachlorobutadiene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
2-Hexanone (MBK)	ND	0.0065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Isopropylbenzene (Cumene)	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Methylene Chloride	ND	0.0065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.0065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Naphthalene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
n-Propylbenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Styrene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,1,1,2-Tetrachloroethane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,1,2,2-Tetrachloroethane	ND	0.00033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Tetrachloroethylene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Tetrahydrofuran	ND	0.0033	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Toluene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2,3-Trichlorobenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2,4-Trichlorobenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,3,5-Trichlorobenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,1,1-Trichloroethane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,1,2-Trichloroethane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Trichloroethylene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2,3-Trichloropropane	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,2,4-Trimethylbenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
1,3,5-Trimethylbenzene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
Vinyl Chloride	ND	0.0033	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
m+p Xylene	ND	0.0013	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF
o-Xylene	ND	0.00065	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 10:47	MFF

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	78.4	70-130		1/8/13 10:47
Toluene-d8	102	70-130		1/8/13 10:47
4-Bromofluorobenzene	107	70-130		1/8/13 10:47

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S4 | Sampled: 1/4/2013 10:00

Sample ID: 13A0099-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Acetophenone	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Aniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Benzidine	ND	0.39	mg/Kg dry	1	V-05	SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Benzoic Acid	ND	1.2	mg/Kg dry	1	L-04	SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Bis(2-chloroethoxy)methane	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Bis(2-chloroethyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Bis(2-chloroisopropyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
4-Bromophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Butylbenzylphthalate	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Carbazole	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
4-Chloroaniline	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
4-Chloro-3-methylphenol	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2-Chloronaphthalene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2-Chlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
4-Chlorophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Dibenzofuran	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Di-n-butylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
1,2-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
1,3-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
1,4-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2,4-Dichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Diethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2,4-Dimethylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Dimethylphthalate	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
4,6-Dinitro-2-methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2,4-Dinitrophenol	ND	0.76	mg/Kg dry	1	V-04	SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2,4-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2,6-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Di-n-octylphthalate	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S4 | Sampled: 1/4/2013 10:00

Sample ID: 13A0099-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Hexachlorobutadiene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Hexachlorocyclopentadiene	ND	0.76	mg/Kg dry	1	V-05	SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Hexachloroethane	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Isophorone	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
1-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
3/4-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
3-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
4-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Nitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2-Nitrophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
4-Nitrophenol	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
N-Nitrosodimethylamine	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
N-Nitrosodiphenylamine	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
N-Nitrosodi-n-propylamine	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Pentachloronitrobenzene	ND	0.39	mg/Kg dry	1	V-16	SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Pentachlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Phenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
Pyridine	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2,4,5-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL
2,4,6-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:06	BGL

Surrogates	% Recovery	Recovery Limits	Flag	
2-Fluorophenol	57.6	30-130		1/5/13 13:06
Phenol-d6	70.9	30-130		1/5/13 13:06
Nitrobenzene-d5	55.2	30-130		1/5/13 13:06
2-Fluorobiphenyl	72.0	30-130		1/5/13 13:06
2,4,6-Tribromophenol	63.2	30-130		1/5/13 13:06
Terphenyl-d14	96.4	30-130		1/5/13 13:06

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S4 | Sampled: 1/4/2013 10:00

Sample ID: 13A0099-03

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 14:49	JMB

Surrogates	% Recovery	Recovery Limits	Flag	
Decachlorobiphenyl [1]	83.5	30-150		1/8/13 14:49
Decachlorobiphenyl [2]	81.5	30-150		1/8/13 14:49
Tetrachloro-m-xylene [1]	76.0	30-150		1/8/13 14:49
Tetrachloro-m-xylene [2]	74.9	30-150		1/8/13 14:49

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S4 | Sampled: 1/4/2013 10:00

Sample ID: 13A0099-03

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	210	9.7	mg/Kg dry	1		SW-846 8100 Modified	1/4/13	1/7/13 20:08	SCS

Surrogates	% Recovery	Recovery Limits	Flag	
o-Terphenyl	81.6	40-140		1/7/13 20:08

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S4 | Sampled: 1/4/2013 10:00

Sample ID: 13A0099-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	14	2.9	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:03	AMP
Barium	36	2.9	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:03	AMP
Cadmium	0.32	0.29	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:03	AMP
Chromium	32	0.58	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:03	AMP
Lead	28	0.87	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:03	AMP
Mercury	ND	0.029	mg/Kg dry	1		SW-846 7471B	1/7/13	1/7/13 13:01	SAJ
Selenium	ND	5.8	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:03	AMP
Silver	ND	0.58	mg/Kg dry	1		SW-846 6010C	1/5/13	1/8/13 8:50	OP

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: S4 | Sampled: 1/4/2013 10:00

Sample ID: 13A0099-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1		SW-846 1010	1/8/13	1/8/13 17:44	AED
Ignitability	Absent		present/absent	1		SW-846 1030	1/8/13	1/8/13 8:00	LL
pH @25°C	8.9		pH Units	1	H-01	SW-846 9045C	1/5/13	1/5/13 13:15	AED
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	1/8/13	1/9/13 11:00	LL
Reactive Sulfide	ND	19	mg/Kg	1		SW-846 9030A	1/8/13	1/9/13 12:30	LL
Specific conductance	19	2.0	µmhos/cm	1		SM18-20 2510B	1/8/13	1/8/13 10:30	LL
% Solids	85.6		% Wt	1		SM 2540G	1/4/13	1/5/13 15:57	RH

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Septic | Sampled: 1/4/2013 10:30

Sample ID: 13A0099-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Acrylonitrile	ND	0.0022	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:14	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Benzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Bromobenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Bromochloromethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Bromodichloromethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Bromoform	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Bromomethane	ND	0.0037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
2-Butanone (MEK)	ND	0.015	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
tert-Butyl Alcohol (TBA)	ND	0.015	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:14	MFF
n-Butylbenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
sec-Butylbenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
tert-Butylbenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Carbon Disulfide	ND	0.0022	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Carbon Tetrachloride	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Chlorobenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Chlorodibromomethane	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Chloroethane	ND	0.0075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Chloroform	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Chloromethane	ND	0.0037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
2-Chlorotoluene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
4-Chlorotoluene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.00075	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2-Dibromoethane (EDB)	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Dibromomethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2-Dichlorobenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,3-Dichlorobenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,4-Dichlorobenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
trans-1,4-Dichloro-2-butene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,1-Dichloroethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2-Dichloroethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,1-Dichloroethylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
cis-1,2-Dichloroethylene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
trans-1,2-Dichloroethylene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2-Dichloropropane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,3-Dichloropropane	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
2,2-Dichloropropane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,1-Dichloropropene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
cis-1,3-Dichloropropene	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
trans-1,3-Dichloropropene	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Diethyl Ether	ND	0.0075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Septic | Sampled: 1/4/2013 10:30

Sample ID: 13A0099-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,4-Dioxane	ND	0.037	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Ethylbenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Hexachlorobutadiene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
2-Hexanone (MBK)	ND	0.0075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Isopropylbenzene (Cumene)	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Methylene Chloride	ND	0.0075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.0075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Naphthalene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
n-Propylbenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Styrene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,1,1,2-Tetrachloroethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,1,2,2-Tetrachloroethane	ND	0.00037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Tetrachloroethylene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Tetrahydrofuran	ND	0.0037	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Toluene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2,3-Trichlorobenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2,4-Trichlorobenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,3,5-Trichlorobenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,1,1-Trichloroethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,1,2-Trichloroethane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Trichloroethylene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2,3-Trichloropropane	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,2,4-Trimethylbenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
1,3,5-Trimethylbenzene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
Vinyl Chloride	ND	0.0037	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
m+p Xylene	ND	0.0015	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF
o-Xylene	ND	0.00075	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:14	MFF

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	77.0	70-130		1/8/13 11:14
Toluene-d8	101	70-130		1/8/13 11:14
4-Bromofluorobenzene	101	70-130		1/8/13 11:14

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Septic | Sampled: 1/4/2013 10:30

Sample ID: 13A0099-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Acetophenone	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Aniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Benzidine	ND	0.38	mg/Kg dry	1	MS-09, V-05	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Benzoic Acid	ND	1.1	mg/Kg dry	1	L-04	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Bis(2-chloroethoxy)methane	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Bis(2-chloroethyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Bis(2-chloroisopropyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
4-Bromophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Butylbenzylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
4-Chloroaniline	ND	0.75	mg/Kg dry	1	R-06	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
4-Chloro-3-methylphenol	ND	0.75	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2-Chloronaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2-Chlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
4-Chlorophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Dibenzofuran	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Di-n-butylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
1,2-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
1,3-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
1,4-Dichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1	R-06	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2,4-Dichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Diethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2,4-Dimethylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Dimethylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
4,6-Dinitro-2-methylphenol	ND	0.38	mg/Kg dry	1	R-06	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2,4-Dinitrophenol	ND	0.75	mg/Kg dry	1	R-06, V-04	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2,4-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2,6-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Di-n-octylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Septic | Sampled: 1/4/2013 10:30

Sample ID: 13A0099-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Hexachlorobutadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Hexachlorocyclopentadiene	ND	0.75	mg/Kg dry	1	V-05, MS-09, R-06	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Hexachloroethane	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Isophorone	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
1-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
3/4-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
3-Nitroaniline	ND	0.38	mg/Kg dry	1	R-06	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
4-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Nitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2-Nitrophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
4-Nitrophenol	ND	0.75	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
N-Nitrosodimethylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
N-Nitrosodiphenylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
N-Nitrosodi-n-propylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Pentachloronitrobenzene	ND	0.38	mg/Kg dry	1	V-16	SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Pentachlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Phenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
Pyridine	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2,4,5-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL
2,4,6-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 13:33	BGL

Surrogates	% Recovery	Recovery Limits	Flag	
2-Fluorophenol	89.2	30-130		1/5/13 13:33
Phenol-d6	104	30-130		1/5/13 13:33
Nitrobenzene-d5	78.0	30-130		1/5/13 13:33
2-Fluorobiphenyl	79.7	30-130		1/5/13 13:33
2,4,6-Tribromophenol	87.6	30-130		1/5/13 13:33
Terphenyl-d14	110	30-130		1/5/13 13:33

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Septic | Sampled: 1/4/2013 10:30

Sample ID: 13A0099-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:01	JMB

Surrogates	% Recovery	Recovery Limits	Flag	
Decachlorobiphenyl [1]	80.4	30-150		1/8/13 15:01
Decachlorobiphenyl [2]	79.2	30-150		1/8/13 15:01
Tetrachloro-m-xylene [1]	71.9	30-150		1/8/13 15:01
Tetrachloro-m-xylene [2]	70.8	30-150		1/8/13 15:01

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Septic | Sampled: 1/4/2013 10:30

Sample ID: 13A0099-04

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	15	9.3	mg/Kg dry	1		SW-846 8100 Modified	1/4/13	1/7/13 19:51	SCS

Surrogates	% Recovery	Recovery Limits	Flag				
o-Terphenyl	75.7	40-140				1/7/13 19:51	

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Septic | Sampled: 1/4/2013 10:30

Sample ID: 13A0099-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	5.8	2.7	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:08	AMP
Barium	33	2.7	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:08	AMP
Cadmium	ND	0.27	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:08	AMP
Chromium	11	0.54	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:08	AMP
Lead	76	0.81	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:08	AMP
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	1/7/13	1/7/13 13:13	SAJ
Selenium	ND	5.4	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:08	AMP
Silver	ND	0.54	mg/Kg dry	1		SW-846 6010C	1/5/13	1/8/13 8:55	OP

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Septic | Sampled: 1/4/2013 10:30

Sample ID: 13A0099-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1		SW-846 1010	1/8/13	1/8/13 17:44	AED
Ignitability	Absent		present/absent	1		SW-846 1030	1/8/13	1/8/13 8:00	LL
pH @28.8°C	6.0		pH Units	1	H-01	SW-846 9045C	1/5/13	1/5/13 13:15	AED
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	1/8/13	1/9/13 11:00	LL
Reactive Sulfide	ND	19	mg/Kg	1		SW-846 9030A	1/8/13	1/9/13 12:30	LL
Specific conductance	2.8	2.0	µmhos/cm	1		SM18-20 2510B	1/8/13	1/8/13 10:30	LL
% Solids	88.5		% Wt	1		SM 2540G	1/4/13	1/5/13 15:57	RH

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Top Soil | Sampled: 1/4/2013 10:40

Sample ID: 13A0099-05

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Acrylonitrile	ND	0.0026	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:41	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Benzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Bromobenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Bromochloromethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Bromodichloromethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Bromoform	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Bromomethane	ND	0.0044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
2-Butanone (MEK)	ND	0.017	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
tert-Butyl Alcohol (TBA)	ND	0.017	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:41	MFF
n-Butylbenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
sec-Butylbenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
tert-Butylbenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Carbon Disulfide	ND	0.0026	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Carbon Tetrachloride	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Chlorobenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Chlorodibromomethane	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Chloroethane	ND	0.0087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Chloroform	ND	0.0017	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Chloromethane	ND	0.0044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
2-Chlorotoluene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
4-Chlorotoluene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.00087	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2-Dibromoethane (EDB)	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Dibromomethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2-Dichlorobenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,3-Dichlorobenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,4-Dichlorobenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
trans-1,4-Dichloro-2-butene	ND	0.0017	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.0087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,1-Dichloroethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2-Dichloroethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,1-Dichloroethylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
cis-1,2-Dichloroethylene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
trans-1,2-Dichloroethylene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2-Dichloropropane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,3-Dichloropropane	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
2,2-Dichloropropane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,1-Dichloropropene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
cis-1,3-Dichloropropene	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
trans-1,3-Dichloropropene	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Diethyl Ether	ND	0.0087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Top Soil | Sampled: 1/4/2013 10:40

Sample ID: 13A0099-05

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,4-Dioxane	ND	0.044	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Ethylbenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Hexachlorobutadiene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
2-Hexanone (MBK)	ND	0.0087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Isopropylbenzene (Cumene)	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0017	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Methylene Chloride	ND	0.0087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.0087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Naphthalene	ND	0.0017	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
n-Propylbenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Styrene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,1,1,2-Tetrachloroethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,1,2,2-Tetrachloroethane	ND	0.00044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Tetrachloroethylene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Tetrahydrofuran	ND	0.0044	mg/Kg dry	1	V-16	SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Toluene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2,3-Trichlorobenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2,4-Trichlorobenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,3,5-Trichlorobenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,1,1-Trichloroethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,1,2-Trichloroethane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Trichloroethylene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2,3-Trichloropropane	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,2,4-Trimethylbenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
1,3,5-Trimethylbenzene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
Vinyl Chloride	ND	0.0044	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
m+p Xylene	ND	0.0017	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF
o-Xylene	ND	0.00087	mg/Kg dry	1		SW-846 8260C	1/8/13	1/8/13 11:41	MFF

Surrogates	% Recovery	Recovery Limits	Flag	
1,2-Dichloroethane-d4	79.8	70-130		1/8/13 11:41
Toluene-d8	99.4	70-130		1/8/13 11:41
4-Bromofluorobenzene	98.6	70-130		1/8/13 11:41

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Top Soil | Sampled: 1/4/2013 10:40

Sample ID: 13A0099-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Acetophenone	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Aniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Benzidine	ND	0.39	mg/Kg dry	1	V-05	SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Benzoic Acid	ND	1.1	mg/Kg dry	1	L-04	SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Bis(2-chloroethoxy)methane	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Bis(2-chloroethyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Bis(2-chloroisopropyl)ether	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
4-Bromophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Butylbenzylphthalate	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Carbazole	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
4-Chloroaniline	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
4-Chloro-3-methylphenol	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2-Chloronaphthalene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2-Chlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
4-Chlorophenylphenylether	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Dibenzofuran	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Di-n-butylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
1,2-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
1,3-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
1,4-Dichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2,4-Dichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Diethylphthalate	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2,4-Dimethylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Dimethylphthalate	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
4,6-Dinitro-2-methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2,4-Dinitrophenol	ND	0.76	mg/Kg dry	1	V-04	SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2,4-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2,6-Dinitrotoluene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Di-n-octylphthalate	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Top Soil | Sampled: 1/4/2013 10:40

Sample ID: 13A0099-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Hexachlorobutadiene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Hexachlorocyclopentadiene	ND	0.76	mg/Kg dry	1	V-05	SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Hexachloroethane	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Isophorone	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
1-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
3/4-Methylphenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
3-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
4-Nitroaniline	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Nitrobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2-Nitrophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
4-Nitrophenol	ND	0.76	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
N-Nitrosodimethylamine	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
N-Nitrosodiphenylamine	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
N-Nitrosodi-n-propylamine	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Pentachloronitrobenzene	ND	0.39	mg/Kg dry	1	V-16	SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Pentachlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Phenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
Pyridine	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
1,2,4-Trichlorobenzene	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2,4,5-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL
2,4,6-Trichlorophenol	ND	0.39	mg/Kg dry	1		SW-846 8270D	1/4/13	1/5/13 14:00	BGL

Surrogates	% Recovery	Recovery Limits	Flag	
2-Fluorophenol	88.1	30-130		1/5/13 14:00
Phenol-d6	83.1	30-130		1/5/13 14:00
Nitrobenzene-d5	85.8	30-130		1/5/13 14:00
2-Fluorobiphenyl	88.0	30-130		1/5/13 14:00
2,4,6-Tribromophenol	95.5	30-130		1/5/13 14:00
Terphenyl-d14	86.5	30-130		1/5/13 14:00

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Top Soil | Sampled: 1/4/2013 10:40

Sample ID: 13A0099-05

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	1/4/13	1/8/13 15:14	JMB

Surrogates	% Recovery	Recovery Limits	Flag	
Decachlorobiphenyl [1]	79.0	30-150		1/8/13 15:14
Decachlorobiphenyl [2]	78.3	30-150		1/8/13 15:14
Tetrachloro-m-xylene [1]	72.3	30-150		1/8/13 15:14
Tetrachloro-m-xylene [2]	71.5	30-150		1/8/13 15:14

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Top Soil | Sampled: 1/4/2013 10:40

Sample ID: 13A0099-05

Sample Matrix: Soil

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
TPH (C9-C36)	100	9.5	mg/Kg dry	1		SW-846 8100 Modified	1/4/13	1/7/13 20:25	SCS

Surrogates	% Recovery	Recovery Limits	Flag				
o-Terphenyl	69.2	40-140					1/7/13 20:25

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Top Soil | Sampled: 1/4/2013 10:40

Sample ID: 13A0099-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	7.5	2.7	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:12	AMP
Barium	22	2.7	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:12	AMP
Cadmium	0.28	0.27	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:12	AMP
Chromium	21	0.55	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:12	AMP
Lead	17	0.82	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:12	AMP
Mercury	ND	0.028	mg/Kg dry	1		SW-846 7471B	1/7/13	1/7/13 13:15	SAJ
Selenium	ND	5.5	mg/Kg dry	1		SW-846 6010C	1/5/13	1/7/13 18:12	AMP
Silver	ND	0.55	mg/Kg dry	1		SW-846 6010C	1/5/13	1/8/13 9:00	OP

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Project Location: Plaistow, NH | Sample Description: | Work Order: 13A0099

Date Received: 1/4/2013

Field Sample #: Top Soil | Sampled: 1/4/2013 10:40

Sample ID: 13A0099-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1		SW-846 1010	1/8/13	1/8/13 17:44	AED
Ignitability	Absent		present/absent	1		SW-846 1030	1/8/13	1/8/13 8:00	LL
pH @25.3°C	6.2		pH Units	1	H-01	SW-846 9045C	1/5/13	1/5/13 13:15	AED
Reactive Cyanide	ND	4.0	mg/Kg	1		SW-846 9014	1/8/13	1/9/13 11:00	LL
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	1/8/13	1/9/13 12:30	LL
Specific conductance	2.4	2.0	µmhos/cm	1		SM18-20 2510B	1/8/13	1/8/13 10:30	LL
% Solids	86.8		% Wt	1		SM 2540G	1/4/13	1/5/13 15:57	RH

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
13A0099-01 [S2]	B065706	01/04/13
13A0099-02 [S3]	B065706	01/04/13
13A0099-03 [S4]	B065706	01/04/13
13A0099-04 [Septic]	B065706	01/04/13
13A0099-05 [Top Soil]	B065706	01/04/13

SM18-20 2510B

Lab Number [Field ID]	Batch	Initial [g]	Date
13A0099-01 [S2]	B065803	1.00	01/08/13
13A0099-02 [S3]	B065803	1.00	01/08/13
13A0099-03 [S4]	B065803	1.00	01/08/13
13A0099-04 [Septic]	B065803	1.00	01/08/13
13A0099-05 [Top Soil]	B065803	1.00	01/08/13

SW-846 1010

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065833	50.0	50.0	01/08/13
13A0099-02 [S3]	B065833	50.0	50.0	01/08/13
13A0099-03 [S4]	B065833	50.0	50.0	01/08/13
13A0099-04 [Septic]	B065833	50.0	50.0	01/08/13
13A0099-05 [Top Soil]	B065833	50.0	50.0	01/08/13

SW-846 1030

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065778	50.0	50.0	01/08/13
13A0099-02 [S3]	B065778	50.0	50.0	01/08/13
13A0099-03 [S4]	B065778	50.0	50.0	01/08/13
13A0099-04 [Septic]	B065778	50.0	50.0	01/08/13
13A0099-05 [Top Soil]	B065778	50.0	50.0	01/08/13

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065703	1.03	50.0	01/05/13
13A0099-02 [S3]	B065703	1.06	50.0	01/05/13
13A0099-03 [S4]	B065703	1.01	50.0	01/05/13
13A0099-04 [Septic]	B065703	1.04	50.0	01/05/13
13A0099-05 [Top Soil]	B065703	1.05	50.0	01/05/13

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065684	0.604	50.0	01/07/13
13A0099-02 [S3]	B065684	0.615	50.0	01/07/13
13A0099-03 [S4]	B065684	0.613	50.0	01/07/13
13A0099-04 [Septic]	B065684	0.602	50.0	01/07/13

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Sample Extraction Data

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-05 [Top Soil]	B065684	0.616	50.0	01/07/13

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065700	10.2	10.0	01/04/13
13A0099-02 [S3]	B065700	10.0	10.0	01/04/13
13A0099-03 [S4]	B065700	10.1	10.0	01/04/13
13A0099-04 [Septic]	B065700	10.4	10.0	01/04/13
13A0099-05 [Top Soil]	B065700	10.0	10.0	01/04/13

Prep Method: SW-846 3546-SW-846 8100 Modified

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065702	30.3	1.00	01/04/13
13A0099-02 [S3]	B065702	30.2	1.00	01/04/13
13A0099-03 [S4]	B065702	30.1	1.00	01/04/13
13A0099-04 [Septic]	B065702	30.3	1.00	01/04/13
13A0099-05 [Top Soil]	B065702	30.3	1.00	01/04/13

Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065790	16.2	10.0	01/08/13
13A0099-02 [S3]	B065790	18.2	10.0	01/08/13
13A0099-03 [S4]	B065790	17.9	10.0	01/08/13
13A0099-04 [Septic]	B065790	15.1	10.0	01/08/13
13A0099-05 [Top Soil]	B065790	13.2	10.0	01/08/13

Prep Method: SW-846 3546-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065692	30.2	1.00	01/04/13
13A0099-02 [S3]	B065692	30.4	1.00	01/04/13
13A0099-03 [S4]	B065692	30.3	1.00	01/04/13
13A0099-04 [Septic]	B065692	30.0	1.00	01/04/13
13A0099-05 [Top Soil]	B065692	30.1	1.00	01/04/13

SW-846 9014

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065801	25.5	250	01/08/13
13A0099-02 [S3]	B065801	25.8	250	01/08/13
13A0099-03 [S4]	B065801	25.8	250	01/08/13
13A0099-04 [Septic]	B065801	25.7	250	01/08/13
13A0099-05 [Top Soil]	B065801	25.2	250	01/08/13

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Sample Extraction Data

SW-846 9030A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
13A0099-01 [S2]	B065802	25.5	250	01/08/13
13A0099-02 [S3]	B065802	25.8	250	01/08/13
13A0099-03 [S4]	B065802	25.8	250	01/08/13
13A0099-04 [Septic]	B065802	25.7	250	01/08/13
13A0099-05 [Top Soil]	B065802	25.2	250	01/08/13

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
13A0099-01 [S2]	B065722	20.0	01/05/13
13A0099-02 [S3]	B065722	20.0	01/05/13
13A0099-03 [S4]	B065722	20.0	01/05/13
13A0099-04 [Septic]	B065722	20.0	01/05/13
13A0099-05 [Top Soil]	B065722	20.0	01/05/13

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B065790 - SW-846 5035										
Blank (B065790-BLK1)				Prepared & Analyzed: 01/08/13						
Acetone	ND	0.10	mg/Kg wet							
Acrylonitrile	ND	0.0060	mg/Kg wet							V-16
tert-Amyl Methyl Ether (TAME)	ND	0.0010	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
tert-Butyl Alcohol (TBA)	ND	0.040	mg/Kg wet							V-16
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butyl Ethyl Ether (TBEE)	ND	0.0010	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							V-16
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Diethyl Ether	ND	0.020	mg/Kg wet							
Diisopropyl Ether (DIPE)	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							V-16
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B065790 - SW-846 5035											
Blank (B065790-BLK1)				Prepared & Analyzed: 01/08/13							
Methylene Chloride	ND	0.020	mg/Kg wet								
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet								
Naphthalene	ND	0.0040	mg/Kg wet								
n-Propylbenzene	ND	0.0020	mg/Kg wet								
Styrene	ND	0.0020	mg/Kg wet								
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet								
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet								
Tetrachloroethylene	ND	0.0020	mg/Kg wet								
Tetrahydrofuran	ND	0.010	mg/Kg wet							V-16	
Toluene	ND	0.0020	mg/Kg wet								
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet								
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet								
1,3,5-Trichlorobenzene	ND	0.0020	mg/Kg wet								
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet								
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet								
Trichloroethylene	ND	0.0020	mg/Kg wet								
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet								
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet								
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet								
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet								
Vinyl Chloride	ND	0.010	mg/Kg wet								
m+p Xylene	ND	0.0040	mg/Kg wet								
o-Xylene	ND	0.0020	mg/Kg wet								
Surrogate: 1,2-Dichloroethane-d4	*0.0455*		mg/Kg wet	0.0500		91.0	70-130				
Surrogate: Toluene-d8	*0.0513*		mg/Kg wet	0.0500		103	70-130				
Surrogate: 4-Bromofluorobenzene	*0.0531*		mg/Kg wet	0.0500		106	70-130				
LCS (B065790-BS1)				Prepared & Analyzed: 01/08/13							
Acetone	0.203	0.10	mg/Kg wet	0.200		101	70-160				†
Acrylonitrile	0.0251	0.0060	mg/Kg wet	0.0200		126	70-130			V-16	
tert-Amyl Methyl Ether (TAME)	0.0231	0.0010	mg/Kg wet	0.0200		115	70-130				
Benzene	0.0245	0.0020	mg/Kg wet	0.0200		122	70-130				
Bromobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.4	70-130				
Bromochloromethane	0.0229	0.0020	mg/Kg wet	0.0200		115	70-130				
Bromodichloromethane	0.0183	0.0020	mg/Kg wet	0.0200		91.6	70-130				
Bromoform	0.0168	0.0020	mg/Kg wet	0.0200		84.1	70-130				
Bromomethane	0.0191	0.010	mg/Kg wet	0.0200		95.5	40-130				†
2-Butanone (MEK)	0.218	0.040	mg/Kg wet	0.200		109	70-160				†
tert-Butyl Alcohol (TBA)	0.195	0.040	mg/Kg wet	0.200		97.7	40-130			V-16	†
n-Butylbenzene	0.0187	0.0020	mg/Kg wet	0.0200		93.5	70-130				
sec-Butylbenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.6	70-130				
tert-Butylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.4	70-160				†
tert-Butyl Ethyl Ether (TBEE)	0.0238	0.0010	mg/Kg wet	0.0200		119	70-130				
Carbon Disulfide	0.0200	0.0060	mg/Kg wet	0.0200		100	70-130				
Carbon Tetrachloride	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130				
Chlorobenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.6	70-130				
Chlorodibromomethane	0.0182	0.0010	mg/Kg wet	0.0200		90.9	70-130				
Chloroethane	0.0195	0.020	mg/Kg wet	0.0200		97.3	70-130				
Chloroform	0.0219	0.0040	mg/Kg wet	0.0200		109	70-130				
Chloromethane	0.0237	0.010	mg/Kg wet	0.0200		118	70-130				
2-Chlorotoluene	0.0192	0.0020	mg/Kg wet	0.0200		95.8	70-130				

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QUALITY CONTROL

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B065790 - SW-846 5035												
LCS (B065790-BS1)				Prepared & Analyzed: 01/08/13								
4-Chlorotoluene	0.0195	0.0020	mg/Kg wet	0.0200		97.5		70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0146	0.0020	mg/Kg wet	0.0200		72.8		70-130			V-16	
1,2-Dibromoethane (EDB)	0.0204	0.0010	mg/Kg wet	0.0200		102		70-130				
Dibromomethane	0.0200	0.0020	mg/Kg wet	0.0200		99.8		70-130				
1,2-Dichlorobenzene	0.0178	0.0020	mg/Kg wet	0.0200		88.8		70-130				
1,3-Dichlorobenzene	0.0178	0.0020	mg/Kg wet	0.0200		88.8		70-130				
1,4-Dichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.4		70-130				
trans-1,4-Dichloro-2-butene	0.0184	0.0040	mg/Kg wet	0.0200		91.9		70-130				
Dichlorodifluoromethane (Freon 12)	0.0129	0.020	mg/Kg wet	0.0200		64.3		40-160				†
1,1-Dichloroethane	0.0235	0.0020	mg/Kg wet	0.0200		118		70-130				
1,2-Dichloroethane	0.0175	0.0020	mg/Kg wet	0.0200		87.5		70-130				
1,1-Dichloroethylene	0.0185	0.0040	mg/Kg wet	0.0200		92.3		70-130				
cis-1,2-Dichloroethylene	0.0222	0.0020	mg/Kg wet	0.0200		111		70-130				
trans-1,2-Dichloroethylene	0.0230	0.0020	mg/Kg wet	0.0200		115		70-130				
1,2-Dichloropropane	0.0233	0.0020	mg/Kg wet	0.0200		117		70-130				
1,3-Dichloropropane	0.0206	0.0010	mg/Kg wet	0.0200		103		70-130				
2,2-Dichloropropane	0.0209	0.0020	mg/Kg wet	0.0200		105		70-130				
1,1-Dichloropropene	0.0222	0.0020	mg/Kg wet	0.0200		111		70-130				
cis-1,3-Dichloropropene	0.0205	0.0010	mg/Kg wet	0.0200		102		70-130				
trans-1,3-Dichloropropene	0.0201	0.0010	mg/Kg wet	0.0200		101		70-130				
Diethyl Ether	0.0188	0.020	mg/Kg wet	0.0200		94.0		70-130				
Diisopropyl Ether (DIPE)	0.0279	0.0010	mg/Kg wet	0.0200		**139**	*	70-130			L-02	
1,4-Dioxane	0.222	0.10	mg/Kg wet	0.200		111		40-160			V-16	†
Ethylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101		70-130				
Hexachlorobutadiene	0.0165	0.0020	mg/Kg wet	0.0200		82.6		70-160				
2-Hexanone (MBK)	0.207	0.020	mg/Kg wet	0.200		103		70-160				†
Isopropylbenzene (Cumene)	0.0214	0.0020	mg/Kg wet	0.0200		107		70-130				
p-Isopropyltoluene (p-Cymene)	0.0186	0.0020	mg/Kg wet	0.0200		92.9		70-130				
Methyl tert-Butyl Ether (MTBE)	0.0237	0.0040	mg/Kg wet	0.0200		118		70-130				
Methylene Chloride	0.0261	0.020	mg/Kg wet	0.0200		130		40-160				†
4-Methyl-2-pentanone (MIBK)	0.213	0.020	mg/Kg wet	0.200		107		70-160				†
Naphthalene	0.0155	0.0040	mg/Kg wet	0.0200		77.6		40-130				†
n-Propylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101		70-130				
Styrene	0.0208	0.0020	mg/Kg wet	0.0200		104		70-130				
1,1,1,2-Tetrachloroethane	0.0193	0.0020	mg/Kg wet	0.0200		96.7		70-130				
1,1,2,2-Tetrachloroethane	0.0202	0.0010	mg/Kg wet	0.0200		101		70-130				
Tetrachloroethylene	0.0210	0.0020	mg/Kg wet	0.0200		105		70-130				
Tetrahydrofuran	0.0215	0.010	mg/Kg wet	0.0200		108		70-130			V-16	
Toluene	0.0204	0.0020	mg/Kg wet	0.0200		102		70-130				
1,2,3-Trichlorobenzene	0.0171	0.0020	mg/Kg wet	0.0200		85.4		70-130				
1,2,4-Trichlorobenzene	0.0168	0.0020	mg/Kg wet	0.0200		84.2		70-130				
1,3,5-Trichlorobenzene	0.0175	0.0020	mg/Kg wet	0.0200		87.3		70-130				
1,1,1-Trichloroethane	0.0202	0.0020	mg/Kg wet	0.0200		101		70-130				
1,1,2-Trichloroethane	0.0209	0.0020	mg/Kg wet	0.0200		104		70-130				
Trichloroethylene	0.0204	0.0020	mg/Kg wet	0.0200		102		70-130				
Trichlorofluoromethane (Freon 11)	0.0168	0.010	mg/Kg wet	0.0200		84.1		70-130				
1,2,3-Trichloropropane	0.0186	0.0020	mg/Kg wet	0.0200		93.0		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0199	0.010	mg/Kg wet	0.0200		99.7		70-130				
1,2,4-Trimethylbenzene	0.0178	0.0020	mg/Kg wet	0.0200		88.9		70-130				
1,3,5-Trimethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6		70-130				
Vinyl Chloride	0.0182	0.010	mg/Kg wet	0.0200		91.0		40-130				†

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QUALITY CONTROL

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B065790 - SW-846 5035												
LCS (B065790-BS1)				Prepared & Analyzed: 01/08/13								
m+p Xylene	0.0398	0.0040	mg/Kg wet	0.0400		99.4		70-130				
o-Xylene	0.0198	0.0020	mg/Kg wet	0.0200		98.8		70-130				
Surrogate: 1,2-Dichloroethane-d4	*0.0439*		mg/Kg wet	0.0500		87.8		70-130				
Surrogate: Toluene-d8	*0.0514*		mg/Kg wet	0.0500		103		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0541*		mg/Kg wet	0.0500		108		70-130				
LCS Dup (B065790-BSD1)				Prepared & Analyzed: 01/08/13								
Acetone	0.207	0.10	mg/Kg wet	0.200		103		70-160	1.95	25		†
Acrylonitrile	0.0250	0.0060	mg/Kg wet	0.0200		125		70-130	0.479	25	V-16	
tert-Amyl Methyl Ether (TAME)	0.0244	0.0010	mg/Kg wet	0.0200		122		70-130	5.40	25		
Benzene	0.0251	0.0020	mg/Kg wet	0.0200		125		70-130	2.42	25		
Bromobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.6		70-130	0.203	25		
Bromochloromethane	0.0241	0.0020	mg/Kg wet	0.0200		120		70-130	4.93	25		
Bromodichloromethane	0.0185	0.0020	mg/Kg wet	0.0200		92.7		70-130	1.19	25		
Bromoform	0.0176	0.0020	mg/Kg wet	0.0200		87.9		70-130	4.42	25		
Bromomethane	0.0200	0.010	mg/Kg wet	0.0200		99.8		40-130	4.40	25		†
2-Butanone (MEK)	0.231	0.040	mg/Kg wet	0.200		116		70-160	5.78	25		†
tert-Butyl Alcohol (TBA)	0.212	0.040	mg/Kg wet	0.200		106		40-130	8.39	25	V-16	†
n-Butylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.7		70-130	1.28	25		
sec-Butylbenzene	0.0203	0.0020	mg/Kg wet	0.0200		101		70-130	3.72	25		
tert-Butylbenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.1		70-160	1.86	25		†
tert-Butyl Ethyl Ether (TBEE)	0.0245	0.0010	mg/Kg wet	0.0200		122		70-130	2.73	25		
Carbon Disulfide	0.0206	0.0060	mg/Kg wet	0.0200		103		70-130	2.86	25		
Carbon Tetrachloride	0.0201	0.0020	mg/Kg wet	0.0200		100		70-130	0.499	25		
Chlorobenzene	0.0200	0.0020	mg/Kg wet	0.0200		100		70-130	0.601	25		
Chlorodibromomethane	0.0188	0.0010	mg/Kg wet	0.0200		94.2		70-130	3.57	25		
Chloroethane	0.0199	0.020	mg/Kg wet	0.0200		99.7		70-130	2.44	25		
Chloroform	0.0226	0.0040	mg/Kg wet	0.0200		113		70-130	3.51	25		
Chloromethane	0.0244	0.010	mg/Kg wet	0.0200		122		70-130	2.91	25		
2-Chlorotoluene	0.0191	0.0020	mg/Kg wet	0.0200		95.3		70-130	0.523	25		
4-Chlorotoluene	0.0198	0.0020	mg/Kg wet	0.0200		99.0		70-130	1.53	25		
1,2-Dibromo-3-chloropropane (DBCP)	0.0154	0.0020	mg/Kg wet	0.0200		77.1		70-130	5.74	25	V-16	
1,2-Dibromoethane (EDB)	0.0215	0.0010	mg/Kg wet	0.0200		107		70-130	4.97	25		
Dibromomethane	0.0209	0.0020	mg/Kg wet	0.0200		105		70-130	4.70	25		
1,2-Dichlorobenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.6		70-130	2.01	25		
1,3-Dichlorobenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.3		70-130	3.87	25		
1,4-Dichlorobenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.4		70-130	1.09	25		
trans-1,4-Dichloro-2-butene	0.0187	0.0040	mg/Kg wet	0.0200		93.5		70-130	1.73	25		
Dichlorodifluoromethane (Freon 12)	0.0128	0.020	mg/Kg wet	0.0200		63.9		40-160	0.624	25		†
1,1-Dichloroethane	0.0247	0.0020	mg/Kg wet	0.0200		124		70-130	4.89	25		
1,2-Dichloroethane	0.0181	0.0020	mg/Kg wet	0.0200		90.7		70-130	3.59	25		
1,1-Dichloroethylene	0.0193	0.0040	mg/Kg wet	0.0200		96.5		70-130	4.45	25		
cis-1,2-Dichloroethylene	0.0226	0.0020	mg/Kg wet	0.0200		113		70-130	1.70	25		
trans-1,2-Dichloroethylene	0.0231	0.0020	mg/Kg wet	0.0200		116		70-130	0.520	25		
1,2-Dichloropropane	0.0235	0.0020	mg/Kg wet	0.0200		118		70-130	0.854	25		
1,3-Dichloropropane	0.0214	0.0010	mg/Kg wet	0.0200		107		70-130	4.09	25		
2,2-Dichloropropane	0.0215	0.0020	mg/Kg wet	0.0200		108		70-130	2.83	25		
1,1-Dichloropropene	0.0236	0.0020	mg/Kg wet	0.0200		118		70-130	5.85	25		
cis-1,3-Dichloropropene	0.0207	0.0010	mg/Kg wet	0.0200		103		70-130	0.874	25		
trans-1,3-Dichloropropene	0.0210	0.0010	mg/Kg wet	0.0200		105		70-130	4.28	25		
Diethyl Ether	0.0194	0.020	mg/Kg wet	0.0200		97.1		70-130	3.24	25		
Diisopropyl Ether (DIPE)	0.0288	0.0010	mg/Kg wet	0.0200		**144**	*	70-130	3.25	25	L-02	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B065790 - SW-846 5035											
LCS Dup (B065790-BSD1)				Prepared & Analyzed: 01/08/13							
1,4-Dioxane	0.173	0.10	mg/Kg wet	0.200		86.6	40-160	24.9	50	V-16	† ‡
Ethylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	2.16	25		
Hexachlorobutadiene	0.0168	0.0020	mg/Kg wet	0.0200		83.9	70-160	1.56	25		
2-Hexanone (MBK)	0.217	0.020	mg/Kg wet	0.200		108	70-160	4.62	25		†
Isopropylbenzene (Cumene)	0.0217	0.0020	mg/Kg wet	0.0200		109	70-130	1.58	25		
p-Isopropyltoluene (p-Cymene)	0.0191	0.0020	mg/Kg wet	0.0200		95.3	70-130	2.55	25		
Methyl tert-Butyl Ether (MTBE)	0.0240	0.0040	mg/Kg wet	0.0200		120	70-130	1.43	25		
Methylene Chloride	0.0266	0.020	mg/Kg wet	0.0200		133	40-160	1.97	25		†
4-Methyl-2-pentanone (MIBK)	0.224	0.020	mg/Kg wet	0.200		112	70-160	5.01	25		†
Naphthalene	0.0166	0.0040	mg/Kg wet	0.0200		83.2	40-130	6.97	25		†
n-Propylbenzene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130	0.596	25		
Styrene	0.0217	0.0020	mg/Kg wet	0.0200		108	70-130	4.15	25		
1,1,1,2-Tetrachloroethane	0.0190	0.0020	mg/Kg wet	0.0200		95.0	70-130	1.77	25		
1,1,2,2-Tetrachloroethane	0.0207	0.0010	mg/Kg wet	0.0200		104	70-130	2.74	25		
Tetrachloroethylene	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130	0.286	25		
Tetrahydrofuran	0.0235	0.010	mg/Kg wet	0.0200		118	70-130	8.87	25	V-16	
Toluene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	0.976	25		
1,2,3-Trichlorobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.6	70-130	4.80	25		
1,2,4-Trichlorobenzene	0.0176	0.0020	mg/Kg wet	0.0200		88.0	70-130	4.41	25		
1,3,5-Trichlorobenzene	0.0182	0.0020	mg/Kg wet	0.0200		90.8	70-130	3.93	25		
1,1,1-Trichloroethane	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	1.67	25		
1,1,2-Trichloroethane	0.0216	0.0020	mg/Kg wet	0.0200		108	70-130	3.49	25		
Trichloroethylene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130	2.23	25		
Trichlorofluoromethane (Freon 11)	0.0175	0.010	mg/Kg wet	0.0200		87.7	70-130	4.19	25		
1,2,3-Trichloropropane	0.0193	0.0020	mg/Kg wet	0.0200		96.6	70-130	3.80	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0202	0.010	mg/Kg wet	0.0200		101	70-130	1.10	25		
1,2,4-Trimethylbenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.3	70-130	2.66	25		
1,3,5-Trimethylbenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.7	70-130	0.101	25		
Vinyl Chloride	0.0182	0.010	mg/Kg wet	0.0200		91.1	40-130	0.110	25		†
m+p Xylene	0.0400	0.0040	mg/Kg wet	0.0400		100	70-130	0.602	25		
o-Xylene	0.0198	0.0020	mg/Kg wet	0.0200		99.0	70-130	0.202	25		
Surrogate: 1,2-Dichloroethane-d4	*0.0445*		mg/Kg wet	0.0500		89.0	70-130				
Surrogate: Toluene-d8	*0.0522*		mg/Kg wet	0.0500		104	70-130				
Surrogate: 4-Bromofluorobenzene	*0.0539*		mg/Kg wet	0.0500		108	70-130				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B065692 - SW-846 3546										
Blank (B065692-BLK1)				Prepared: 01/04/13 Analyzed: 01/05/13						
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzidine	ND	0.34	mg/Kg wet							V-05
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Benzoic Acid	ND	1.0	mg/Kg wet							L-04
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.66	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							
4-Chloro-3-methylphenol	ND	0.66	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.66	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							V-04
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.66	mg/Kg wet							
1,2-Diphenylhydrazine (as Azobenzene)	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.66	mg/Kg wet							V-05
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
1-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B065692 - SW-846 3546											
Blank (B065692-BLK1)				Prepared: 01/04/13 Analyzed: 01/05/13							
2-Methylphenol	ND	0.34	mg/Kg wet								
3/4-Methylphenol	ND	0.34	mg/Kg wet								
Naphthalene	ND	0.17	mg/Kg wet								
2-Nitroaniline	ND	0.34	mg/Kg wet								
3-Nitroaniline	ND	0.34	mg/Kg wet								
4-Nitroaniline	ND	0.34	mg/Kg wet								
Nitrobenzene	ND	0.34	mg/Kg wet								
2-Nitrophenol	ND	0.34	mg/Kg wet								
4-Nitrophenol	ND	0.66	mg/Kg wet								
N-Nitrosodimethylamine	ND	0.34	mg/Kg wet								
N-Nitrosodiphenylamine	ND	0.34	mg/Kg wet								
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet								
Pentachloronitrobenzene	ND	0.34	mg/Kg wet							V-16	
Pentachlorophenol	ND	0.34	mg/Kg wet								
Phenanthrene	ND	0.17	mg/Kg wet								
Phenol	ND	0.34	mg/Kg wet								
Pyrene	ND	0.17	mg/Kg wet								
Pyridine	ND	0.34	mg/Kg wet								
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet								
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet								
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet								
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet								
Surrogate: 2-Fluorophenol	*7.04*		mg/Kg wet	6.67		106	30-130				
Surrogate: Phenol-d6	*7.35*		mg/Kg wet	6.67		110	30-130				
Surrogate: Nitrobenzene-d5	*3.61*		mg/Kg wet	3.33		108	30-130				
Surrogate: 2-Fluorobiphenyl	*3.87*		mg/Kg wet	3.33		116	30-130				
Surrogate: 2,4,6-Tribromophenol	*5.94*		mg/Kg wet	6.67		89.1	30-130				
Surrogate: Terphenyl-d14	*3.43*		mg/Kg wet	3.33		103	30-130				
LCS (B065692-BS1)				Prepared: 01/04/13 Analyzed: 01/05/13							
Acenaphthene	1.76	0.17	mg/Kg wet	1.67		106	40-140				
Acenaphthylene	1.72	0.17	mg/Kg wet	1.67		103	40-140				
Acetophenone	1.70	0.34	mg/Kg wet	1.67		102	40-140				
Aniline	1.29	0.34	mg/Kg wet	1.67		77.2	10-140				†
Anthracene	1.79	0.17	mg/Kg wet	1.67		107	40-140				
Benzidine	0.893	0.34	mg/Kg wet	1.67		53.6	40-140			V-05	
Benzo(a)anthracene	1.74	0.17	mg/Kg wet	1.67		104	40-140				
Benzo(a)pyrene	1.70	0.17	mg/Kg wet	1.67		102	40-140				
Benzo(b)fluoranthene	1.69	0.17	mg/Kg wet	1.67		102	40-140				
Benzo(g,h,i)perylene	1.95	0.17	mg/Kg wet	1.67		117	40-140				
Benzo(k)fluoranthene	1.60	0.17	mg/Kg wet	1.67		95.9	40-140				
Benzoic Acid	ND	1.0	mg/Kg wet	1.67		*	30-130			L-04	
Bis(2-chloroethoxy)methane	1.80	0.34	mg/Kg wet	1.67		108	40-140				
Bis(2-chloroethyl)ether	1.88	0.34	mg/Kg wet	1.67		113	40-140				
Bis(2-chloroisopropyl)ether	1.76	0.34	mg/Kg wet	1.67		106	40-140				
Bis(2-Ethylhexyl)phthalate	1.87	0.34	mg/Kg wet	1.67		112	40-140				
4-Bromophenylphenylether	1.70	0.34	mg/Kg wet	1.67		102	40-140				
Butylbenzylphthalate	1.71	0.66	mg/Kg wet	1.67		103	40-140				
Carbazole	1.80	0.17	mg/Kg wet	1.67		108	40-140				
4-Chloroaniline	1.48	0.66	mg/Kg wet	1.67		88.7	10-140				†
4-Chloro-3-methylphenol	1.95	0.66	mg/Kg wet	1.67		117	30-130				
2-Chloronaphthalene	1.56	0.34	mg/Kg wet	1.67		93.3	40-140				

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QUALITY CONTROL

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B065692 - SW-846 3546												
LCS (B065692-BS1)				Prepared: 01/04/13 Analyzed: 01/05/13								
2-Chlorophenol	1.71	0.34	mg/Kg wet	1.67		103		30-130				
4-Chlorophenylphenylether	1.88	0.34	mg/Kg wet	1.67		113		40-140				
Chrysene	1.66	0.17	mg/Kg wet	1.67		99.6		40-140				
Dibenz(a,h)anthracene	1.95	0.17	mg/Kg wet	1.67		117		40-140				
Dibenzofuran	1.76	0.34	mg/Kg wet	1.67		106		40-140				
Di-n-butylphthalate	1.72	0.34	mg/Kg wet	1.67		103		40-140				
1,2-Dichlorobenzene	1.74	0.34	mg/Kg wet	1.67		105		40-140				
1,3-Dichlorobenzene	1.70	0.34	mg/Kg wet	1.67		102		40-140				
1,4-Dichlorobenzene	1.68	0.34	mg/Kg wet	1.67		101		40-140				
3,3-Dichlorobenzidine	1.55	0.17	mg/Kg wet	1.67		93.0		20-140				†
2,4-Dichlorophenol	1.77	0.34	mg/Kg wet	1.67		106		30-130				
Diethylphthalate	1.86	0.34	mg/Kg wet	1.67		112		40-140				
2,4-Dimethylphenol	1.61	0.34	mg/Kg wet	1.67		96.6		30-130				
Dimethylphthalate	1.88	0.66	mg/Kg wet	1.67		113		40-140				
4,6-Dinitro-2-methylphenol	1.60	0.34	mg/Kg wet	1.67		96.1		30-130				
2,4-Dinitrophenol	1.35	0.66	mg/Kg wet	1.67		81.1		30-130			V-04	
2,4-Dinitrotoluene	2.11	0.34	mg/Kg wet	1.67		127		40-140				
2,6-Dinitrotoluene	2.08	0.34	mg/Kg wet	1.67		125		40-140				
Di-n-octylphthalate	1.74	0.66	mg/Kg wet	1.67		104		40-140				
1,2-Diphenylhydrazine (as Azobenzene)	1.63	0.34	mg/Kg wet	1.67		98.1		40-140				
Fluoranthene	1.68	0.17	mg/Kg wet	1.67		101		40-140				
Fluorene	1.92	0.17	mg/Kg wet	1.67		115		40-140				
Hexachlorobenzene	1.77	0.34	mg/Kg wet	1.67		106		40-140				
Hexachlorobutadiene	1.71	0.34	mg/Kg wet	1.67		103		40-140				
Hexachlorocyclopentadiene	1.45	0.66	mg/Kg wet	1.67		87.3		40-140			V-05	
Hexachloroethane	1.69	0.34	mg/Kg wet	1.67		101		40-140				
Indeno(1,2,3-cd)pyrene	1.96	0.17	mg/Kg wet	1.67		118		40-140				
Isophorone	1.82	0.34	mg/Kg wet	1.67		109		40-140				
1-Methylnaphthalene	1.73	0.17	mg/Kg wet	1.67		104		40-140				
2-Methylnaphthalene	1.71	0.17	mg/Kg wet	1.67		103		40-140				
2-Methylphenol	1.71	0.34	mg/Kg wet	1.67		103		30-130				
3/4-Methylphenol	1.64	0.34	mg/Kg wet	1.67		98.6		30-130				
Naphthalene	1.71	0.17	mg/Kg wet	1.67		103		40-140				
2-Nitroaniline	1.78	0.34	mg/Kg wet	1.67		107		40-140				
3-Nitroaniline	2.04	0.34	mg/Kg wet	1.67		122		30-140				†
4-Nitroaniline	1.87	0.34	mg/Kg wet	1.67		112		40-140				
Nitrobenzene	1.73	0.34	mg/Kg wet	1.67		104		40-140				
2-Nitrophenol	1.75	0.34	mg/Kg wet	1.67		105		30-130				
4-Nitrophenol	1.97	0.66	mg/Kg wet	1.67		118		30-130				
N-Nitrosodimethylamine	1.71	0.34	mg/Kg wet	1.67		102		40-140				
N-Nitrosodiphenylamine	2.45	0.34	mg/Kg wet	1.67		**147**	*	40-140			L-02	
N-Nitrosodi-n-propylamine	1.73	0.34	mg/Kg wet	1.67		104		40-140				
Pentachloronitrobenzene	1.80	0.34	mg/Kg wet	1.67		108		40-140			V-16	
Pentachlorophenol	1.46	0.34	mg/Kg wet	1.67		87.9		30-130				
Phenanthrene	1.78	0.17	mg/Kg wet	1.67		107		40-140				
Phenol	1.76	0.34	mg/Kg wet	1.67		105		30-130				
Pyrene	1.84	0.17	mg/Kg wet	1.67		110		40-140				
Pyridine	1.44	0.34	mg/Kg wet	1.67		86.4		30-140				†
1,2,4,5-Tetrachlorobenzene	1.51	0.34	mg/Kg wet	1.67		90.8		40-140				
1,2,4-Trichlorobenzene	1.77	0.34	mg/Kg wet	1.67		106		40-140				
2,4,5-Trichlorophenol	1.78	0.34	mg/Kg wet	1.67		107		30-130				
2,4,6-Trichlorophenol	1.72	0.34	mg/Kg wet	1.67		103		30-130				

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B065692 - SW-846 3546												
LCS (B065692-BS1)				Prepared: 01/04/13 Analyzed: 01/05/13								
Surrogate: 2-Fluorophenol	*6.88*		mg/Kg wet	6.67		103		30-130				
Surrogate: Phenol-d6	*7.13*		mg/Kg wet	6.67		107		30-130				
Surrogate: Nitrobenzene-d5	*3.45*		mg/Kg wet	3.33		103		30-130				
Surrogate: 2-Fluorobiphenyl	*3.19*		mg/Kg wet	3.33		95.7		30-130				
Surrogate: 2,4,6-Tribromophenol	*9.39*		mg/Kg wet	6.67		**141**	*	30-130			S-07	
Surrogate: Terphenyl-d14	*3.79*		mg/Kg wet	3.33		114		30-130				
LCS Dup (B065692-BSD1)				Prepared: 01/04/13 Analyzed: 01/05/13								
Acenaphthene	1.76	0.17	mg/Kg wet	1.67		106		40-140	0.227	30		
Acenaphthylene	1.72	0.17	mg/Kg wet	1.67		103		40-140	0.0194	30		
Acetophenone	1.63	0.34	mg/Kg wet	1.67		98.1		40-140	4.21	30		
Aniline	1.26	0.34	mg/Kg wet	1.67		75.9		10-140	1.72	50		† ‡
Anthracene	1.78	0.17	mg/Kg wet	1.67		107		40-140	0.543	30		
Benzidine	0.731	0.34	mg/Kg wet	1.67		43.9		40-140	19.9	30	V-05	
Benzo(a)anthracene	1.71	0.17	mg/Kg wet	1.67		103		40-140	1.26	30		
Benzo(a)pyrene	1.66	0.17	mg/Kg wet	1.67		99.7		40-140	1.97	30		
Benzo(b)fluoranthene	1.67	0.17	mg/Kg wet	1.67		100		40-140	1.31	30		
Benzo(g,h,i)perylene	1.91	0.17	mg/Kg wet	1.67		115		40-140	2.03	30		
Benzo(k)fluoranthene	1.64	0.17	mg/Kg wet	1.67		98.4		40-140	2.53	30		
Benzoic Acid	ND	1.0	mg/Kg wet	1.67			*	30-130		50	L-04	‡
Bis(2-chloroethoxy)methane	1.78	0.34	mg/Kg wet	1.67		107		40-140	0.819	30		
Bis(2-chloroethyl)ether	1.88	0.34	mg/Kg wet	1.67		113		40-140	0.496	30		
Bis(2-chloroisopropyl)ether	1.80	0.34	mg/Kg wet	1.67		108		40-140	1.93	30		
Bis(2-Ethylhexyl)phthalate	1.87	0.34	mg/Kg wet	1.67		112		40-140	0.160	30		
4-Bromophenylphenylether	1.90	0.34	mg/Kg wet	1.67		114		40-140	11.1	30		
Butylbenzylphthalate	1.73	0.66	mg/Kg wet	1.67		104		40-140	0.659	30		
Carbazole	1.69	0.17	mg/Kg wet	1.67		102		40-140	6.29	30		
4-Chloroaniline	1.47	0.66	mg/Kg wet	1.67		88.3		10-140	0.362	30		†
4-Chloro-3-methylphenol	2.06	0.66	mg/Kg wet	1.67		123		30-130	5.12	30		
2-Chloronaphthalene	1.52	0.34	mg/Kg wet	1.67		91.1		40-140	2.41	30		
2-Chlorophenol	1.65	0.34	mg/Kg wet	1.67		98.9		30-130	3.94	30		
4-Chlorophenylphenylether	1.86	0.34	mg/Kg wet	1.67		111		40-140	1.39	30		
Chrysene	1.67	0.17	mg/Kg wet	1.67		100		40-140	0.321	30		
Dibenz(a,h)anthracene	1.89	0.17	mg/Kg wet	1.67		113		40-140	3.19	30		
Dibenzofuran	1.79	0.34	mg/Kg wet	1.67		107		40-140	1.58	30		
Di-n-butylphthalate	1.57	0.34	mg/Kg wet	1.67		94.2		40-140	9.04	30		
1,2-Dichlorobenzene	1.73	0.34	mg/Kg wet	1.67		104		40-140	0.498	30		
1,3-Dichlorobenzene	1.70	0.34	mg/Kg wet	1.67		102		40-140	0.176	30		
1,4-Dichlorobenzene	1.67	0.34	mg/Kg wet	1.67		100		40-140	0.557	30		
3,3-Dichlorobenzidine	1.47	0.17	mg/Kg wet	1.67		88.3		20-140	5.16	50		† ‡
2,4-Dichlorophenol	1.79	0.34	mg/Kg wet	1.67		107		30-130	1.46	30		
Diethylphthalate	1.80	0.34	mg/Kg wet	1.67		108		40-140	3.34	30		
2,4-Dimethylphenol	1.59	0.34	mg/Kg wet	1.67		95.6		30-130	1.04	30		
Dimethylphthalate	1.89	0.66	mg/Kg wet	1.67		114		40-140	0.813	30		
4,6-Dinitro-2-methylphenol	1.48	0.34	mg/Kg wet	1.67		89.0		30-130	7.69	30		
2,4-Dinitrophenol	1.14	0.66	mg/Kg wet	1.67		68.7		30-130	16.6	30	V-04	
2,4-Dinitrotoluene	1.98	0.34	mg/Kg wet	1.67		119		40-140	6.62	30		
2,6-Dinitrotoluene	2.06	0.34	mg/Kg wet	1.67		124		40-140	0.855	30		
Di-n-octylphthalate	1.79	0.66	mg/Kg wet	1.67		108		40-140	2.96	30		
1,2-Diphenylhydrazine (as Azobenzene)	1.82	0.34	mg/Kg wet	1.67		109		40-140	10.5	30		
Fluoranthene	1.47	0.17	mg/Kg wet	1.67		88.0		40-140	13.5	30		
Fluorene	1.91	0.17	mg/Kg wet	1.67		114		40-140	0.680	30		

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B065692 - SW-846 3546												
LCS Dup (B065692-BSD1)				Prepared: 01/04/13 Analyzed: 01/05/13								
Hexachlorobenzene	1.90	0.34	mg/Kg wet	1.67		114		40-140	6.99	30		
Hexachlorobutadiene	1.74	0.34	mg/Kg wet	1.67		105		40-140	2.03	30		
Hexachlorocyclopentadiene	1.42	0.66	mg/Kg wet	1.67		85.2		40-140	2.41	30	V-05	
Hexachloroethane	1.72	0.34	mg/Kg wet	1.67		103		40-140	2.03	30		
Indeno(1,2,3-cd)pyrene	1.90	0.17	mg/Kg wet	1.67		114		40-140	3.02	30		
Isophorone	1.83	0.34	mg/Kg wet	1.67		110		40-140	0.621	30		
1-Methylnaphthalene	1.75	0.17	mg/Kg wet	1.67		105		40-140	0.825	30		
2-Methylnaphthalene	1.75	0.17	mg/Kg wet	1.67		105		40-140	2.18	30		
2-Methylphenol	1.66	0.34	mg/Kg wet	1.67		99.7		30-130	3.04	30		
3/4-Methylphenol	1.68	0.34	mg/Kg wet	1.67		101		30-130	2.46	30		
Naphthalene	1.71	0.17	mg/Kg wet	1.67		103		40-140	0.195	30		
2-Nitroaniline	1.81	0.34	mg/Kg wet	1.67		109		40-140	2.01	30		
3-Nitroaniline	1.94	0.34	mg/Kg wet	1.67		117		30-140	4.75	30		†
4-Nitroaniline	1.61	0.34	mg/Kg wet	1.67		96.7		40-140	14.8	30		
Nitrobenzene	1.72	0.34	mg/Kg wet	1.67		103		40-140	0.599	30		
2-Nitrophenol	1.75	0.34	mg/Kg wet	1.67		105		30-130	0.0191	30		
4-Nitrophenol	1.67	0.66	mg/Kg wet	1.67		100		30-130	16.3	50		‡
N-Nitrosodimethylamine	1.68	0.34	mg/Kg wet	1.67		101		40-140	1.44	30		
N-Nitrosodiphenylamine	2.68	0.34	mg/Kg wet	1.67		**161**	*	40-140	9.12	30	L-02	
N-Nitrosodi-n-propylamine	1.70	0.34	mg/Kg wet	1.67		102		40-140	2.08	30		
Pentachloronitrobenzene	1.79	0.34	mg/Kg wet	1.67		108		40-140	0.427	30	V-16	
Pentachlorophenol	1.31	0.34	mg/Kg wet	1.67		78.8		30-130	10.9	30		
Phenanthrene	1.79	0.17	mg/Kg wet	1.67		108		40-140	0.671	30		
Phenol	1.70	0.34	mg/Kg wet	1.67		102		30-130	3.42	30		
Pyrene	1.90	0.17	mg/Kg wet	1.67		114		40-140	3.32	30		
Pyridine	1.43	0.34	mg/Kg wet	1.67		85.7		30-140	0.837	30		†
1,2,4,5-Tetrachlorobenzene	1.49	0.34	mg/Kg wet	1.67		89.5		40-140	1.49	30		
1,2,4-Trichlorobenzene	1.79	0.34	mg/Kg wet	1.67		107		40-140	0.972	30		
2,4,5-Trichlorophenol	1.82	0.34	mg/Kg wet	1.67		109		30-130	2.42	30		
2,4,6-Trichlorophenol	1.72	0.34	mg/Kg wet	1.67		103		30-130	0.0387	30		
Surrogate: 2-Fluorophenol	*6.93*		mg/Kg wet	6.67		104		30-130				
Surrogate: Phenol-d6	*6.98*		mg/Kg wet	6.67		105		30-130				
Surrogate: Nitrobenzene-d5	*3.47*		mg/Kg wet	3.33		104		30-130				
Surrogate: 2-Fluorobiphenyl	*3.10*		mg/Kg wet	3.33		93.1		30-130				
Surrogate: 2,4,6-Tribromophenol	*8.72*		mg/Kg wet	6.67		**131**	*	30-130			S-07	
Surrogate: Terphenyl-d14	*3.85*		mg/Kg wet	3.33		115		30-130				
Matrix Spike (B065692-MS1)		**Source: 13A0099-04**		Prepared: 01/04/13 Analyzed: 01/05/13								
Acenaphthene	1.37	0.19	mg/Kg dry	1.88	ND	72.7		40-140				
Acenaphthylene	1.34	0.19	mg/Kg dry	1.88	ND	71.4		40-140				
Acetophenone	1.32	0.38	mg/Kg dry	1.88	ND	70.3		40-140				
Aniline	0.779	0.38	mg/Kg dry	1.88	ND	41.4		40-140				
Anthracene	1.37	0.19	mg/Kg dry	1.88	ND	72.8		40-140				
Benzidine	ND	0.38	mg/Kg dry	1.88	ND		*	40-140			MS-09, V-05	
Benzo(a)anthracene	1.36	0.19	mg/Kg dry	1.88	ND	72.3		40-140				
Benzo(a)pyrene	1.32	0.19	mg/Kg dry	1.88	ND	70.1		40-140				
Benzo(b)fluoranthene	1.24	0.19	mg/Kg dry	1.88	ND	66.1		40-140				
Benzo(g,h,i)perylene	1.33	0.19	mg/Kg dry	1.88	ND	70.7		40-140				
Benzo(k)fluoranthene	1.19	0.19	mg/Kg dry	1.88	ND	63.0		40-140				
Benzoic Acid	0.889	1.1	mg/Kg dry	1.88	ND	47.2		40-140				
Bis(2-chloroethoxy)methane	1.36	0.38	mg/Kg dry	1.88	ND	72.0		40-140				
Bis(2-chloroethyl)ether	1.48	0.38	mg/Kg dry	1.88	ND	78.8		40-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B065692 - SW-846 3546											
Matrix Spike (B065692-MS1)	**Source: 13A0099-04**			Prepared: 01/04/13 Analyzed: 01/05/13							
Bis(2-chloroisopropyl)ether	1.40	0.38	mg/Kg dry	1.88	ND	74.2		40-140			
Bis(2-Ethylhexyl)phthalate	1.48	0.38	mg/Kg dry	1.88	ND	78.6		40-140			
4-Bromophenylphenylether	1.61	0.38	mg/Kg dry	1.88	ND	85.4		40-140			
Butylbenzylphthalate	1.32	0.75	mg/Kg dry	1.88	ND	70.3		40-140			
Carbazole	1.18	0.19	mg/Kg dry	1.88	ND	62.5		40-140			
4-Chloroaniline	0.754	0.75	mg/Kg dry	1.88	ND	40.0		40-140			R-06
4-Chloro-3-methylphenol	1.63	0.75	mg/Kg dry	1.88	ND	86.5		30-130			
2-Chloronaphthalene	1.23	0.38	mg/Kg dry	1.88	ND	65.5		40-140			
2-Chlorophenol	1.36	0.38	mg/Kg dry	1.88	ND	72.4		30-130			
4-Chlorophenylphenylether	1.48	0.38	mg/Kg dry	1.88	ND	78.6		40-140			
Chrysene	1.31	0.19	mg/Kg dry	1.88	ND	69.5		40-140			
Dibenz(a,h)anthracene	1.40	0.19	mg/Kg dry	1.88	ND	74.5		40-140			
Dibenzofuran	1.41	0.38	mg/Kg dry	1.88	ND	74.8		40-140			
Di-n-butylphthalate	1.30	0.38	mg/Kg dry	1.88	ND	69.3		40-140			
1,2-Dichlorobenzene	1.34	0.38	mg/Kg dry	1.88	ND	71.4		40-140			
1,3-Dichlorobenzene	1.29	0.38	mg/Kg dry	1.88	ND	68.3		40-140			
1,4-Dichlorobenzene	1.30	0.38	mg/Kg dry	1.88	ND	68.9		40-140			
3,3-Dichlorobenzidine	0.658	0.19	mg/Kg dry	1.88	ND	**35.0**	*	40-140			MS-23
2,4-Dichlorophenol	1.42	0.38	mg/Kg dry	1.88	ND	75.5		30-130			
Diethylphthalate	1.38	0.38	mg/Kg dry	1.88	ND	73.3		40-140			
2,4-Dimethylphenol	1.47	0.38	mg/Kg dry	1.88	ND	78.0		30-130			
Dimethylphthalate	1.44	0.75	mg/Kg dry	1.88	ND	76.5		40-140			
4,6-Dinitro-2-methylphenol	0.933	0.38	mg/Kg dry	1.88	ND	49.5		30-130			R-06
2,4-Dinitrophenol	0.799	0.75	mg/Kg dry	1.88	ND	42.4		30-130			R-06, V-04
2,4-Dinitrotoluene	1.43	0.38	mg/Kg dry	1.88	ND	75.7		40-140			
2,6-Dinitrotoluene	1.50	0.38	mg/Kg dry	1.88	ND	79.8		40-140			
Di-n-octylphthalate	1.09	0.75	mg/Kg dry	1.88	ND	57.9		40-140			
1,2-Diphenylhydrazine (as Azobenzene)	1.60	0.38	mg/Kg dry	1.88	ND	84.8		40-140			
Fluoranthene	1.06	0.19	mg/Kg dry	1.88	ND	56.3		40-140			
Fluorene	1.46	0.19	mg/Kg dry	1.88	ND	77.8		40-140			
Hexachlorobenzene	1.61	0.38	mg/Kg dry	1.88	ND	85.4		40-140			
Hexachlorobutadiene	1.36	0.38	mg/Kg dry	1.88	ND	72.3		40-140			
Hexachlorocyclopentadiene	0.209	0.75	mg/Kg dry	1.88	ND	**11.1**	*	30-130			MS-09, R-06, V-05
Hexachloroethane	1.23	0.38	mg/Kg dry	1.88	ND	65.4		40-140			
Indeno(1,2,3-cd)pyrene	1.41	0.19	mg/Kg dry	1.88	ND	74.9		40-140			
Isophorone	1.40	0.38	mg/Kg dry	1.88	ND	74.2		40-140			
1-Methylnaphthalene	1.33	0.19	mg/Kg dry	1.88	ND	70.4		40-140			
2-Methylnaphthalene	1.34	0.19	mg/Kg dry	1.88	ND	70.9		40-140			
2-Methylphenol	1.33	0.38	mg/Kg dry	1.88	ND	70.5		30-130			
3/4-Methylphenol	1.34	0.38	mg/Kg dry	1.88	ND	70.9		30-130			
Naphthalene	1.35	0.19	mg/Kg dry	1.88	ND	71.7		40-140			
2-Nitroaniline	1.54	0.38	mg/Kg dry	1.88	ND	81.6		40-140			
3-Nitroaniline	1.17	0.38	mg/Kg dry	1.88	ND	62.3		40-140			R-06
4-Nitroaniline	1.09	0.38	mg/Kg dry	1.88	ND	57.7		40-140			
Nitrobenzene	1.34	0.38	mg/Kg dry	1.88	ND	70.9		40-140			
2-Nitrophenol	1.35	0.38	mg/Kg dry	1.88	ND	71.6		30-130			
4-Nitrophenol	1.33	0.75	mg/Kg dry	1.88	ND	70.7		30-130			
N-Nitrosodimethylamine	1.28	0.38	mg/Kg dry	1.88	ND	67.9		40-140			
N-Nitrosodiphenylamine	2.27	0.38	mg/Kg dry	1.88	ND	121		40-140			
N-Nitrosodi-n-propylamine	1.35	0.38	mg/Kg dry	1.88	ND	71.9		40-140			
Pentachloronitrobenzene	1.46	0.38	mg/Kg dry	1.88	ND	77.5		40-140			V-16
Pentachlorophenol	1.28	0.38	mg/Kg dry	1.88	ND	67.8		30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B065692 - SW-846 3546												
Matrix Spike (B065692-MS1)	**Source: 13A0099-04**			Prepared: 01/04/13 Analyzed: 01/05/13								
Phenanthrene	1.43	0.19	mg/Kg dry	1.88	ND	75.7		40-140				
Phenol	1.33	0.38	mg/Kg dry	1.88	ND	70.9		30-130				
Pyrene	1.42	0.19	mg/Kg dry	1.88	ND	75.5		40-140				
Pyridine	1.00	0.38	mg/Kg dry	1.88	ND	53.1		40-140				
1,2,4,5-Tetrachlorobenzene	1.25	0.38	mg/Kg dry	1.88	ND	66.2		40-140				
1,2,4-Trichlorobenzene	1.40	0.38	mg/Kg dry	1.88	ND	74.6		40-140				
2,4,5-Trichlorophenol	1.54	0.38	mg/Kg dry	1.88	ND	82.0		30-130				
2,4,6-Trichlorophenol	1.47	0.38	mg/Kg dry	1.88	ND	77.9		30-130				
Surrogate: 2-Fluorophenol	*5.49*		mg/Kg dry	7.53		72.9		30-130				
Surrogate: Phenol-d6	*5.53*		mg/Kg dry	7.53		73.5		30-130				
Surrogate: Nitrobenzene-d5	*2.59*		mg/Kg dry	3.77		68.7		30-130				
Surrogate: 2-Fluorobiphenyl	*2.50*		mg/Kg dry	3.77		66.3		30-130				
Surrogate: 2,4,6-Tribromophenol	*6.37*		mg/Kg dry	7.53		84.6		30-130				
Surrogate: Terphenyl-d14	*2.79*		mg/Kg dry	3.77		74.0		30-130				
Matrix Spike Dup (B065692-MSD1)	**Source: 13A0099-04**			Prepared: 01/04/13 Analyzed: 01/05/13								
Acenaphthene	1.52	0.19	mg/Kg dry	1.87	ND	81.1		40-140	10.2		30	
Acenaphthylene	1.50	0.19	mg/Kg dry	1.87	ND	80.2		40-140	11.1		30	
Acetophenone	1.39	0.38	mg/Kg dry	1.87	ND	74.3		40-140	4.84		30	
Aniline	0.975	0.38	mg/Kg dry	1.87	ND	52.1		40-140	22.3		30	
Anthracene	1.51	0.19	mg/Kg dry	1.87	ND	80.9		40-140	9.88		30	
Benzidine	ND	0.38	mg/Kg dry	1.87	ND		*	40-140	NC		30	MS-09, V-05
Benzo(a)anthracene	1.48	0.19	mg/Kg dry	1.87	ND	79.1		40-140	8.31		30	
Benzo(a)pyrene	1.37	0.19	mg/Kg dry	1.87	ND	73.0		40-140	3.33		30	
Benzo(b)fluoranthene	1.26	0.19	mg/Kg dry	1.87	ND	67.6		40-140	1.58		30	
Benzo(g,h,i)perylene	1.39	0.19	mg/Kg dry	1.87	ND	74.4		40-140	4.41		30	
Benzo(k)fluoranthene	1.22	0.19	mg/Kg dry	1.87	ND	65.3		40-140	2.89		30	
Benzoic Acid	1.01	1.1	mg/Kg dry	1.87	ND	53.9		40-140	12.6		30	
Bis(2-chloroethoxy)methane	1.54	0.38	mg/Kg dry	1.87	ND	82.3		40-140	12.6		30	
Bis(2-chloroethyl)ether	1.52	0.38	mg/Kg dry	1.87	ND	81.4		40-140	2.58		30	
Bis(2-chloroisopropyl)ether	1.49	0.38	mg/Kg dry	1.87	ND	79.5		40-140	6.24		30	
Bis(2-Ethylhexyl)phthalate	1.58	0.38	mg/Kg dry	1.87	ND	84.6		40-140	6.69		30	
4-Bromophenylphenylether	1.64	0.38	mg/Kg dry	1.87	ND	87.6		40-140	1.95		30	
Butylbenzylphthalate	1.46	0.74	mg/Kg dry	1.87	ND	78.1		40-140	9.93		30	
Carbazole	1.26	0.19	mg/Kg dry	1.87	ND	67.2		40-140	6.64		30	
4-Chloroaniline	1.19	0.74	mg/Kg dry	1.87	ND	63.5		40-140	**44.8**	*	30	R-06
4-Chloro-3-methylphenol	1.74	0.74	mg/Kg dry	1.87	ND	93.3		30-130	6.81		30	
2-Chloronaphthalene	1.35	0.38	mg/Kg dry	1.87	ND	72.0		40-140	8.79		30	
2-Chlorophenol	1.42	0.38	mg/Kg dry	1.87	ND	76.1		30-130	4.37		30	
4-Chlorophenylphenylether	1.62	0.38	mg/Kg dry	1.87	ND	86.7		40-140	9.04		30	
Chrysene	1.45	0.19	mg/Kg dry	1.87	ND	77.7		40-140	10.6		30	
Dibenz(a,h)anthracene	1.46	0.19	mg/Kg dry	1.87	ND	78.2		40-140	4.10		30	
Dibenzofuran	1.58	0.38	mg/Kg dry	1.87	ND	84.3		40-140	11.3		30	
Di-n-butylphthalate	1.41	0.38	mg/Kg dry	1.87	ND	75.2		40-140	7.48		30	
1,2-Dichlorobenzene	1.43	0.38	mg/Kg dry	1.87	ND	76.5		40-140	6.24		30	
1,3-Dichlorobenzene	1.36	0.38	mg/Kg dry	1.87	ND	72.5		40-140	5.27		30	
1,4-Dichlorobenzene	1.34	0.38	mg/Kg dry	1.87	ND	71.5		40-140	3.04		30	
3,3-Dichlorobenzidine	1.43	0.19	mg/Kg dry	1.87	ND	76.3		40-140	**73.7**	*	30	R-06
2,4-Dichlorophenol	1.53	0.38	mg/Kg dry	1.87	ND	81.8		30-130	7.40		30	
Diethylphthalate	1.53	0.38	mg/Kg dry	1.87	ND	81.9		40-140	10.4		30	
2,4-Dimethylphenol	1.60	0.38	mg/Kg dry	1.87	ND	85.5		30-130	8.53		30	
Dimethylphthalate	1.55	0.74	mg/Kg dry	1.87	ND	82.6		40-140	7.03		30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B065692 - SW-846 3546												
Matrix Spike Dup (B065692-MSD1)	**Source: 13A0099-04**			Prepared: 01/04/13 Analyzed: 01/05/13								
4,6-Dinitro-2-methylphenol	1.40	0.38	mg/Kg dry	1.87	ND	75.0		30-130	**40.3**	*	30	R-06
2,4-Dinitrophenol	1.48	0.74	mg/Kg dry	1.87	ND	79.2		30-130	**59.9**	*	30	R-06, V-04
2,4-Dinitrotoluene	1.75	0.38	mg/Kg dry	1.87	ND	93.5		40-140	20.4		30	
2,6-Dinitrotoluene	1.70	0.38	mg/Kg dry	1.87	ND	90.9		40-140	12.3		30	
Di-n-octylphthalate	1.09	0.74	mg/Kg dry	1.87	ND	58.2		40-140	0.217		30	
1,2-Diphenylhydrazine (as Azobenzene)	1.58	0.38	mg/Kg dry	1.87	ND	84.6		40-140	0.830		30	
Fluoranthene	1.12	0.19	mg/Kg dry	1.87	ND	59.6		40-140	5.14		30	
Fluorene	1.66	0.19	mg/Kg dry	1.87	ND	88.8		40-140	12.6		30	
Hexachlorobenzene	1.66	0.38	mg/Kg dry	1.87	ND	88.5		40-140	2.99		30	
Hexachlorobutadiene	1.44	0.38	mg/Kg dry	1.87	ND	77.2		40-140	5.78		30	
Hexachlorocyclopentadiene	0.352	0.74	mg/Kg dry	1.87	ND	**18.8**	*	30-130	**51.3**	*	30	MS-09, R-06, V-05
Hexachloroethane	1.33	0.38	mg/Kg dry	1.87	ND	71.4		40-140	7.99		30	
Indeno(1,2,3-cd)pyrene	1.48	0.19	mg/Kg dry	1.87	ND	79.0		40-140	4.67		30	
Isophorone	1.51	0.38	mg/Kg dry	1.87	ND	80.5		40-140	7.53		30	
1-Methylnaphthalene	1.41	0.19	mg/Kg dry	1.87	ND	75.3		40-140	6.06		30	
2-Methylnaphthalene	1.42	0.19	mg/Kg dry	1.87	ND	76.1		40-140	6.46		30	
2-Methylphenol	1.48	0.38	mg/Kg dry	1.87	ND	79.1		30-130	10.9		30	
3/4-Methylphenol	1.57	0.38	mg/Kg dry	1.87	ND	83.9		30-130	16.2		30	
Naphthalene	1.44	0.19	mg/Kg dry	1.87	ND	76.9		40-140	6.31		30	
2-Nitroaniline	1.61	0.38	mg/Kg dry	1.87	ND	86.1		40-140	4.72		30	
3-Nitroaniline	1.69	0.38	mg/Kg dry	1.87	ND	90.3		40-140	**36.0**	*	30	R-06
4-Nitroaniline	1.36	0.38	mg/Kg dry	1.87	ND	72.9		40-140	22.6		30	
Nitrobenzene	1.39	0.38	mg/Kg dry	1.87	ND	74.3		40-140	3.99		30	
2-Nitrophenol	1.43	0.38	mg/Kg dry	1.87	ND	76.7		30-130	6.21		30	
4-Nitrophenol	1.44	0.74	mg/Kg dry	1.87	ND	77.0		30-130	7.84		30	
N-Nitrosodimethylamine	1.28	0.38	mg/Kg dry	1.87	ND	68.2		40-140	0.283		30	
N-Nitrosodiphenylamine	2.32	0.38	mg/Kg dry	1.87	ND	124		40-140	2.03		30	
N-Nitrosodi-n-propylamine	1.45	0.38	mg/Kg dry	1.87	ND	77.6		40-140	6.99		30	
Pentachloronitrobenzene	1.60	0.38	mg/Kg dry	1.87	ND	85.6		40-140	9.19		30	V-16
Pentachlorophenol	1.32	0.38	mg/Kg dry	1.87	ND	70.3		30-130	3.01		30	
Phenanthrene	1.55	0.19	mg/Kg dry	1.87	ND	83.0		40-140	8.58		30	
Phenol	1.40	0.38	mg/Kg dry	1.87	ND	75.1		30-130	5.15		30	
Pyrene	1.58	0.19	mg/Kg dry	1.87	ND	84.6		40-140	10.7		30	
Pyridine	1.00	0.38	mg/Kg dry	1.87	ND	53.6		40-140	0.235		30	
1,2,4,5-Tetrachlorobenzene	1.35	0.38	mg/Kg dry	1.87	ND	72.1		40-140	7.84		30	
1,2,4-Trichlorobenzene	1.49	0.38	mg/Kg dry	1.87	ND	79.7		40-140	6.00		30	
2,4,5-Trichlorophenol	1.70	0.38	mg/Kg dry	1.87	ND	91.0		30-130	9.79		30	
2,4,6-Trichlorophenol	1.61	0.38	mg/Kg dry	1.87	ND	86.0		30-130	9.20		30	
Surrogate: 2-Fluorophenol	*5.59*		mg/Kg dry	7.48		74.6		30-130				
Surrogate: Phenol-d6	*5.78*		mg/Kg dry	7.48		77.2		30-130				
Surrogate: Nitrobenzene-d5	*2.73*		mg/Kg dry	3.74		73.0		30-130				
Surrogate: 2-Fluorobiphenyl	*2.69*		mg/Kg dry	3.74		71.8		30-130				
Surrogate: 2,4,6-Tribromophenol	*7.94*		mg/Kg dry	7.48		106		30-130				
Surrogate: Terphenyl-d14	*3.10*		mg/Kg dry	3.74		82.8		30-130				

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B065700 - SW-846 3546										
Blank (B065700-BLK1)				Prepared: 01/04/13 Analyzed: 01/08/13						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.168*		mg/Kg wet	0.200		84.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.179*		mg/Kg wet	0.200		89.7	30-150			
Surrogate: Tetrachloro-m-xylene	*0.146*		mg/Kg wet	0.200		72.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.157*		mg/Kg wet	0.200		78.6	30-150			
LCS (B065700-BS1)				Prepared: 01/04/13 Analyzed: 01/08/13						
Aroclor-1016	0.19	0.10	mg/Kg wet	0.200		96.0	40-140			
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		93.5	40-140			
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		97.0	40-140			
Aroclor-1260 [2C]	0.19	0.10	mg/Kg wet	0.200		94.0	40-140			
Surrogate: Decachlorobiphenyl	*0.189*		mg/Kg wet	0.200		94.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.188*		mg/Kg wet	0.200		94.0	30-150			
Surrogate: Tetrachloro-m-xylene	*0.171*		mg/Kg wet	0.200		85.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.169*		mg/Kg wet	0.200		84.7	30-150			
LCS Dup (B065700-BSD1)				Prepared: 01/04/13 Analyzed: 01/08/13						
Aroclor-1016	0.19	0.10	mg/Kg wet	0.200		97.3	40-140	1.40	30	
Aroclor-1016 [2C]	0.19	0.10	mg/Kg wet	0.200		92.7	40-140	0.806	30	
Aroclor-1260	0.19	0.10	mg/Kg wet	0.200		96.2	40-140	0.782	30	
Aroclor-1260 [2C]	0.19	0.10	mg/Kg wet	0.200		93.4	40-140	0.670	30	
Surrogate: Decachlorobiphenyl	*0.180*		mg/Kg wet	0.200		89.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.178*		mg/Kg wet	0.200		89.0	30-150			
Surrogate: Tetrachloro-m-xylene	*0.161*		mg/Kg wet	0.200		80.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.158*		mg/Kg wet	0.200		79.2	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B065700 - SW-846 3546										
Matrix Spike (B065700-MS1)	**Source: 13A0099-05**			Prepared: 01/04/13 Analyzed: 01/08/13						
Aroclor-1016	0.16	0.11	mg/Kg dry	0.228	ND	68.9	40-140			
Aroclor-1016 [2C]	0.15	0.11	mg/Kg dry	0.228	ND	67.8	40-140			
Aroclor-1260	0.16	0.11	mg/Kg dry	0.228	ND	69.3	40-140			
Aroclor-1260 [2C]	0.15	0.11	mg/Kg dry	0.228	ND	65.9	40-140			
Surrogate: Decachlorobiphenyl	*0.145*		mg/Kg dry	0.228		63.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.145*		mg/Kg dry	0.228		63.6	30-150			
Surrogate: Tetrachloro-m-xylene	*0.143*		mg/Kg dry	0.228		62.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.139*		mg/Kg dry	0.228		61.0	30-150			
Matrix Spike Dup (B065700-MSD1)	**Source: 13A0099-05**			Prepared: 01/04/13 Analyzed: 01/08/13						
Aroclor-1016	0.20	0.12	mg/Kg dry	0.230	ND	89.0	40-140	26.4	30	
Aroclor-1016 [2C]	0.20	0.12	mg/Kg dry	0.230	ND	86.2	40-140	24.8	30	
Aroclor-1260	0.20	0.12	mg/Kg dry	0.230	ND	87.9	40-140	24.6	30	
Aroclor-1260 [2C]	0.20	0.12	mg/Kg dry	0.230	ND	85.6	40-140	26.9	30	
Surrogate: Decachlorobiphenyl	*0.190*		mg/Kg dry	0.230		82.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.191*		mg/Kg dry	0.230		83.0	30-150			
Surrogate: Tetrachloro-m-xylene	*0.176*		mg/Kg dry	0.230		76.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.173*		mg/Kg dry	0.230		75.2	30-150			

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QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B065702 - SW-846 3546										
Blank (B065702-BLK1)				Prepared: 01/04/13 Analyzed: 01/07/13						
TPH (C9-C36)	ND	8.3	mg/Kg wet							
Surrogate: o-Terphenyl	*3.15*		mg/Kg wet	3.33		94.4	40-140			
LCS (B065702-BS1)				Prepared: 01/04/13 Analyzed: 01/07/13						
TPH (C9-C36)	30.8	8.3	mg/Kg wet	33.3		92.4	40-140			
Surrogate: o-Terphenyl	*2.75*		mg/Kg wet	3.33		82.5	40-140			
LCS Dup (B065702-BSD1)				Prepared: 01/04/13 Analyzed: 01/07/13						
TPH (C9-C36)	29.9	8.3	mg/Kg wet	33.3		89.8	40-140	2.81	30	
Surrogate: o-Terphenyl	*2.64*		mg/Kg wet	3.33		79.2	40-140			
Matrix Spike (B065702-MS1)	**Source: 13A0099-04**			Prepared: 01/04/13 Analyzed: 01/07/13						
TPH (C9-C36)	59.0	9.4	mg/Kg dry	37.5	15.0	117	40-140			
Surrogate: o-Terphenyl	*2.91*		mg/Kg dry	3.75		77.5	40-140			
Matrix Spike Dup (B065702-MSD1)	**Source: 13A0099-04**			Prepared: 01/04/13 Analyzed: 01/07/13						
TPH (C9-C36)	56.2	9.4	mg/Kg dry	37.7	15.0	109	40-140	5.00	30	
Surrogate: o-Terphenyl	*2.75*		mg/Kg dry	3.77		72.9	40-140			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B065684 - SW-846 7471										
Blank (B065684-BLK1)				Prepared & Analyzed: 01/07/13						
Mercury	ND	0.025	mg/Kg wet							
LCS (B065684-BS1)				Prepared & Analyzed: 01/07/13						
Mercury	3.69	0.33	mg/Kg wet	3.73		99.0	71.7-128.3			
LCS Dup (B065684-BSD1)				Prepared & Analyzed: 01/07/13						
Mercury	3.22	0.33	mg/Kg wet	3.73		86.3	71.7-128.3	13.8	30	
Batch B065703 - SW-846 3050B										
Blank (B065703-BLK1)				Prepared: 01/05/13 Analyzed: 01/07/13						
Arsenic	ND	2.5	mg/Kg wet							
Barium	ND	2.5	mg/Kg wet							
Cadmium	ND	0.25	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							
Selenium	ND	5.0	mg/Kg wet							
Silver	ND	0.50	mg/Kg wet							
LCS (B065703-BS1)				Prepared: 01/05/13 Analyzed: 01/07/13						
Arsenic	94.4	5.0	mg/Kg wet	94.5		99.9	82.2-117.5			
Barium	163	5.0	mg/Kg wet	166		98.0	83.1-116.3			
Cadmium	57.6	0.50	mg/Kg wet	59.9		96.1	84-115.9			
Chromium	70.3	1.0	mg/Kg wet	69.3		102	81.4-118.6			
Lead	87.9	1.5	mg/Kg wet	91.7		95.9	82.4-117.8			
Selenium	161	10	mg/Kg wet	159		101	79.2-120.8			
Silver	31.4	1.0	mg/Kg wet	33.9		92.7	66.4-133.9			
LCS Dup (B065703-BSD1)				Prepared: 01/05/13 Analyzed: 01/07/13						
Arsenic	94.8	5.0	mg/Kg wet	94.5		100	82.2-117.5	0.443	30	
Barium	167	5.0	mg/Kg wet	166		101	83.1-116.3	2.72	30	
Cadmium	58.5	0.50	mg/Kg wet	59.9		97.7	84-115.9	1.64	30	
Chromium	72.4	1.0	mg/Kg wet	69.3		104	81.4-118.6	2.89	30	
Lead	86.8	1.5	mg/Kg wet	91.7		94.7	82.4-117.8	1.30	30	
Selenium	157	10	mg/Kg wet	159		98.8	79.2-120.8	2.21	30	
Silver	33.0	1.0	mg/Kg wet	33.9		97.4	66.4-133.9	4.90	30	
MRL Check (B065703-MRL1)				Prepared: 01/05/13 Analyzed: 01/08/13						
Lead	0.755	0.75	mg/Kg wet	0.746		101	80-120			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B065706 - % Solids										
Duplicate (B065706-DUP1)	**Source: 13A0099-04**			Prepared: 01/04/13 Analyzed: 01/05/13						
% Solids	87.8		% Wt		88.5			0.794	20	
Batch B065722 - SW-846 9045C										
LCS (B065722-BS1)				Prepared & Analyzed: 01/05/13						
pH	6.02		pH Units	6.00		100	93.7-106			
Duplicate (B065722-DUP1)	**Source: 13A0099-05**			Prepared & Analyzed: 01/05/13						
pH	6.1		pH Units		6.2			1.14	7.49	H-01
Batch B065801 - SW-846 9014										
Blank (B065801-BLK1)				Prepared: 01/08/13 Analyzed: 01/09/13						
Reactive Cyanide	ND	0.40	mg/Kg							
LCS (B065801-BS1)				Prepared: 01/08/13 Analyzed: 01/09/13						
Reactive Cyanide	8.4	0.40	mg/Kg	10.0		84.0	80.1-115			
Batch B065802 - SW-846 9030A										
Blank (B065802-BLK1)				Prepared: 01/08/13 Analyzed: 01/09/13						
Reactive Sulfide	ND	2.0	mg/Kg							
LCS (B065802-BS1)				Prepared: 01/08/13 Analyzed: 01/09/13						
Reactive Sulfide	19	2.0	mg/Kg	14.9		128	32.9-140			
Batch B065803 - SM18-20 2510B										
Blank (B065803-BLK1)				Prepared & Analyzed: 01/08/13						
Specific conductance	ND	2.0	µmhos/cm							
LCS (B065803-BS1)				Prepared & Analyzed: 01/08/13						
Specific conductance	150	2.0	µmhos/cm	147		99.2	77.3-114			
Duplicate (B065803-DUP1)	**Source: 13A0099-04**			Prepared & Analyzed: 01/08/13						
Specific conductance	2.7	2.0	µmhos/cm		2.8			4.40	18.9	
Batch B065833 - SW-846 1010										
Blank (B065833-BLK1)				Prepared & Analyzed: 01/08/13						
Flashpoint	> 212 °F		°F							

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B065833 - SW-846 1010										
LCS (B065833-BS1)				Prepared & Analyzed: 01/08/13						
Flashpoint	81		°F	81.0		99.5	98.8-101			
LCS Dup (B065833-BSD1)				Prepared & Analyzed: 01/08/13						
Flashpoint	81		°F	81.0		99.5	98.8-101	0.00	1.61	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
H-01	Recommended sample holding time was exceeded, but analysis was performed before 2X the allowable holding time.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
MS-09	Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
S-01	The surrogate recovery for this sample is not available due to sample dilution below the surrogate reporting limit required from high analyte concentration and/or matrix interferences.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 1010 in Soil	
Flashpoint	NY,NC,ME,VA
SW-846 1030 in Soil	
Ignitability	NY,NH,CT,NC,ME,VA
SW-846 6010C in Soil	
Arsenic	CT,NH,NY,ME,NC,VA
Barium	CT,NH,NY,ME,NC,VA
Cadmium	CT,NH,NY,ME,NC,VA
Chromium	CT,NH,NY,ME,NC,VA
Lead	CT,NH,NY,AIHA,ME,NC,VA
Selenium	CT,NH,NY,ME,NC,VA
Silver	CT,NH,NY,ME,NC,VA
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
SW-846 8260C in Soil	
Acetone	CT,NH,NY,ME,VA
Acrylonitrile	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromobenzene	NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
n-Butylbenzene	CT,NH,NY,ME,VA
sec-Butylbenzene	CT,NH,NY,ME,VA
tert-Butylbenzene	CT,NH,NY,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Soil	
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
2-Chlorotoluene	CT,NH,NY,ME,VA
4-Chlorotoluene	CT,NH,NY,ME,VA
Dibromomethane	NH,NY,ME,VA
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
1,3-Dichloropropane	NH,NY,ME,VA
2,2-Dichloropropane	NH,NY,ME,VA
1,1-Dichloropropene	NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NY,VA
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,VA
Naphthalene	NH,NY,ME,VA
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME,VA
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA

con-test® ANALYTICAL LABORATORY
39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260C in Soil	
1,2,3-Trichloropropane	NH,NY,ME,VA
1,2,4-Trimethylbenzene	CT,NH,NY,ME,VA
1,3,5-Trimethylbenzene	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
m+p Xylene	CT,NH,NY,ME,VA
o-Xylene	CT,NH,NY,ME,VA
SW-846 8270D in Soil	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Acetophenone	NY,NH,ME,NC,VA
Aniline	NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzidine	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Benzoic Acid	NY,NH,ME,NC,VA
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NH,ME,NC,VA
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA
2-Chloronaphthalene	CT,NY,NH,NC,VA
2-Chlorophenol	CT,NY,NH,ME,NC,VA
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Dibenzofuran	CT,NY,NH,ME,NC,VA
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA
1,2-Dichlorobenzene	NY,NH,ME,NC,VA
1,3-Dichlorobenzene	NY,NH,ME,NC,VA
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D in Soil	
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
1,2-Diphenylhydrazine (as Azobenzene)	NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodimethylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodiphenylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachloronitrobenzene	NC
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Phenol	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
Pyridine	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC
SW-846 9014 in Soil	
Reactive Cyanide	NY,CT
SW-846 9030A in Soil	
Reactive Sulfide	CT,NY

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The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2013
CT	Connecticut Department of Publilc Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2013
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2013
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2013
FL	Florida Department of Health	E871027 NELAP	06/30/2013
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2013
WA	State of Washington Department of Ecology	C2065	02/23/2013
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2012

CHAIN OF CUSTODY RECORD

13A0099

Rev 04.05.12

con-test® ANALYTICAL LABORATORY
Phone: 413-525-2332
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Email: info@contestlabs.com
www.contestlabs.com
39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

Company Name: EBI Consulting
Address: 21 B St. Burlington MA
Attention: Ed Giordano
Project Location: Plaistow NH
Sampled By: E. Giordano

Telephone: 781-418-2316
Project #: 35120041
Client PO#:

DATA DELIVERY (check all that apply)
○ FAX ☒ EMAIL ○ WEBSITE
Fax # egiordano@ebiconsulting.com
Email:
Format: ☒ PDF ☒ EXCEL ○ GIS
○ OTHER
○ "Enhanced Data Package"

Project Proposal Provided? (for billing purposes)
☒ yes 20120809 Disposal proposal date parameters

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection Beginning Date/Time	Collection Ending Date/Time	Composite	Grab	*Matrix Code	Conc Code
-01	S2	1/4/13	9:30		X	S	
-02	S3	1/4/13	9:50		X	S	
-03	S4	1	10:00		X	S	
-04	Septic	1	10:30		X	S	
-05	Topsoil	1/4/13	10:40		X	S	

ANALYSIS REQUESTED

# of Containers	VOC	SVOC	PCB -	TPH 8100	RCRA8	pH	Conductivity	Reactivity	Ignitability	Flash	TCLP Hex Chrom as Light
** Preservation											
***Container Code											
-01	X	X	X	X	X	X	X	X	X	X	
-02	X	X	X	X	X	X	X	X	X	X	
-03	X	X	X	X	X	X	X	X	X	X	
-04	X	X	X	X	X	X	X	X	X	X	
-05	X	X	X	X	X	X	X	X	X	X	

Dissolved Metals
○ Field Filtered
○ Lab to Filter

***Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V= vial
S=summa can
T=tedlar bag
O=Other

**Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfa
X = Na hydroxide
T = Na thiosulfate
O = Other

*Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL = sludge
O = other

Comments:

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) Edward Giordano	1.4.13	Date/Time: 1410
Received by: (signature) Steph Malfa	1.4.13	Date/Time: 1410
Relinquished by: (signature) Steph Malfa	1.4.13	Date/Time: 1805
Received by: (signature)	1-4-13	Date/Time: 1805

Turnaround ††
☐ 7-Day
☐ 10-Day
☒ Other ____
RUSH †
☐ †24-Hr ☐ †48-Hr
☒ †72-Hr ☐ †4-Day
† Require lab approval

Detection Limit Requirements
Massachusetts:
Connecticut:
Other: NH

Is your project MCP or RCP ?
○ MCP Form Required
○ RCP Form Required
○ MA State DW Form Required PWSID # ____

NELAC & AIHA-LAP, LLC Accredited
WBE/DBE Certified

†† TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com

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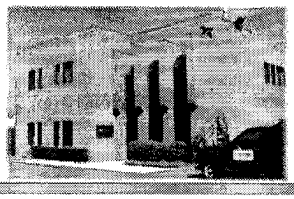

Sample Receipt Checklist

CLIENT NAME: EBF **RECEIVED BY:** WF **DATE:** 1-4-13

1) **Was the chain(s) of custody relinquished and signed?** **Yes** No **No CoC Included**

2) **Does the chain agree with the samples?** **Yes** No

If not, explain:

3) **Are all the samples in good condition?** **Yes** No

If not, explain:

4) **How were the samples received:**

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? **Yes** No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 3.4

5) **Are there Dissolved samples for the lab to filter?** Yes **No**

Who was notified _____ Date _____ Time _____

6) **Are there any RUSH or SHORT HOLDING TIME samples?** **Yes** No

Who was notified _____ Date _____ Time _____

7) **Location where samples are stored:** 19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) **Do all samples have the proper Acid pH:** Yes No **N/A** _____

9) **Do all samples have the proper Base pH:** Yes No **N/A** _____

10) **Was the PC notified of any discrepancies with the CoC vs the samples:** Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)	10	2 oz amber/clear jar	
1 Liter Plastic		Air Cassette	
500 mL Plastic		Hg/Hopcalite Tube	
250 mL plastic		Plastic Bag / Ziploc	
40 mL Vial - type listed below	15	PM 2.5 / PM 10	
Colisure / bacteria bottle		PUF Cartridge	
Dissolved Oxygen bottle		SOC Kit	
Encore		TO-17 Tubes	
Flashpoint bottle		Non-ConTest Container	
Perchlorate Kit		Other glass jar	
Other		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol 5

Bisulfate 10 # DI Water _____

Thiosulfate _____ Unpreserved

Time and Date Frozen:

ANALYTICAL REPORT

Lab Number:	L1300227
Client:	EnviroBusiness, Inc. 21 B Street Burlington, MA 01803
ATTN:	Ed Giodarno
Phone:	(917) 804-5470
Project Name:	PLAISTOW
Project Number:	3512004
Report Date:	01/10/13

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1300227-01	PLAISTOW RGP 01/13	PLAISTOW	01/04/13 12:30

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: PLAISTOW
Project Number: 3512004
Lab Number: L1300227
Report Date: 01/10/13

Case Narrative (continued)

Chlorine, Total Residual

WG582885: A laboratory duplicate could not be performed due to insufficient sample volume available for analysis.

Phenolics, Total

WG583599: A laboratory duplicate could not be performed due to insufficient sample volume available for analysis.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Simmons

Title: Technical Director/Representative Date: 01/10/13

ORGANICS

VOLATILES

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID: L1300227-01
Client ID: PLAISTOW RGP 01/13
Sample Location: PLAISTOW
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/06/13 23:15
Analyst: PD

Date Collected: 01/04/13 12:30
Date Received: 01/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID: L1300227-01 Date Collected: 01/04/13 12:30

Client ID: PLAISTOW RGP 01/13 Date Received: 01/04/13

Sample Location: PLAISTOW Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
Xylenes, Total	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	ND		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID: L1300227-01 Date Collected: 01/04/13 12:30

Client ID: PLAISTOW RGP 01/13 Date Received: 01/04/13

Sample Location: PLAISTOW Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	100		70-130

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID:	L1300227-01	Date Collected:	01/04/13 12:30
Client ID:	PLAISTOW RGP 01/13	Date Received:	01/04/13
Sample Location:	PLAISTOW	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C-SIM(M)		
Analytical Date:	01/09/13 09:49		
Analyst:	MM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID:	L1300227-01	Date Collected:	01/04/13 12:30
Client ID:	PLAISTOW RGP 01/13	Date Received:	01/04/13
Sample Location:	PLAISTOW	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	14,504.1	Extraction Date:	01/09/13 11:00
Analytical Date:	01/09/13 14:43		
Analyst:	SH		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Microextractables by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.010	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	--	1

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/13 14:24
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG583081-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--
1,4-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/13 14:24
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG583081-3					
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
Xylenes, Total	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/06/13 14:24
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG583081-3					
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	101		70-130

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 14,504.1
Analytical Date: 01/09/13 13:57
Analyst: SH

Extraction Date: 01/09/13 11:00

Parameter	Result	Qualifier	Units	RL	MDL
Microextractables by GC - Westborough Lab for sample(s): 01 Batch: WG583509-1					
1,2-Dibromoethane	ND		ug/l	0.010	--
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	--

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C-SIM(M)
Analytical Date: 01/09/13 08:12
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG583558-3					
1,4-Dioxane	ND		ug/l	3.0	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW

Project Number: 3512004

Lab Number: L1300227

Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG583081-1 WG583081-2								
Methylene chloride	104		91		70-130	13		20
1,1-Dichloroethane	103		87		70-130	17		20
Chloroform	104		89		70-130	16		20
Carbon tetrachloride	106		86		63-132	**21**	Q	20
1,2-Dichloropropane	103		88		70-130	16		20
Dibromochloromethane	99		85		63-130	15		20
1,1,2-Trichloroethane	102		89		70-130	14		20
Tetrachloroethene	94		78		70-130	19		20
Chlorobenzene	101		86		75-130	16		25
Trichlorofluoromethane	114		90		62-150	**24**	Q	20
1,2-Dichloroethane	100		88		70-130	13		20
1,1,1-Trichloroethane	106		86		67-130	**21**	Q	20
Bromodichloromethane	100		85		67-130	16		20
trans-1,3-Dichloropropene	95		82		70-130	15		20
cis-1,3-Dichloropropene	98		85		70-130	14		20
1,1-Dichloropropene	104		85		70-130	20		20
Bromoform	98		84		54-136	15		20
1,1,2,2-Tetrachloroethane	104		94		67-130	10		20
Benzene	106		89		70-130	17		25
Toluene	100		85		70-130	16		25
Ethylbenzene	101		86		70-130	16		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW

Project Number: 3512004

Lab Number: L1300227

Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG583081-1 WG583081-2								
Chloromethane	88		72		64-130	20		20
Bromomethane	116		66		39-139	**55**	Q	20
Vinyl chloride	116		92		55-140	**23**	Q	20
Chloroethane	128		106		55-138	19		20
1,1-Dichloroethene	105		86		61-145	20		25
trans-1,2-Dichloroethene	104		86		70-130	19		20
Trichloroethene	108		90		70-130	18		25
1,2-Dichlorobenzene	102		91		70-130	11		20
1,3-Dichlorobenzene	102		89		70-130	14		20
1,4-Dichlorobenzene	103		89		70-130	15		20
Methyl tert butyl ether	96		83		63-130	15		20
p/m-Xylene	102		87		70-130	16		20
o-Xylene	103		88		70-130	16		20
cis-1,2-Dichloroethene	105		88		70-130	18		20
Dibromomethane	101		88		70-130	14		20
1,4-Dichlorobutane	103		93		70-130	10		20
1,2,3-Trichloropropane	82		71		64-130	14		20
Styrene	106		90		70-130	16		20
Dichlorodifluoromethane	92		74		36-147	**22**	Q	20
Acetone	115		92		58-148	**22**	Q	20
Carbon disulfide	101		80		51-130	**23**	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW

Project Number: 3512004

Lab Number: L1300227

Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG583081-1 WG583081-2								
2-Butanone	92		76		63-138	19		20
Vinyl acetate	85		81		70-130	5		20
4-Methyl-2-pentanone	94		78		59-130	19		20
2-Hexanone	89		75		57-130	17		20
Ethyl methacrylate	86		75		70-130	14		20
Acrylonitrile	101		90		70-130	12		20
Bromochloromethane	107		92		70-130	15		20
Tetrahydrofuran	102		85		58-130	18		20
2,2-Dichloropropane	101		83		63-133	20		20
1,2-Dibromoethane	98		84		70-130	15		20
1,3-Dichloropropane	100		86		70-130	15		20
1,1,1,2-Tetrachloroethane	101		86		64-130	16		20
Bromobenzene	101		88		70-130	14		20
n-Butylbenzene	110		93		53-136	17		20
sec-Butylbenzene	110		94		70-130	16		20
tert-Butylbenzene	107		91		70-130	16		20
o-Chlorotoluene	96		88		70-130	9		20
p-Chlorotoluene	109		94		70-130	15		20
1,2-Dibromo-3-chloropropane	102		87		41-144	16		20
Hexachlorobutadiene	88		75		63-130	16		20
Isopropylbenzene	109		92		70-130	17		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG583081-1 WG583081-2								
p-Isopropyltoluene	109		92		70-130	17		20
Naphthalene	96		86		70-130	11		20
n-Propylbenzene	112		97		69-130	14		20
1,2,3-Trichlorobenzene	96		81		70-130	17		20
1,2,4-Trichlorobenzene	95		83		70-130	13		20
1,3,5-Trimethylbenzene	109		95		64-130	14		20
1,2,4-Trimethylbenzene	110		96		70-130	14		20
trans-1,4-Dichloro-2-butene	88		76		70-130	15		20
Ethyl ether	104		90		59-134	14		20
tert-Butyl Alcohol	90		75		70-130	18		20
Tertiary-Amyl Methyl Ether	100		84		66-130	17		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95		94		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	107		108		70-130
Dibromofluoromethane	101		99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 Batch: WG583509-2								
1,2-Dibromoethane	86		-		70-130	-		20
1,2-Dibromo-3-chloropropane	77		-		70-130	-		20
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG583558-1 WG583558-2								
1,4-Dioxane	103		108		70-130	5		25

Matrix Spike Analysis
Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Microextractables by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583509-3 QC Sample: L1300227-01 Client ID: PLAISTOW RGP 01/13												
1,2-Dibromoethane	ND	0.251	0.223	89		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	0.251	0.203	81		-	-		70-130	-		20

SEMIVOLATILES

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID:	L1300227-01	Date Collected:	01/04/13 12:30
Client ID:	PLAISTOW RGP 01/13	Date Received:	01/04/13
Sample Location:	PLAISTOW	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D	Extraction Date:	01/05/13 02:12
Analytical Date:	01/07/13 17:36		
Analyst:	JB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/l	20	--	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Hexachlorocyclopentadiene	ND		ug/l	20	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
NDPA/DPA	ND		ug/l	2.0	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
2-Nitroaniline	ND		ug/l	5.0	--	1
3-Nitroaniline	ND		ug/l	5.0	--	1
4-Nitroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
n-Nitrosodimethylamine	ND		ug/l	2.0	--	1

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID: L1300227-01 Date Collected: 01/04/13 12:30

Client ID: PLAISTOW RGP 01/13 Date Received: 01/04/13

Sample Location: PLAISTOW Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
p-Chloro-m-cresol	ND		ug/l	2.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1
4,6-Dinitro-o-cresol	ND		ug/l	10	--	1
Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1
Benzoic Acid	ND		ug/l	50	--	1
Benzyl Alcohol	ND		ug/l	2.0	--	1
Carbazole	ND		ug/l	2.0	--	1
Pyridine	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	91		41-149

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID:	L1300227-01	Date Collected:	01/04/13 12:30
Client ID:	PLAISTOW RGP 01/13	Date Received:	01/04/13
Sample Location:	PLAISTOW	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	01/05/13 02:15
Analytical Date:	01/07/13 12:05		
Analyst:	AS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.24		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	ND		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	ND		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	ND		ug/l	0.20	--	1
Benzo(k)fluoranthene	ND		ug/l	0.20	--	1
Chrysene	ND		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	ND		ug/l	0.20	--	1
Benzo(ghi)perylene	ND		ug/l	0.20	--	1
Fluorene	ND		ug/l	0.20	--	1
Phenanthrene	0.20		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--	1
Pyrene	ND		ug/l	0.20	--	1
1-Methylnaphthalene	ND		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	95		41-149

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/07/13 16:21
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 01/05/13 02:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG582898-1					
Benzidine	ND		ug/l	20	--
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Hexachlorocyclopentadiene	ND		ug/l	20	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	2.0	--
NDPA/DPA	ND		ug/l	2.0	--
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
2-Nitroaniline	ND		ug/l	5.0	--
3-Nitroaniline	ND		ug/l	5.0	--
4-Nitroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
n-Nitrosodimethylamine	ND		ug/l	2.0	--

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/07/13 16:21
Analyst: JB

Extraction Method: EPA 3510C
Extraction Date: 01/05/13 02:12

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG582898-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
p-Chloro-m-cresol	ND		ug/l	2.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--
4,6-Dinitro-o-cresol	ND		ug/l	10	--
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--
Benzoic Acid	ND		ug/l	50	--
Benzyl Alcohol	ND		ug/l	2.0	--
Carbazole	ND		ug/l	2.0	--
Pyridine	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	96		41-149

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/07/13 10:54
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 01/05/13 02:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG582899-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
1-Methylnaphthalene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/07/13 10:54
Analyst: AS

Extraction Method: EPA 3510C
Extraction Date: 01/05/13 02:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG582899-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	101		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW

Project Number: 3512004

Lab Number: L1300227

Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG582898-2 WG582898-3								
Benzidine	10		10		10-75	0		30
1,2,4-Trichlorobenzene	68		69		39-98	1		30
Bis(2-chloroethyl)ether	63		61		40-140	3		30
1,2-Dichlorobenzene	64		62		40-140	3		30
1,3-Dichlorobenzene	61		58		40-140	5		30
1,4-Dichlorobenzene	62		60		36-97	3		30
3,3'-Dichlorobenzidine	69		88		40-140	24		30
2,4-Dinitrotoluene	**102**	Q	**103**	Q	24-96	1		30
2,6-Dinitrotoluene	98		98		40-140	0		30
Azobenzene	85		85		40-140	0		30
4-Chlorophenyl phenyl ether	83		86		40-140	4		30
4-Bromophenyl phenyl ether	93		93		40-140	0		30
Bis(2-chloroisopropyl)ether	63		61		40-140	3		30
Bis(2-chloroethoxy)methane	73		72		40-140	1		30
Hexachlorocyclopentadiene	57		52		40-140	9		30
Isophorone	78		77		40-140	1		30
Nitrobenzene	69		68		40-140	1		30
NitrosoDiPhenylAmine(NDPA)/DPA	92		94		40-140	2		30
Bis(2-Ethylhexyl)phthalate	110		105		40-140	5		30
Butyl benzyl phthalate	108		106		40-140	2		30
Di-n-butylphthalate	107		105		40-140	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW

Project Number: 3512004

Lab Number: L1300227

Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG582898-2 WG582898-3								
Di-n-octylphthalate	102		100		40-140	2		30
Diethyl phthalate	94		93		40-140	1		30
Dimethyl phthalate	86		89		40-140	3		30
Aniline	**31**	Q	**36**	Q	40-140	15		30
4-Chloroaniline	47		66		40-140	**34**	Q	30
2-Nitroaniline	94		95		52-143	1		30
3-Nitroaniline	67		82		25-145	20		30
4-Nitroaniline	96		98		51-143	2		30
Dibenzofuran	81		80		40-140	1		30
n-Nitrosodimethylamine	39		40		22-74	3		30
2,4,6-Trichlorophenol	99		100		30-130	1		30
P-Chloro-M-Cresol	94		95		23-97	1		30
2-Chlorophenol	74		74		27-123	0		30
2,4-Dichlorophenol	89		86		30-130	3		30
2,4-Dimethylphenol	82		86		30-130	5		30
2-Nitrophenol	85		83		30-130	2		30
4-Nitrophenol	38		39		10-80	3		30
2,4-Dinitrophenol	89		89		20-130	0		30
4,6-Dinitro-o-cresol	102		100		20-164	2		30
Phenol	34		34		12-110	0		30
2-Methylphenol	72		70		30-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG582898-2 WG582898-3								
3-Methylphenol/4-Methylphenol	72		72		30-130	0		30
2,4,5-Trichlorophenol	104		105		30-130	1		30
Benzoic Acid	46		51		10-164	10		30
Benzyl Alcohol	68		64		26-116	6		30
Carbazole	94		92		55-144	2		30
Pyridine	17		12		10-66	**34**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	54		52		21-120
Phenol-d6	41		39		10-120
Nitrobenzene-d5	79		77		23-120
2-Fluorobiphenyl	84		83		15-120
2,4,6-Tribromophenol	94		90		10-120
4-Terphenyl-d14	100		98		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG582899-2 WG582899-3								
Acenaphthene	94		90		37-111	4		40
2-Chloronaphthalene	89		87		40-140	2		40
Fluoranthene	110		104		40-140	6		40
Hexachlorobutadiene	86		86		40-140	0		40
Naphthalene	83		82		40-140	1		40
Benzo(a)anthracene	111		103		40-140	7		40
Benzo(a)pyrene	101		95		40-140	6		40
Benzo(b)fluoranthene	100		113		40-140	12		40
Benzo(k)fluoranthene	109		95		40-140	14		40
Chrysene	97		91		40-140	6		40
Acenaphthylene	100		94		40-140	6		40
Anthracene	91		86		40-140	6		40
Benzo(ghi)perylene	99		86		40-140	14		40
Fluorene	92		91		40-140	1		40
Phenanthrene	100		96		40-140	4		40
Dibenzo(a,h)anthracene	106		95		40-140	11		40
Indeno(1,2,3-cd)Pyrene	106		94		40-140	12		40
Pyrene	105		100		26-127	5		40
1-Methylnaphthalene	90		89		40-140	1		40
2-Methylnaphthalene	90		90		40-140	0		40
Pentachlorophenol	**113**	Q	**109**	Q	9-103	4		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG582899-2 WG582899-3								
Hexachlorobenzene	95		91		40-140	4		40
Hexachloroethane	75		74		40-140	1		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	51		52		21-120
Phenol-d6	37		37		10-120
Nitrobenzene-d5	82		81		23-120
2-Fluorobiphenyl	86		87		15-120
2,4,6-Tribromophenol	106		99		10-120
4-Terphenyl-d14	105		101		41-149

PCBS

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

SAMPLE RESULTS

Lab ID:	L1300227-01	Date Collected:	01/04/13 12:30
Client ID:	PLAISTOW RGP 01/13	Date Received:	01/04/13
Sample Location:	PLAISTOW	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 608
Analytical Method:	5,608	Extraction Date:	01/05/13 00:59
Analytical Date:	01/07/13 22:15	Cleanup Method1:	EPA 3665A
Analyst:	JW	Cleanup Date1:	01/05/13
		Cleanup Method2:	EPA 3660B
		Cleanup Date2:	01/05/13

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.250	--	1
Aroclor 1221	ND		ug/l	0.250	--	1
Aroclor 1232	ND		ug/l	0.250	--	1
Aroclor 1242	ND		ug/l	0.250	--	1
Aroclor 1248	ND		ug/l	0.250	--	1
Aroclor 1254	ND		ug/l	0.250	--	1
Aroclor 1260	ND		ug/l	0.250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	61		30-150
Decachlorobiphenyl	71		30-150

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 01/07/13 21:26
Analyst: JW

Extraction Method: EPA 608
Extraction Date: 01/05/13 00:59
Cleanup Method1: EPA 3665A
Cleanup Date1: 01/05/13
Cleanup Method2: EPA 3660B
Cleanup Date2: 01/05/13

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG582887-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	79		30-150
Decachlorobiphenyl	76		30-150

Matrix Spike Analysis
Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582887-3 QC Sample: L1300227-01 Client ID: PLAISTOW RGP 01/13												
Aroclor 1016	ND	2.04	1.63	80		-	-		40-140	-		50
Aroclor 1260	ND	2.04	1.66	81		-	-		40-140	-		50

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	77				30-150
Decachlorobiphenyl	83				30-150

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG582887-2								
Aroclor 1016	84		-		40-140	-		50
Aroclor 1260	76		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78				30-150
Decachlorobiphenyl	77				30-150

Lab Duplicate Analysis
Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582887-4 QC Sample: L1300227-01 Client ID: PLAISTOW RGP 01/13						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	61		65		30-150
Decachlorobiphenyl	71		70		30-150

METALS

Project Name: PLAISTOW
Project Number: 3512004
Lab Number: L1300227
Report Date: 01/10/13

SAMPLE RESULTS

Lab ID: L1300227-01
Client ID: PLAISTOW RGP 01/13
Sample Location: PLAISTOW
Matrix: Water
Date Collected: 01/04/13 12:30
Date Received: 01/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	ND		mg/l	0.0015	--	1	01/07/13 08:27	01/08/13 13:49	EPA 3005A	1,6020A	AK
Arsenic, Total	0.0019		mg/l	0.0005	--	1	01/07/13 08:27	01/08/13 13:49	EPA 3005A	1,6020A	AK
Cadmium, Total	ND		mg/l	0.0002	--	1	01/07/13 08:27	01/08/13 13:49	EPA 3005A	1,6020A	AK
Chromium, Total	ND		mg/l	0.0010	--	1	01/07/13 08:27	01/08/13 14:30	EPA 3005A	1,6020A	AK
Copper, Total	0.0031		mg/l	0.0010	--	1	01/07/13 08:27	01/08/13 14:30	EPA 3005A	1,6020A	AK
Iron, Total	0.30		mg/l	0.05	--	1	01/07/13 08:27	01/08/13 14:48	EPA 3005A	19,200.7	BM
Lead, Total	0.0011		mg/l	0.0005	--	1	01/07/13 08:27	01/08/13 13:49	EPA 3005A	1,6020A	AK
Mercury, Total	ND		mg/l	0.0002	--	1	01/07/13 15:20	01/07/13 18:18	EPA 245.1	3,245.1	JH
Nickel, Total	0.0049		mg/l	0.0010	--	1	01/07/13 08:27	01/08/13 14:30	EPA 3005A	1,6020A	AK
Selenium, Total	ND		mg/l	0.005	--	1	01/07/13 08:27	01/08/13 13:49	EPA 3005A	1,6020A	AK
Silver, Total	ND		mg/l	0.0004	--	1	01/07/13 08:27	01/08/13 13:49	EPA 3005A	1,6020A	AK
Zinc, Total	0.0137		mg/l	0.0100	--	1	01/07/13 08:27	01/08/13 13:49	EPA 3005A	1,6020A	AK

Project Name: PLAISTOW
Project Number: 3512004
Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG582985-1										
Antimony, Total	ND		mg/l	0.0015	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Arsenic, Total	ND		mg/l	0.0005	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Cadmium, Total	ND		mg/l	0.0002	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Chromium, Total	ND		mg/l	0.0010	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Copper, Total	ND		mg/l	0.0010	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Lead, Total	ND		mg/l	0.0005	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Nickel, Total	ND		mg/l	0.0010	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Selenium, Total	ND		mg/l	0.005	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Silver, Total	ND		mg/l	0.0004	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK
Zinc, Total	ND		mg/l	0.0100	--	1	01/07/13 08:27	01/08/13 13:08	1,6020A	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG583138-1										
Mercury, Total	ND		mg/l	0.0002	--	1	01/07/13 15:20	01/07/13 18:03	3,245.1	JH

Prep Information

Digestion Method: EPA 245.1

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG583261-1										
Iron, Total	ND		mg/l	0.05	--	1	01/07/13 08:27	01/07/13 16:54	19,200.7	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW

Project Number: 3512004

Lab Number: L1300227

Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG582985-2								
Antimony, Total	91		-		80-120	-		
Arsenic, Total	103		-		80-120	-		
Cadmium, Total	118		-		80-120	-		
Chromium, Total	92		-		80-120	-		
Copper, Total	95		-		80-120	-		
Lead, Total	97		-		80-120	-		
Nickel, Total	103		-		80-120	-		
Selenium, Total	112		-		80-120	-		
Silver, Total	103		-		80-120	-		
Zinc, Total	108		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG583138-2								
Mercury, Total	91		-		85-115	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG583261-2								
Iron, Total	100		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582985-4 QC Sample: L1300202-01 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.5050	101		-	-		80-120	-		20
Arsenic, Total	0.0013B	0.12	0.1379	114		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0587	115		-	-		80-120	-		20
Chromium, Total	0.0011	0.2	0.1835	91		-	-		80-120	-		20
Copper, Total	0.0759	0.25	0.3216	98		-	-		80-120	-		20
Lead, Total	0.0010	0.51	0.4988	98		-	-		80-120	-		20
Nickel, Total	0.0027	0.5	0.5064	101		-	-		80-120	-		20
Selenium, Total	ND	0.12	0.138	115		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0498	100		-	-		80-120	-		20
Zinc, Total	0.0555	0.5	0.5970	108		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583138-4 QC Sample: L1300192-01 Client ID: MS Sample												
Mercury, Total	ND	0.001	0.0012	116		-	-		70-130	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583261-4 QC Sample: L1300003-22 Client ID: MS Sample												
Iron, Total	3.1	1	3.6	**50**	Q	-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582985-3 QC Sample: L1300202-01 Client ID: DUP Sample						
Antimony, Total	ND	ND	mg/l	NC		20
Arsenic, Total	0.0013B	0.0015	mg/l	15		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.0011	0.0013	mg/l	17		20
Copper, Total	0.0759	0.0776	mg/l	2		20
Lead, Total	0.0010	0.001	mg/l	1		20
Nickel, Total	0.0027	0.0037	mg/l	**31**	Q	20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Zinc, Total	0.0555	0.0550	mg/l	1		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583138-3 QC Sample: L1300192-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583261-3 QC Sample: L1300003-22 Client ID: DUP Sample						
Iron, Total	3.1	2.8	mg/l	10		20

INORGANICS
&
MISCELLANEOUS

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

SAMPLE RESULTS

Lab ID: L1300227-01
Client ID: PLAISTOW RGP 01/13
Sample Location: PLAISTOW
Matrix: Water

Date Collected: 01/04/13 12:30
Date Received: 01/04/13
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	15		mg/l	5.0	NA	1	-	01/07/13 09:20	30,2540D	DW
Cyanide, Total	ND		mg/l	0.005	--	1	01/07/13 11:17	01/07/13 15:11	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	01/05/13 00:44	30,4500CL-D	EL
TPH	ND		mg/l	4.00	--	1	01/08/13 07:30	01/08/13 16:00	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03	--	1	01/09/13 11:45	01/09/13 14:01	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/04/13 22:30	01/04/13 23:16	30,3500CR-D	DE
Anions by Ion Chromatography - Westborough Lab										
Chloride	200.		mg/l	5.00	--	10	-	01/08/13 10:04	44,300.0	ED

Project Name: PLAISTOW
Project Number: 3512004
Lab Number: L1300227
Report Date: 01/10/13

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG582872-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/04/13 22:30	01/04/13 23:13	30,3500CR-D	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG582885-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	01/05/13 00:44	30,4500CL-D	EL
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG582998-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	01/07/13 09:20	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG583046-1										
Cyanide, Total	ND		mg/l	0.005	--	1	01/07/13 11:17	01/07/13 15:02	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG583270-1										
TPH	ND		mg/l	4.00	--	1	01/08/13 07:30	01/08/13 16:00	74,1664A	JO
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG583295-1										
Chloride	ND		mg/l	0.500	--	1	-	01/08/13 09:40	44,300.0	ED
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG583599-1										
Phenolics, Total	ND		mg/l	0.03	--	1	01/09/13 11:45	01/09/13 14:00	4,420.1	MP

Lab Control Sample Analysis

Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG582872-2								
Chromium, Hexavalent	95		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG582885-2								
Chlorine, Total Residual	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG583046-2								
Cyanide, Total	106		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG583270-2								
TPH	85		-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG583295-2								
Chloride	100		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG583599-2								
Phenolics, Total	99		-		82-111	-		12

Matrix Spike Analysis
Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582872-4 QC Sample: L1300227-01 Client ID: PLAISTOW RGP 01/13												
Chromium, Hexavalent	ND	0.1	0.103	103		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583046-4 QC Sample: L1300003-31 Client ID: MS Sample												
Cyanide, Total	0.049	0.2	0.260	105		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583270-4 QC Sample: L1300308-02 Client ID: MS Sample												
TPH	ND	22.2	16.7	75		-	-		64-132	-		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583295-3 QC Sample: L1300227-01 Client ID: PLAISTOW RGP 01/13												
Chloride	200	40	235	88		-	-		40-151	-		18
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583599-3 QC Sample: L1300227-01 Client ID: PLAISTOW RGP 01/13												
Phenolics, Total	ND	0.8	0.83	104		-	-		77-124	-		12

Lab Duplicate Analysis
Batch Quality Control

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582872-3 QC Sample: L1300227-01 Client ID: PLAISTOW RGP 01/13						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG582998-2 QC Sample: L1300199-01 Client ID: DUP Sample						
Solids, Total Suspended	1200	1200	mg/l	0		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583046-3 QC Sample: L1300003-31 Client ID: DUP Sample						
Cyanide, Total	0.049	0.050	mg/l	0		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583270-3 QC Sample: L1300308-01 Client ID: DUP Sample						
TPH	ND	ND	mg/l	NC		34
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG583295-4 QC Sample: L1300227-01 Client ID: PLAISTOW RGP 01/13						
Chloride	200	202.	mg/l	1		18

Project Name: PLAISTOW
Project Number: 3512004

Lab Number: L1300227
Report Date: 01/10/13

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1300227-01A	Vial HCl preserved	A	N/A	2.7	Y	Absent	8260-SIM(14),8260(14)
L1300227-01B	Vial HCl preserved	A	N/A	2.7	Y	Absent	8260-SIM(14),8260(14)
L1300227-01C	Vial HCl preserved	A	N/A	2.7	Y	Absent	8260-SIM(14),8260(14)
L1300227-01D	Vial Na2S2O3 preserved	A	N/A	2.7	Y	Absent	504(14)
L1300227-01E	Vial Na2S2O3 preserved	A	N/A	2.7	Y	Absent	504(14)
L1300227-01F	Amber 1000ml unpreserved	A	7	2.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1300227-01G	Amber 1000ml unpreserved	A	7	2.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1300227-01H	Amber 1000ml unpreserved	A	7	2.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1300227-01I	Amber 1000ml unpreserved	A	7	2.7	Y	Absent	8270TCL(7),8270TCL-SIM(7)
L1300227-01J	Amber 1000ml Na2S2O3	A	7	2.7	Y	Absent	PCB-608(7)
L1300227-01K	Amber 1000ml Na2S2O3	A	7	2.7	Y	Absent	PCB-608(7)
L1300227-01L	Amber 1000ml HCl preserved	A	N/A	2.7	Y	Absent	TPH-1664(28)
L1300227-01M	Amber 1000ml HCl preserved	A	N/A	2.7	Y	Absent	TPH-1664(28)
L1300227-01N	Amber 500ml H2SO4 preserved	A	<2	2.7	Y	Absent	TPHENOL-420(28)
L1300227-01O	Plastic 1000ml unpreserved	A	7	2.7	Y	Absent	TSS-2540(7)
L1300227-01P	Plastic 500ml unpreserved	A	7	2.7	Y	Absent	HEXCR-3500(1),TRC-4500(1)
L1300227-01Q	Plastic 500ml unpreserved	A	7	2.7	Y	Absent	CL-300(28)
L1300227-01R	Plastic 250ml NaOH preserved	A	>12	2.7	Y	Absent	TCN-4500(14)
L1300227-01S	Plastic 250ml HNO3 preserved	A	<2	2.7	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)

*Values in parentheses indicate holding time in days

Project Name:	PLAISTOW	**Lab Number:**	L1300227
Project Number:	3512004	**Report Date:**	01/10/13

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report

Project Name:	PLAISTOW	**Lab Number:**	L1300227
Project Number:	3512004	**Report Date:**	01/10/13

Data Qualifiers

due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

Project Name: PLAISTOW **Lab Number:** L1300227

Project Number: 3512004 **Report Date:** 01/10/13

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.

5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).

14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

74 Method 1664,Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certificate/Approval Program Summary

Last revised December 19, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. ***NELAP Accredited Solid Waste/Soil.***

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

Maine Department of Human Services Certificate/Lab ID: 2009024.
Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 6010C, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8330, 8151A, 8260B, 8260C, 8270C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9030B, 9040B, 9045C, 6010B, 6010C, 6020, 6020A, 7471A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8270D, 8330, 8151A, 8081A, 8081B, 8082, 8082A, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.
*Drinking Water (*Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertOT SM9223B; MF-SM9222D.)

*Non-Potable Water (*Inorganic Parameters:, (EPA 200.8 for: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn); (EPA 200.7 for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.
Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010C, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012B, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C,

3546, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. ***NELAP Accredited via NJ-DEP.***
Refer to MA-DEP Certificate for Potable and Non-Potable Water.
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality Certificate/Lab ID: T104704476. ***NELAP Accredited.***
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 $S2^{-}$D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. ***NELAP Accredited.***
Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 355B0, 3580A, 3630C, 6020A, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C,

8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:
EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/4/13

ALPHA Job #: L1300227

Client Information

Client: EBI consulting
Address: 12 B Street Burlington
Phone: 339-234-8739
Fax:
Email: efgordan@ebiconsulting.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Plaistow
Project Location: Plaistow
Project #: 3512004
Project Manager: EGordan
ALPHA Quote #:

Turn-Around Time

☐ Standard ☒ RUSH (only confirmed if pre-approved!)
Date Due: 1/10/13 Time: 5pm

Report Information - Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program | Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes ☐ No Are MCP Analytical Methods Required?
☐ Yes ☐ No Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)
☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required , indicate in Sample Specific Comments which samples and what tests MS to be performed.
(Note: All ***CAM*** methods for inorganic analyses require MS every 20 soil samples)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: MADEP RCP	SAMPLE HANDLING	TOTAL # BOTTLES
00227-1	Plaistow RGP 01/13	1/4/13	1230	GW	EFG	X		

SAMPLE HANDLING
Filtration
☐ Done
☐ Not needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

Sample Specific Comments

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

FORM NO: 01-01 (rev. 18-Jan-2010)

Container Type
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	1/4/13 1635		1/4/13 16:35

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Serial_No:01101312:53

Attachment 5
Proposed Walgreens Pharmacy Stormwater Pollution Prevention Plan, including NPDES Stormwater CGP Permit No. NHR12A639

ALLEN & MAJOR
ASSOCIATES, INC.

PROPOSED WALGREENS PHARMACY

STORE # 15464

5-9 PLAISTOW ROAD

PLAISTOW, NEW HAMPSHIRE

STORMWATER POLLUTION PREVENTION PLAN

DATE PREPARED
OCTOBER 26, 2012

APPLICANT:
TAURUS PLAISTOW INVESTORS
LIMITED PARTNERSHIP
22 BATTERYMARCH STREET
BOSTON, MA 02109

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
250 COMMERCIAL STREET, SUITE 1001
MANCHESTER, NEW HAMPSHIRE 03101

A&M PROJECT NO.: 1235-15B

STORM WATER POLLUTION PREVENTION PLAN

Map 24 Lot 38
5-9 Plaistow Road
Plaistow, New Hampshire

PREPARED FOR:

Taurus Plaistow Investors
Limited Partnership
22 Batterymarch Street
Boston, MA 02109

OPERATOR(S):

Mark Donohoe
Select Real Estate Consulting
44 Brook Street
Manchester, MA 01944

PREPARED BY:

Michael Malynowski, PE CPESC
Allen & Major Associates, Inc.
250 Commercial Street
Suite 1001
Manchester, NH 03101

SWPPP PREPARATION DATE:

October 26, 2012

ESTIMATED PROJECT DATES:
START OF CONSTRUCTION: NOVEMBER 14, 2012
COMPLETION OF CONSTRUCTION: SEPTEMBER 14, 2015

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b. Structural BMPs
c. Stormwater Management

Section 5: **Good Housekeeping BMPS**

a. Material Handling and Waste Management
b. Establish Proper Building Material Staging Areas
c. Designate Washout Areas
d. Control Equipment/Vehicle Washing
e. Discharge Reporting
f. Spill Prevention, Control and Response Plan
g. Allowable Non-Stormwater Discharge Management

Section 6: **Schedules:**

a. Construction
b. BMP Implementation
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Section 7: **Inspections and Oversight**

Section 8: **Pollution Prevention:**

a. Inventory of Materials
b. Spill Prevention Practices
c. Spill Control & Clean-up

Section 9: **Record Keeping & Certifications**

a. Recordkeeping
b. Revisions

APPENDIX A - Forms:

a. NOI and Acknowledgement Letter from EPA/State
b. Inspection Reports
c. Corrective Action Log
d. SWPPP Amendment Log
e. Construction Activities Log
f. Subcontractor Certifications/Agreements

APPENDIX B – Support Documentation:

a. NHDES Alteration of Terrain Permit (AoT-0461)
b. NH Natural Heritage Bureau response
c. NHDHR response
d. NHDES Subsurface Disposal Permit (CA201209204)
e. NPDES General Permit for Storm Water Discharges from Construction Activities

APPENDIX C - Maps:

a. USGS Locus Map
b. Aerial Image Map
c. SCS Soils Map
d. Site Plan Set

SECTION 1: OPERATORS

Taurus Plaistow Investors Limited Partnership ***or its designee*** will be responsible for inspections and overall construction oversight at the start of site work, **and** may name a site supervisor to perform the inspection tasks.

An independent erosion control monitor should be identified to work with the contractor, providing suggestions and information related to stormwater control during the construction activities. Site inspections by the independent monitor should be conducted once a week.

Operator(s)

Mark Donohoe
44 Brook Street
Manchester, MA 01944
Email: mdonohoe@selectreinv.com
Cell: (617) 407-6676

Project Manager(s) or Site Supervisor (s)

Same as above

Stormwater Manager and SWPPP Contact(s):

Michael Malynowski, PE CPESC
250 Commercial Street
Suite 1001
Manchester, NH 03101
Email: mmalynowski@allenmajor.com
Cell: 781-640-7650

Emergency 24 hour contact:

Mark Donohoe
44 Brook Street
Manchester, MA 01944
Email: mdonohoe@selectreinv.com
Cell: (617) 407-6676

SECTION 2: SITE EVALUATION AND ASSESSMENT

Allen & Major Associates, Inc. (A&M) has prepared this Stormwater Pollution Prevention Plan (SWPPP) on behalf of Taurus Plaistow Investors Limited Partnership of Boston, MA.

The SWPPP provides an overview of the regulations and requirements governing construction sites, and provides suggested best management practices that can be implemented at the site to address erosion and sediment issues that may arise during construction. This document also provides checklists and self-audit checklists for use by Taurus Plaistow Investors Limited Partnership and its contractor when construction commences.

The Construction Site Operator for this site has been identified as;

Mark Donohoe
44 Brook Street
Manchester, MA 01944
Email: mdonohoe@selectreinv.com
Cell: (617) 407-6676

Allen & Major Associates, Inc. (A&M) is not a Site Operator and is not responsible for the implementation of the suggested practices and guidelines presented in the SWPPP.

This SWPPP was prepared in accordance with the regulations and guidelines set forth the by the U.S. Environmental Protection Agency (EPA) in its Final National Pollutant Discharge Elimination System (NPDES), General Permit for stormwater Discharges from Construction Activities, finalized in the Federal Register/Vol 68 No. 149, Monday August 4, 2003/Notices.

SWPPP Notice of Intent:

In preparation of this SWPPP, a NOI for stormwater discharges was filed for the project under the NPDES General Permit NHR 100000. As required by the general permit, a copy of the EPA NPDES NOI and the Construction General Permit (2012) are presented in Appendix A. This NOI was filed by Michael Malynowski, PE of A&M on behalf of the Owner (Taurus Plaistow Investors Limited Partnership) and Operator (Mark Donohoe) via EPA Website. Confirmation of the filing was also obtained and attached herein.

As understood from Taurus Plaistow Investors Limited Partnership, Mark Donohoe will act as the primary contact and therefore meets the definition of the permitting authority's definition of "Operator" (presented below).

Operator: for the purpose of the CGP and in the context of stormwater associated with construction activity, means any party associated with a construction project that means either of the following tow criteria:

a. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
b. The party has day-to-day operational control of the activities at the project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g. they are authorized to direct workers at the site to carry out activities required by the SWPPP or comply with other permit conditions). This definition is provided to inform permittees of EPA's interpretation of how the regulatory definitions of "owner or operator" and "facility or activity" are applied to discharges of stormwater associated with construction activity.

This SWPPP has not only been prepared as an Erosion and Sediment Control Plan, but it also illustrates that measures will be taken to minimize the potential impact of stormwater pollution from other common sources at construction sites. The SWPPP has also been prepared to illustrate that the information required to comply with the regulatory requirements has been documented as it relates to the impact of construction activities on:

- Endangered species, critical habitat, and the basis for permit coverage.
- Wetlands and Waters of the United States.

In addition, information related to the following topics has also been documented:

Requirements for the NOI:

- Confirmation of the delivery of the NOI to EPA, or from the EPA's web page must be included with the SWPPP.
- The signatory on the NOI must sign all documents associated with the SWPPP. If the signatory chooses not to sign all documents, they must designate a duly authorized representative to sign all relevant documents. This designation has to be made in writing and must be included SWPPP. Form B is to be used for designating duly authorized representatives.

Contractor Responsibilities:

- The Contractor shall manage the discharge of stormwater from the site in accordance with the NPDES CGP and the following provisions:
- The Contractor shall be responsible for conducting the Stormwater management practices in accordance with the permit.
- The Contractor shall be responsible for providing the Qualified Inspectors to conduct inspections required by the SWPPP.
- The Contractor shall be responsible for any enforcement action taken or imposed by federal state, or local agencies, including the cost of fines, construction delays, and remedial actions resulting from the Contractor's failure to comply with the permit provisions.

SWPPP Location Requirements:

The SWPPP is meant to be a working document that shall be maintained at the site of the construction at all times during the project. It shall be readily available upon request by the Operator's personnel, and shall be kept on site until the site complies with the Final Stabilization section of this document.

A sign must be posted at the main entrance of the construction site and inside the job trailer that indicates where the SWPPP is located at the site.

SECTION 3: SITE DESCRIPTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared to address stormwater runoff for the proposed is the construction of a 14,820 sf. pharmacy and associated parking, roadways, landscaping and BMPs. The proposed pharmacy will be located in the southwest corner of the site. To accommodate the proposed pharmacy, approximately 165' of the existing building will be removed and the adjacent parking lot area shall be redesigned. The remainder of the site will be unchanged. The overall project site is comprised of a 20.39± acre lot located at 9 Plaistow Road (Rt. 125) in Plaistow, New Hampshire.

The site is generally sloping from south to north and the soils consist of mostly fill material. The majority of the site is paved, with some areas of grass and woodland. There are two existing strip mall buildings located on site, with associated parking and landscaping areas. There is an existing stream and wetland system located in the northeast corner of the site. The existing impervious area on site is 528,354 sf. Existing vegetation is mostly secondary growth with some large mature stands of hardwoods and conifers

a. **Project Name:** Walgreens Pharmacy
Owner: Taurus Plaistow Investors
Limited Partnership
22 Batterymarch Street
Boston, MA 02109

Operator: Mark Donohoe
44 Brook Street
Manchester, MA 01944

b. **Project Description:** Proposed is the construction of a 14,820 sf. pharmacy and associated parking, roadways, landscaping and BMPs.

c. **Runoff Coefficient and Areas**

Pre-Development
Runoff Coefficient = 86 (average)
Site Area = 873,709 sf
Impervious Area = 528,354 sf (60.5%)

Post-Development
Runoff Coefficient = 87 (average)
Site Area = 888,498 sf
Impervious Area = 554,729 sf (62.4%)
Area of Disturbance = 100,188 sf +/-

d. **Sequence of Major Activities:**

1. Install stabilized construction entrances.
2. Prepare temporary parking and storage area. Upon implementation and installation of the following areas: trailer, parking, lay down, wheel wash, concrete washout, masons area, fuel and material storage containers, solid waste containers, etc., denote them on the site maps immediately and note any changes in the locations as they occur throughout the construction process.
3. Construct the filter barriers on the site and at the perimeter prior to all earthmoving activities.
4. Clear and grub the site.

5. Construct the temporary sedimentation and sediment trap basins as necessary.

6. Construct stormwater detention areas and swales. Note, swales and detention areas shall be stabilized prior to directing stormwater to them.

7. Halt all activities and contact the civil engineering consultant to perform inspection of bmps. General contractor shall schedule and conduct storm water pre-construction meeting with engineer and all ground disturbing contractors before proceeding with construction.

8. Begin grading the site.

9. Start construction of building pad and structures.

10. Temporarily seed denuded areas. All cut and fill slopes shall be seeded / loamed within 72 hours of achieving finish grade.

11. Install building, utilities, storm sewers, curbs and gutters. Install inlet protection devices around all storm drain structures.

12. Install rip rap around outlet structures.

13. Finalize roadway grading, and prepare site for paving. Note, all roadways and parking lots shall be stabilized within 72 hours of achieving finish grade.

14. Pave site.

15. Complete finish grading and install permanent seeding and planting.

16. Once site is stabilized, remove all temporary erosion and sediment control devices (after approval by civil engineer, owner, town of Plaistow, and NHDES).

e. Receiving Waters: Kelly Brook & Seaver Brook

a. Stabilization

Temporary Stabilization

Shall be applied to areas where construction activities cease for more than 21 days shall be seed and mulch. The seed mixture is to be Rye applied at a rate of 120 pounds per acre. Prior to seeding, 2,000 pounds of ground agricultural limestone and 1,000 pounds of 10-10-10 fertilizer shall be applied to each area to be stabilized. After seeding, each area shall be mulched with 4,000 pounds of straw per acre. The straw mulch is to be tacked into place by a disk with blades set nearly straight. Areas of the site which are to be paved will be temporarily stabilized by applying geotextile and stone sub-base until bituminous pavement can be applied.

Permanent Stabilization

A. Stones and trash should be removed so as not to interfere with the seeding area.
B. Where the soil has been compacted by construction operations, loosen soil to a depth of 2 inches before applying fertilizer, lime and seed.
C. If applicable, fertilizer and organic soil amendments should be applied during the growing season.
D. Apply limestone and fertilizer according to soil test recommendations. If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 600 pounds per acre or 13.8 pounds per 1,000 square feet of low phosphate fertilizer (N-P2O5-K2O) or equivalent. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of 3 tons per acre (138 lb. Per 1,000 square feet).
E. Fertilizer should be restricted to a low phosphate, slow release nitrogen fertilizer

b. Structural BMPs

Reference:

New Hampshire Stormwater Management Manual, Volumes 2 & 3, December 2008 and *Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire,* August 1992.

Selection:

(Arranged according to function in Handbook)

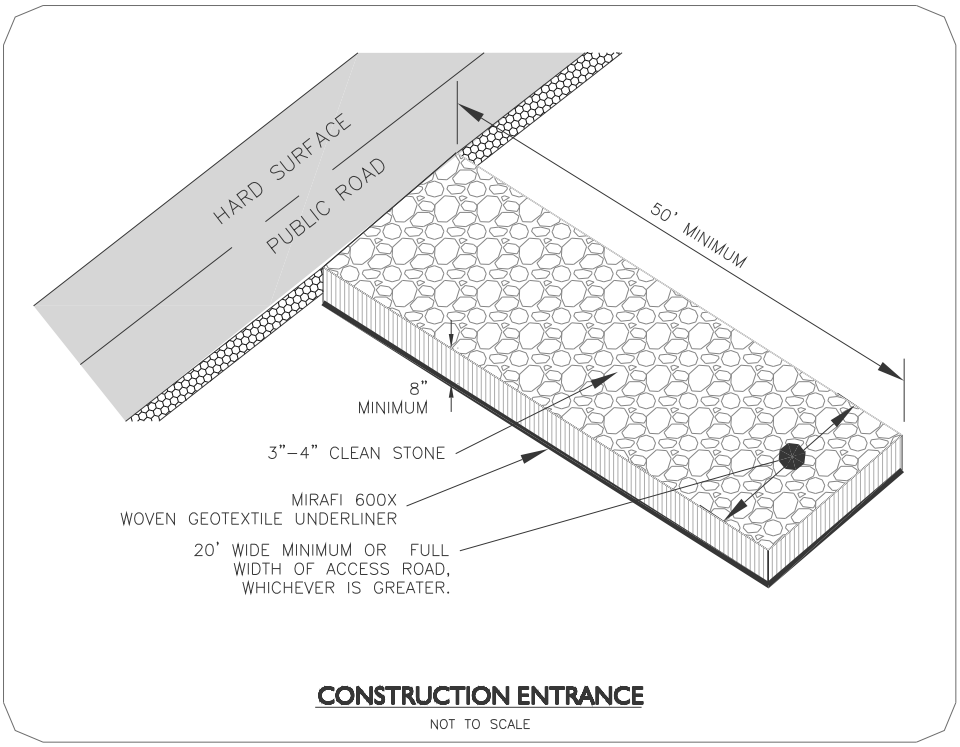
Erosion & Sediment Control	Flow Control	Water Quality Control
Temp. Construction Entrance		
Storm Drain Inlet Protection		
Silt Fence Barrier	Silt Fence Barrier	
Catch Basin Cleaning		
Seeding for long term cover		Seeding for long term cover
		Street Sweeping

Temporary Construction Entrance:

Design – the entrance was laid out such that loose debris, mud, silt, etc. would be removed from construction vehicles prior to exiting the site. This is a temporary measure and would be removed after construction is complete.

Construction - see *Plans*.

Maintenance – daily inspections during construction.

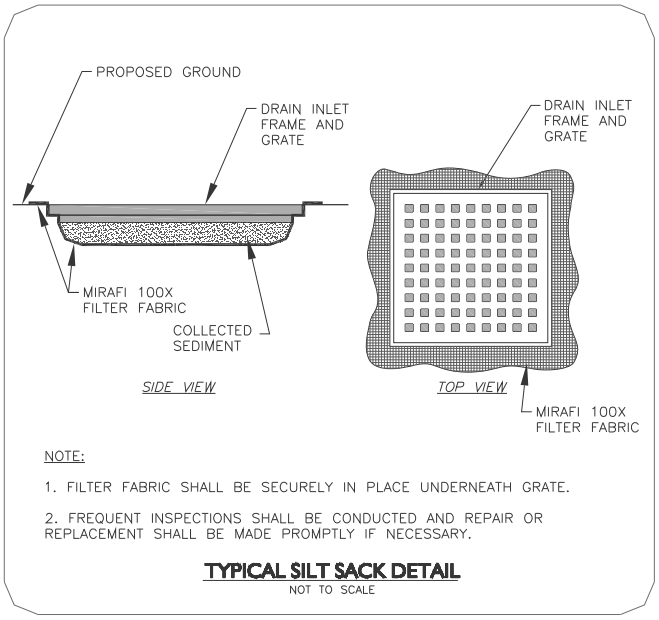


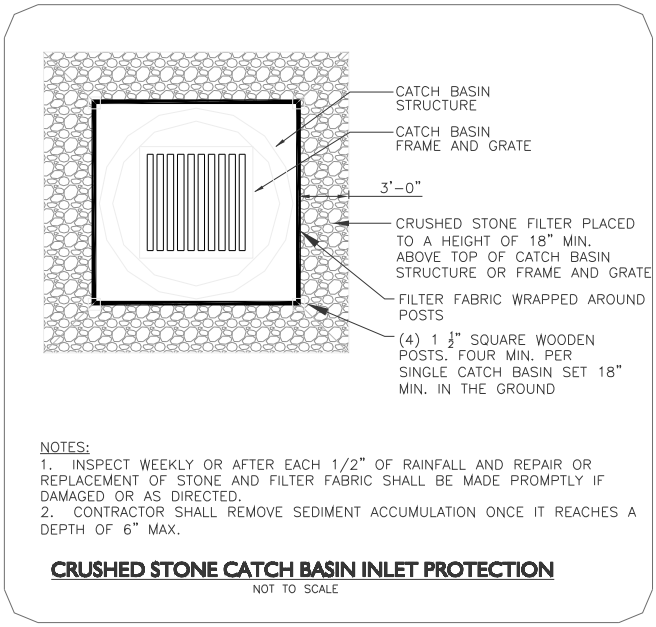
Storm Drain Inlet Protection:

Design – this protection measure would be applied at every catch basin, as recommended in the *Manual*. This is a temporary measure and would be removed after construction is complete.

Construction – see *Site Plan.*

Maintenance - daily inspections during construction.



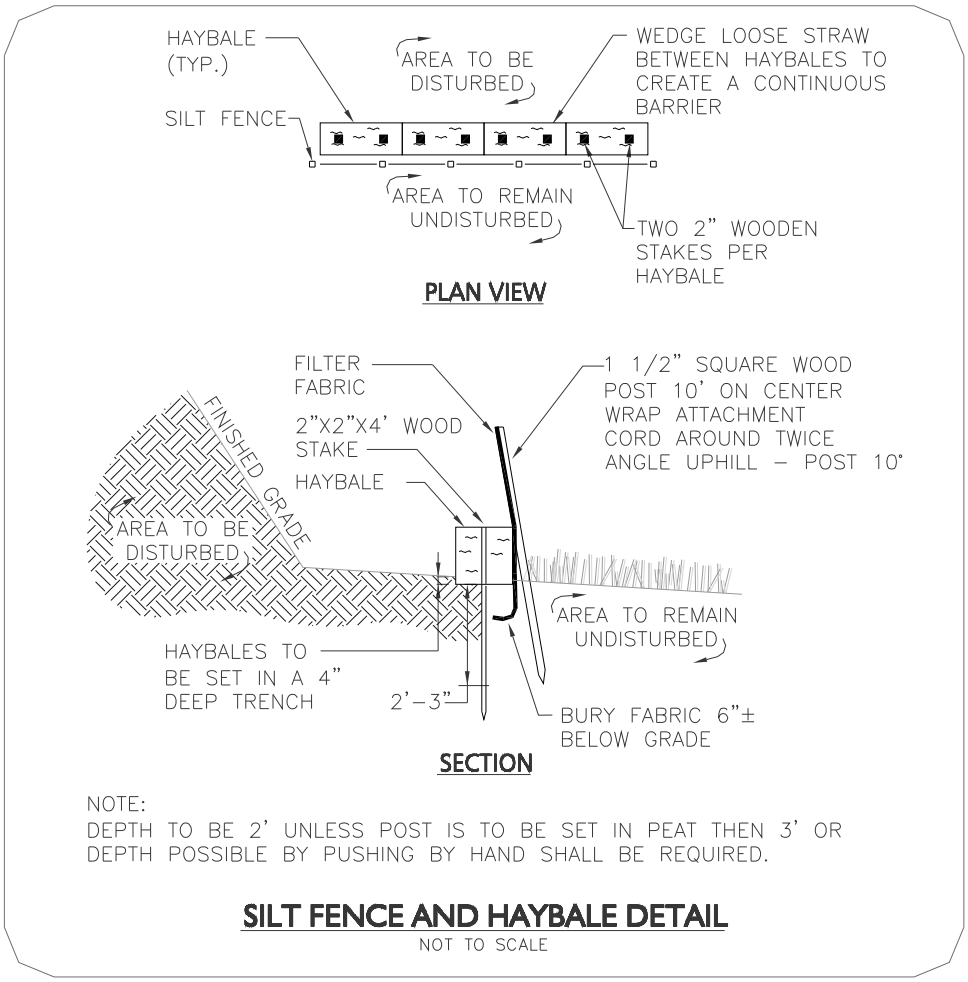


Temporary Silt Fence Barrier:

Design – the barrier was laid out such that it would be downhill from all construction activities, (see Site Plan). This would be a temporary measure and would be removed after construction activities are stabilized.

Construction – see Site Plan.

Maintenance – daily inspections during construction.



Catch Basin Cleaning:

During pre-construction operations, catch basins shall be protected utilizing a temporary catch basin sediment filter to be installed beneath the inlet grate. The filter shall be inspected on a weekly basis and after storm events producing an excess of 1" of rainfall. The filter shall be removed and cleaned of all accumulated sediment and debris when filter becomes 80% full.

During post-construction operations, deep sump catch basins shall be cleaned and inspected annually in the early spring. Sediment and debris shall be removed by mechanical means. Outlet pipes shall be flushed to point of discharge on the same frequency as mentioned above. Disposal of the accumulated sediment and hydrocarbons must be in accordance with applicable local, state, and federal guidelines and regulations.

Street Sweeping:

Sweeping should be conducted immediately following spring snowmelt to remove sand and other debris. Pavement surfaces may be swept at other times, basically for aesthetic reasons, such as in the fall after leaves have dropped to remove accumulated debris. Since contaminants accumulate within 12 inches of the curbline. Street cleaning operations should concentrate in cleaning curb and gutter lines for maximum pollutant removal efficiency. Other areas can also be swept periodically, probably on a less regular basis.

c. Storm Water Management

Reference:

1. *New Hampshire Stormwater Management Manual, Volumes 2 & 3, December 2008 and Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire, August 1992*
2. ***SCS - TR55*** (Second Ed., 1986) - for runoff curve numbers.
3. **SCS** - Rainfall Distribution Maps.

The proposed system is a combination of open and closed systems and includes grading the proposed driveway and parking areas such that flows would enter the detention basin. From the basin, the water would be released to a small sediment basin. From the basin the water would be released off-site.

Methodology:

The overall project is designed using proven and accepted methods consisting of a closed drainage system incorporating catch basin inlets and underground infiltration/detention systems. The analysis points were maintained in both pre and post conditions while the drainage patterns were maintained were possible. The methodology is SCS TR-20, Type III rainfalls (2, 10, 25, 50 & 100 year events). This is consistent with the requirements of the State of New Hampshire. All pertinent calculations represented in the following pages were developed utilizing HydroCAD Storm water modeling software.

Because construction sites have the potential to generate a wide range of materials and wastes, good housekeeping practices should be in place to reduce contaminants from entering stormwater.

a. Material Handling and Waste Management

Material handling procedures should be established for paving material and vegetation removed from the area being cleared and graded.

Construction materials that will be used and activities that will be performed in association with the clearing and grading that have the potential to contribute pollutants and sediment to stormwater runoff include the following:

WASTE MATERIALS

- Solid Waste will be collected and stored in a secure dumpster at the site. The dumpster shall meet all local and state solid waste management regulations. Only construction debris and trash will be deposited in the dumpster. No construction materials will be buried on-site.
- The dumpsters will be inspected weekly and immediately after storm events. The dumpster will be emptied weekly and taken to the appropriate landfill. If trash and construction debris are exceeding the dumpster's capacity, the dumpsters will be emptied more frequently.

VEHICLE AND EQUIPMENT FUELING

- For this project, vehicles used daily to access the site by workers will not be fueled at the site. If this practice changes, refueling should be conducted in the staging area so any release can be confined and addressed immediately and efficiently.
- If refueling of equipment at the site is required, it too should be conducted within the staging area.
- If refueling cannot be conducted at the staging area, a spill response kit should be easily accessible during the refueling process.
- Refueling cannot take place within 100 feet of a sensitive area such as brooks or BVW.

VEHICLE AND EQUIPMENT MAINTENANCE

- • Vehicle and equipment procedures should follow the same steps as outlined in the above section related to vehicle and equipment fueling.

HAZARDOUS MATERIALS

- These materials are associated with vehicle and equipment that will be used on site and include diesel fuel, gasoline, motor oil, hydraulic oil, and machine grease.
- If hazardous materials must be stored on site, they will be stored at the staging area in appropriate and clearly marked containers and segregated from other non-water materials. Secondary containment will be provided for all hazardous waste materials and they will be placed on an in secondary containment on a commercially available spill pallet.

SANITARY WASTE

- Sanitary facilities (portable toilet) will be provided at the site staging area throughout the construction phase if access to the site building is not available.

b. Establish Proper Building Material Staging Areas

Materials and temporary equipment will be stored in the designated staging areas. A continuous line of straw bales and silt fencing shall be placed around any stockpile of topsoil or other earth material, as needed. Stockpiles are not to be stored in or near resource areas and any stockpile that is not utilized **for a period of 14 days** shall be stabilized with mulch used as a temporary cover to prevent both erosion and blowing of materials. **For periods of 20 days or more**, stockpiles will be hydroseeded.

c. Designate Washout Areas

If any washout areas are required for concrete or paint during the construction process a designated area will be established in the staging area. While this is not anticipated for this project, the following should be implemented if a change in the project scope occurs. If a washout area is incorporated into the project plans, it will be identified on the proper site plan and included in the SWPPP.

- Washout of concrete trucks or paint materials will be conducted in a designated location in the staging area.
- These areas must be self contained and not connected to any stormwater outlet or discharge point at the site.
- Adequate containment for the amount of water to be used will be established.
- Washout structures will be inspected daily and material removed from the structure for proper disposal as needed, following the evaporation of the water.
- If paints are used at the site they will be tightly sealed and stored in containers. Excess paint will be disposed of in accordance with the manufacturer's instructions and state and local regulations.

d. Control Equipment/Vehicle Washing

Vehicle washing will not be conducted at the site as part of this project.

e. Discharge Reporting

If a discharge occurs, or if the project receives a written notice or order from any regulatory agency, the contractor will immediately notify the Site Operator. A written report discussing the discharge will also be submitted to the Site Operator within 2 days of the discharge event, notice, or order.

<u>Discharges requiring reporting include:</u>

- Stormwater from a disturbed soil area discharged to a waterway without treatment by a temporary construction BMP;
- Non-stormwater, except conditionally exempted discharges, discharged to a waterway or a storm drain system, without treatment by an approved control measure (BMP);
- Stormwater discharged to a waterway or a storm drain system where the control measures (BMPs) have been overwhelmed or not properly maintained or installed;
- Stormwater runoff containing hazardous substances from spills discharged to a waterway or storm drain system (the contractor is required to make any hazard spill reporting requirements to state and local agencies immediately after discovery of a reportable spill);
- Other discharge reporting as directed by the proponent's consultant.

The report to the Site Operator will contain the following information:

- The date, time, location, nature of the operation, and the type or unauthorized discharge, including the cause or nature of the notice or order,
- The control measures (BMPs) deployed prior to the discharge event, or prior to receiving notice or order,
- The date of deployment and type of control measures (BMPs) deployed after the discharge event, or after receiving the notice or order, including additional measures installed or planned to reduce or prevent re-occurrence, and
- An implementation and maintenance schedule for any affected BMPs.

f. Spill Prevention, Control and Response Plan

Contractor's vehicles that will be used during construction activities are equipped with spill response kits having the appropriate materials to respond and cleanup a spill. These will be maintained at all times by the contractor. Appropriate equipment may include booms, gloves, goggles, kitty litter, sand, sawdust, plastic and metal containers, rags and mops.

While it is not anticipated that hazardous materials will need to be stored on site as part of the project, the following practices will be implemented to prevent spills and to address a spill if it occurs.

- Any hazardous materials will be stored in accordance with any manufacturer's recommended storage procedures.
- If hazardous materials are stored on site, a spill kit will be kept at the storage area.
- If a spill or release occurs it will be addressed immediately after discovery and the materials disposed of properly.
- Spill areas will be kept well ventilated and personnel will be required to wear the appropriate protective clothing.
- A spill report must be prepared describing the spill, how the spill was addressed, what caused the release and how the clean up was implemented. The spill prevention plan will then need to be updated so that a similar instance does not occur.
- The contractor's site supervisor will be responsible for day-to-day operations; will be the spill prevention and cleanup coordinator. The contractor is responsible for ensuring that the site superintendent has had the proper training in spill management, hazardous materials handling and clean-up responses.

If a release occurs that is equal to or in excess of a reportable quantity (RQ) established under either 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302, Facility personnel must notify the **National Response Center (NRC) at 1-800-424-8802** as soon as knowledge of the discharge is identified.

<u>SPILLS REACHING SURFACE WATERS</u>

In the event that product has been released and reached either surface waters, jurisdictional wetlands, the following agencies shall be notified:

OIL COMPLIANCE SECTION
NH DEPARTMENT OF ENVIRONMENTAL SERVICES
HAZEN DRIVE CONCORD, NH 03301
603-271-3441 OR 24 HRS A DAY: 1-800-346-4009

NEW HAMPSHIRE STATE POLICE
1-800-622-2394
24 HRS A DAY: 271-3636

U.S. EPA
J.F.K. FEDERAL BUILDING BOSTON, MA 02203 617-223-7265

REQUIRED REPORTING
If two spill events reach a surface water and occur within a twelve month period, or if one spill event involving 1,000 gallons or more reach a surface water, an expanded report is required to be filed by the owner within 60 days of the event. The report is to be submitted to the U.S. E.P.A. Regional Administrator and the N. H. Department of Environmental Services, Water Division.
If greater than 25 gallons of product has been released, the following shall be notified:

OIL COMPLIANCE SECTION
NH DEPARTMENT OF ENVIRONMENTAL SERVICES
HAZEN DRIVE CONCORD, NH 03301
603-271-3644
OR 24 HRS A DAY 800-346-4009

If less than 25 gallons of product has been released, it has been immediately contained, and removed within 24 hours with no impact on either ground water or surface water, the NH Department of Environmental Services need not be notified.

g. Allowable Non-Stormwater Discharge Management

The allowable non-stormwater discharges permissible under Part 1.3B of EPA's CPG, and that are applicable to this project, are listed below and the measures used to eliminate or reduce them and to prevent them from becoming contaminated:

1. Discharges from fire-fighting activities
2. Fire hydrant flushing's
3. Waters used to wash vehicles where detergents are not used
4. Water used to control dust in accordance with EPA's CGP, Part 3, Subpart 3.4.G
5. Potable water including uncontaminated water line flushing's
6. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used
7. Uncontaminated excavation dewatering
8. Landscape irrigation

While these discharges are permissible, steps should be taken to eliminate or reduced these activities to the extent possible. Appropriate pollution prevention measures for the non-stormwater components of the discharge must be implemented.

a. Construction

Construction will begin after November 14, 2012 and should be completed by September 2013.

b. BMP implementation

- See "Erosion and Sedimentation Control General Notes" which are to be an integral part of this process.
- Install construction entrance, silt fencing and other perimeter control BMP practices as per details and at locations shown on the drawings -prior to earth moving operations. Maintain regularly to prevent sediment migration.
- Clear and grub area. Dispose of debris in appropriate facilities.
- Strip and stockpile topsoil. Stabilize stockpiles of soil construction material by providing silt fencing on downslope sidesLimit total area to be disturbed during construction of the site as much as practicable, before disturbed areas are stabilized. All disturbed areas shall be stabilized within 72 hours after final grading.
- Remove and stockpile materials as required. Stockpile shall be surrounded with haybales to prevent erosion. Stockpile areas are limited and thus management of materials will be required.

c. Inspections

- The construction entrance would be inspected on a daily basis by the contractor. All structural BMPs shall be inspected every 7 days. These inspections and repairs will be recorded in the Inspection Logs herein.
- The BMPs installed as part of this project shall be maintained in good working order at all times during the reconstruction project. A Stormwater Construction Site Inspection Report is presented in Appendix A.

Inspection Personnel:

- Taurus Plaistow Investors Limited Partnership or its designee will be responsible for inspections and overall construction oversight. At the start of site work, and may name a site supervisor to perform the inspection tasks. If so, a Delegation of Authority Form should be signed and the SWPPP amended at that time.
- An independent erosion control monitor should be identified to work with the contractor, providing suggestions and information related to stormwater control during the construction activities. Site inspections by the independent monitor should be conducted once a week.

Project Inspection Oversight:

Mark Donohoe
44 Brook Street
Manchester, MA 01944
Email: mdonohoe@selectreinv.com
Cell: (617) 407-6676

Daily/Weekly Inspection Oversight:

Michael Malynowski, PE CPESC
Allen & Major Associates, Inc.
250 Commercial Street
Suite 1001
Manchester, NH 03101
Email: mmalynowski@allenmajor.com
Cell: 781-640-7650

SECTION 7: INSPECTIONS AND OVERSIGHT

- Inspections will be performed at least once every 14 days and within 24 hours of a storm > 0.5".
- Upon discovery of a malfunction or damage, the BMP shall be immediately repaired.
- Silt fence will be inspected for depth of sediment, tears, and secure placement. Upon discovery of silt build-up to more than 1/3 of effective height, silt will be removed and fence re-secured.
- The sedimentation basin will be inspected for depth of sediment, and when silt reaches 10% of design capacity, or at end of job, it will be cleaned.
- Temporary and permanent seeding and plantings will be inspected for bare spots, washouts, and healthy growth.
- During each inspection, the Inspection Log shall be completed.
- Inspectors for the Operator shall be trained and responsible for all documentation.

SECTION 8: POLLUTION PREVENTION:

a. Inventory of Materials:

- Concrete
- Wood
- Masonry (blocks, etc.)
- Detergents/cleaning solvents
- Paints (enamel and latex)
- Metal studs/nails/building panels
- Tar/adhesives
- Fertilizers
- Petroleum based products (oil/gas)

b. Spill Prevention Practices

- Only enough product as required for the job will be stored on site.
- All materials will be stored in neat, orderly areas in appropriate containers as recommended by the product manufacturers. Whenever possible, a secure, roofed structure will be used for such storage.
- Unused materials will be kept in the original manufacturer's containers.
- Original material package safety & instruction labels shall be retained.
- Mixing materials will only be done as recommended by the manufacturer.
- When possible, all of a product will be used prior to disposing of container.
- Manufacturer's instructions for proper use and disposal will be followed.
- A contractors' designee will be responsible for daily inspection of use and disposal of materials on site.

c. Spill Control & Clean-up

- Manufacturer instructions for spill cleanup will be clearly posted on site, and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment needed to cleanup spills will be kept near the material storage area(s) on site.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury.
- Spill of toxic or hazardous materials will be reported to the appropriate state or local government agency, regardless of size.
- The spill prevention plan will be adjusted to include measures to prevent spills from reoccurring.
- A description of the spill, what caused it, and the cleanup measures will be recorded in the inspection logs.
- One of the site operators will designate individuals to be responsible for various aspects of prevention and cleanup. These individuals will be trained to identify proper or improper storage and handling of the materials and to initiate appropriate cleanup procedures when required. These individuals' names will be posted at material storage areas.

SECTION 9: RECORD KEEPING & CERTIFICATIONS

6.1 Recordkeeping

The following records shall be maintained per Part 3.4 C of the Construction General Permit and attached to this SWPPP by the Contractor:

- The dates when major grading activities occur.
- The dates when construction activities temporarily or permanently cease on a portion of the site,
- The dates when stabilization measures are initiated,
- A copy of the construction general permit,
- A copy of the letter from EPA notifying you of their receipt of your complete NOI application,
- Inspection reports; and
- Records relating to endangered species.

Records should be maintained for a minimum of 3 years.

Compliance with Federal, State & Local Regulations:

This storm water pollution prevention plan complies with state requirements established for Site Specific Permits in the ***Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire***, and applicable requirements for storm water management and erosion and sediment control in the local bylaws**.**

Pollution Prevention Plan 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 gathered and evaluated the information submitted. Bases on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed: _____ Date: _____

Printed Name: Michael Malynowski, PE CPESC
Title/Position: Project Manager

Contractor Certification:

I certify under penalty of law that I understand the terms and conditions of the general National Pollution Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activities from the construction site identified herein.

Signed: _____ Date: _____

Printed Name: _____
Title/Position: _____
Company: _____

APPENDIX A

FORMS

NPDES FORM 3510-9		UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER AN NPDES GENERAL PERMIT	Form Approved. OMB Nos. 2040-0004

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the operator identified in Section II of this form meets the eligibility requirements of Parts 1.1 and 1.2 of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in Part 8 of the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form.

I. Approval to Use Paper NOI Form

Have you been given approval from the Regional Office to use this paper NOI form*? ☐ Yes ☐ NO

If yes, provide the reason you need to use this paper form, the name of the EPA Regional Office staff person who approved your use of this form, and the date of approval:

Reason for using paper form:

Name of EPA staff person:

Date approval obtained:

*** Note: You are required to obtain approval from the applicable Regional Office prior to using this paper NOI form.**

II. Permit Information: Tracking Number (EPA Use Only) NHR12A639

Permit Number: NHR120000 (see Appendix B of the CGP for the list of eligible permit numbers)

III. Operator Information

Name: Mark Donohoe

Phone: 617-407-6676 Fax (Optional):

Email: mdonohoe@selectreinv.com

IRS Employer Identification Number (EIN):

Point of Contact (First Name, Middle Initial, Last Name): Mark Donohoe

Mailing Address:

Street: 44 Brook Street

City: Manchester State: MA Zip: 01944

NOI Preparer (Complete if NOI was prepared by someone other than the certifier):

Prepared by (First Name, Middle Initial, Last Name): Michael Malynowski

Organization: Allen & Major Assoc.

Phone: Fax (Optional):

E-mail: mmalynowski@allenmajor.com

IV. Project/Site Information

Project/Site Name: Walgreens Pharmacy

Project/Site Address:

Street/Location: 9 Plaistow Road

City: Plaistow State: NH Zip: 03865

County or similar government subdivision: Rockingham

For the project/site for which you are seeking permit coverage, provide the following information:

Latitude/Longitude (Use one of three possible formats, and specify method)

Latitude	1. _____	N(degrees, minutes, seconds)	Longitude	1. _____	W(degrees, minutes, seconds)
	2. 42,48,9420	N(degrees, minutes, decimal)		2. 71,06,1350	W(degrees, minutes, decimal)
	3. _____	N(degrees, decimals)		3. _____	W(degrees, decimals)

Latitude/Longitude Data Source: ☐ U.S.G.S topographical map ☐ EPA Web Site ☐ GPS ☑ Other: USGS Website

If you used a U.S.G.S. topographic map, what was the scale?

Horizontal Reference Datum: ☐ NAD 27 ☐ NAD 83 or WGS 84 ☑ Unknown

Is your project/site located in Indian Country lands, or located on a property of religious or cultural significance to an Indian tribe? ☐ Yes ☑ No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property:

Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? ☐ Yes ☑ No

Estimated Project Start Date: 11/01/2012 Estimated Project Completion Date: 08/01/2013

Estimated Area to be Disturbed (to the nearest quarter acre): 1.5

Have earth-disturbing activities commenced on your project/site? ☐ Yes ☑ No

If yes, is your project an emergency-related project? ☐ Yes ☑ No

Have stormwater discharges from your project/site been covered previously under an NPDES permit? ☐ Yes ☑ No

If yes, provide the Tracking Number if you had coverage under EPA's CGP or the NPDES permit number if you had coverage under an EPA individual permit:

V. Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☑ No

Are there any surface waters within 50 feet of your project's earth disturbances? ☐ Yes ☑ No

Receiving Waters and Wetlands Information: (Attach a separate list if necessary)

Surface water(s) to which discharge	Impaired Water	Listed Water Pollutant(s)	Tier 2, 2.5 or 3	Source	TMDL Name and Pollutant
Kelly Brook-Seaver Brook	No		No	NHDES's Web GIS OneStop program	

Describe the methods you used to complete the above table: Please refer to the Source(s) in the above table.

VI. Chemical Treatment Information

Will you use polymers, flocculants, or other treatment chemicals at your construction site? ☐ Yes ☑ No

If yes, will you use cationic treatment chemicals* at your construction site? ☐ Yes ☐ No

If yes, have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI*? ☐ Yes ☐ No

If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

Please indicate the treatment chemicals that you will use:

* Note: You are ineligible for coverage under this permit unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

VII. Stormwater Pollution Prevention Plan (SWPPP) Information

Has the SWPPP been prepared in advance of filing this NOI? ☑ Yes ☐ No

SWPPP Contact Information:

First Name, Middle Initial, Last Name: Michael Malynowski

Organization: Allen & Major Assoc.

Phone: 603-627-5500 Fax (Optional):

E-mail: mmalynowski@allenmajor.com

VIII. Endangered Species Protection

Using the instructions in Appendix D of the CGP, under which criterion listed in Appendix D are you eligible for coverage under this permit (only check 1 box)?

☑ A ☐ B ☐ C ☐ D ☐ E ☐ F

Provide a brief summary of the basis for criterion selection listed in Appendix D (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service, specific study):NHB

If you select criterion B, provide the Tracking Number from the other operator's notification of authorization under this permit:

If you select criterion C, you must attach a copy of your site map (see Part 7.2.6 of the permit), and you must answer the following questions:

What federally-listed species or federally-designated critical habitat are located in your "action area":

What is the distance between your site and the listed species or critical habitat (miles):

If you select criterion D, E, or F, attach copies of any letters or other communications between you and the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

IX. Historic Preservation

Are you installing any stormwater controls as described in Appendix E that require subsurface earth disturbance? (Appendix E, Step 1) ☑ Yes ☐ No

If yes, have prior surveys or evaluations conducted on the site have already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix E, Step 2) ☑ Yes ☐ No

If no, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? (Appendix E, Step 3) ☐ Yes ☐ No

If no, did the SHPO, THPO, or other tribal representative (whichever applies) respond to you within the 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? (Appendix E, Step 4) ☐ Yes ☐ No

If yes, describe the nature of their response:

☐	Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions.
☐	No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls.
☐	Other: ____

X. Certification Information

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 gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: Michael Malynowski

Title: Project Manager

Signature: Date: Friday, October 26, 2012

E-mail: mmalynowski@allenmajor.com

Stormwater Construction Site Inspection Report

General Information			
Project Name	Walgreens Pharmacy		
NPDES Tracking No.	NHR12A639	**Location**	5-9 Plaistow Road - Plaistow, NH
Date of Inspection		**Start/End Time**	
Inspector's Name(s)	Michael A. Malynowski, PE CPESC		
Inspector's Title(s)	Professional Engineer / SWPPP Preparer		
Inspector's Contact Information	250 Commercial Street - Manchester, NH t: 603-627-5500 c: 781-640-7650 e: mmalynowski@allenmajor.com		
Describe present phase of construction			

Type of Inspection

☐ **Regular** ☐ **Pre-storm event** ☐ **During storm event** ☐ **Post-storm event**

Weather Information

Current Conditions:

Has it rained since the last inspection? ☐ Yes ☐ No

Storm Start Date & Time **Storm Duration (hrs):** **Approximate Rainfall (in):**

Do you suspect that untreated discharges may have occurred since the last inspection?
☐ **Yes** ☐ **No**

If Yes describe:

Are there any untreated discharges at the time of inspection?
☐ Yes ☐ No

If Yes describe:

Site-specific BMPs

Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of this numbered site map with you during your inspections. This list will help ensure that you are inspecting all required BMPs at your site. Customize this section as needed.

	BMP Description	If Required, is BMP Installed?	BMP Maintenance Required?	Corrective Action Needed Including contact follow-up
1	Overall Site Construction Activities	☐ Yes ☐ No	☐ Yes ☐ No	
	Haybale / Silt Fence Barrier	☐ Yes ☐ No	☐ Yes ☐ No	
	Construction Entrance	☐ Yes ☐ No	☐ Yes ☐ No	
	Stockpile protection	☐ Yes ☐ No	☐ Yes ☐ No	
	Inlet Projection	☐ Yes ☐ No	☐ Yes ☐ No	
		☐ Yes ☐ No	☐ Yes ☐ No	

	BMP Description	If Required, is BMP Installed?	BMP Maintenance Required?	Corrective Action Needed Including contact follow-up
2	Deep Sump Catch Basin			
	• Grates clear of debris	☐ Yes ☐ No	☐ Yes ☐ No	
	• Inlet and outlet clear of debris	☐ Yes ☐ No	☐ Yes ☐ No	
	• Clear of oil or grease	☐ Yes ☐ No	☐ Yes ☐ No	
	• Flow clear of siltation	☐ Yes ☐ No	☐ Yes ☐ No	
3	Subsurface Detention System			
	• Inlet/Inflow pipes clear of debris	☐ Yes ☐ No	☐ Yes ☐ No	
	• Overflow clear of debris	☐ Yes ☐ No	☐ Yes ☐ No	
	• Outlet clear of debris	☐ Yes ☐ No	☐ Yes ☐ No	
	• Other (specify)	☐ Yes ☐ No	☐ Yes ☐ No	
4	Water Quality Unit			
	• Inlet/Inflow pipes clear of debris	☐ Yes ☐ No	☐ Yes ☐ No	
	• Overflow clear of debris	☐ Yes ☐ No	☐ Yes ☐ No	
	• Outlet clear of debris	☐ Yes ☐ No	☐ Yes ☐ No	
	• Other (specify)	☐ Yes ☐ No	☐ Yes ☐ No	

ADDITIONAL COMMENTS

Overall Site Issues

	BMP/activity	Implemented, if required?	Maintenance required?	Corrective Action
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐ Yes ☐ No	☐ Yes ☐ No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐ Yes ☐ No	☐ Yes ☐ No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☐ Yes ☐ No	☐ Yes ☐ No	
4	Are discharge points and receiving waters free of sediment deposits?	☐ Yes ☐ No	☐ Yes ☐ No	
5	Are storm drain inlets properly protected?	☐ Yes ☐ No	☐ Yes ☐ No	
6	Is the construction entrance preventing sediment from being tracked into the street?	☐ Yes ☐ No	☐ Yes ☐ No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☐ Yes ☐ No	☐ Yes ☐ No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐ Yes ☐ No	☐ Yes ☐ No	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐ Yes ☐ No	☐ Yes ☐ No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐ Yes ☐ No	☐ Yes ☐ No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☐ Yes ☐ No	☐ Yes ☐ No	
12	Other?	☐ Yes ☐ No	☐ Yes ☐ No	

Check Box If Compliance is Apparent:

☐ As of the date of this inspection, this project appears to be in compliance with the terms of its Storm Water Pollution Prevention Plan and the current Construction General Permit.

If you don't check the box above, then describe the incident(s) of non-compliance and the tasks that are needed to bring the project into compliance.

Describe any incidents of non-compliance not described above:

Certification statement:

"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 gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: _____

Signature: _____ Date: _____

Copies to:

☐ Contractor: Timothy Doyle (timothy.doyle@torreyco.com)
Wally Frink (Wally.Frink@torreyco.com)

☐ Coordinator: Mark Donohoe (mdonohoe@selectreinv.com)

☐ Town: Steve Reichert (stever@cldengineers.com)

☐ Owner: Ed Vydra (evydra@tiholdings.com)

CORRECTIVE ACTION LOG

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

SWPPP AMENDMENT LOG

Date	Changes to SWPPP	By

CONSTRUCTION ACTIVITIES LOG

Date	Activity

SUBCONTRACTOR CERTIFICATIONS

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: ***Permit Tracking Number: NHR12A639***

Project Title: ***Walgreens Pharmacy construction site located at 5-7 Plaistow Road, Plaistow, NH***

Operator(s):

Mark Donohoe
Select Real Estate Consulting, Inc.
44 Brook Street
Manchester, MA 01944
Email: mdonohoe@selectreinv.com
Cell: (617) 407-6676

Timothy Doyle
The Torrey Company
25 Messenger Street
Plainville, MA 02762
Email: (timothy.doyle@torreyco.com)
P: 508-695-6005 F: 508-695-2123

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____

DELEGATION OF AUTHORITY

I, ***Mark Donohoe*** , hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit ***(Permit Tracking Number: NHR12A639),*** at the ***Walgreens Pharmacy construction site located at 5-7 Plaistow Road, Plaistow, NH***. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

Timothy Doyle (timothy.doyle@torreyco.com)
The Torrey Company
25 Messenger Street
Plainville, MA 02762
P: 508-695-6005 F: 508-695-2123

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix I of EPA's Construction General Permit (CGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix I.

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 gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Mark Donohoe
Select Real Estate Consulting, Inc.
44 Brook Street
Manchester, MA 01944
Email: mdonohoe@selectreinv.com
Cell: (617) 407-6676

Name: Mark Donohoe

Signature: MD

Title: President

Date: 11/21/12

APPENDIX B

SUPPORT DOCUMENTATION

The State of New Hampshire
Department of Environmental Services
Thomas S. Burack, Commissioner

Celebrating 25 Years of Protecting New Hampshire's Environment

August 20, 2012

Taurus Investment Holdings, LLC
Attn: Edward Vydra
22 Batterymarch Street
Boston, MA 02109

Re: Plaistow Road Plaza Walgreens
Plaistow, NH
Tax Map/Lot #: 24/38

Permit: AoT-0461

Dear Mr. Vydra:

Based upon the plans and application, approved on August 20, 2012, we are hereby issuing RSA 485-A:17 Alteration of Terrain Permit AoT-0461. This permit is subject to the following conditions:

1. Activities shall not cause or contribute to any violations of the surface water quality standards established in Administrative Rule Env-Wq 1700.

2. You must submit revised plans for permit amendment prior to any changes in construction details or sequences. You must notify the Department in writing within ten days of a change in ownership.

3. You must notify the Department in writing prior to the start of construction and upon completion of construction. Forms are available at: http://des.nh.gov/organization/divisions/water/aot/categories/forms.htm.

4. The approved plans, dated July 27. 2012, and supporting documentation in the permit file are a part of this approval.

5. **This permit expires on August 20, 2017.** No earth moving activities shall occur on the project after the expiration date unless the permit has been extended by the Department. If requesting an extension, the request must be received by the department before the permit expires. The Amendment Request form is available at: http://des.nh.gov/organization/divisions/water/aot/categories/forms.htm.

6. This permit does not relieve the applicant from the obligation to obtain other local, state or federal permits that may be required (e.g., from US EPA, US Army Corps of Engineers, etc.). Projects disturbing over 1 acre may require a federal stormwater permit from EPA. Information regarding this permitting process can be obtained at: http://des.nh.gov/organization/divisions/water/stormwater/construction.htm.

7. No construction activity shall occur until a Wetland Permit is obtained from the Department, if applicable.

Sincerely,

Craig D. Rennie, CWS, CWB
Land Resource Specialist

cc: Plaistow Planning Board
Allen & Major Associates, Inc. (email)

New Hampshire Natural Heritage Bureau

To: Matthew Routhier
250 Commercial Street
Suite 1001
Manchester, NH 03101

Date: 5/3/2012

From: NH Natural Heritage Bureau

Re: Review by NH Natural Heritage Bureau of request dated 5/3/2012

NHB File ID: NHB12-1031

Applicant: Matthew Routhier

Location: Tax Map(s)/Lot(s): map 24 lot 36
Plaistow

Project Description: Remove existing portion of building near Haseltine and build new 14,000 S.F. free standing building and parking

The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

This report is valid through 5/2/2013.

Department of Resources and Economic Development
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DRED/NHB
PO Box 1856
Concord NH 03302-1856

MAP OF PROJECT BOUNDARIES FOR NHB FILE ID: NHB12-1031

Department of Resources and Economic Development
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DRED/NHB
PO Box 1856
Concord NH 03302-1856

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources
State Historic Preservation Office
Attention: Review & Compliance
19 Pillsbury Street, Concord, NH 03301-3570

RECEIVED
MAY 10 2012

DHR Use Only	
R&C #	3824
Log In Date	5/10/12
Response Date	5/15/
Sent Date	5/16/12

Request for Project Review by the New Hampshire Division of Historical Resources

☐ This Project is funded by the American Recovery and Reinvestment Act of 2009

☒ This is a new submittal ☐ This is additional information relating to DHR Review #:

GENERAL PROJECT INFORMATION

Project Title Walgreens Pharmacy

Project Location Plaistow

Tax Map & Lot # Map 24 Lot 36

NH State Plane - Feet Geographic Coordinates: Easting 115670 Northing 1135783 WGS84 datum
(see RPR Manual and R&C FAQ's for help accessing this data)

Lead Federal Agency EPA-NPDES
(Agency providing funds, licenses, or permits)
Permit or Job Reference #

State Agency and Contact (if applicable) NH Alteration of Terrain
Permit or Job Reference #

APPLICANT INFORMATION

Applicant Name TAURUS PLAISTOW INVESTORS LIMITED PATNERSHIPS

Street Address 22 BATTERYMARCH STREET Phone Number 6173574440

City Boston State MA Zip 02109 Email evydra@tiholdings.com

CONTACT PERSON TO RECEIVE RESPONSE

Name/Company Matthew Routhier C/O Allen & Major Associates, Inc.

Mailing Address 250 Commercial Street, Suite 1001 Phone Number 6036275500

City Manchester State NH Zip 03101 Email mrouthier@allenmajor.com

Thank You

Please refer to the Request for Project Review manual for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Include a self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, the Division of Historical Resources (DHR) may require additional information to complete our review. All items and supporting documentation submitted with a review request, including photographs and publications, must be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process, please visit our website at: www.nh.gov/nhdhr/review or contact the R&C Specialist at 603.271.3558.

PROJECT BOUNDARIES AND DESCRIPTION

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION

REQUIRED

☒ Attach the relevant portion of a 7.5' USGS Map (photocopied or computer-generated) ***indicating the defined project boundary.***

☒ Attach a detailed written description of the proposed project. Include: (1) a narrative description of the proposed project; (2) site plan; (3) photos and description of the proposed work if the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures; and (4) a photocopy of the relevant portion of a soils map (if accessible) for ground-disturbing projects.

Architecture

Are there any buildings or structures within the project area? ☒ Yes ☐ No

If yes, submit all of the following information:

Approximate age(s): 19-23 years

☒ Photographs of ***each*** building located within the project area along with a photo key. Include streetscape images if applicable. (Digital photographs are accepted. All photographs must be clear, crisp and focused)

☐ DHR file review conducted on Provide file review results in project narrative.

Please note that as part of the review process, the DHR may request an architectural survey or other additional information.

Archaeology

Does the proposed undertaking involve ground-disturbing activity? ☒ Yes ☐ No

If yes, submit all of the following information:

☒ Project specific map and/or preliminary site plan that fully describes the project boundaries and areas of proposed excavation.

☒ Description of current and previous land use and disturbances.

☒ Any available information concerning known or suspected archaeological resources within the project area.

Please note that as part of the review process, the DHR may request an archaeological survey or other additional information.

DHR COMMENT

This Space for Division of Historical Resources Use Only

☐ No Potential to cause Effects ☐ Additional information is needed in order to complete our review

☐ No Adverse Effect ☑ No Historic Properties Affected ☐ Adverse Effect

Comments: _____

If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

Authorized Signature: _____ Date: 15 May 12

APPROVAL FOR CONSTRUCTION

C/2012109204

N.H. DEPARTMENT OF ENVIRONMENTAL SERVICES
SUBSURFACE SYSTEMS BUREAU
P.O. BOX 95, 29 HAZEN DRIVE, CONCORD, NH 03302-0095

CA2012109204
APPROVAL NO.

THE PLANS AND SPECIFICATIONS FOR SEWAGE OR WASTE DISPOSAL SYSTEM SUBMITTED FOR:

OWNER: TAURUS INVESTMENT HOLDINGS LLC
22 BATTERYMARCH ST
BOSTON MA 02109-

COPY SENT TO:
BOARD OF SELECTMEN
145 MAIN ST
PLAISTOW NH 03865

BY APPLICANT: PERMIT NO 01740

ALLEN & MAJOR ASSOCIATES INC
250 COMMERCIAL ST STE 1001
MANCHESTER NH 03101-

Map No./Lot No.: 24/38
Subd. Appvl. No.: 5+ ACRES
Subd. Name:
County: ROCKINGHAM
Registry Book No.: 4439
Registry Page No.: 1835
Probate Docket No.: (If Applicable)

Type of System: O-
BR
925 GPD

Town/City Location: PLAISTOW

Street Location: 9 PLAISTOW ROAD

Subsurface waste disposal systems must be operated and maintained in a manner so as to prevent nuisance or health hazard due to system failure. (RSA 485-A:37)

It is unlawful to discharge any hazardous chemicals or substances into subsurface waste disposal systems. Included are paints, thinners, gasoline and chlorinated hydrocarbon solvents such as TCE, sometimes used to clean failed septic systems and auto parts. (Env-Ws 1503.04)

ADVISE YOUR CONTRACTOR OF REQUIRED CHANGES IN PLANS AS INDICATED BELOW CONDITIONS

APPROVED FOR A NEW 14,820SF DRY GOODS STORE AND THE EXISTING 3,607SF RETAIL STORES, 925GPD

1. APPROVED WITH A PUBLIC WATER SYSTEM ONLY
2. SYSTEM MUST BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS

06/21/2012
Approved this date: _____

DAWN BUKER
By: _____
N.H. Department of Environmental Services Staff

Date amended: _____

Amended by: _____ (OVER)

REVISED 8/01

201201886

APPLICANT'S INSTALLER'S

National Pollutant Discharge Elimination System
General Permit for Discharges from
Construction Activities

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 et. seq., (hereafter CWA or the Act), as amended by the Water Quality Act of 1987, P.L. 100-4, "operators" of construction activities (defined in Part 1.1.a and Appendix A) that meet the requirements of Part 1.1 of this National Pollutant Discharge Elimination System (NPDES) general permit, are authorized to discharge pollutants in accordance with the effluent limitations and conditions set forth herein. Permit coverage is required from the "commencement of earth-disturbing activities" (see Appendix A) until "final stabilization" (see Part 2.2).

This permit becomes effective on **February 16, 2012**. For the State of Idaho (except for Indian country), this permit becomes effective on **April 9, 2012**. For areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, this permit becomes effective on **April 13, 2012**. For projects located in the following areas, this permit becomes effective on **May 9, 2012**: Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

This permit and the authorization to discharge expire at midnight, **February 16, 2017**.

Signed and issued this 16th day of February, 2012

H. Curtis Spalding
Regional Administrator, Region 1

Signed and issued this 16th day of February, 2012

William K. Honker, P.E.
Acting Director, Water Quality Protection Division, Region 6

Signed and issued this 16th day of February, 2012

John Filippelli
Director, Division of Environmental Planning & Protection, Region 2

Signed and issued this 16th day of February, 2012

Karen Flournoy
Director, Wetlands and Pesticides Division, Region 7

Signed and issued this 16th day of February, 2012

José C. Font
Acting Division Director, Carribbean Environmental Protection Division, Region 2, Caribbean Office

Signed and issued this 16th day of February, 2012

Melanie L. Pallman
Acting Assistant Regional Administrator, Office of Partneships and Regulatory Assistance, Region 8

Signed and issued this 16th day of February, 2012

Catherine A. Libertz
Assistant Director, Water Protection Division, Region 3

Signed and issued this 16th day of February, 2012

Nancy Woo
Deputy Director, Water Division, Region 9

Signed and issued this 16th day of February, 2012

James D. Giattina
Director, Water Protection Division, Region 4

Signed and issued this 16th day of February and 9th day of April, 2012

Michael J. Lidgard
Acting Director, Office of Water and Watersheds, Region 10

Signed and issued this 16th day of February and 9th day of May, 2012

Tinka G. Hyde
Director, Water Division, Region 5

Signed and issued this 13th day of April, 2012

Christine Psyk
Associate Director, Office of Water and Watersheds, Region 10

The signatures are for the permit conditions in Parts 1 through 9 and Appendices A through K.

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1. HOW TO OBTAIN PERMIT COVERAGE UNDER THE CGP.

To be covered under this permit, you must meet the eligibility conditions and follow the requirements for applying for permit coverage in this Part.

1.1. ELIGIBILITY CONDITIONS REQUIRED OF ALL PROJECTS.

Only those projects that meet all of the following eligibility conditions may be covered under this permit:

a. You are an "operator" of the construction project for which discharges will be covered under this permit;

Note: For the purposes of this permit, an "operator" is any party associated with a construction project that meets either of the following two criteria:

1. *The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or*
2. *The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).*

Subcontractors generally are not considered operators for the purposes of this permit.

Note: Where there are multiple operators associated with the same project, all operators are required to obtain permit coverage. The following applies in these situations:

1. *If one operator has control over plans and specifications and a different operator has control over activities at the project site, they may divide responsibility for compliance with the terms of this permit as long as they develop a group SWPPP (see Part 7.1.1), which documents which operator has responsibility for each requirement of the permit.*
2. *If an operator only has operational control over a portion of a larger project (e.g., one of four homebuilders in a subdivision), the operator is responsible for compliance with all applicable effluent limits, terms, and conditions of this permit as it relates to the activities on their portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP in the areas under their control.*
3. *You must ensure either directly or through coordination with other permittees, that your activities do not render another party's pollutant discharge controls ineffective.*
4. *If the operator of a "construction support activity" (see Part 1.3.c) is different than the operator of the main construction site, that operator is also required to obtain permit coverage.*

b. Your project:

i. Will disturb 1 or more acres of land, or will disturb less than 1 acre of land but is part of a common plan of development or sale that will ultimately disturb 1 or more acres of land; or

ii. Your project's discharges have been designated by EPA as needing a permit under § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);

c. Your project is located in an area where EPA is the permitting authority (see Appendix B);

d. Discharges from your project are not:

i. Already covered by a different NPDES permit for the same discharge; or

ii. In the process of having coverage under a different NPDES permit for the same discharge denied, terminated, or revoked.[1, 2]

e. You are able to demonstrate that you meet one of the criteria listed in Appendix D with respect to the protection of species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or federally-designated critical habitat;

f. You have completed the screening process in Appendix E relating to the protection of historic properties and places; and

g. You have complied with all requirements in Part 9 imposed by the applicable state, Indian tribe, or territory in which your construction activities will occur.

1.2. ELIGIBILITY CONDITIONS THAT APPLY DEPENDING ON TYPE OF PROJECT.

You must also satisfy, if applicable, the conditions in Parts 1.2.1 through 1.2.4 in order to obtain coverage under this permit.

1.2.1. Eligibility for Emergency-Related Construction Activities.

If you are conducting earth-disturbing activities in response to a public emergency *(e.g., natural disaster, widespread disruption in essential public services)*, and the related work requires immediate authorization to avoid imminent endangerment to human health, public safety, or the environment, or to reestablish essential public services, you are authorized to discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing earth-disturbing activities (see Table 1) establishing that you are eligible under this permit. You are also required to provide documentation in your SWPPP to substantiate the occurrence of the public emergency.

1.2.2. Water Quality Standards – Eligibility for New Sources.

If you are a "new source" (as defined in Appendix A), you are not eligible for coverage under this permit for discharges that EPA, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, EPA may notify you that an individual permit application is necessary in accordance with Part 1.4.5. However, EPA may authorize your coverage under this permit after you have included appropriate controls and implementation procedures designed to bring your discharge into compliance with water quality standards. In the absence of information demonstrating otherwise, EPA expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

---

[1] Parts 1.1.d.i and 1.1.d.ii do not include sites currently covered under the 2003 or 2008 CGPs, which are in the process of obtaining coverage under this permit, and sites covered under this permit, which are transferring coverage to a different operator.

[2] Notwithstanding a project being made ineligible for coverage under this permit because it falls under the description of Parts 1.1.d.i or 1.1.d.ii, above, EPA may waive the applicable requirement after specific review if it determines that coverage under this permit is appropriate.

1.2.3. Discharging to Waters with High Water Quality – Eligibility for New Sources.

If you are a "new source" (as defined in Appendix A), you are eligible to discharge to a Tier 2, Tier 2.5, or Tier 3 water only if your discharge will not lower the water quality of the applicable water. In the absence of information demonstrating otherwise, EPA expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part 3.3.2, will result in discharges that will not lower the water quality of the applicable water. See list of Tier 2, Tier 2.5, and Tier 3 waters in Appendix F.

Note: Your project will be considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first surface water to which you discharge is identified by a state, tribe, or EPA as a Tier 2, Tier 2.5, or Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

1.2.4. Use of Cationic Treatment Chemicals.

If you plan to use cationic treatment chemicals (as defined in Appendix A), you are ineligible for coverage under this permit, unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

1.3. Types of Discharges Authorized Under the CGP.

The following is a list of discharges that are allowed under the permit provided that appropriate stormwater controls are designed, installed, and maintained:

a. Stormwater discharges, including stormwater runoff, snowmelt runoff, and surface runoff and drainage, associated with construction activity under 40 CFR § 122.26(b)(14) or § 122.26(b)(15)(i);

b. Stormwater discharges designated by EPA as needing a permit under 40 CFR § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);

c. Stormwater discharges from construction support activities *(e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas)* provided:

   i. The support activity is directly related to the construction site required to have permit coverage for stormwater discharges;

   ii. The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects;

   iii. The support activity does not continue to operate beyond the completion of the construction activity at the project it supports; and

   iv. Stormwater controls are implemented in accordance with Part 2 and, if applicable, Part 3, for discharges from the support activity areas.

d. The following non-stormwater discharges from your construction activity, provided that, with the exception of water used to control dust and to irrigate areas to be vegetatively stabilized, these discharges are not routed to areas of exposed soil on your site and you comply with any applicable requirements for these discharges in Part 2:

   i. Discharges from emergency fire-fighting activities;

ii. Fire hydrant flushings;

iii. Landscape irrigation;

iv. Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;

v. Water used to control dust;

vi. Potable water including uncontaminated water line flushings;

vii. Routine external building washdown that does not use detergents;

viii. Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used. You are prohibited from directing pavement wash waters directly into any surface water, storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;

ix. Uncontaminated air conditioning or compressor condensate;

x. Uncontaminated, non-turbid discharges of ground water or spring water;

xi. Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and

xii. Construction dewatering water that has been treated by an appropriate control under Part 2.1.3.4; and

e. Discharges of stormwater listed above in Parts a, b, and c, or authorized non-stormwater discharges in Part d above, commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

1.4. SUBMITTING YOUR NOTICE OF INTENT (NOI).

To be covered under this permit, you must submit to EPA a complete and accurate NOI prior to commencing construction activities. The NOI certifies to EPA that you are eligible for coverage according to Part 1.1 and 1.2, and provides information on your construction operation and discharge.

Note: All "operators" (as defined in Appendix A) associated with your construction project, who meet the Part 1.1 eligibility requirements, and who elect to seek coverage under this permit, are required to submit an NOI.

Note: There are two exceptions to the requirement to submit the NOI prior to the commencement of construction activities: (1) for emergency-related projects, and (2) for new projects scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012. [3] *For these two types of projects, the NOI*

[3] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in the following areas, if you are schedule to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

must be submitted within 30 calendar days after the commencement of earth-disturbing activities (see Part 1.4.2).

Note: You must complete the development of a Stormwater Pollution Prevention Plan (SWPPP) consistent with Part 7 prior to submitting your NOI for coverage under this permit.

1.4.1. How to Submit Your NOI.

You are required to use EPA's electronic NOI system, or "eNOI system", to prepare and submit your NOI. Go to www.epa.gov/npdes/stormwater/cgpenoi to access the eNOI system and file an NOI. If you have a problem with the use of the eNOI system, contact the EPA Regional Office that corresponds to the location of your site. If you are given approval by the EPA Regional Office to use a paper NOI, and you elect to use it, you must complete the form in Appendix J.

1.4.2. Deadlines for Submitting Your NOI and Your Official Date of Permit Coverage.

Table 1 provides the deadlines for submitting your NOI and your official start date of permit coverage, which differ depending on when you commence construction activities. The following terms are used in Table 1 to establish NOI deadlines:

a. New project – a construction project that commences construction activities on or after February 16, 2012, or or April 9, 2012 for the State of Idaho (except for Indian country), or April 13, 2012 for areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

b. Existing project – a construction project that commenced construction activities prior to February 16, 2012, or April 9, 2012 for the State of Idaho (except for Indian country), or April 13, 2012 for areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

c. New operator of a new or existing project – an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction project.

Table 1 NOI Submittal Deadlines and Official Start Date for Permit Coverage.

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
New project	You must submit your NOI at least 14 calendar days prior to commencing earth-disturbing activities. *Exception:* If your project qualifies as an "emergency-related project" under Part 1.2.1, you must submit your NOI by no later than 30 calendar days after commencing	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied. *Exception:* If your project qualifies as

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
	earth-disturbing activities. *Exception:* If you are scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities.[4]	an "emergency-related project" under Part 1.2.1, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. *Exception:* If you are scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied.[5]

[4] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects located in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you must submit your NOI by no later than 30 days after commencing earth-disturbing activities: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

[5] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. For new projects located in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
Existing project	You must submit your NOI by no later than May 16, 2012.[6] However, if you have not previously obtained coverage under an NPDES permit, you must submit your NOI immediately.	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied.[7]
New operator of a new or existing project	You must submit your NOI at least 14 calendar days before the date the transfer to the new operator will take place.	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied.

Note: If you have missed the deadline to submit your NOI, any and all discharges from your construction activities will continue to be unauthorized under the Clean Water Act until they are covered by this or a different NPDES permit. EPA may take enforcement action for any unpermitted discharges that occur between the commencement of earth-disturbing activities and discharge authorization.

Note: Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

1.4.3. Your Official End Date of Permit Coverage

Once covered under this permit, your coverage will last until the date that:

- You terminate permit coverage consistent with Part 8; or
- Your discharges are permitted under a different NPDES permit or a reissued or replacement version of this permit after expiring on February 16, 2017; or
- For existing projects that continue after this permit has expired, the deadline has passed for the submission of an NOI for coverage under a reissued or replacement version of this permit and you have failed to submit an NOI by the required deadline.

1.4.4. Continuation of Coverage for Existing Permittees After the Permit Expires.

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and

[6] For existing projects located in the State of Idaho (except Indian country), NOIs must be submitted by no later than July 8, 2012. For existing projects located in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, NOIs must be submitted by no later than July 12, 2012. For existing projects located in the following areas, NOIs must be submitted no later than August 7, 2012: the Fond Du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac Du Flambeau Band of Lake Superior Chippewa in Wisconsin.

[7] Note that if you are currently covered under the 2003 or 2008 CGP, this coverage continues until your coverage under this permit begins, provided you have submitted an NOI by the deadline.

remain in force and effect for discharges that were covered prior to expiration. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by this permit until the earliest of:

- Your authorization for coverage under a reissued or replacement version of this permit following your timely submittal of a complete and accurate NOI requesting coverage under the new permit; or

  Note: If you fail to submit a timely NOI for coverage under the reissued or replacement permit, your coverage will terminate on the date that the NOI was due.

- Your submittal of a Notice of Termination; or
- Issuance or denial of an individual permit for the project's discharges; or
- A final permit decision by EPA not to reissue a general permit, at which time EPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will terminate at the end of this time period.

EPA reserves the right to modify or revoke and reissue this permit under 40 CFR 122.62 and 63, in which case you will be notified of any relevant changes or procedures to which you may be subject.

1.4.5. Procedures for Denial of Coverage.

Following your submittal of a complete and accurate NOI, you may be notified in writing by EPA that you are not covered, and that you must either apply for and/or obtain coverage under an individual NPDES permit or an alternate general NPDES permit. This notification will include a brief statement of the reasons for this decision and will provide application information. Any interested person may request that EPA consider requiring an individual permit under this paragraph.

If you are already a permittee with coverage under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual NPDES permit or alternate general NPDES permit, as it applies to you, coverage under this general permit will terminate. EPA may grant additional time to submit the application if you request it. If you are covered under this permit and fail to submit an individual NPDES permit application or an NOI for an alternate general NPDES permit as required by EPA, then the applicability of this permit to you is terminated at the end of the day specified by EPA as the deadline for application submittal. EPA may take appropriate enforcement action for any unpermitted discharge. If you submit a timely permit application, then when an individual NPDES permit is issued to you or you are provided with coverage under an alternate general NPDES permit, your coverage under this permit is terminated on the effective date of the individual permit or date of coverage under the alternate general permit.

1.5. REQUIREMENT TO POST A NOTICE OF YOUR PERMIT COVERAGE.

You must post a sign or other notice conspicuously at a safe, publicly accessible location in close proximity to the project site. At a minimum, the notice must include the NPDES Permit tracking number and a contact name and phone number for obtaining additional project information. The notice must be located so that it is visible from the public road that is nearest to the active part of the construction site, and it must use a font large enough to be readily viewed from a public right-of-way.

2. EFFLUENT LIMITATIONS APPLICABLE TO ALL DISCHARGES FROM CONSTRUCTION SITES

You are required to comply with the following effluent limitations in this Part for discharges from your site and/or from construction support activities (see Part 1.3.c).

Note: If your project is an "existing project" (see Part 1.4.2.b) or if you are a "new operator of an existing project" (see Part 1.4.2.c), and it is infeasible for you to comply with a specific requirement in this Part because (1) the requirement was not part of the permit you were previously covered under (i.e., the 2003 or 2008 CGP), and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), or because you are unable to comply with the requirement due to the manner in which stormwater controls have already been installed or were already designed prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), you are required to document this fact in your SWPPP and are waived from complying with that requirement. This flexibility applies only to the requirements in Parts 2.1, and 2.3.3 through 2.3.5 (except for Parts 2.3.3.1, 2.3.3.2b, 2.3.3.3c.i, and 2.3.3.4). This only applies to those portions of your site that have already commenced earth-disturbing activities or where stormwater controls implemented in compliance with the previous permit have already been installed.

Part 2 includes the following types of requirements:

- Erosion and Sediment Control Requirements (Part 2.1)
- Stabilization Requirements (Part 2.2)
- Pollution Prevention Requirements (Part 2.3)

2.1. EROSION AND SEDIMENT CONTROL REQUIREMENTS.

You must design, install, and maintain erosion and sediment controls that minimize the discharge of pollutants from earth-disturbing activities. To meet this requirement, you must comply with the following provisions.

2.1.1. General Requirements Applicable to All Construction Sites.

2.1.1.1 ***Area of Disturbance.*** You are required to minimize the amount of soil exposed during construction activities. You are also subject to the deadlines for temporarily and/or permanently stabilizing exposed portions of your site pursuant to Part 2.2.

2.1.1.2 ***Design Requirements.***

a. You must account for the following factors in designing your stormwater controls:

i. The expected amount, frequency, intensity, and duration of precipitation;

ii. The nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. If any stormwater flow will be channelized at your site, you must design stormwater controls to control both peak flowrates and total stormwater volume to minimize erosion at outlets and to minimize downstream channel and streambank erosion; and

iii. The range of soil particle sizes expected to be present on the site.

b. You must direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers established under Part 2.1.2.1, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

2.1.1.3 ***Installation Requirements.***

a. **Complete installation of stormwater controls by the time each phase of earth-disturbance has begun, unless infeasible.** By the time earth-disturbing activities in any given portion of your site have begun, unless infeasible, you must install and make operational any downgradient sediment controls (*e.g., buffers or equivalent sediment controls, perimeter controls, exit point controls, storm drain inlet protection)* that control discharges from the initial site clearing, grading, excavating, and other land-disturbing activities.

Note: Where it is infeasible to install stormwater controls prior to the initial earth disturbance, it is EPA's expectation that it will be a rare circumstance that will prevent the operator from installing such controls immediately following the initial earth disturbance.

Following the installation of these initial controls, all other stormwater controls planned for this portion of your site and described in your SWPPP must be installed and made operational as soon as conditions on the site allow.

Note: The requirement to install stormwater controls prior to earth-disturbance for each phase of the project does not apply to the earth disturbance associated with the actual installation of these controls.

b. **Use good engineering practices and follow manufacturer's specifications.** You must install all stormwater controls in accordance with good engineering practices, including applicable design specifications.

Note: Design specifications may be found in manufacturer specifications and/or in applicable erosion and sediment control manuals or ordinances. Any departures from such specifications must reflect good engineering practice and must be explained in your SWPPP.

2.1.1.4 ***Maintenance Requirements.***

a. You must ensure that all erosion and sediment controls required in this Part remain in effective operating condition during permit coverage and are protected from activities that would reduce their effectiveness.

b. You must inspect all erosion and sediment controls in accordance with the applicable requirements in Part 4.1, and document your findings in accordance with Part 4.1.7. If you find a problem (*e.g., erosion and sediment controls need to be replaced, repaired, or maintained*), you must make the necessary repairs or modifications in accordance with the following schedule:

i. Initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.

ii. When installation of a new erosion or sediment control or a significant repair is needed, you must install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery where feasible. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7-day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7-day timeframe. Where these actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing this work.

2.1.2. Erosion and Sediment Control Requirements Applicable to All Sites.

2.1.2.1 **Provide Natural Buffers or Equivalent Sediment Controls.** (These requirements only apply when a surface water is located within 50 feet of your project's earth disturbances).

Note: EPA does not consider stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, sediment basins) to constitute "surface waters" for the purposes of triggering the requirement to comply with this Part.

Note: Areas that you do not own or that are otherwise outside your operational control may be considered areas of undisturbed natural buffer for purposes of compliance with this part.

You must ensure that any discharges to surface waters through the area between the disturbed portions of the property and any surface waters located within 50 feet of your site are treated by an area of undisturbed natural buffer and/or additional erosion and sediment controls in order to achieve a reduction in sediment load equivalent to that achieved by a 50-foot natural buffer. Refer to Appendix G (Buffer Guidance) for information to assist you in complying with this requirement, and to Part 2.1.2.1e for exceptions to this requirement.

a. **Compliance Alternatives.** You can comply with this requirement in one of the following ways:

i. Provide and maintain a 50-foot undisturbed natural buffer; or

Note: If your earth disturbances are located 50 feet or further from a surface water, then you have complied with this alternative.

ii. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or

iii. If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment

controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Note: For the compliance alternatives in Parts 2.1.2.1a.i and 2.1.2.1a.ii, you are not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists (e.g., arid and semi-arid areas). You only need to retain and protect from disturbance the natural buffer that existed prior to the commencement of construction. Any preexisting structures or impervious surfaces are allowed in the natural buffer provided you retain and protect from disturbance the natural buffer area outside the preexisting disturbance. Similarly, for alternatives 2.1.2.1a.ii and 2.1.2.1a.iii, you are required to implement and maintain sediment controls that achieve the sediment load reduction equivalent to the undisturbed natural buffer that existed on the site prior to the commencement of construction. In determining equivalent sediment load reductions, you may consider naturally non-vegetated areas and prior disturbances. See Appendix G for a discussion of how to determine equivalent reductions.

You must document the compliance alternative you have selected in your SWPPP, and comply with the applicable additional requirements described in Parts 2.1.2.1b and 2.1.2.1c below.

The compliance alternative selected above must be maintained throughout the duration of permit coverage, except that you may select a different compliance alternative during your period of permit coverage, in which case you must modify your SWPPP to reflect this change.

b. **Additional Requirements for the Compliance Alternatives in Parts 2.1.2.1a.i and 2.1.2.1a.ii.** If you choose either of the compliance alternatives in Parts 2.1.2.1a.i or 2.1.2.1a.ii above, throughout your period of coverage under this permit, you must comply with the following additional requirements:

   i. Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer;

   ii. Document in your SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and

   iii. Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas.

c. **Additional Requirements for the Compliance Alternatives in Parts 2.1.2.1a.ii and 2.1.2.1a.iii.** If you choose either of the compliance alternatives in Parts 2.1.2.1a.ii and 2.1.2.1a.iii, you must document in your SWPPP the erosion and sediment control(s) you will use to achieve an equivalent sediment reduction, and any information you relied upon to demonstrate the equivalency.

d. **Additional Requirement for the Compliance Alternative in Part 2.1.2.1a.iii.** If you choose the compliance alternative in Part 2.1.2.1a.iii, you must also

include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

e. **Exceptions.**

i. If there is no discharge of stormwater to surface waters through the area between your site and any surface waters located within 50 feet of your site, you are not required to comply with the requirements in this Part. This includes situations where you have implemented control measures, such as a berm or other barrier, that will prevent such discharges.

ii. Where no natural buffer exists due to preexisting development disturbances *(e.g., structures, impervious surfaces)* that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this Part, unless you will remove portions of the preexisting development.

Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you are required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction for either Part 2.1.2.1a.ii or 2.1.2.1a.iii above, you are not expected to compensate for the reduction in buffer function from the area covered by these preexisting disturbances. See Appendix G for further information on how to comply with the compliance alternatives in Part 2.1.2.1a.ii or 2.1.2.1a.iii above.

If during your project, you will disturb any portion of these preexisting disturbances, the area disturbed will be deducted from the area treated as natural buffer.

iii. For "linear construction projects" (see Appendix A), you are not required to comply with the requirements in this Part if site constraints (*e.g., limited right-of-way*) prevent you from meeting any of the compliance alternatives in Part 2.1.2.1a, provided that, to the extent practicable, you limit disturbances within 50 feet of the surface water and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the surface water. You must also document in your SWPPP your rationale as to why it is infeasible for you to comply with the requirements in Part 2.1.2.1a, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.

iv. For "small residential lot" construction (*i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre*), you have the option of complying with the requirements in Appendix G (Part G.2.3).

v. The following disturbances within 50 feet of a surface water are exempt from the requirements in this Part:

- Construction approved under a CWA Section 404 permit; or
- Construction of a water-dependent structure or water access area *(e.g., pier, boat ramp, trail)*.

You must document in your SWPPP if any of the above disturbances will occur within the buffer area on your site.

2.1.2.2 ***Install Perimeter Controls.***

a. **Installation Requirements:** You must install sediment controls along those perimeter areas of your site that will receive stormwater from earth-disturbing activities.[8]

For linear projects with rights-of-way that restrict or prevent the use of such perimeter controls, you must maximize the use of these controls where practicable and document in your SWPPP why it is impracticable in other areas of the project.

b. **Maintenance Requirements:** You must remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control.

2.1.2.3 ***Minimize Sediment Track-Out.*** You must minimize the track-out of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting your construction site. To comply with this requirement, you must:

a. Restrict vehicle use to properly designated exit points;

b. Use appropriate stabilization techniques[9] at all points that exit onto paved roads so that sediment removal occurs prior to vehicle exit;

c. Where necessary, use additional controls[10] to remove sediment from vehicle tires prior to exit; and

d. Where sediment has been tracked-out from your site onto the surface of off-site streets, other paved areas, and sidewalks, you must remove the deposited sediment by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. You must remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

Note: EPA recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of Part 2.1.2.3.

2.1.2.4 **Control Discharges from Stockpiled Sediment or Soil.** For any stockpiles or land clearing debris composed, in whole or in part, of sediment or soil, you must comply with the following requirements:

[8] Examples of perimeter controls include, but are not limited to, filter berms, silt fences, and temporary diversion dikes.

[9] Examples of appropriate stabilization techniques include the use of aggregate stone with an underlying geotextile or non-woven filter fabric, or turf mats.

[10] Examples of additional controls to remove sediment from vehicle tires include, but are not limited to, wheel washing, rumble strips, and rattle plates.

Note: For the purposes of this permit, sediment or soil stockpiles are defined as the storage for multiple days of soil or other sediment material to be used in the construction project.

a. Locate the piles outside of any natural buffers established under Part 2.1.2.1a and physically separated from other stormwater controls implemented in accordance with Part 2.1;

b. Protect from contact with stormwater (including run-on) using a temporary perimeter sediment barrier;[11]

c. Where practicable, provide cover or appropriate temporary stabilization to avoid direct contact with precipitation or to minimize sediment discharge;

d. Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water; and

e. Unless infeasible, contain and securely protect from wind.

2.1.2.5 ***Minimize Dust.*** In order to avoid pollutants from being discharged into surface waters, to the extent feasible, you must minimize the generation of dust through the appropriate application of water or other dust suppression techniques.

2.1.2.6 ***Minimize the Disturbance of Steep Slopes.*** You must minimize the disturbance of "steep slopes" (see definition in Appendix A).

Note: The permit does not prevent or prohibit disturbance on steep slopes. For some projects, disturbance on steep slopes may be necessary for construction (e.g., a road cut in mountainous terrain). If a disturbance to steep slopes is required for the project, EPA would recognize that it is not economically achievable to avoid the disturbance to steep slopes. However, in cases where steep slope disturbances are required, minimizing the disturbances to steep slopes consistent with this requirement can be accomplished through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances to these areas and using stabilization practices designed to be used on steep grades.

2.1.2.7 ***Preserve Topsoil.*** You must preserve native topsoil on your site, unless infeasible.

Note: Some projects may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain. In these cases, preserving topsoil at the site would not be feasible. Some sites may not have space to stockpile topsoil on site for later use, in which case, it may also not be feasible to preserve topsoil.

Note: Stockpiling of topsoil at off-site locations, or transfer of topsoil to other locations, is an example of a practice that is consistent with the requirements in this Part.

2.1.2.8 ***Minimize Soil Compaction***. In areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed, you must either:

[11] Examples include berms, dikes, fiber rolls, silt fences, sandbag, gravel bags, or straw bale.

a. **Restrict vehicle / equipment use.** Restrict vehicle and equipment use in these locations to avoid soil compaction; or

b. **Use soil conditioning techniques.** Prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetative growth, if necessary and feasible.

2.1.2.9 ***Protect Storm Drain Inlets.*** If you discharge to any storm drain inlet that carries stormwater flow from your site directly to a surface water (and it is not first directed to a sediment basin, sediment trap, or similarly effective control), and you have authority to access the storm drain inlet, you must:

a. **Installation Requirements.** Install inlet protection measures[12] that remove sediment from your discharge prior to entry into the storm drain inlet.

Note: Inlet protection measures can be removed in the event of flood conditions or to prevent erosion.

b. **Maintenance Requirements.** Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, you must remove the deposited sediment by the end of the same work day in which it is found or by the end of the following work day if removal by the same work day is not feasible.

2.1.3. Requirements Applicable Only to Sites Using These Specific Stormwater Controls.

You are required to comply with the following requirements if you will install any of the following stormwater controls at your site:

2.1.3.1 ***Constructed Stormwater Conveyance Channels.*** Design stormwater conveyance channels to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. Minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices[13] within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

2.1.3.2 ***Sediment Basins.*** If you install a sediment basin , you must comply with the following:

a. **Design requirements.**

i. Provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm (see Appendix H), or (2) 3,600 cubic feet per acre drained;

ii. When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge of pollutants, unless infeasible;

[12] Examples of inlet protection measures include fabric filters, sandbags, concrete blocks, and gravel barriers.

[13] Examples of velocity dissipation devices include check dams, sediment traps, riprap, or grouted riprap at outlets.

Note: EPA believes that the circumstances in which it is infeasible to design outlet structures in this manner are rare. Exceptions may include areas with extended cold weather, where surface outlets may not be feasible during certain time periods (although it is expected that they would be used during other periods). If you have determined that it is infeasible to meet this requirement, you must provide documentation in your SWPPP to support your determination.

iii. Prevent erosion of (1) the sediment basin using stabilization controls *(e.g., erosion control blankets)*, and (2) the inlet and outlet using erosion controls and velocity dissipation devices; and

iv. Sediment basins must be situated outside of surface waters and any natural buffers established under Part 2.1.2.1a, and must be designed to avoid collecting water from wetlands.

b. **Maintenance requirements.** Keep in effective operating condition and remove accumulated sediment to maintain at least ½ of the design capacity of the sediment basin at all times.

2.1.3.3 ***Use of Treatment Chemicals.*** If you are using polymers, flocculants, or other treatment chemicals at your site, you must comply with the following minimum requirements:

a. **Use conventional erosion and sediment controls prior to and after the application of treatment chemicals.** Use conventional erosion and sediment controls prior to chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control *(e.g., sediment basin, perimeter control)* prior to discharge.

b. **Select appropriate treatment chemicals***.* Chemicals must be selected that are appropriately suited to the types of soils likely to be exposed during construction and discharged to locations where chemicals will be applied, and to the expected turbidity, pH, and flow rate of stormwater flowing into the chemical treatment system or area.

c. **Minimize discharge risk from stored chemicals.** Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures *(e.g., spill berms, decks, spill containment pallets),* or provide equivalent measures, designed and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means *(e.g., storing chemicals in covered area or having a spill kit available on site)*.

d. **Comply with state/local requirements.** Comply with relevant state and local requirements affecting the use of treatment chemicals.

e. **Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier.** You must also use treatment chemicals and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document specific departures from these practices or specifications and how they reflect good engineering practice.

f. **Ensure proper training.** Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.

g. **Comply with additional requirements for the approved use of cationic chemicals.** If you have been authorized to use cationic chemicals at your site pursuant to Part 1.2.4, and the authorization is conditioned on your compliance with additional requirements necessary to ensure that the use of such chemicals will not cause an exceedance of water quality standards, you are required to comply with all such requirements.

h. **Provide proper SWPPP documentation.** You must include documentation in your SWPPP consistent with Parts 7.2.6.9 and 7.2.10.2 on the specific chemicals and chemical treatment systems you will use, and how you will comply with the requirements in this Part.

2.1.3.4 ***Dewatering Practices.*** You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls.[14] Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.

You must also meet the following requirements for dewatering activities:

a. **Discharge requirements.**

i. Do not discharge visible floating solids or foam;

ii. Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;

iii. To the extent feasible, utilize vegetated, upland areas of the site to infiltrate dewatering water before discharge. In no case will surface waters be considered part of the treatment area;

iv. At all points where dewatering water is discharged, comply with the velocity dissipation requirements of Part 2.1.3.1;

v. With backwash water, either haul it away for disposal or return it to the beginning of the treatment process; and

vi. Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

b. **Treatment chemical restrictions.** If you are using polymers, flocculants, or other treatment chemicals to treat dewatering water, you must comply with the requirements in Parts 2.1.3.3.

2.2. STABILIZATION REQUIREMENTS.

You are required to stabilize exposed portions of your site in accordance with the requirements of this Part.

[14] Examples of appropriate controls include, but are not limited to, sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems (e.g., bag or sand filters) that are designed to remove sediment.

Note: For the purposes of this permit, "exposed portions of your site" means areas of exposed soil that are required to be stabilized. Note that EPA does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left unvegetated or unstabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

2.2.1. Deadlines for Initiating and Completing Stabilization.

2.2.1.1 ***Deadline to Initiate Stabilization.*** You must initiate soil stabilization measures immediately whenever earth-disturbing activities have permanently or temporarily ceased on any portion of the site.

Note: Earth-disturbing activities have permanently ceased when clearing and excavation within any area of your construction site that will not include permanent structures has been completed.

Note: Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future.

The 14 calendar day timeframe above begins counting as soon as you know that construction work on a portion of your site will be temporarily ceased. In circumstances where you experience unplanned or unanticipated delays in construction due to circumstances beyond your control (e.g., sudden work stoppage due to unanticipated problems associated with construction labor, funding, or other issues related to the ability to work on the site; weather conditions rendering the site unsuitable for the continuation of construction work) and you do not know at first how long the work stoppage will continue, your requirement to immediately initiate stabilization is triggered as soon as you know with reasonable certainty that work will be stopped for 14 or more additional calendar days. At that point, you must comply with Parts 2.2.1.1 and 2.2.1.2.

Note: For the purposes of this permit, EPA will consider any of the following types of activities to constitute the initiation of stabilization:

1. *prepping the soil for vegetative or non-vegetative stabilization;*
2. *applying mulch or other non-vegetative product to the exposed area;*
3. *seeding or planting the exposed area;*
4. *starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and*
5. *finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization in Parts 2.2.1.2 and 2.2.1.3.*

This list of examples is not exhaustive.

Note: The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this provision, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

2.2.1.2 ***Deadline to Complete Stabilization Activities.*** As soon as practicable, but no later than 14 calendar days after the initiation of soil stabilization measures consistent with Part 2.2.1.1[15], you are required to have completed:

[15] EPA may determine, based on an inspection carried out under Part 4.2 and corrective actions required under Part 5.3, that the level of sediment discharge on the site makes it necessary to require a faster schedule for completing stabilization. For instance, if sediment discharges from an area of exposed soil

a. For vegetative stabilization, all activities[16] necessary to initially seed or plant the area to be stabilized; and/or

b. For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

2.2.1.3 ***Exceptions to the Deadlines for Initiating and Completing Stabilization.***

a. *Deadlines for projects occurring in arid or semi-arid areas, or drought-stricken areas.* These requirements apply if (1) your site is located in an arid area, a semi-arid area, or a drought-stricken area, as these terms are defined in Appendix A, (2) construction will occur during the seasonally dry period or during a period in which drought is predicted to occur, and (3) you are using vegetative cover for temporary or permanent stabilization. You may also comply with the deadlines in Part 2.2.1.1 instead. The deadlines for these types of projects are as follows:

i. Immediately initiate, and within 14 calendar days of a temporary or permanent cessation of work in any portion of your site complete, the installation of temporary non-vegetative stabilization measures to the extent necessary to prevent erosion;

ii. As soon as practicable, given conditions or circumstances on your site, complete all activities necessary to initially seed or plant the area to be stabilized; and

iii. If construction is occurring during the seasonally dry period, indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions. You must also include the schedule you will follow for initiating and completing vegetative stabilization.

b. *Deadlines for projects that are affected by circumstances beyond the control of the permittee that delay the initiation and/or completion of vegetative stabilization as required in Parts 2.2.1.1 and/or 2.2.1.2.* If you are unable to meet the deadlines in Parts 2.2.1.1and/or 2.2.1.2 due to circumstances beyond your control[17], and you are using vegetative cover for temporary or permanent stabilization, you may comply with the following stabilization deadlines instead:

i. Immediately initiate, and within 14 calendar days complete, the installation of temporary non-vegetative stabilization measures to prevent erosion;

ii. Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on your site; and

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that is required to be stabilized are compromising the performance of existing stormwater controls, EPA may require stabilization to correct this problem.

[16] For example, such activities might include, but are not limited to, soil conditioning, application of seed or sod, planting of seedlings or other vegetation, application of fertilizer, and, as deemed appropriate, watering.

[17] Examples include problems with the supply of seed stock or with the availability of specialized equipment, unsuitability of soil conditions due to excessive precipitation and/or flooding.

Note: You are required to have stabilized the exposed portions of your site consistent with Part 2.2.2 prior to terminating permit coverage under Part 8.2.

iii. Document the circumstances that prevent you from meeting the deadlines required in Parts 2.2.1.1and/or 2.2.1.2 and the schedule you will follow for initiating and completing stabilization.

c. *Deadlines for sites discharging to sensitive waters.* For any portion of the site that discharges to a sediment or nutrient-impaired water (see Part 3.2) or to a water that is identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes (see Part 3.3), you are required to complete the stabilization activities specified in Parts 2.2.1.2a and/or 2.2.1.2b within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities.

Note: If you qualify for the deadlines for initiating and completing stabilization in Part 2.2.1.3a or b*, you may comply with the stabilization deadlines in Part 2.2.1.3a or* b *for any portion of your site that discharges to a sensitive water.*

2.2.2. Criteria for Stabilization.

To be considered adequately stabilized, you must meet the criteria below depending on the type of cover you are using, either vegetative or non-vegetative.

2.2.2.1 ***Vegetative Stabilization.***

a. ***For all sites, except those located in arid or semi-arid areas or on agricultural lands.***

i. If you are vegetatively stabilizing any exposed portion of your site through the use of seed or planted vegetation, you must provide established uniform vegetation *(e.g., evenly distributed without large bare areas)*, which provides 70 percent or more of the density of coverage that was provided by vegetation prior to commencing earth-disturbing activities. You should avoid the use of invasive species;

ii. For final stabilization, vegetative cover must be perennial; and

iii. Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, you must select, design, and install non-vegetative erosion controls that provide cover *(e.g., mulch, rolled erosion control products)* to the area while vegetation is becoming established.

b. ***For sites located in arid or semi-arid areas, or drought-stricken areas.*** If you are located in an arid or semi-arid area, or a drought-stricken area, as these terms are defined in Appendix A, you are considered to have completed final stabilization if both of the following criteria are met:

i. The area you have seeded or planted must within 3 years provide established vegetation that covers 70 percent or more of the density of vegetation prior to commencing earth-disturbing activities; and

ii. In addition to seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded

or planted area, you must select, design, and install non-vegetative erosion controls that provide cover for at least 3 years without active maintenance by you.

c. ***For sites located on land used for agriculture.*** Disturbed areas on land used for agricultural purposes *(e.g., pipelines across crop or range land, staging areas for highway construction*) that are restored to their pre-construction agricultural use are not subject to these final stabilization criteria. Areas disturbed that were not previously used for agricultural activities, and areas that are not being returned to preconstruction agricultural use, must meet the conditions for stabilization in this Part**.**

2.2.2.2 ***Non-Vegetative Stabilization.*** If you are using non-vegetative controls to stabilize exposed portions of your site, or if you are using such controls to temporarily protect areas that are being vegetatively stabilized, you must provide effective non-vegetative cover[18] to stabilize any such exposed portions of your site.

2.3. POLLUTION PREVENTION REQUIREMENTS.

You are required to design, install, and maintain effective pollution prevention measures in order to prevent the discharge of pollutants. Consistent with this requirement, you must:

- Eliminate certain pollutant discharges from your site (see Part 2.3.1);
- Properly maintain all pollution prevention controls (see Part 2.3.2); and
- Comply with pollution prevention standards for pollutant-generating activities that occur at your site (see Part 2.3.3).

These requirements apply to all areas of your construction site and any and all support activities covered by this permit consistent with Part 1.3.c.

2.3.1. Prohibited Discharges.

You are prohibited from discharging the following from your construction site:

2.3.1.1 Wastewater from washout of concrete, unless managed by an appropriate control as described in Part 2.3.3.4;

2.3.1.2 Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, unless managed by an appropriate control as described in Part 2.3.3.4;

2.3.1.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;

2.3.1.4 Soaps, solvents, or detergents used in vehicle and equipment washing; and

2.3.1.5 Toxic or hazardous substances from a spill or other release.

2.3.2. General Maintenance Requirements.

You must ensure that all pollution prevention controls installed in accordance with this Part remain in effective operating condition and are protected from activities that would reduce their effectiveness. You must inspect all pollutant-generating activities and

[18] For temporary stabilization, examples of temporary non-vegetative stabilization methods include, but are not limited to, hydromulch and erosion control blankets. For final stabilization, examples of permanent non-vegetative stabilization methods include, but are not limited to, riprap, gabions, and geotextiles.

pollution prevention controls in accordance with your inspection frequency requirements in Parts 4.1.2 or 3.2.2.1 to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharges to receiving waters, and must document your findings in accordance with Part 4.1.7. If you find that controls need to be replaced, repaired, or maintained, you must make the necessary repairs or modifications in accordance with the following:

2.3.2.1 Initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.

2.3.2.2 When installation of a new pollution prevention control or a significant repair is needed, you must install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7 calendar day timeframe. Where these actions result in changes to any of the pollution prevention controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing this work.

2.3.3. Pollution Prevention Standards.

You are required to comply with the pollution prevention standards in this Part if you conduct any of the following activities at your site or at any construction support activity areas covered by this permit (see Part 1.3.c):

- Fueling and maintenance of equipment or vehicles;
- Washing of equipment and vehicles;
- Storage, handling, and disposal of construction materials, products, and wastes; and
- Washing of applicators and containers used for paint, concrete, or other materials.

The pollution prevention standards are as follows:

2.3.3.1 ***Fueling and Maintenance of Equipment or Vehicles***. If you conduct fueling and/or maintenance of equipment or vehicles at your site, you must provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuel, from the area where these activities will take place.[19]

To comply with the prohibition in Part 2.3.1.3, you must:

a. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR 112 and Section 311 of the CWA;

b. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;

[19] Examples of effective controls include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances, providing secondary containment *(e.g., spill berms, decks, spill containment pallets)*and cover where appropriate, and/or having spill kits readily available.

c. Use drip pans and absorbents under or around leaky vehicles;

d. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements;

e. Clean up spills or contaminated surfaces immediately, using dry clean up measures where possible, and eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge; and

f. Do not clean surfaces by hosing the area down.

2.3.3.2 ***Washing of Equipment and Vehicles.***

a. You must provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing;[20] and

b. To comply with the prohibition in Part 2.3.1.4, for storage of soaps, detergents, or solvents, you must provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these detergents from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.

2.3.3.3 ***Storage, Handling, and Disposal of Construction Products, Materials, and Wastes.*** You must minimize the exposure to stormwater of any of the products, materials, or wastes specified below that are present at your site by complying with the requirements in this Part.

Note: These requirements do not apply to those products, materials, or wastes that are not a source of stormwater contamination or that are designed to be exposed to stormwater.

To ensure you meet this requirement, you must:

a. *For building products*[21]*:* In storage areas, provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these products from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.

b. *For pesticides, herbicides, insecticides, fertilizers, and landscape materials:*

i. In storage areas, provide either (1) cover (e.g., *plastic sheeting or temporary roofs*) to prevent these chemicals from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas; and

ii. Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label.

c. *For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals:*

[20] Examples of effective controls include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls.

[21] Some examples of building products that are typically stored at construction sites include, but are not limited to, asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures.

i. To comply with the prohibition in Part 2.3.1.3, store chemicals in water-tight containers, and provide either (1) cover *(e.g., plastic sheeting or temporary roofs)* to prevent these containers from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas *(e.g., spill kits)*, or provide secondary containment *(e.g., spill berms, decks, spill containment pallets)*; and

ii. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

d. *For hazardous or toxic waste[22]:*

i. Separate hazardous or toxic waste from construction and domestic waste;

ii. Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;

iii. Store all containers that will be stored outside within appropriately-sized secondary containment *(e.g., spill berms, decks, spill containment pallets)* to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas *(e.g., storing chemicals in covered area or having a spill kit available on site)*;

iv. Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements; and

v. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

e. *For construction and domestic waste[23]*: Provide waste containers *(e.g., dumpster or trash receptacle)* of sufficient size and number to contain construction and domestic wastes. In addition, you must:

(1) On work days, clean up and dispose of waste in designated waste containers; and

(2) Clean up immediately if containers overflow.

[22] Examples of hazardous or toxic waste that may be present at construction sites include, but are not limited to, paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids.

[23] Examples of construction and domestic waste include, but are not limited to, packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.

f. *For sanitary waste:* Position portable toilets so that they are secure and will not be tipped or knocked over.

2.3.3.4 **Washing of Applicators and Containers used for Paint, Concrete, or Other Materials.** To comply with the prohibition in Parts 2.3.1.1 and 2.3.1.2, you must provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials. To comply with this requirement, you must:

a. Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation;

b. Handle washout or cleanout wastes as follows:

i. Do not dump liquid wastes in storm sewers;

ii. Dispose of liquid wastes in accordance with applicable requirements in Part 2.3.3.3; and

iii. Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part 2.3.3.3; and

c. Locate any washout or cleanout activities as far away as possible from surface waters and stormwater inlets or conveyances, and, to the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.

2.3.4. Emergency Spill Notification.

You are prohibited from discharging toxic or hazardous substances from a spill or other release, consistent with Part 2.3.1.5. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the discharge. You must also, within 7 calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. State, tribal, or local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies.

2.3.5. Fertilizer Discharge Restrictions.

You are required to minimize discharges of fertilizers containing nitrogen or phosphorus. To meet this requirement, you must comply with the following requirements:

2.3.5.1 Apply at a rate and in amounts consistent with manufacturer's specifications, or document departures from the manufacturer specifications where appropriate in Part 7.2.7.2 of the SWPPP;

2.3.5.2 Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;

2.3.5.3 Avoid applying before heavy rains that could cause excess nutrients to be discharged;

2.3.5.4 Never apply to frozen ground;

2.3.5.5 Never apply to stormwater conveyance channels with flowing water; and

2.3.5.6 Follow all other federal, state, tribal, and local requirements regarding fertilizer application.

3. WATER QUALITY-BASED EFFLUENT LIMITATIONS.

3.1. GENERAL EFFLUENT LIMITATION TO MEET APPLICABLE WATER QUALITY STANDARDS

Your discharge must be controlled as necessary to meet applicable water quality standards. You must also comply with any additional requirements that your state or tribe requires you to meet in Part 9.

In the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards. If at any time you become aware, or EPA determines, that your discharge is not being controlled as necessary to meet applicable water quality standards, you must take corrective action as required in Part 5.2.1, and document the corrective actions as required in Part 5.2.2 and Part 5.4.

EPA will also impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI, or from other sources indicates that your discharges are not controlled as necessary to meet applicable water quality standards. This includes situations where additional controls are necessary to comply with a wasteload allocation in an EPA established or approved TMDL.

3.2. DISCHARGE LIMITATIONS FOR IMPAIRED WATERS

If you discharge to a surface water that is impaired for (1) sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or (2) nutrients, including impairments for nitrogen and/or phosphorus, you are required to comply with the requirements in Part 3.2.2.

Note: For the purposes of this Part, "impaired waters" are waters identified as impaired on the appropriate CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first surface water to which you discharge is identified by a state, tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

If you discharge to an impaired water that is impaired for a parameter other than a sediment-related parameter or nutrients, EPA will inform you if any additional limits or controls are necessary for your discharge to be controlled as necessary to meet water quality standards, including for it to be consistent with the assumptions of any available wasteload allocation in any applicable TMDL, or if coverage under an individual permit is necessary in accordance with Part 1.4.5.

If during your coverage under a previous permit, you were required to install and maintain stormwater controls specifically to meet the assumptions and requirements of an EPA-approved or established TMDL (for any parameter) or to otherwise control your discharge to meet water quality standards, you must continue to implement such controls as part of this permit.

3.2.1. Identify If You Discharge To An Impaired Water.

If you discharge to an impaired water, you must provide the following information in your NOI:

- A list of all impaired waters to which you discharge;
- The pollutant(s) for which the surface water is impaired; and

- Whether a TMDL has been approved or established for the waters to which you discharge.

3.2.2. Requirements for Discharges to Sediment or Nutrient-Impaired Waters.

If you discharge to a surface water that is impaired for (1) sediment or a sediment-related parameter *(e.g., total suspended solids (TSS) or turbidity)* and/or (2) nutrients *(e.g., nitrogen and/or phosphorus)*, including impaired waters for which a TMDL has been approved or established for the impairment, you are required to comply with the following stormwater control requirements, which supplement the requirements applicable to your site in other corresponding parts of the permit

3.2.2.1 ***Frequency of Site Inspection.*** You must conduct inspections at the frequency specified in Part 4.1.3.

3.2.2.2 ***Deadline to Complete Stabilization.*** You must comply with the deadlines for completing site stabilization as specified in Part 2.2.1.3c.

3.2.2.3 ***State and Tribal Requirements.*** You must comply with any additional state or tribal impairment-related requirements included in Part 9.

EPA will also impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if it is determined that the controls in the Part will not be sufficient to control discharges consistent with the assumptions and requirements of an applicable wasteload allocation of an approved or established TMDL or to prevent the site from contributing to the impairment.

3.3. DISCHARGES TO WATERS IDENTIFIED AS TIER 2, TIER 2.5, OR TIER 3.

3.3.1. Identify if You Discharge to a Tier 2, Tier 2.5, or Tier 3 Water.

If you discharge to a water identified by a state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 water, you must provide on your NOI a list of waters identified as Tier 2, Tier 2.5, or Tier 3 to which you discharge. See Appendix F for a list of Tier 2 and 3 waters.

Note: For the purposes of this permit, you are considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first surface water to which you discharge is identified by a state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3. Tiers 2, 2.5 and 3 refer to waters either identified by the state as high quality waters or Outstanding National Resource Waters under 40 CFR §131.12(a)(2) and (3). For discharges that enter a storm sewer system prior to discharge, the surface water to which you discharge is the first surface water that receives the stormwater discharge from the storm sewer system.

3.3.2. Requirements for New Projects Discharging to Tier 2, Tier 2.5, or Tier 3 Waters.

For new projects, if you will discharge to a Tier 2, Tier 2.5, or Tier 3 water, you are required to comply with the requirements in Parts 4.1.3 (inspection frequencies) and 2.2.1.3c (stabilization deadlines), and, if applicable, Part 9 (relevant state or tribal requirements). In addition, on a case-by-case basis, EPA may notify operators of such new projects or operators of existing projects with increased discharges that additional analyses, stormwater controls, or other permit conditions are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary in accordance with Part 1.4.5.

4. INSPECTIONS.

4.1. SITE INSPECTIONS.

4.1.1. Person(s) Responsible for Inspecting Site.

The person(s) inspecting your site may be a person on your staff or a third party you hire to conduct such inspections. You are responsible for ensuring that the person who conducts inspections is a "qualified person."

Note: A "qualified person" is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

4.1.2. Frequency of Inspections.

At a minimum, you must conduct a site inspection in accordance with one of the two schedules listed below, unless you are subject to Part 4.1.3 or Part 4.1.4:

4.1.2.1 At least once every 7 calendar days; or

4.1.2.2 Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: You are required to specify in your SWPPP which schedule you will be following.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly in accordance with Part 4.1.2.2 and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

4.1.3. Increase in Inspection Frequency for Sites Discharging to Sensitive Waters.

For any portion of the site that discharges to a sediment or nutrient-impaired water (see Part 3.2) or to a water that is identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes (see Part 3.3), instead of the inspection frequency specified in Part 4.1.2, you must conduct inspections in accordance with the following inspection frequencies:

4.1.3.1 Once every 7 calendar days; and

4.1.3.2 Within 24 hours of the occurrence of a storm event of 0.25 inches or greater. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that

measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

Note: If you qualify for any of the reduced inspection frequencies in Part 4.1.4, you may conduct inspections in accordance with Part 4.1.4 for any portion of your site that discharges to a sensitive water.

4.1.4. Reductions in Inspection Frequency.

Your inspection frequency may be reduced as follows:

4.1.4.1 ***For Stabilized Areas.*** You may reduce the frequency of inspections to once per month in any area of your site where the stabilization steps in Parts 2.2.1.2a and 2.2.1.2b have been completed. If construction activity resumes in this portion of the site at a later date, the inspection frequency immediately increases to that required in Parts 4.1.2 or 4.1.3, if applicable. You must document the beginning and ending dates of this period in your records.

4.1.4.2 ***For Arid, Semi-Arid, or Drought-Stricken Areas.*** You may reduce the frequency of inspections to once per month and within 24 hours of the occurrence of a storm event of 0.25 inches or greater if your site is located in an arid, semi-arid, or drought-stricken area, as these terms are defined in Appendix A, and construction is occurring during the seasonally dry period or during a period in which drought is predicted to occur. You must document that you are using this reduced schedule and the beginning and ending dates of the seasonally dry period in your SWPPP. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

4.1.4.3 ***For Frozen Conditions*.**

a. If you are suspending earth-disturbing activities due to frozen conditions, you may temporarily suspend inspections on your site until thawing conditions (see Appendix A) begin to occur if:

i. Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.1.2 or 4.1.3, if applicable;

ii. Land disturbances have been suspended; and

iii. All disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.

b. If you are still conducting earth-disturbing activities during frozen conditions, you may reduce your inspection frequency to once per month if:

i. Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.1.2 or 4.1.3 if applicable; and

ii. Except for areas in which you are actively conducting earth-disturbing activities, disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.

You must document the beginning and ending dates of this period in your SWPPP.

4.1.5. Areas that Need to Be Inspected. During your site inspection, you must at a minimum inspect the following areas of your site:

4.1.5.1 All areas that have been cleared, graded, or excavated and that have not yet completed stabilization consistent with Part 2.2;

4.1.5.2 All stormwater controls (including pollution prevention measures) installed at the site to comply with this permit;

4.1.5.3 Material, waste, borrow, or equipment storage and maintenance areas that are covered by this permit;

4.1.5.4 All areas where stormwater typically flows within the site, including drainageways designed to divert, convey, and/or treat stormwater;

4.1.5.5 All points of discharge from the site; and

4.1.5.6 All locations where stabilization measures have been implemented.

You are not required to inspect areas that, at the time of the inspection, are considered unsafe to your inspection personnel.

4.1.6. Requirements for Inspections. During your site inspection, you must at a minimum:

4.1.6.1 Check whether all erosion and sediment controls and pollution prevention controls are installed, appear to be operational, and are working as intended to minimize pollutant discharges. Determine if any controls need to be replaced, repaired, or maintained in accordance with Parts 2.1.1.4 and 2.3.2;

4.1.6.2 Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site;

4.1.6.3 Identify any locations where new or modified stormwater controls are necessary to meet the requirements of Parts 2 and/or 3;

4.1.6.4 At points of discharge and, if applicable, the banks of any surface waters flowing within your property boundaries or immediately adjacent to your property, check for signs of visible erosion and sedimentation *(i.e., sediment deposits)* that have occurred and are attributable to your discharge; and

4.1.6.5 Identify any and all incidents of noncompliance observed.

4.1.6.6 If a discharge is occurring during your inspection, you are required to:

a. Identify all points of the property from which there is a discharge;

b. Observe and document the visual quality of the discharge, and take note of the characteristics of the stormwater discharge, including color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollutants; and

c. Document whether your stormwater controls are operating effectively, and describe any such controls that are clearly not operating as intended or are in need of maintenance.

4.1.6.7 Based on the results of your inspection, initiate corrective action under Part 5.

4.1.7. Inspection Report.

4.1.7.1 ***Requirement to Complete Inspection Report.*** You must complete an inspection report within 24 hours of completing any site inspection. Each inspection report must include the following:

a. The inspection date;

b. Names and titles of personnel making the inspection;

c. A summary of your inspection findings, covering at a minimum the observations you made in accordance with Part 4.1.6;

d. If you are inspecting your site at the frequency specified in Part 4.1.2.2, Part 4.1.3, or Part 4.1.4.2, and you conducted an inspection because of rainfall measuring 0.25 inches or greater, you must include the applicable rain gauge or weather station readings that triggered the inspection; and

e. If you have determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations that this condition applied to.

4.1.7.2 ***Signature Requirements.*** Each inspection report must be signed in accordance with Appendix I, Part I.11 of this permit.

4.1.7.3 ***Recordkeeping Requirements.*** You are required to keep a current, copy of all inspection reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by EPA. For purposes of this permit, your inspection reports may be kept electronically if the records are:

a. In a format that can be read in a similar manner as a paper record;

b. Legally dependable with no less evidentiary value than their paper equivalent; and

c. Accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

Note: See Section IX.1.7 of the Fact Sheet for a discussion on ways to ensure that electronic records satisfy this requirement. See Appendix I, Part I.11.5 for requirements relating to electronic signature of these documents.

All inspection reports completed for this Part must be retained for at least 3 years from the date that your permit coverage expires or is terminated.

4.2. INSPECTIONS BY EPA.

You must allow EPA, or an authorized representative of the EPA, to conduct the following activities at reasonable times:

4.2.1. Enter onto areas of your site, including any construction support activity areas covered by this permit (see Part 1.3.c), and onto locations where records are kept under the conditions of this permit;

4.2.2. Access and copy any records that must be kept under the conditions of this permit;

4.2.3. Inspect your construction site, including any construction support activity areas covered by this permit (see Part 1.3.c) and any stormwater controls installed and maintained at the site; and

4.2.4. Sample or monitor for the purpose of ensuring compliance.

5. CORRECTIVE ACTIONS.

5.1. "CORRECTIVE ACTIONS" DEFINED.

Corrective actions are actions you take in compliance with this Part to:

- Repair, modify, or replace any stormwater control used at the site;
- Clean up and properly dispose of spills, releases, or other deposits; or
- Remedy a permit violation.

5.2. REQUIREMENTS FOR TAKING CORRECTIVE ACTION.

You must complete the following corrective actions in accordance with the deadlines specified in this Part. In all circumstances, you must immediately take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

Note: In this context, the term "immediately" requires construction operators to, on the same day a condition requiring corrective action is found, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. However, if the problem is identified at a time in the work day when it is too late to initiative corrective action, the initiation of corrective action must begin on the following work day.

5.2.1. For any of the following conditions on your site, you must install a new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7-day timeframe.

5.2.1.1 A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Parts 2 and/or 3; or

5.2.1.2 You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1. In this case, you must notify your EPA Regional Office by the end of the next work day. You are required to submit your notification through EPA's electronic NOI system, or "eNOI", at www.epa.gov/npdes/cgpenoi; or

5.2.1.3 One of the prohibited discharges in Part 2.3.1 is occurring or has occurred.

5.2.2. Where your corrective actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing corrective action work.

5.3. CORRECTIVE ACTION REQUIRED BY EPA.

You must comply with any corrective actions required by EPA as a result of permit violations found during an inspection carried out under Part 4.2.

5.4. CORRECTIVE ACTION REPORT.

For each corrective action taken in accordance with this Part, you must complete a corrective action report, which includes the applicable information in Parts 5.4.1 and 5.4.2. Note that these reports must be maintained in your records but do not need to be provided to EPA except upon request.

5.4.1. Within 24 hours of discovering the occurrence of one of the triggering conditions in Part 5.2.1 at your site, you must complete a report of the following:

5.4.1.1 Which condition was identified at your site;

5.4.1.2 The nature of the condition identified; and

5.4.1.3 The date and time of the condition identified and how it was identified.

5.4.2. Within 7 calendar days of discovering the occurrence of one of the triggering conditions in Part 5.2.1 at your site, you must complete a report of the following:

5.4.2.1 Any follow-up actions taken to review the design, installation, and maintenance of stormwater controls, including the dates such actions occurred;

5.4.2.2 A summary of stormwater control modifications taken or to be taken, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed; and

5.4.2.3 Notice of whether SWPPP modifications are required as a result of the condition identified or corrective action.

5.4.3. Signature Requirements. Each corrective action report must be signed and certified in accordance with Appendix I, Part I.11 of this permit.

5.4.4. Recordkeeping Requirements. You are required to keep a current copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by EPA. For purposes of this permit, your corrective action reports may be kept electronically if the records are:

5.4.4.1 In a format that can be read in a similar manner as a paper record;

5.4.4.2 Legally dependable with no less evidentiary value than their paper equivalent; and

5.4.4.3 Accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

Note: See Section IX.1.7 of the Fact Sheet for a discussion on ways to ensure that electronic records satisfy this requirement. See Appendix I, Part I.11.5 for requirements relating to electronic signature of these documents.

All corrective action reports completed for this Part must be retained for at least 3 years from the date that your permit coverage expires or is terminated.

6. STAFF TRAINING REQUIREMENTS.

Prior to the commencement of earth-disturbing activities or pollutant-generating activities, whichever occurs first, you must ensure that the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention measures);
- Personnel responsible for the application and storage of treatment chemicals (if applicable);
- Personnel who are responsible for conducting inspections as required in Part 4.1.1; and
- Personnel who are responsible for taking corrective actions as required in Part 5.

Notes: (1) If the person requiring training is a new employee, who starts after you commence earth-disturbing or pollutant-generating activities, you must ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit.

(2) For emergency-related construction activities, the requirement to train personnel prior to commencement of earth-disturbing activities does not apply, however, such personnel must have the required training prior to NOI submission.

You are responsible for ensuring that all activities on the site comply with the requirements of this permit. You are not required to provide or document formal training for subcontractors or other outside service providers, but you must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.

At a minimum, personnel must be trained to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- The location of all stormwater controls on the site required by this permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

7. STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

7.1. GENERAL REQUIREMENTS.

7.1.1. Requirement to Develop a SWPPP Prior to Submitting Your NOI.

All operators associated with a construction project to be covered under this permit must develop a SWPPP.

Note: You have the option of developing a group SWPPP where you are one of several operators who will be engaged in construction activities at your site. For instance, if both the owner and the general contractor of the construction site are permitted, the owner may be the party responsible for SWPPP development, and the general contractor can choose to use this same SWPPP, as long as the SWPPP addresses the general contractor's scope of construction work and obligations under this permit.

You are required to develop your site's SWPPP prior to submitting your NOI. At a minimum, your SWPPP must include the information required in Part 7.2 and as specified in other parts of the permit. [24] You must also update the SWPPP as required in Part 7.4.

Note: If your project is an "existing project" (see Part 1.4.2.b) or if you are a new operator of an existing project" (see Part 1.4.2.c), and it is infeasible for you to comply with a specific requirement in this Part or in Parts 2.1, and 2.3.3 through 2.3.5 (except for Parts 2.3.3.1, 2.3.3.2b, 2.3.3.3c.i, and 2.3.3.4) because (1) the provision was not part of the permit you were previously covered under (i.e., the 2003 or 2008 CGP), and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), or because you are unable to comply with the requirement due to the manner in which stormwater controls have already been installed or were already designed prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), you are required to include documentation of the reasons why it is infeasible for you to meet the specific requirement, and then you may be waived from complying with this requirement. You must include a separate justification why it is infeasible for you to meet each of the applicable requirements.

If you prepared a SWPPP for coverage under a previous version of this NPDES permit, you must review and update your SWPPP to ensure that this permit's requirements are addressed prior to submitting your NOI.

7.2. SWPPP CONTENTS.

Your SWPPP must include the following information, at a minimum.

[24] The SWPPP does not establish the effluent limits that apply to your site's discharges; these limits are established in this permit in Parts 2 and 3.

7.2.1. Stormwater Team.

Each operator, or group of multiple operators, must assemble a "stormwater team," which is responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the requirements in this permit.

The SWPPP must identify the personnel (by name or position) that are part of the stormwater team, as well as their individual responsibilities. Each member of the stormwater team must have ready access to an electronic or paper copy of applicable portions of this permit, the most updated copy of your SWPPP, and other relevant documents or information that must be kept with the SWPPP.

7.2.2. Nature of Construction Activities.

The SWPPP must describe the nature of your construction activities, including the size of the property (in acres) and the total area expected to be disturbed by the construction activities (in acres), construction support activity areas covered by this permit (see Part 1.3.c), and the maximum area expected to be disturbed at any one time.

7.2.3. Emergency-Related Projects.

If you are conducting earth-disturbing activities in response to a public emergency (see Part 1.2), you must document the cause of the public emergency *(e.g., natural disaster, extreme flooding conditions, etc.)*, information substantiating its occurrence *(e.g., state disaster declaration or similar state or local declaration)*, and a description of the construction necessary to reestablish effected public services.

7.2.4. Identification of Other Site Operators.

The SWPPP must include a list of all other operators who will be engaged in construction activities at your site, and the areas of the site over which each operator has control.

7.2.5. Sequence and Estimated Dates of Construction Activities.

The SWPPP must include a description of the intended sequence of construction activities, including a schedule of the estimated start dates and the duration of the activity, for the following activities:

7.2.5.1 Installation of stormwater control measures, and when they will be made operational, including an explanation of how the sequence and schedule for installation of stormwater control measures complies with Part 2.1.1.3a and of any departures from manufacturer specifications pursuant to Part 2.1.1.3b;

7.2.5.2 Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;

7.2.5.3 Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site;

7.2.5.4 Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject in Part 2.2.1; and

7.2.5.5 Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.

Note: If plans change due to unforeseen circumstances or for other reasons, the requirement to describe the sequence and estimated dates of construction activities is not meant

to "lock in" the operator to meeting these projections. When departures from initial projections are necessary, this should be documented in the SWPPP itself or in associated records, as appropriate.

7.2.6. Site Map.

The SWPPP must include a legible site map, or series of maps, showing the following features of your project:

Note: Included in the project site are any construction support activities covered by this permit (see Part 1.3.c).

7.2.6.1 Boundaries of the property and of the locations where construction activities will occur, including:

a. Locations where earth-disturbing activities will occur, noting any phasing of construction activities;

b. Approximate slopes before and after major grading activities. Note areas of steep slopes, as defined in Appendix A;

c. Locations where sediment, soil, or other construction materials will be stockpiled;

d. Locations of any crossings of surface waters;

e. Designated points on the site where vehicles will exit onto paved roads;

f. Locations of structures and other impervious surfaces upon completion of construction; and

g. Locations of construction support activity areas covered by this permit (see Part 1.3.c).

7.2.6.2 Locations of all surface waters, including wetlands, that exist within or in the immediate vicinity of the site. Indicate which waterbodies are listed as impaired, and which are identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 waters;

7.2.6.3 The boundary lines of any natural buffers provided consistent with Part 2.1.2.1a;

7.2.6.4 Areas of federally-listed critical habitat for endangered or threatened species;

7.2.6.5 Topography of the site, existing vegetative cover (*e.g., forest, pasture, pavement, structures*)**,** and drainage pattern(s) of stormwater and authorized non-stormwater flow onto, over, and from the site property before and after major grading activities;

7.2.6.6 Stormwater and allowable non-stormwater discharge locations, including:

a. Locations of any storm drain inlets on the site and in the immediate vicinity of the site; and

Note: The requirement to show storm drain inlets in the immediate vicinity of the site on your site map only applies to those inlets that are easily identifiable from your site or from a publicly accessible area immediately adjacent to your site.

b. Locations where stormwater or allowable non-stormwater will be discharged to surface waters (including wetlands) on or near the site.

7.2.6.7 Locations of all potential pollutant-generating activities identified in Part 7.2.7;

7.2.6.8 Locations of stormwater control measures; and

7.2.6.9 Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

7.2.7. Construction Site Pollutants.

The SWPPP must include the following:

7.2.7.1 A list and description of all the pollutant-generating activities[25] on your site.

7.2.7.2 For each pollutant-generating activity, an inventory of pollutants or pollutant constituents *(e.g., sediment, fertilizers and/or pesticides, paints, solvents, fuels)* associated with that activity, which could be exposed to rainfall, or snowmelt, and could be discharged from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges. You must also document any departures from the manufacturer's specifications for applying fertilizers containing nitrogen and phosphorus, as required in Part 2.3.5.1.

7.2.8. Non-Stormwater Discharges.

The SWPPP must also identify all sources of allowable non-stormwater discharges listed in Part 1.3.d.

7.2.9. Buffer Documentation.

If you are required to comply with Part 2.1.2.1 because a surface water is located within 50 feet of your project's earth disturbances, you must describe which compliance alternative you have selected for your site, and comply with any additional requirements to provide documentation in Part 2.1.2.1.

7.2.10. Description of Stormwater Control Measures.

7.2.10.1 ***Stormwater Control Measures to be Used During Construction Activity.*** The SWPPP must describe all stormwater control measures that are or will be installed and maintained at your site to meet the requirements of Part 2. For each stormwater control measure, you must document:

a. Information on the type of stormwater control measure to be installed and maintained, including design information;

b. What specific sediment controls will be installed and made operational prior to conducting earth-disturbing activities in any given portion of your site to meet the requirement of Part 2.1.2.2a;

c. For exit points on your site, document stabilization techniques you will use and any additional controls that are planned to remove sediment prior to vehicle exit consistent with Part 2.1.2.3; and

d. For linear projects, where you have determined that the use of perimeter controls in portions of the site is impracticable, document why you believe this to be the case (see Part 2.1.2.2a).

7.2.10.2 ***Use of Treatment Chemicals.*** If you will use polymers, flocculants, or other treatment chemicals at your site, the SWPPP must include:

a. A listing of all soil types[26] that are expected to be exposed during construction and that will be discharged to locations where chemicals

[25] Examples of pollutant-generating activities include, but are not limited to: paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations.

will be applied. Also include a listing of soil types expected to be found in fill material to be used in these same areas, to the extent you have this information prior to construction.

b. A listing of all treatment chemicals to be used at the site, and why the selection of these chemicals is suited to the soil characteristics of your site;

c. If you have been authorized by your applicable EPA Regional Office to use cationic treatment chemicals, include the specific controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards;

d. The dosage of all treatment chemicals you will use at the site or the methodology you will use to determine dosage;

e. Information from any applicable Material Safety Data Sheets (MSDS);

f. Schematic drawings of any chemically-enhanced stormwater controls or chemical treatment systems to be used for application of the treatment chemicals;

g. A description of how chemicals will be stored consistent with Part 2.1.3.3b;

h. References to applicable state or local requirements affecting the use of treatment chemicals, and copies of applicable manufacturer's specifications regarding the use of your specific treatment chemicals and/or chemical treatment systems; and

i. A description of the training that personnel who handle and apply chemicals have received prior to permit coverage, or will receive prior to use of the treatment chemicals at your site.

7.2.10.3 ***Stabilization Practices.*** The SWPPP must describe the specific vegetative and/or non-vegetative practices that will be used to comply with the requirements in Part 2.2, including:

a. If you will be complying with the stabilization deadlines specified in Part 2.2.1.3a, you must indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions; and

b. If you will be complying with the stabilization deadlines specified in Part 2.2.1.3b, you must document the circumstances that prevent you from meeting the deadlines specified in Parts 2.2.1.1 and/or 2.2.1.2.

7.2.11. Pollution Prevention Procedures.

7.2.11.1 ***Spill Prevention and Response Procedures.*** The SWPPP must describe procedures that you will follow to prevent and respond to spills and leaks consistent with Part 2.3, including:

a. Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks; and

[26] Information on soils may be obtained at http://websoilsurvey.nrcs.usda.gov/app/.

b. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.4 and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.

You may also reference the existence of Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the CWA, or spill control programs otherwise required by an NPDES permit for the construction activity, provided that you keep a copy of that other plan onsite.

Note: Even if you already have an SPCC or other spill prevention plan in existence, your plans will only be considered adequate if they meet all of the requirements of this Part, either as part of your existing plan or supplemented as part of the SWPPP.

7.2.11.2 ***Waste Management Procedures.*** The SWPPP must describe procedures for how you will handle and dispose of all wastes generated at your site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

7.2.12. Procedures for Inspection, Maintenance, and Corrective Action.

The SWPPP must describe the procedures you will follow for maintaining your stormwater control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part 2.1.1.4, Part 2.3.2, Part 4, and Part 5 of the permit. The following information must also be included in your SWPPP:

7.2.12.1 Personnel responsible for conducting inspections;

7.2.12.2 The inspection schedule you will be following, which is based on whether your site is subject to Part 4.1.2 or Part 4.1.3, and whether your site qualifies for any of the allowances for reduced inspection frequencies in Part 4.1.4. If you will be conducting inspections in accordance with the inspection schedule in Part 4.1.2.2 or Part 4.1.3, the location of the rain gauge on your site or the address of the weather station you will be using to obtain rainfall data;

7.2.12.3 If you will be reducing your inspection frequency in accordance with Part 4.1.4.2, the beginning and ending dates of the seasonally-defined arid period for your area or the valid period of drought. If you will be reducing your inspection frequency in accordance with Part 4.1.4.3, the beginning and ending dates of frozen conditions on your site; and

7.2.12.4 Any inspection or maintenance checklists or other forms that will be used.

7.2.13. Staff Training.

The SWPPP must include documentation that the required personnel were trained in accordance with Part 6.

7.2.14. Documentation of Compliance with Other Federal Requirements.

7.2.14.1 *Endangered Species Act.* The SWPPP must include documentation supporting your determination with respect to Part 1.1.e and Appendix D.

7.2.14.2 *Historic Properties.* The SWPPP must include documentation required by Appendix E in relation to potential impacts to historic properties.

7.2.14.3 *Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Stormwater Controls.* If you are using any of the following stormwater controls at your site, as they are described below, you must document any contact you have had with the applicable state agency or EPA Regional Office responsible for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR Parts 144 -147. Such controls would generally be considered Class V UIC wells:

a. Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);

b. Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow; and

c. Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

Note: For state UIC program contacts, refer to the following EPA website: http://water.epa.gov/type/groundwater/uic/whereyoulive.cfm.

7.2.15. SWPPP Certification.

You must sign and date your SWPPP in accordance with Appendix I, Part I.11.

7.2.16. Post-Authorization Additions to the SWPPP.

Once you are notified of your coverage under this permit, you must include the following documents as part of your SWPPP:

7.2.16.1 A copy of your NOI submitted to EPA along with any correspondence exchanged between you and EPA related to coverage under this permit;

7.2.16.2 A copy of the acknowledgment letter you receive from the NOI Processing Center or eNOI system assigning your permit tracking number;

7.2.16.3 A copy of this permit (an electronic copy easily available to the stormwater team is also acceptable).

7.3. ON-SITE AVAILABILITY OF YOUR SWPPP.

You are required to keep a current copy of your SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by EPA; a state, tribal, or local agency approving stormwater management plans; the operator of a storm sewer system receiving discharges from the site; or representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS).

EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) will be withheld from the public, but may not be withheld from EPA, USFWS, or NMFS.

Note: Information covered by a claim of confidentiality will be disclosed by EPA only to the extent of, and by means of, the procedures set forth in 40 CFR Part 2, Subpart B. In general, submitted information protected by a business confidentiality claim may

be disclosed to other employees, officers, or authorized representatives of the United States concerned with implementing the CWA. The authorized representatives, including employees of other executive branch agencies, may review CBI during the course of reviewing draft regulations.

If an onsite location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of your construction site.

7.4. REQUIRED SWPPP MODIFICATIONS.

7.4.1. List of Conditions Requiring SWPPP Modification.

You must modify your SWPPP, including the site map(s), in response to any of the following conditions:

7.4.1.1 Whenever new operators become active in construction activities on your site, or you make changes to your construction plans, stormwater control measures, pollution prevention measures, or other activities at your site that are no longer accurately reflected in your SWPPP. This includes changes made in response to corrective actions triggered under Part 5. You do not need to modify your SWPPP if the estimated dates in Part 7.2.5 change during the course of construction;

7.4.1.2 To reflect areas on your site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;

7.4.1.3 If inspections or investigations by site staff, or by local, state, tribal, or federal officials determine that SWPPP modifications are necessary for compliance with this permit;

7.4.1.4 Where EPA determines it is necessary to impose additional requirements on your discharge, the following must be included in your SWPPP:

a. A copy of any correspondence describing such requirements; and

b. A description of the stormwater control measures that will be used to meet such requirements.

7.4.1.5 To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater control measures implemented at the site; and

7.4.1.6 If applicable, if a change in chemical treatment systems or chemically-enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

7.4.2. Deadlines for SWPPP Modifications.

You must complete required revisions to the SWPPP within 7 calendar days following the occurrence of any of the conditions listed in Part 7.4.1.

7.4.3. SWPPP Modification Records.

You are required to maintain records showing the dates of all SWPPP modifications. The records must include the name of the person authorizing each change (see Part 7.2.15 above) and a brief summary of all changes.

7.4.4. Certification Requirements.

All modifications made to the SWPPP consistent with Part 7.4 must be authorized by a person identified in Appendix I, Part I.11.b.

7.4.5. Required Notice to Other Operators.

Upon determining that a modification to your SWPPP is required, if there are multiple operators covered under this permit, you must immediately notify any operators who may be impacted by the change to the SWPPP.

8. HOW TO TERMINATE COVERAGE.

Until you terminate coverage under this permit, you are required to comply with all conditions and effluent limitations in the permit. To terminate permit coverage, you must submit to EPA a complete and accurate Notice of Termination (NOT), which certifies that you have met the requirements for terminating in Part 8.

8.1. MINIMUM INFORMATION REQUIRED IN NOT.

You will be required to provide the following in your NOT:

8.1.1. NPDES permit tracking number provided by EPA when you received coverage under this permit;

8.1.2. Basis for submission of the NOT (see Part 8.2);

8.1.3. Operator contact information;

8.1.4. Name of project and address (or a description of location if no street address is available); and

8.1.5. NOT certification.

8.2. CONDITIONS FOR TERMINATING PERMIT COVERAGE.

You may terminate permit coverage only if one of the following conditions occurs at your site:

8.2.1. You have completed all earth-disturbing activities at your site and, if applicable, construction support activities covered by this permit (see Part 1.3.c), and you have met the following requirements:

8.2.1.1 For any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which you had control during the construction activities, you have met the requirements for final vegetative or non-vegetative stabilization in Part 2.2.2;

8.2.1.2 You have removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following your termination of permit coverage;

8.2.1.3 You have removed all stormwater controls that were installed and maintained during construction, except those that are intended for long-term use following your termination of permit coverage or those that are biodegradable; and

8.2.1.4 You have removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following your termination of permit coverage; or

8.2.2. You have transferred control of all areas of the site for which you are responsible under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit; or

8.2.3. Coverage under an individual or alternative general NPDES permit has been obtained.

8.3. HOW TO SUBMIT YOUR NOT.

You are required to use EPA's electronic NOI system, or "eNOI system", to prepare and submit your NOT. The electronic NOT form you are required to complete is found at www.epa.gov/npdes/stormwater/cgpenoi. You will use your NOI tracking number *(i.e., the EPA number you were assigned upon authorization under the permit)* to upload the

fillable NOT form, which will ensure that EPA properly records your termination of coverage. If you have a problem with the use of the eNOI system, contact the EPA Regional Office that corresponds to the location of your site. If you are given approval by the EPA Regional Office to use a paper NOT, you must complete the form in Appendix K.

8.4. DEADLINE FOR SUBMITTING NOTS.

You must submit your NOT within 30 calendar days after any one of the triggering conditions in Part 8.2 occur.

8.5. EFFECTIVE DATE OF TERMINATION OF COVERAGE.

Your authorization to discharge under this permit terminates at midnight of the calendar day that a complete NOT is processed and posted on EPA's website (www.epa.gov/npdes/stormwater/cgpnoisearch).

9. PERMIT CONDITIONS APPLICABLE TO SPECIFIC STATES, INDIAN COUNTRY LANDS, OR TERRITORIES

The provisions in this Part provide modifications or additions to the applicable conditions of this permit to reflect specific additional conditions required as part of the state or tribal CWA Section 401 certification process, or the Coastal Zone Management Act (CZMA) certification process, or as otherwise established by the permitting authority. The specific additional revisions and requirements only apply to activities in those specific states, Indian country, and areas in certain states subject to construction projects by Federal Operators. States, Indian country, and areas subject to construction by Federal Operators not included in this Part do not have any modifications or additions to the applicable conditions of this permit

9.1. Region 1

9.1.1. MAR120000: Commonwealth of Massachusetts (except Indian country).

9.1.1.1 You must comply with the Massachusetts Clean Waters Act (Ch. 21, ss. 26-53).

9.1.1.2 You must comply with the conditions in 314 CMR 4.00- Massachusetts Surface Water Quality Standards.

9.1.1.3 You must comply with the conditions in 314 CMR 3.00- Massachusetts Surface Water Discharge Permit Program.

9.1.1.4 You must comply with the Wetlands Protection Act (Ch. 131 s. 40) and its regulations, 310 CMR 10.00 and any Order of Conditions issued by a Conservation Commission or a Superseding Order of Conditions issued by the Massachusetts Department of Environmental Protection.

9.1.1.5 You must comply with the Massachusetts Storm Water Performance Standards, as prescribed by state regulations promulgated under the authority of the Massachusetts Clean Waters Act, MGL Ch. 21, ss 26-53 and the Wetlands Protection Act, Ch. 131, s. 40.

9.1.1.6 You must comply with the conditions in 314 CMR 9.00 – Water Quality Certification for Discharges of Dredged or Fill Material, Dredging, and Dredged Material Disposal in Waters of the United States within the Commonwealth.

9.1.1.7 You must comply with the Massachusetts Endangered Species Act (MESA), MGL Ch. 313A and regulations at 321 CMR 10.00 and any actions undertaken to comply with this stormwater general permit shall not result in non-compliance with the MESA.

9.1.1.8 Activities covered under this general permit shall not interfere with the implementation of mosquito control work conducted in accordance with Chapter 252 including s. 5A thereunder and MassDEP Guideline Number BRP G01-02, West Nile Virus Application of Pesticides to Wetland Resource Areas and Buffer Zones, and Public Water Supplies.

9.1.1.9 The Department may request a copy of the Stormwater Pollution Prevention Plan (SWPPP) and the permittee is required to submit the SWPPP to the Department within 14 days of such request. The Department may conduct an inspection of any facility covered by this permit to ensure compliance with state law requirements, including state water quality standards. The Department may enforce its certification conditions.

9.1.1.10 The Department may require the permit holder to perform water quality monitoring during the permit term if monitoring is necessary for the protection of public health or the environment as designated under the authority at 314 CMR 3.00.

9.1.1.11 The Department may require the permit holder to provide measurable verification of the effectiveness of Best Management Practices (BMPs) and other control measures used in the stormwater management program, including water quality monitoring.

9.1.1.12 The Department has determined that compliance with this permit does not protect the permit holder from enforcement actions deemed necessary by the Department under its associated regulations to address an imminent threat to public health or a significant adverse environmental impact which results in a violation of the Massachusetts Clean Waters Act, Ch. 21, ss. 26-53.

9.1.1.13 The Department reserves the right to modify this 401 Water Quality Certification if any changes, modifications, or deletions are made to this general permit. In addition, the Department reserves the right to add and/or alter the terms and conditions of this 401 Water Quality Certification to carry out its responsibilities during the term of this general permit with respect to water quality, including any revisions to 314 CMR 4.00, Massachusetts Surface Water Quality Standards.

9.1.1.14 Should any violation of the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, or the conditions of this 401 Water Quality Certification occur, the Department will direct the permit holder to correct the violation(s). The Department has the right to take any action as authorized by the General Laws of the Commonwealth to address the violation(s) of this permit or the Massachusetts Clean Waters Act and the regulations promulgated thereunder. Substantial civil and criminal penalties are authorized under MGL Ch. 21, s. 42 for discharging into Masachusetts' waters in violation of an order or permit issued by this Department. This 401 Water Quality Certification does not relieve the permit holder of the duty to comply with other applicable Massachusetts statutes and regulations.

9.1.2. NHR120000: State of New Hampshire.

9.1.2.1 If you disturb 100,000 square feet or more of contiguous area, you must also apply for an Alteration of Terrain (AoT) permit from DES pursuant to RSA 485-A:17 and Env-Ws 1500. This requirement also applies to a lower disturbance threshold of 50,000 square feet or more when construction occurs within the protected shoreline under the Shoreland Water Quality Protection Act (see RSA 483-B and Env-Ws 1400). A permit application must also be filed if your project disturbs an area of greater than 2,500 square feet, is within 50 feet of any surface water, and has a flow path of 50 feet or longer disturbing a grade of 25 percent or greater. Project sites with disturbances smaller than those discussed above, that have the potential to adversely affect state surface waters, are subject to the conditions of an AoT General Permit by Rule.

9.1.2.2 You must determine that any excavation dewatering discharges are not contaminated before they will be authorized as an allowable non-stormwater discharge under this permit (see Part 1.3.d). The water is considered uncontaminated if there is no groundwater contamination within 1,000 feet of the source of the groundwater to be treated and discharged.

Information on groundwater contamination can be generated over the Internet via the NHDES web site http://des.nh.gov/ at the OneStop Web Geographic Information System at http://www2.des.state.nh.us/gis/onestop. If it is determined that the groundwater to be dewatered is near a remediation or other waste site you must apply for the Remediation General Permit (see http://www.epa.gov/region1/npdes/rgp.html.)

9.1.2.3 You must treat any uncontaminated excavation dewatering discharges as necessary to remove suspended solids and turbidity. The discharges must be sampled at a location prior to mixing with stormwater at least once per week during weeks when discharges occur. Samples must be analyzed for total suspended solids (TSS) and must meet monthly average and daily maximum TSS limits of 50 milligrams per liter (mg/L) and 100 mg/L, respectively. TSS (a.k.a. Residue, Nonfilterable) sampling and analysis must be performed in accordance with Tables IB and II in 40 CFR 136.3 (see: http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfr136_02.html). Records of any sampling and analysis must be maintained and kept with the SWPPP for at least three years after final site stabilization.

9.1.2.4 Construction site owners and operators must consider opportunities for post-construction groundwater recharge using infiltration best management practices (BMPs) during site design and preparation of the stormwater pollution prevention plan (SWPPP). If your construction site is in a town that is required to obtain coverage under the NPDES General Permit for discharges from Municipal Separate Storm Sewer Systems (MS4) you may be required to use such practices. The SWPPP must include a description of any on-site infiltration that will be installed as a post-construction stormwater management measure or reasons for not employing such measures such as 1) The facility is located in a wellhead protection area as defined in RSA 485-C:2; or 2) The facility is located in an area where groundwater has been reclassified to GAA, GAI or GA2 pursuant to RSA 485-C and Env-Ws 420; or 3) Any areas that would be exempt from the groundwater recharge requirements contained in Env-Ws 1507.04(e), including all land uses or activities considered to be a "High-load Area" (see Env-Wq 1502.26). For design considerations for infiltration measures see Volume II of the NH Stormwater Manual.

9.1.2.5 Appendix F contains a list of Tier 2, or high quality waters. Although there is no official list of tier 2 waters, it can be assumed that all NH surface waters are tier 2 for turbidity unless 1) the surface water that you are proposing to discharge into is listed as impaired for turbidity in the states listing of impaired waters (see Surface Water Quality Watershed Report Cards at http://des.nh.gov/organization/divisions/water/wmb/swqa/report_cards.htm or 2) sampling upstream of the proposed discharge location shows turbidity values greater than 10 NTU. A single grab sample collected during dry weather (no precipitation within 48 hours) is acceptable.

9.1.2.6 To ensure compliance with RSA 485-C, RSA 485-A, RSA 485-A:13, I(a), Env-Wq 1700 and Env-Wq 302, the following information may be requested by NHDES. This information must be kept on site unless you receive a written request from NHDES that it be sent to the address shown in Part 9.1.2.7.

a. A site map required in Part 7.2.6, showing the type and location of all post-construction infiltration BMPs utilized at the facility or the reason(s) why none were installed;

b. A list of all non-stormwater discharges that occur at the facility, including their source locations and the control measures being used (see Part 1.3.d).

c. Records of sampling and analysis of TSS required for construction dewatering discharges (see Part 9.1.2.3).

9.1.2.7 All required or requested documents must be sent to:

NH Department of Environmental Services, Wastewater Engineering Bureau, Permits & Compliance Section
P.O. Box 95
Concord, NH 03302-0095

9.1.2.8 When NHDES determines that additional water quality certification requirements are necessary to protect water quality, it may require individual discharges to meet additional conditions to obtain or continue coverage under the CGP. Any such conditions must be supplied to the permittee in writing. Any required pollutant loading analyses and any designs for structural best management practices necessary to protect water quality must be prepared by a civil or sanitary engineer registered in New Hampshire.

9.2. Region 4

9.2.1. FLR12000I: Indian country within the State of Florida.

9.2.1.1 **Seminole Tribe of Florida**. The following conditions apply only for discharges on federal trust lands of the Seminole Tribe of Florida (Big Cypress, Brighton, Hollywood, Immokalee, and Tampa Reservations):

a. Any discharges into waters of the Seminole Tribe of Florida shall not cause an exceedance in Turbidity of 29 NTU above natural background conditions.

b. Unless otherwise specified by previous permits or criteria, a storm event of three (3) day duration and twenty five (25) year return frequency shall be used in computing off-site discharge on Seminole Lands as agreed upon in the Water Rights Compact agreement attached to Public Law 100-228 (December 31, 1987), Seminole Indian Land Claims Settlement Act of 1987.

c. The Seminole Tribe of Florida accepts a 20' X 20' stabilization at entry/exit points.

9.3. Region 5

MNR12000I: Indian country within the State of Minnesota.

9.3.1.1 **Fond du Lac Band of Lake Superior Chippewa.** The following conditions apply only to discharges on the Fond du Lac Band of Lake Superior Chippewa Reservation.

a. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:

Fond du Lac Reservation
Office of Water Protection
1720 Big Lake Road
Cloquet, MN 55720

CGP applicants are encouraged to work with the FDL Office of Water Protection in the identification of all proposed receiving waters.

b. Copies of the Notice of Intent (NOI) and the Notice of Termination (NOT) must be sent to the Fond du Lac Office of Water Protection at the same time they are submitted to EPA.

c. The turbidity limit shall NOT exceed 10% of natural background as determined by the Office of Water protection staff.

d. Turbidity sampling must take place within 24 hours of a ½ -inch or greater rainfall event. The results of the sampling must be reported to the Officce of Water Protection staff within 7 days of sample collection. All sample reporting must include the date and time, location (GPS:UTM/Zone 15), and NTU.

e. Discharges to receiving waters with open water must be sampled for turbidity prior to any authorized discharge as determined by Office of Water Protection staff.

f. This certification does not pertain to any new discharge to Outstanding Reservation Resource Waters (ORRW) as described in §105 b.3 of the Fond du Lac Water Quality Standards (Ordinance #12/98). Although additional waters may be designated in the future, currently Perch Lake, Rice Portage Lake, Miller Lake, Deadfish Lake and Jaskari Lake are designated as ORRWs. New dischargers wishing to discharge to an ORRW must obtain an individual permit for stormwater discharges from large and small construction activities.

g. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Fond du Lac Reservation, Ordinance 12/98 as amended. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Fond du Lac Reservation for any of the uses designated in the Water Quality Standards of the Fond du Lac Reservation. These uses include wildlife, aquatic life, warm and cold water fisheries, subsistence fishing (netting), primary contact recreation, cultural, wild rice areas, aesthetic waters, agriculture, navigation and commercial.

h. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Fond du Lac Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Fond du Lac reservation, including groundwater.

i. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

9.3.1.2 **Grand Portage Band of Lake Superior Chippewa.** The following conditions apply only to discharges on the Grand Portage Band of Lake Superior Chippewa Reservation.

a. The CGP authorization is for construction activities that may occur within the exterior boundaries of the Grand Portage Reservation in

accordance to the Grand Portage Land Use Ordinance. The CGP regulates stormwater discharges associated with construction sites of one acre or more in size. Only those activities specifically authorized by the CGP are authorized by this certification (the "Certification"). This Certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for listing as such.

b. All construction stormwater discharges authorized by the CGP must comply with the Water Quality Standards and Water Resources Ordinance, as well as Applicable Federal Standards (as defined in the Water Resources Ordinance). As such, appropriate steps must be taken to ensure that petroleum products or other chemical pollutants are prevented from entering the Waters of the Reservation (as defined in the Water Resources Ordinance). All spills must be reported to the appropriate emergency-management agency, and measures must be taken to prevent the pollution of the Waters of the Reservation, including groundwater.

c. A copy of the Storm Water Pollution Prevention Plan (the "Plan") required by the CGP must be submitted to the Board at least 30 days in advance of sending the requisite Notice of Intent to EPA. The Board may require monitoring of storm-water discharges as determined on a case-by-case basis. If the Board determines that a monitoring plan is necessary, the monitoring plan must be prepared and incorporated into the Plan before the Notice of Intent is submitted to the EPA. The Plan should be sent to:

   Grand Portage Environmental Resources Board
   P.O. Box 428
   Grand Portage, MN 55605

   Copies of the Notice of Intent and Notice of Termination required under the General Permit must be submitted to the Board at the address above at the same time they are submitted to the EPA.

d. If requested by the Grand Portage Environmental Department, the permittee must provide additional information necessary for a case-by-case eligibility determination to assure compliance with the Water Quality Standards and any Applicable Federal Standards.

e. Discharges that the Board has determined to be or that may reasonably be expected to be contributing to a violation of Water Quality Standards or Applicable Federal Standards are not authorized by this Certification.

f. The Board retains full authority provided by the Water Resources Ordinance to ensure compliance with and to enforce the provisions of the Water Resource Ordinance and Water Quality Standards, Applicable Federal Standards, and these Certification conditions.

g. Appeals related to Board actions taken in accordance with any of the preceding conditions may be heard by the Grand Portage Tribal Court.

9.3.2. WIR12000I: Indian country within the State of Wisconsin.

9.3.2.1 **Bad River Band of the Lake Superior Tribe of Chippewa Indians.** The following conditions apply only to discharges on the Bad River Band of the Lake Superior Tribe of Chippewa Indians Reservation.

a. Only those activities specifically authorized by the CGP are authorized by this Certification. This Certification does not authorize impacts to cultural properties, or historical sites, or properties that may be eligible for listing as such.[27, 28]

b. Operators are not eligible to obtain authorization under the CGP for all new discharges to an Outstanding Tribal Resource Water (or Tier 3 water).[29] Outstanding Tribal Resource Waters, or Tier 3 waters, include the following: Kakagon Slough and the lower wetland reaches of its tributaries that support wild rice, Kakagon River, Bad River Slough, Honest John Lake, Bog Lake, a portion of Bad River, from where it enters the Reservation through the confluence with the White River, and Potato River.[30]

c. Projects utilizing cationic treatment chemicals[31] within the Bad River Reservation boundaries are not eligible for coverage under the CGP.[32]

d. All projects which are eligible for coverage under the CGP and are located within the exterior boundaries of the Bad River Reservation shall be implemented in such a manner that is consistent with the Tribe's Water Quality Standards (WQS).[33]

e. An operator proposing to discharge to an Outstanding Resource Water (or Tier 2.5 water) under the CGP must comply with the antidegradation provisions of the Tribe's WQS. Outstanding Resource Waters, or Tier 2.5 waters, include the following: a portion of Bad River, from downstream the confluence with the White River to Lake Superior, White River, Marengo River, Graveyard Creek, Bear Trap Creek, Wood Creek, Brunsweiler River, Tyler Forks, Bell Creek, and Vaughn Creek.[34] The antidegradation demonstration materials described in provision E.4.iii. must be submitted to the following address:

   Bad River Tribe's Natural Resources Department
   Attn: Water Resources Specialist
   P.O. Box 39
   Odanah, WI 54861

f. An operator proposing to discharge to an Exceptional Resource Water (or Tier 2 water) under the CGP must comply with the antidegradation provisions of the Tribe's WQS. Exceptional Resource Waters, or Tier 2 waters, include the following: any surface water within the exterior boundaries of the Reservation that is not specifically classified as an Outstanding Resource Water (Tier 2.5 water) or an Outstanding Tribal

[27] Bad River Band of Lake Superior Tribe of Chippewa Indians Water Quality Standards adopted by Resolution No. 7-6-11-441 (hereafter, Tribe's WQS).

[28] 36 C.F.R §800.16(l)(2).

[29] Tribe's WQS: See provisions E.3.ii and E.4.iv.

[30] Tribe's WQS: See provision E.2.iii.

[31] See definition of cationic treatment chemicals in Appendix A of the CGP

[32] Tribe's WQS: See provisions E.6.ii.a and E.6.ii.c.

[33] See Footnote 27.

[34] Tribe's WQS: See provision E.2.ii.

Resource Water (Tier 3 water).[35] The antidegradation demonstration materials described in provision E.4.ii. must be submitted to the following address:

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

g. A discharge to a surface water within the Bad River Reservation boundaries shall not cause or contribute to an exceedance of the turbidity criterion included in the Tribe's WQS, which states: Turbidity shall not exceed 5 NTU over natural background turbidity when the background turbidity is 50 NTU or less, or turbidity shall not increase more than 10% when the background turbidity is more than 50 NTU.[36]

h. All projects which are eligible for coverage under the CGP within the exterior boundaries of the Bad River Reservation must comply with the Bad River Reservation Wetland and Watercourse Protection Ordinance, or Chapter 323 of the Bad River Tribal Ordinances, including the erosion and sedimentation control, natural buffer, and stabilization requirements. Questions regarding Chapter 323 and requests for permit applications can be directed to the Wetlands Specialist in the Tribe's Natural Resources Department at (715) 682-7123 or wetlands@badriver-nsn.gov.

i. An operator of a project, which is eligible for coverage under the CGP, that would result in an allowable discharge under the CGP occurring within the exterior boundaries of the Bad River Reservation must notify the Tribe prior to the commencing earth-disturbing activities.[37] The operator must submit a copy of the Notice of Intent (NOI) to the following addresses at the same time it is submitted to the U.S. EPA:

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

Bad River Tribe's Natural Resources Department
Attn: Tribal Historic Preservation Officer (THPO)
P.O. Box 39
Odanah, WI 54861

The operator must also submit a copy of the Notice of Termination (NOT) to the above addresses at the same time it is submitted to the U.S. EPA.

j. The THPO must be provided 30 days to comment on the project.[38]

k. The operator must obtain THPO concurrence in writing. This written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties. For more information regarding the specifics

[35] Tribe's WQS: See provision E.2.i.

[36] Tribe's WQS: See provision E.7.iii.

[37] See footnotes 27 and 28.

[38] 36 C.F.R. § 800.3(c)(4).

of the cultural resources process, see 36 CFR Part 800. A best practice for an operator is to consult with the THPO during the planning stages of an undertaking.[39]

l. An operator of a project, which is eligible for coverage under the CGP, that would result in an allowable discharge under the CGP occurring within the exterior boundaries of the Bad River Reservation must submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the following address at the same time as submitting the NOI:[40]

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

m. Any corrective action reports that are required under the CGP must be submitted to the following address within one (1) working day of the report completion:[41]

Bad River Tribe's Natural Resources Department
P.O. Box 39
Odanah, WI 54861

n. An operator shall be responsible for meeting any additional permit requirements imposed by the U.S. EPA necessary to comply with the Tribe's antidegradation policies if the discharge point is located upstream of waters designated by the Tribe.[42]

9.3.2.2 **Lac du Flambeau Band of Lake Superior Chippewa Indians.** The following conditions apply only to discharges on the Lac du Flambeau Band of Lake Superior Chippewa Indians Reservation.

a. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:

Lac du Flambeau
Tribal Land Management
P. O. Box 279
Lac du Flambeau, WI 54538

CGP applicants are encouraged to work with the LdF Office of Water Protection in the identification of all proposed receiving waters.

b. Copies of the NOI and the Notice of Termination (NOT) must be sent to the LdF Water Resource Program at the same time they are submitted to EPA.

c. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Lac du Flambeau Reservation. This includes, but is not limited to, the

[39] 36 C.F.R. § 800.3(b).

[40] See footnote 27.

[41] See footnote 27.

[42] See footnote 27.

prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Lac du Flambeau Reservation for any of the uses designated in the Water Quality Standards of the Lac du Flambeau Reservation.

d. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Lac du Flambeau Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Lac du Flambeau Reservation, including groundwater.

e. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

Note: Facilities within the Sokaogon Chippewa Community are not eligible for stormwater discharge coverage under this permit. Contact the Region 5 office for an individual permit application.

9.4. Region 6

9.4.1. NMR120000: State of New Mexico, except Indian country.

9.4.1.1 In addition to all other provisions of this permit, operators who intend to obtain authorization under this permit for all new and existing stormwater discharges must satisfy the following condition:

The SWPPP must include site-specific interim and permanent stabilization, managerial, and structural solids, erosion, and sediment control best management practices (BMPs) and/or other controls that are designed to prevent to the maximum extent practicable an increase in the sediment yield and flow velocity from pre-construction, pre-development conditions to assure that applicable standards in 20.6.4 NMAC, including the antidegradation policy, or waste load allocations (WLAs) are met. This requirement applies to discharges both during construction and after construction operations have been completed. The SWPPP must identify, and document the rationale for selecting these BMPs and/or other controls. The SWPPP must also describe design specifications, construction specifications, maintenance schedules (including a long term maintenance plan), criteria for inspections, and expected performance and longevity of these BMPs. BMP selection must be made based on the use of appropriate soil loss prediction models (e.g., SEDCAD 4.0, RUSLE, SEDIMOT II, MULTISED, etc.), or equivalent, generally accepted (by professional erosion control specialists), soil loss prediction tools. The operator(s) must demonstrate, and include documentation in the SWPPP, that implementation of the site-specific practices will assure that the applicable standards or WLAs are met, and will result in sediment yields and flow velocities that, to the maximum extent practicable, will not be greater than the sediment yield levels and flow velocities from pre-construction, pre-development conditions. The SWPPP must be prepared in accordance with good engineering practices by qualified (e.g., CPESC certified, engineers with appropriate training, etc.) erosion control specialists familiar with the use of soil loss prediction models and design of erosion and sediment control systems based on these models (or equivalent soil loss prediction tools). Qualifications of the preparer (e.g., professional certifications, description of appropriate training) must be

documented in the SWPPP. The operator(s) must design, implement, and maintain BMPs in the manner specified in the SWPPP.

9.4.1.2 Operators are not eligible to obtain authorization under this permit for all new and existing stormwater discharges to outstanding national resource waters (ONRWs) (also referred to as "Tier 3" waters).

9.4.1.3 For temporary stabilization, instead of the deadline for initiating and completing stabilization in Part 2.2.1.3a, operators must comply with the deadlines in Parts 2.2.1.1 and 2.2.1.2.

9.4.1.4 Instead of the criteria for vegetative stabilization in Part 2.2.2.1.a, operators must provide a uniform vegetation (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for all unpaved areas and areas not covered by permanent structures. The adjustment to allow for less than 100 % native vegetative cover (e.g., 50 % native vegetative cover x 70 % = 35 %) is acceptable.

9.4.1.5 The following replaces the criteria for final vegetative stabilization in Part 2.2.2.1.b:

- The area you have seeded and planted must within 3 years provide established vegetation that achieves 70% of the native background vegetative cover for all unpaved areas and areas not covered by permanent structures; and
- In addition to to seeding or planting the area to be vegetatively stabilized, you must select, design, and install non-vegetative erosion controls that provide cover for at least 3 years without active maintenance by you.

In addition, permittees are only authorized to used this option as a method for final vegetative stabilization for purposes of filing a Notice of Termination (NOT) under the following conditions:

If this option is selected, you must notify NMED at the address listed in Part 9.4.1.6 at the time the NOT is submitted to EPA. The information to be submitted includes:

- A copy of the NOT;
- Contact information, including individual name or title, address, and phone number for the party responsible for implementing the final stabilization measures; and
- The date that the permanent vegetative stabilization practice was implemented and the projected timeframe that the 70 % native vegetative cover requirements are expected to be met. (Note that if more than three years is required to establish 70 % of the natural vegetative cover, this technique cannot be used or cited for fulfillment of the final stabilization requirement – you remain responsible for establishment of final stabilization).

NMED also requires that operators periodically (minimum once/year) inspect and properly maintain the area until the criteria for final stabilization, as specified in Part 2.2 of the CGP, have been met. Operators must prepare an inspection report documenting the findings of these inspections and signed in accordance with Appendix I, Part I.11. This inspection record must be

retained along with the SWPPP for three years after the NOT is submitted for the site and additionally submitted to NMED at the address listed in Part 9.4.1.6. The inspections at a minimum must include the following:

- Observations of all areas of the site disturbed by construction activity;
- Best Management Practices (BMPs)/post-construction stormwater controls must be observed to ensure they are effective;
- An assessment of the status of vegetative re-establishment; and
- Corrective actions required to ensure vegetative success within three years, and control of pollutants in stormwater runoff from the site, including implementation dates.

9.4.1.6 Copies of all documents submitted to EPA in non-electronic format must be sent to the following address:

Program Manager
Point Source Regulation Section
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
Santa Fe, New Mexico 87502

9.4.2. NMR12000I: Indian country within the State of New Mexico.

9.4.2.1 **Pueblo of Sandia**. The following conditions apply only to discharges on the Pueblo of Sandia Reservation:

a. Copies of all Notices of Intent submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address. Discharges are not authorized by this permit unless an accurate and complete NOI has been submitted to the Pueblo of Sandia.

Regular U.S. Delivery Mail:
Pueblo of Sandia Environment Department
Attention: Water Quality Manager
481 Sandia Loop
Bernalillo, New Mexico 87004

b. The Pueblo of Sandia will not allow the Rainfall Erosivity Waivers (see Appendix C) to be granted for any small construction activities.

c. The Stormwater Pollution Prevention Plan (SWPPP) must be available to the Pueblo of Sandia Environment either electronically or hard copy upon request for review. The SWPPP must be made available at least fourteen (14) days before construction begins. The fourteen (14) day period will give Tribal staff time to become familiar with the project site, prepare for construction inspections, and determine compliance with the Pueblo of Sandia Water Quality Standards. Failure to provide a SWPPP to the Pueblo of Sandia may result in denial of the discharge or construction delay.

d. An "Authorization to Proceed Letter" with site specific mitigation, site and project requirements will be sent out to the permittee when a review of the NOI and SWPPP is completed by the Pueblo of Sandia

Environment Department. This approval will allow the construction to proceed if all applicable requirements are met.

e. Before submitting a Notice of Termination (NOT), permittees must clearly demonstrate to the Pueblo of Sandia Environment Department though a site visit or documentation that requirements for site stabilization have been met and any temporary erosion control structures have been removed. A short letter stating the stabilization requirements have been met will be sent to the permittee to add to the permittees NOT submission to EPA.

f. Copies of all NOT submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address:

Regular U.S. Delivery Mail:
Pueblo of Sandia Environment Department
Attention: Water Quality Manager
481 Sandia Loop
Bernalillo, New Mexico 87004

9.4.3. OKR12000F: Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).

In accordance with Section 303 of the Clean Water Act and Oklahoma's Water Quality Standards (OAC 785: 45):

9.4.3.1 For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, this permit may only be used to authorize discharges from temporary construction activities. Certification is denied for any on-going activities such as sand and gravel mining or any mineral mining.

9.4.3.2 For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, certification is denied for any discharges originating from support activities, including concrete and asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, or borrow areas.

9.5. Region 8

9.5.1. MTR12000I: Indian country within the State of Montana

9.5.1.1 **The Confederated Salish and Kootenai Tribes of the Flathead Nation**. The following conditions apply only to discharges on the Confederated Salish and Kootenai Tribes of the Flathead Nation Reservation:

a. Permittees must send the Stormwater Pollution Prevention Plan (SWPPP) to the Tribes at least 30 days before construction starts.

b. Before submitting the Notice of Termination (NOT), permittees must clearly demonstrate to an appointed tribal staff person during an on-site inspection that requirements for site stabilization have been met.

c. The permittee must send a copy of the Notice of Intent (NOI) and the Notice of Termination (NOT) to the tribes.

d. Permittees may submit their SWPPPs and NOTs electronically to clintf@cskt.org.

Written NOI's, SWPPPs and NOT's may be mailed to:
Clint Folden, Water Quality Regulatory Specialist
Confederated Salish and Kootenai Tribes
Natural Resources Department
P.O. Box 278
Pablo, MT 59855

9.5.1.2 Fort Peck Tribes. The following conditions apply only to discharges on the Fort Peck Reservation:

Permittees must notify the Fort Peck Office of Environmental Protection (OEP) two weeks prior to commencing construction.

9.6. Region 9

9.6.1. AZR12000I: Indian country within the State of Arizona.

9.6.1.1 **Hualapai Tribal Lands**. The following condition applies only for discharges on the Hualapai Reservation:

All notices of intent for proposed stormwater discharges under the CGP and all pollution prevention plans for stormwater discharges on Hualapai Tribal lands shall be submitted to Water Resources Program through the Tribal Chairman for review and approval, P.O. Box 179, Peach Springs, AZ 86434.

9.6.2. CAR12000I: Indian country within the State of California.

9.6.2.1 **Big Pine Paiute Tribe of the Owens Valley**. Big Pine Tribal Water Quality Standards Section VII(e): If a proposed action has the possibility to adversely affect the water quality of Big Pine Creek, an application must be filed with the Tribal Environmental Office. The application must describe the action proposed and its effects on the creek, how this information was derived, and a justification for the action. Upon satisfying these requirements, the Tribal Environmental Office will recommend or not recommend this proposal to be considered by the Tribal Council. Tribal Council will make a determination whether to consider the proposal further. If the Tribal Council wishes to consider the application further, the public participation process will take place (see paragraph VII(d)). The Tribal Council has the sole authority in permitting degradation to Big Pine Creek. If the Tribal Council makes the decision to allow degradation, they will submit their decision to the USEPA for review and approval.

9.6.3. GUR120000: The Island of Guam.

Permittees must adhere with imposed conditions for the project, in accordance with section 307(c)(1), of the Coastal Zone Management Act, 15 CFR part 930.

9.6.4. MPR120000: Commonwealth of the Northern Mariana Islands (CNMI).

9.6.4.1 An Earthmoving and Erosion Control Permit must be obtained from DEQ prior to any construction activity covered under the NPDES General Permit.

9.6.4.2 All conditions and requirements set forth in the United States Environmental Protection Agency (USEPA), National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities must be complied with.

9.6.4.3 A stormwater pollution prevention plan (SWPPP) for stormwater discharges from construction activities must be approved by the Director of DEQ prior to submission of the Notice of Intent (NOI).

9.6.4.4 A NOI to be covered by the General Permit for Discharges from Construction Activities must be submitted to DEQ and USEPA, Region IX, in the form prescribed by USEPA, accompanied by a SWPPP approval letter from DEQ.

9.6.4.5 The NOI must be postmarked fourteen (14) calendar days prior to any stormwater discharges and a copy is submitted to the Director of DEQ no later than seven (7) calendar days prior to any stormwater discharges.

9.6.4.6 Copies of all monitoring reports required by the NPDES General Permit are submitted to DEQ.

9.6.4.7 In accordance with Section 10.3(h) and (i) of the CNMI Water Quality Standards, DEQ reserves the right to deny coverage under this permit and require submittal of an application for an individual NPDES permit based on review of the NOI or other information made available to the Director.

9.6.5. NVR12000I: Indian country within the State of Nevada.

9.6.5.1 **Pyramid Lake Paiute Tribe**. The following conditions apply only for discharges on the Pyramid Lake Paiute Reservation:

a. A SWPPP for stormwater discharges from project construction activities must be submitted to, and approved by, the PLPT Environmental Department director, prior to the submission of a Notice of Intent (NOI or eNOI) to EPA.

b. The applicant is to submit a hard copy of the Notice of Intent (NOI or eNOI) and a draft or final copy of the Stormwater Pollution Prevention Plan (SWPPP) by U.S. Mail to the Pyramid Lake Environmental Department at the address below:

Pyramid Lake Tribe Environmental Department
P.O. Box 256
Nixon, NV 89424

c. The applicant is to concurrently submit to the PLPT Environmental Department, hard copies of any other forms submitted to the EPA, including waivers, reporting, and Notice of Termination (NOT).

9.7. Region 10

9.7.1. IDR120000: The State of Idaho, except those located on Indian country.

For the complete text of Idaho's certification including the full anti-degradation analysis, please visit the IDEQ website at http://www.deq.idaho.gov/media/821491-usepa-npdes-general-permit-storm-water-discharges-401-certification-final-0412.pdf

9.7.1.1 The Idaho Department of Environmental Quality's (DEQ) certification of this permit does not constitute authorization of your permitted activities by any other state or federal agency or private person or entity. DEQ's certification does not excuse you from the obligation to obtain any other necessary

approvals, authorizations or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

9.7.1.2 Idaho's Antidegradation Policy. Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

a. Tier 1 Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.05).
b. Tier 2 Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.06).
c. Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.07).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (Idaho Code § 39-3603(2)(b)(i)). Any water body not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met (Idaho Code § 39-3603(2)(b)(iii)). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (Idaho Code § 39-3603(2)(b)). The primary pollutants of concern associated with stormwater discharges from construction activities are sediment and turbidity (as Total Suspended Solids). Other potential pollutants include the following: phosphorus, nitrogen and other nutrients from fertilizers; pesticides; petroleum products; construction chemicals; and solid wastes.

9.7.1.3 Protection and Maintenance of Existing Uses (Tier 1 Protection). In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The permittee must notify the appropriate DEQ Regional Office (see table in Part 9.7.1.8 below for contact information) of any potential discharges to impaired waters - water bodies identified as "impaired" for sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or nutrients, including impairments for nitrogen and/or phosphorus.

To determine the support status of the affected water body, the permittee must use the most current EPA-approved Integrated Report, available on Idaho DEQ's website: http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx. Impaired waters are identified in Categories 4 and 5 of the Integrated Report. Category 4(a) reflects impaired waters for which a TMDL has been approved by EPA. Category 5

contains waters which have been identified as "impaired" but do not yet have an EPA-approved TMDL.

DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: http://mapcase.deq.idaho.gov/wq2010/.

In addition to complying with the Part 3.2.2 requirements for any sediment or nutrient-impaired waters, permittee(s) must also comply with Idaho's numeric turbidity criteria, developed to protect aquatic life uses. The criterion states, "Turbidity shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days" (IDAPA 58.01.02250.02.e). For Waters of the State which have been identified as impaired due to sedimentation/siltation, the permittee must conduct turbidity monitoring as described below in Part 9.7.1.6

9.7.1.4 Protection of High-Quality Waters (Tier 2 Protection). To determine the support status of the affected water body, the permittee must use the most current EPA-approved Integrated Report, available on Idaho DEQ's website: http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx. DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: http://mapcase.deq.idaho.gov/wq2010/.

DEQ retains the authority to determine that a 303(d) listed water body is actually a high quality water body if there is biological, chemical or physical data to support such a determination. In cases where information submitted with the NOI, or available from other sources, indicates that further Tier 2 analysis is necessary and/or additional conditions are needed, either for a new project or an existing project with a significantly increased discharge, EPA and DEQ will conduct a review and require any appropriate additional controls. If during this review, EPA and DEQ decide that an additional Tier 2 protection is warranted, then EPA may either change the terms of coverage or terminate coverage under the CGP and require an individual permit.

9.7.1.5 Protection of Outstanding Resource Waters (Tier 3 Protection). Idaho's antidegradation policy requires that the quality of outstanding resource waters (ORWs) be maintained and protected from the impacts of point source discharges. No water bodies in Idaho have been designated as outstanding resource waters to date; however, it is possible that waters may become designated during the term of the CGP. Any applicant proposing to discharge to an ORW must obtain an individual NPDES permit from EPA.

9.7.1.6 Turbidity Monitoring. For Waters of the State which are identified in the Integrated Report as impaired for sedimentation/siltation, the permittee must conduct turbidity monitoring each day during construction activities when the project is not stabilized per Part 2.2 or shut down per Part 4.1.4.3 of the CGP. A properly and regularly calibrated turbidimeter is required.

A sample must be taken twice daily at an undisturbed area immediately upstream of the project area to establish background turbidity levels for each monitoring event. Background turbidity, location, date and time must be recorded prior to monitoring downstream of the project area.

A sample must also be taken twice daily immediately downstream from any point of discharge, and within any visible plume. The turbidity, location, date

and time must be recorded. The downstream sample(s) must be taken immediately following the upstream sample(s) in order to obtain meaningful and representative results.

Results from the compliance point sampling or observation must be compared to the background levels to determine whether project activities are causing an exceedance of state WQS. If the downstream turbidity is 50 NTUs or more than the upstream turbidity, or a plume is observed, then the project is causing an exceedance of the WQS. The permittee must inspect the condition of project BMPs. If the BMPs are functioning to their fullest capability, then the permittee must modify project activities and/or BMPs to correct the violation.

Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The report must describe all exceedances and subsequent actions taken, including the effectiveness of the action.

9.7.1.7 Equivalent Analysis Waiver. Use of the "Equivalent Analysis Waiver" in Appendix C (Part C.3) of the CGP is not authorized.

9.7.1.8 Reporting of Discharges Containing Hazardous Materials or Petroleum Products. Any spill of hazardous materials must be immediately reported to the appropriate DEQ regional office (see table of contacts, below) (IDAPA 58.01.02.850.03). Spills of petroleum products that exceed 25 gallons or that cause a visible sheen on nearby surface waters should be reported to DEQ within 24-hours. Petroleum product spills of less than 25 gallons or spills that do not cause a sheen on nearby surface waters shall only be reported to DEQ if clean-up cannot be accomplished within 24-hours (IDAPA 58.01.02.851.04).

DEQ Regional Office	Contact Name	Phone Number
Boise	Lance Holloway	208-373-0550
Coeur d'Alene	June Bergquist	208-769-1422
Idaho Falls	Troy Saffle	208-528-2650
Lewiston	John Cardwell	208-799-4370
Pocatello	Greg Mladenka	208-236-6160
Twin Falls	Balthasar Buhidar	208-736-2190

Outside of regular business hours, qualified spills shall be reported to the State Communications Center (1-800-632-8000 or 208-846-7610).

9.7.2. ORR12000I: Indian country within the State of Oregon.

9.7.2.1 **Confederated Tribes of the Umatilla Indian Reservation**. The following conditions apply only to discharges on the Umatilla Indian Reservation:

a. The operator shall be responsible for achieving compliance with the Confederated Tribes of the Umatilla Indian Reservations (CTUIR) Water Quality Standards.

b. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTUIR Water Resources Program at the address below, at the same time it is submitted to EPA.

c. The operator shall be responsible for submitting all Stormwater Pollution Prevention Plans (SWPPP) required under this permit to the CTUIR Water Resources Program for review and determination that the SWPPP is sufficient to meet Tribal Water Quality Standards, prior to the beginning of any discharge activities taking place.

d. The operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the CTUIR Water Resources Program at the same time it is reported to EPA.

Confederated Tribes of the Umatilla Indian Reservation
Water Resources Program
46411 Timine Way
Pendleton, OR 97801

e. The CTUIR Tribal Historic Preservation Office (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties, and if so, define the undertaking's area of potential effect (APE).

f. The THPO must be provided 30 days to comment on the APE as defined in the permit application.

g. If the project is an undertaking, a cultural resource investigation must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines; http://www.nps.gov/history/local-law/arch_stnds_0.htm) and documented using Oregon Reporting Standards (http://egov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml). The resulting report must be submitted to the THPO and the THOP must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.

h. The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.

i. For more information regarding the specifics of the cultural resources process, see 36 CFR Part 800.

Confederated Tribes of the Umatilla Indian Reservation
Cultural Resources Protection Program
Tribal Historic Preservation Office
46411 Timine Way
Pendleton, OR 97801

9.7.2.2 Confederated Tribes of the Warm Springs Reservation of Oregon. The following conditions apply only for discharges on the Warm Springs Reservation:

a. All activities covered by this NPDES general permit occurring within a designated riparian buffer zone as established in Ordinance 74 (Integrated Resource Management Plan or IRMP) must be reviewed, approved and permitted through the Tribe's Hydraulic Permit Application process, including payment of any applicable fees.

b. All activities covered by this NPDES permit must follow all applicable land management and resource conservation requirements specified in the IRMP.

c. Operators of activities covered by this NPDES general permit must submit a Storm Water Pollution Prevention Plan to the Tribe's Water Control Board at the following address for approval at least 30 days prior to beginning construction activity:

Chair, Warm Springs Water Control Board
P.O. Box C
Warm Springs, Oregon 97761

d. The operator shall be responsible for achieving compliance with the Water Quality Standards of the Confederated Tribes of the Warm Springs Reservation of Oregon. The operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the Water Control Board at the address above.

e. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTWS, Branch of Natural Resources, Tribal Environmental Office at the address above, at the same time it is submitted to EPA.

f. The CTWS Tribal Historic Preservation Officer (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties, and if so, define the undertaking's area of potential effect (APE).

g. The THPO must be provided 30 days to comment on the APE as defined in the permit application.

h. If the project is an undertaking, a cultural resource investigation must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines; http://www.nps.gov/history/local-law/arch_stnds_0.htm) and documented using Oregon Reporting Standards (http://egov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml). The resulting report must be submitted to the THPO and the THOP must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.

i. The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.

j. For more information regarding the specifics of the cultural resources process, see 36 CFR Part 800.

9.7.3. WAR12000F: Areas in the State of Washington, except those located on Indian country, subject to construction by Federal Operators.

9.7.3.1 Discharges shall not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR Part 131.36). Discharges that are not in compliance with these standards are not authorized.

9.7.3.2 Prior to the discharge of stormwater and non-stormwater to waters of the state, the permittee shall apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate Stormwater Pollution Prevention Plan (SWPPP), with all appropriate best management practices (BMPs) installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.

9.7.3.3 Sampling & Numeric Effluent Limitations – For Sites Discharging to Certain Waterbodies on the 303(d) List

a. Permittees that discharge to water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH or phosphorus, shall conduct water quality sampling according to the requirements of this subsection.

Parameter identified in 303(d) listing	Parameter/Units	Analytical Method	Sampling Frequency	Water Quality Standard
Turbidity Fine Sediment Phosphorus	Turbidity/NTU	SM2130 or EPA180.1	Weekly, if discharging	If background is 50 NTU or less: 5 NTU over background; or If background is more than 50 NTU: 10% over background
High pH	pH/Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5

b. The operator must retain all monitoring results required by this section as part of the SWPPP. All data and related monitoring records must be provided to EPA or the Washington State Department of Ecology (Ecology) upon request.

c. The operator must notify EPA when the discharge turbidity or discharge pH exceeds the water quality standards as defined in 5.b and 6.b below. All such reports must be submitted within 30 days of measurement to EPA at the following address:

USEPA – Region 10
NPDES Compliance Unit - Attn: Federal Facilities Compliance Officer
1200 6th Avenue, Suite 900
OCE-133
Seattle, WA 98101
(206) 553-1846

d. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current EPA approved listing of impaired waters that exists on January 29, 2009, or the date when the operator's complete NOI is received by EPA, whichever is later. The most

recent EPA approved 303(d) list is available on Ecology's website at www.ecy.wa.gov/programs/wq/303d/2008/index.html.

e. Discharges to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus

i. Permittees which discharge to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus shall conduct turbidity sampling at the following locations to evaluate compliance with the water quality standard for turbidity:

(1) Background turbidity shall be measured in the 303(d) listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.

(2) Discharge turbidity shall be measured at the point of discharge into the 303(d) listed receiving waterbody, inside the area of influence of the discharge; or

(3) Alternatively, discharge turbidity may be measured at the point where the discharge leaves the construction site, rather than in the receiving waterbody.

Based on sampling, if the discharge turbidity ever exceeds the water quality standard for turbidity (more than 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or more than a 10% increase in turbidity when the background turbidity is more than 50 NTU), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for turbidity. If the receiving water background turbidity is 50 NTU or less, the water quality standard is 5 NTU over background. If the receiving water background turbidity is more than 50 NTU, the water quality standard is 10% over background.

If a future discharge exceeds the water quality standard for turbidity, the permittee shall:

(1) Review the SWPPP for compliance with the permit and make appropriate revisions within seven days of the discharge that exceeded the standard.

(2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than ten days of the discharge that exceeded the standard.

(3) Document BMP implementation and maintenance in the site log book.

(4) Continue to sample daily until discharge turbidity meets the water quality standard for turbidity.

f. Discharges to waterbodies on the 303(d) list for High pH

i. Permittees which discharge to waterbodies on the 303(d) list for high pH shall conduct sampling one of the following locations to evaluate compliance with the water quality standard for pH (in the range of 6.5 – 8.5):

(1) pH shall be measured at the point of discharge into the 303(d) listed waterbody, inside the area of influence of the discharge; or,

(2) Alternatively, pH may be measured at the point where the discharge leaves the construction site, rather than in the receiving water.

ii. Based on the sampling set forth above, if the pH ever exceeds the water quality standard for pH (in the range of 6.5 – 8.5), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for pH. If a future discharge exceeds the water quality standard for pH, the permittee shall:

(1) Review the SWPPP for compliance with the permit and make appropriate revisions within 7 days of the discharge.

(2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than 10 days of the discharge that exceeded the standards.

(3) Document BMP implementation and maintenance in the site log book.

(4) Continue to sample daily until discharge meets the water quality standard for pH (in the range of 6.5 – 8.5).

9.7.3.4 Sampling & Limitations – For Sites Discharging to TMDLs

a. Discharges to a waterbodies subject to an applicable Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus, shall be consistent with the assumptions and requirements of the TMDL.

i. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges shall be consistent with any specific waste load allocations or requirements established by the applicable TMDL.

(1) Discharges shall be sampled weekly, or as otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.

(2) Analytical methods used to meet the monitoring requirements shall conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.

ii. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but no specific requirements have been identified, compliance with this permit will be assumed to be consistent with the approved TMDL.

iii. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with this permit will be assumed to be consistent with the approved TMDL.

iv. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

b. Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which has been completed and approved by EPA prior to February 16, 2012, or prior to the date the operator's complete NOI is received by EPA, whichever is later.

Completed TMDLs are available on Ecology's website at www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html, or by phone at (360) 407-6460.

9.7.4. WAR12000I: Indian country within the State of Washington

9.7.4.1 **Kalispel Tribe**. The following conditions apply only for discharges on the Kalispel Reservation:

a. The operator shall be responsible for achieving compliance with the Kalispel Tribe's Water Quality Standards, and;

b. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Kalispel Tribe Natural Resources Department (KNRD) at the same time as it is submitted to the EPA, and;

c. The operator shall submit all Storm Water Pollution Prevention Plans (SWPPP) to KNRD thirty (30) days prior to beginning any discharge activities for review, and;

d. The operator shall be responsible for reporting any exceedance of Tribal Water Quality Standards to KNRD at the same time it is reported to EPA, and;

e. Prior to any land disturbing activities on the Kalispel Indian Reservation and its dependent communities, the operator shall attain a cultural resource clearance letter from KNRD.

f. All tribal correspondence pertaining to the General Permit for Discharges from Construction Activities shall be sent to:

Kalispel Tribe Natural Resources Department
Water Resources Program
PO Box 39
Usk, WA 99180

9.7.4.2 **Lummi Nation**. The following conditions apply only for discharges on the Lummi Reservation:

a. Pursuant to Lummi Code of Laws (LCL) 17.05.020(a), the operator must also obtain a land use permit from the Lummi Planning Department as provided in Title 15 of the Lummi Code of Laws and regulations adopted thereunder.

b. Pursuant to LCL 17.05.020(a), each operator shall develop and submit a Stormwater Pollution Prevention Plan to the Lummi Water Resources Division for review and approval by the Water Resources Manager prior to beginning any discharge activities.

c. Pursuant to LCL Title 17, each operator shall be responsible for achieving compliance with the Water Quality Standards for Surface Waters of the Lummi Indian Reservation (Lummi Administrative Regulations [LAR] 17 LAR 07.010 together with supplements and amendments thereto).

d. Each operator shall submit a signed hard copy of the Notice of Intent (NOI) to the Lummi Water Resources Division at the same time it is submitted electronically to the Environmental Protection Agency (EPA) and shall provide the Lummi Water Resources Division the acknowledgement of receipt of the NOI from the EPA and the associated NPDES tracking number provided by the EPA within 7 calendar days of receipt by EPA.

e. Each operator shall submit a signed hard copy of the Notice of Termination (NOT) to the Lummi Water Resources Division at the same time it is submitted electronically to the EPA and shall provide the Lummi Water Resources Division the EPA acknowledgement of receipt of the NOT.

f. Stormwater Pollution Prevention Plans, Notice of intent, Notice of Termination and associated correspondence with the EPA shall be submitted to:

Lummi Natural Resources Department
ATTN: Water Resources Manager
2616 Kwina Road
Bellingham, WA 98226-9298

g. Please see the Lummi Nation website (www.lummi-nsn.gov) and/or the Lummi Natural Resources Department website (http://lnnr.lummi-nsn.gov/LummiWebsite/Website.php?PageID=53) to review a copy of Title 17 of the Lummi Code of Laws, associated regulations, and the references upon which the conditions identified above are based.

9.7.4.3 **Makah Tribe**. The following conditions apply only for discharges on the Makah Reservation:

a. The operator shall be responsible for achieving compliance with the Makah Tribe's Water Quality Standards.

b. The operator shall submit a Storm Water Pollution Prevention Plan to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division for review and approval at least thirty (30) days prior to beginning any discharge activities.

c. The operator shall submit a copy of the Notice of Intent to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division at the same time it is submitted to EPA.

d. Storm Water Pollution Prevention Plans and Notices of Intent shall be submitted to:

Ray Colby
Makah Tribal Water Quality
Water Quality Specialist
(360) 645-3162
colby.ray@centurytel.net
PO Box 115
Neah Bay, WA 98357

9.7.4.4 **Puyallup Tribe of Indians**. The following conditions apply only for discharges on the Puyallup Reservation:

a. Each permittee shall be responsible for achieving compliance with the Puyallup Tribe's Water Quality Standards, including antidegradation provisions. The Puyallup Natural Resources Department will conduct an antidegradation review for permitted activities that have the potential to lower water quality. The antidegradation review will be consistent with the Tribe's Antidegradation Implementation Procedures.

b. The permittee shall be responsible for meeting any additional permit requirements imposed by EPA necessary to comply with the Puyallup Tribe's antidegradation policies if the discharge point is located within 1 linear mile upstream of waters designated by the Tribe.

c. Each permittee shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Puyallup tribal Natural Resources Department at the address listed below at the same time it is submitted to EPA.

Puyallup Tribe of Indians
3009 E. Portland Avenue
Tacoma, WA 98404
ATTN: Natural Resources Department – Bill Sullivan and Char Naylor

d. All supporting documentation and certifications in the NOI related to coverage under the general permit for Endangered Species Act purposes shall be submitted to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department for review.

e. If EPA requires coverage under an individual or alternative permit, the permittee shall submit a copy of the permit to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department at the address listed above.

f. The permittee shall submit all stormwater pollution prevention plans to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department for review and approval prior to beginning any activities resulting in a discharge to tribal waters.

g. The permittee shall conduct benchmark monitoring for turbidity and nutrients, complying with Section 3 monitoring requirements.

h. The permittee shall notify Bill Sullivan and Char Naylor prior to conducting inspections at construction sites generating stormwater discharged to tribal waters.

Appendix A - Definitions and Acronyms

Definitions

"Action Area" – all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. See 50 CFR 402. For the purposes of this permit and for application of the Endangered Species Act requirements, the following areas are included in the definition of action area:

- The areas on the construction site where stormwater discharges originate and flow toward the point of discharge into the receiving waters (including areas where excavation, site development, or other ground disturbance activities occur) and the immediate vicinity. (Example: Where bald eagles nest in a tree that is on or bordering a construction site and could be disturbed by the construction activity or where grading causes stormwater to flow into a small wetland or other habitat that is on the site that contains listed species.)
- The areas where stormwater discharges flow from the construction site to the point of discharge into receiving waters. (Example: Where stormwater flows into a ditch, swale, or gully that leads to receiving waters and where listed species (such as listed amphibians) are found in the ditch, swale, or gully.)
- The areas where stormwater from construction activities discharge into receiving waters and the areas in the immediate vicinity of the point of discharge. (Example: Where stormwater from construction activities discharges into a stream segment that is known to harbor listed aquatic species.)
- The areas where stormwater controls will be constructed and operated, including any areas where stormwater flows to and from the stormwater controls. (Example: Where a stormwater retention pond would be built.)
- The areas upstream and/or downstream from the stormwater discharge into a stream segment that may be affected by these discharges. (Example: Where sediment discharged to a receiving stream settles downstream and impacts a breeding area of a listed aquatic species.)

"Agricultural Land" - cropland, grassland, rangeland, pasture, and other agricultural land, on which agricultural and forest-related products or livestock are produced and resource concerns may be addressed. Agricultural lands include cropped woodland, marshes, incidental areas included in the agricultural operation, and other types of agricultural land used for the production of livestock.

"Antidegradation Policy" or "Antidegradation Requirements" - the water quality standards regulation that requires States and Tribes to establish a three-tiered antidegradation program:

1. Tier 1 maintains and protects existing uses and water quality conditions necessary to support such uses. An existing use can be established by demonstrating that fishing, swimming, or other uses have actually occurred since November 28, 1975, or that the water quality is suitable to allow such uses to occur. Where an existing use is established, it must be protected even if it is not listed in the water quality standards as a designated use. Tier 1 requirements are applicable to all surface waters.
2. Tier 2 maintains and protects "high quality" waters -- water bodies where existing conditions are better than necessary to support CWA § 101(a)(2) "fishable/swimmable"

uses. Water quality can be lowered in such waters. However, State and Tribal Tier 2 programs identify procedures that must be followed and questions that must be answered before a reduction in water quality can be allowed. In no case may water quality be lowered to a level which would interfere with existing or designated uses.

3. Tier 3 maintains and protects water quality in outstanding national resource waters (ONRWs). Except for certain temporary changes, water quality cannot be lowered in such waters. ONRWs generally include the highest quality waters of the United States. However, the ONRW classification also offers special protection for waters of exceptional ecological significance, i.e., those which are important, unique, or sensitive ecologically. Decisions regarding which water bodies qualify to be ONRWs are made by States and authorized Indian Tribes.

"Arid Areas" – areas with an average annual rainfall of 0 to 10 inches.

"Bank" (e.g., stream bank or river bank) – the rising ground bordering the channel of a water of the U.S.

"Bluff" – a steep headland, promontory, riverbank, or cliff.

"Borrow Areas" – the areas where materials are dug for use as fill, either onsite or off-site.

"Bypass" – the intentional diversion of waste streams from any portion of a treatment facility. See 40 CFR 122.41(m)(1)(i).

"Cationic Treatment Chemical" – polymers, flocculants, or other chemicals that contain an overall positive charge. Among other things, they are used to reduce turbidity in stormwater discharges by chemically bonding to the overall negative charge of suspended silts and other soil materials and causing them to bind together and settle out. Common examples of cationic treatment chemicals are chitosan and cationic PAM.

"Commencement of Earth-Disturbing Activities" - the initial disturbance of soils (or 'breaking ground') associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material).

"Commencement of Pollutant-Generating Activities" – at construction sites (for the purposes of this permit) occurs in any of the following circumstances:

- Clearing, grubbing, grading, and excavation has begun;
- Raw materials related to your construction activity, such as building materials or products, landscape materials, fertilizers, pesticides, herbicides, detergents, fuels, oils, or other chemicals have been placed at your site;
- Use of authorized non-stormwater for washout activities, or dewatering activities, have begun; or
- Any other activity has begun that causes the generation of or the potential generation of pollutants.

"Construction Activities" – earth-disturbing activities, such as the clearing, grading, and excavation of land.

"Construction and Development Effluent Limitations and New Source Performance Standards" (C&D Rule) – as published in 40 CFR § 450 is the regulation requiring effluent limitations guidelines

(ELG's) and new source performance standards (NSPS) for controlling the discharge of pollutants from construction sites.

"Construction Site" – the land or water area where construction activities will occur and where stormwater controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether. The construction site is often a smaller subset of the lot or parcel within which the project is taking place.

"Construction Support Activities" – a construction-related activity that specifically supports the construction activity and involves earth disturbance or pollutant-generating activities of its own, and can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas.

"Construction Waste" – discarded material (such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and styrofoam).

"Conveyance Channel" – a temporary or permanent waterway designed and installed to safely convey stormwater flow within and out of a construction site.

"Corrective Action" – for the purposes of the permit, any action taken to (1) repair, modify, or replace any stormwater control used at the site; (2) clean up and dispose of spills, releases, or other deposits found on the site; and (3) remedy a permit violation.

"Critical Habitat" – as defined in the Endangered Species Act at 16 U.S.C. 1531 for a threatened or endangered species, (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

"CWA" – the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq.

"Dewatering" – the act of draining rainwater and/or groundwater from building foundations, vaults, and trenches.

"Discharge" – when used without qualification, means the "discharge of a pollutant."

"Discharge of a Pollutant" – any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

"Discharge Point" – for the purposes of this permit, the location where collected and concentrated stormwater flows are discharged from the construction site.

"Discharge-Related Activity" – activities that cause, contribute to, or result in stormwater and allowable non-stormwater point source discharges, and measures such as the siting, construction, and operation of stormwater controls to control, reduce, or prevent pollutants from being discharged.

"Discharge to an Impaired Water" – for the purposes of this permit, a discharge to an impaired water occurs if the first water of the U.S. to which you discharge is identified by a State, Tribe, or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the water of the U.S. to which you discharge is the first water of the U.S. that receives the stormwater discharge from the storm sewer system.

"Domestic Waste" – for the purposes of this permit, typical household trash, garbage or rubbish items generated by construction activities.

"Drainageway" – an open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water.

"Drought-Stricken Area" – for the purposes of this permit, an area in which the National Oceanic and Atomospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.gif.

"Earth-Disturbing Activity" or "Land-Disturbing Activity" – actions taken to alter the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g., excavating, cutting, and filling), soil compaction, and movement and stockpiling of top soils.

"Effective Operating Condition" – for the purposes of this permit, a stormwater control is kept in effective operating condition if it has been implemented and maintained in such a manner that it is working as designed to minimize pollutant discharges.

"Effluent Limitations" – for the purposes of this permit, any of the Part 2 or Part 3 requirements.

"Effluent Limitations Guideline" (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

"Electronic Notice of Intent" (eNOI) – EPA's online system for submitting electronic Construction General Permit forms.

"Eligible" – for the purposes of this permit, refers to stormwater and allowable non-stormwater discharges that are authorized for coverage under this general permit.

"Emergency-Related Project" – a project initiated in response to a public emergency (e.g., natural disaster, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services.

"Endangered Species" – defined in the Endangered Species Act at 16 U.S.C. 1531 as any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose

protection under the provisions of this Act would present an overwhelming and overriding risk to man.

"Excursion" – a measured value that exceeds a specified limit.

"Existing Project" – a construction project that commenced construction activities prior to February 16, 2012 (April 9, 2012 for the State of Idaho, except for Indian Country; April 13, 2012 for areas in the state of Washington, except for Indian Country, subject to construction activity by a Federal Operator; May 9, 2012 for projects in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin).

"Exit Points" – any points of egress from the construction site to be used by vehicles and equipment during construction activities.

"Exposed Soils" – for the purposes of this permit, soils that as a result of earth-disturbing activities are left open to the elements.

"Federal Operator" – an entity that meets the definition of "Operator" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

"Final Stabilization" – on areas not covered by permanent structures, either (1) vegetation has been established, or for arid or semi-arid areas, will be established that provides a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the natural background vegetative cover, or (2) non-vegetative stabilization methods have been implemented to provide effective cover for exposed portions of the site.

"Hazardous Materials" or "Hazardous Substances" or "Hazardous or Toxic Waste" – for the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.

"Historic Property" – as defined in the National Historic Preservation Act regulations means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

"Impaired Water" or "Water Quality Impaired Water" or "Water Quality Limited Segment" – for the purposes of this permit, waters identified as impaired on the CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first water of the U.S. to which you discharge is identified by a state, tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the U.S. to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

"Impervious Surface" – for the purpose of this permit, any land surface with a low or no capacity for soil infiltration including, but not limited to, pavement, sidewalks, parking areas and driveways, packed gravel or soil, or rooftops.

"Indian Country" or "Indian Country Lands" – defined at 40 CFR §122.2 as:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
2. All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

"Infeasible" – for the purpose of this permit, infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices. EPA notes that it does not intend for any permit requirement to conflict with state water rights law.

"Install" or "Installation" – when used in connection with stormwater controls, to connect or set in position stormwater controls to make them operational.

"Intermittent (or Seasonal) Stream" – one which flows at certain times of the year when groundwater provides water for stream flow, as well as during and immediately after some precipitation events or snowmelt.

"Jar test" – a test designed to simulate full-scale coagulation/flocculation/sedimentation water treatment processes by taking into account the possible conditions.

"Landward" – positioned or located away from a waterbody, and towards the land.

"Level Spreader" – a temporary stormwater control used to spread stormwater flow uniformly over the ground surface as sheet flow to prevent concentrated, erosive flows from occurring.

"Linear Project" – includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

"Minimize" – to reduce and/or eliminate to the extent achievable using stormwater controls that are technologically available and economically practicable and achievable in light of best industry practices.

"Municipal Separate Storm Sewer System" or "MS4" – defined at 40 CFR §122.26(b)(8) as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
2. Designed or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and

4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

"National Pollutant Discharge Elimination System" (NPDES) – defined at 40 CFR §122.2 as the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA. The term includes an 'approved program.'

"Native Topsoil" – the uppermost layer of naturally occurring soil for a particular area, and is often rich in organic matter, biological activity, and nutrients.

"Native Vegetation" – the species of plants that have developed for a particular region or ecosystem and are considered endemic to that region or ecosystem.

"Natural Buffer" – for the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities.

"Natural Vegetation" – vegetation that occurs spontaneously without regular management, maintenance or species introductions, removals, and that generally has a strong component of native species.

"New Operator of a New or Existing Project" – an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction project.

"New Project" – a construction project that commences construction activities on or after February 16 (or on or after April 9, 2012 for the State of Idaho, except for Indian Country; April 13, 2012 for areas in the state of Washington, except for Indian Country, subject to construction activity by a Federal Operator; May 9, 2012 for projects in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin).

"New Source" – for the purpose of this permit, a construction project that commenced construction activities after February 1, 2010.

"New Source Performance Standards (NSPS)" – for the purposes of this permit, NSPS are technology-based standards that apply to construction sites that are new sources under 40 CFR 450.24.

"Non-Stormwater Discharges" – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

"Non-Turbid" – a discharge that does not cause or contribute to an exceedence of turbidity-related water quality standards.

"Notice of Intent" (NOI) – the form (electronic or paper) required for authorization of coverage under the Construction General Permit.

"Notice of Termination" (NOT) – the form (electronic or paper) required for terminating coverage under the Construction General Permit.

"Operational" – for the purpose of this permit, stormwater controls are made "operational" when they have been installed and implemented, are functioning as designed, and are properly maintained.

"Operator" – for the purpose of this permit and in the context of stormwater discharges associated with construction activity, any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
2. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).

This definition is provided to inform permittees of EPA's interpretation of how the regulatory definitions of "owner or operator" and "facility or activity" are applied to discharges of stormwater associated with construction activity.

"Ordinary High Water Mark" – the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris.

"Outfall" – see "Discharge Point."

"Permitting Authority" – for the purposes of this permit, EPA, a Regional Administrator of EPA, or an authorized representative.

"Point(s) of Discharge" – see "Discharge Point."

"Point Source" – any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

"Pollutant" – defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

"Pollutant-Generating Activities" – at construction sites (for the purposes of this permit), those activities that lead to or could lead to the generation of pollutants, either as a result of earth-disturbance or a related support activity. Some of the types of pollutants that are typically found at construction sites are:

- sediment;
- nutrients;
- heavy metals;
- pesticides and herbicides;
- oil and grease;
- bacteria and viruses;

- trash, debris, and solids;
- treatment polymers; and
- any other toxic chemicals.

"Pollution Prevention Measures" – stormwater controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

"Polymers" – for the purposes of this permit, coagulants and flocculants used to control erosion on soil or to enhance the sediment removal capabilities of sediment traps or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum chloride, and gypsum.

"Prohibited Discharges" – discharges that are not allowed under this permit, including:

1. Wastewater from washout of concrete;
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
4. Soaps or solvents used in vehicle and equipment washing;
5. Toxic or hazardous substances from a spill or other release; and
6. Waste, garbage, floatable debris, construction debris, and sanitary waste from pollutant-generating activities.

"Provisionally Covered Under this Permit" – for the purposes of this permit, EPA provides temporary coverage under this permit for emergency-related projects prior to receipt of a complete and accurate NOI. Discharges from earth-disturbing activities associated with the emergency-related projects are subject to the terms and conditions of the permit during the period of temporary coverage.

"Receiving Water" – a "Water of the United States" as defined in 40 CFR §122.2 into which the regulated stormwater discharges.

"Run-On" – sources of stormwater that drain from land located upslope or upstream from the regulated site in question.

"Semi-Arid Areas" – areas with an average annual rainfall of 10 to 20 inches.

"Site" – for construction activities, the land or water area where earth-disturbing activities take place, including construction support activities.

"Small Construction Activity" – defined at 40 CFR §122.26(b)(15) and incorporated here by reference. A small construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than one (1) acre and less than five (5) acres of land or will disturb less than one (1) acre of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

"Small Residential Lot" – for the purpose of this permit, a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

"Snowmelt" – the conversion of snow into overland stormwater and groundwater flow as a result of warmer temperatures.

"Spill" – for the purpose of this permit, the release of a hazardous or toxic substance from its container or containment.

"Stabilization" – the use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas exposed through the construction process.

"Steep Slopes" – where a state, Tribe, local government, or industry technical manual (e.g., stormwater BMP manual) has defined what is to be considered a "steep slope", this permit's definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

"Storm Sewer System" – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) designed or used for collecting or conveying stormwater.

"Stormwater" – stormwater runoff, snow melt runoff, and surface runoff and drainage.

"Stormwater Control Measure" - refers to any stormwater control, BMP, or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

"Stormwater Controls" – see "Stormwater Control measure."

"Stormwater Discharge Associated with Construction Activity" – as used in this permit, a discharge of pollutants in stormwater to waters of the United States from areas where land-disturbing activities (e.g., clearing, grading, or excavation) occur, or where construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck chute washdown, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants), are located.

"Stormwater Inlet" – a structure placed below grade to conduct water used to collect stormwater runoff for conveyance purposes.

"Stormwater Team" – the group of individuals responsible for oversight of the development and modifications of the SWPPP, and oversight of compliance with the permit requirements. The individuals on the "Stormwater Team" must be identified in the SWPPP.

"Storm Event" – a precipitation event that results in a measurable amount of precipitation.

"Storm Sewer" – a system of pipes (separate from sanitary sewers) that carries stormwater runoff from buildings and land surfaces.

"Subcontractor" – for the purposes of this permit, an individual or company that takes a portion of a contract from the general contractor or from another subcontractor.

"Surface Water" – a "Water of the United States" as defined in 40 CFR §122.2.

"SWPPP" (Stormwater Pollution Prevention Plan) – a site-specific, written document that, among other things: (1) identifies potential sources of stormwater pollution at the construction site; (2) describes stormwater control measures to reduce or eliminate pollutants in stormwater discharges from the construction site; and (3) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.

"Temporary Stabilization" – a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

"Thawing Conditions" – for the purposes of this permit, thawing conditions are expected based on the historical likelihood of two or more days with daytime temperatures greater than 32˚F. This date can be determined by looking at historical weather data. Note: the estimation of thawing conditions is for planning purposes only. During construction the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

"Threatened Species" – defined in the Endangered Species Act at 16 U.S.C. 1531 as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

"Tier 2 Waters" – for antidegradation purposes, pursuant to 40 CFR 131.12(a)(2), those waters thatare characterized as having water quality that exceeds the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.

"Tier 2.5 Waters" – for antidegradation purposes, those waters designated by States or Tribes as requiring a level of protection equal to and above that given to Tier 2 waters, but less than that given Tier 3 waters. Some States have special requirements for these waters.

"Tier 3 Waters" – for antidegradation purposes, pursuant to 40 CFR 131.12(a)(3), Tier 3 waters are identified by states as having high quality waters constituting an Outstanding Natural Resource Water (ONRW), such as waters of National Parks and State Parks, wildlife refuges, and waters of exceptional recreational or ecological significance.

"Total Maximum Daily Load" or "TMDL" – the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

"Toxic Waste" – see "Hazardous Materials."

"Turbidity" – a condition of water quality characterized by the presence of suspended solids and/or organic material.

"Uncontaminated Discharge" – a discharge that does not cause or contribute to an exceedence of applicable water quality standards.

"Upland" - the dry land area above and 'landward' of the ordinary high water mark.

"Upset" – Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

"Water-Dependent Structures" – structures or facilities that are required to be located directly adjacent to a waterbody or wetland, such as a marina, pier, boat ramp, etc.

"Water Quality Standards" – defined in 40 CFR § 131.3, and are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States, water quality criteria for such waters based upon such uses, and an antidegradation policy to protect high-quality waters. Water quality standards protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.

"Waters of the United States" – defined at 40 CFR §122.2 as:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
    a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
    b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    c. Which are used or could be used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (1) through (4) of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

In applying this definition, EPA will consider applicable Court cases and current guidance.

"Wetland" – those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. On-site evaluations are typically required to confirm the presence and boundaries of wetlands.

"Work day" – for the purposes of this permit, a work day is a calendar day on which construction activities will take place.

Acronyms

C&D – Construction & Development

CGP – Construction General Permit

CFR – Code of Federal Regulations

CWA – Clean Water Act

eNOI – Electronic Notice of Intent

EPA – United States Environmental Protection Agency

ESA – Endangered Species Act

FWS – United States Fish and Wildlife Service

MS4 – Municipal Separate Storm Sewer System

MSGP – Multi-Sector General Permit

NMFS – United States National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NRCS – National Resources Conservation Service

POTW – Publicly Owned Treatment Works

SPCC – Spill Prevention Control and Countermeasure

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USGS – United States Geological Survey

WQS – Water Quality Standard

Appendix B - Permit Areas Eligible for Coverage

Permit coverage for stormwater discharges from construction activity occurring within the following areas is provided by legally separate and distinctly numbered permits:

B.1 EPA Region 1: CT, MA, ME, NH, RI, VT

US EPA, Region 01
Office of Ecosystem Protection
NPDES Stormwater Program
5 Post Office Square
Boston, MA 02109-3912

The States of Connecticut, Maine, Rhode Island, and Vermont are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
CTR12000I	Indian country within the State of Connecticut
MAR120000	Commonwealth of Massachusetts (except Indian country)
MAR12000I	Indian country within the State of Massachusetts
NHR120000	State of New Hampshire
RIR12000I	Indian country within the State of Rhode Island
VTR12000F	Areas in the State of Vermont subject to construction by a Federal Operator

B.2 EPA Region 2: NJ, NY, PR, VI

For NJ, NY, and VI:
US EPA, Region 02
NPDES Stormwater Program
290 Broadway, 24th Floor
New York, NY 10007-1866

For PR:
US EPA, Region 02
Caribbean Environmental Protection Division
NPDES Stormwater Program
1492 Ponce de Leon Ave
Central Europa Building, Suite 417
San Juan, PR 00907-4127

The State of New York is the NPDES Permitting Authority for the majority of discharges within its state. The State of New Jersey and the Virgin Islands are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
NYR12000I	Indian country within the State of New York
PRR120000	Commonwealth of Puerto Rico

B.3 EPA Region 3: DE, DC, MD, PA, VA, WV

US EPA, Region 03
NPDES Stormwater Program
1650 Arch St
Philadelphia, PA 19103

The State of Delaware is the NPDES Permitting Authority for the majority of discharges within its state. Maryland, Pennsylvania, Virginia, and West Virginia are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
DCR120000	District of Columbia
DER12000F	Areas in the State of Delaware subject to construction by a Federal Operator

B.4 EPA Region 4: AL, FL, GA, KY, MS, NC, SC, TN

US EPA, Region 04
Water Protection Division
NPDES Stormwater Program
61 Forsyth St SW
Atlanta, GA 30303-3104

The States of Alabama, Florida, Mississippi, and North Carolina are the NPDES Permitting Authority for the majority of discharges within their respective States. EPA Region 4 is the NPDES Permitting Authority for all Indian country lands within any other Region 4 State except Catawba lands in South Carolina.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
ALR12000I	Indian country within the State of Alabama
FLR12000I	Indian country within the State of Florida
MSR12000I	Indian country within the State of Mississippi
NCR12000I	Indian country within the State of North Carolina
RE412000I	Indian country within any other Region 4 State (except Catawba lands in South Carolina)

B.5 EPA Region 5: IL, IN, MI, MN, OH, WI

US EPA, Region 05
NPDES & Technical Support
NPDES Stormwater Program
77 W Jackson Blvd
(WN-16J)
Chicago, IL 60604-3507

The States of Michigan, Minnesota, and Wisconsin are the NPDES Permitting Authority for the majority of discharges within their respective states. The States of Illinois, Indiana, and Ohio are the NPDES Permitting Authorities for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
MIR10000I	Indian country within the State of Michigan
MNR10000I	Indian country within the State of Minnesota
WIR10000I	Indian country within the State of Wisconsin, except the Sokaogon Chippewa (Mole Lake) Community

B.6 EPA Region 6: AR, LA, OK, TX, NM (except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands)

US EPA, Region 06
NPDES Stormwater Program
1445 Ross Ave, Suite 1200
Dallas, TX 75202-2733

The States of Louisiana, Oklahoma, and Texas are the NPDES Permitting Authority for the majority of discharges within their respective state. The State of Arkansas is the NPDES Permitting Authority for all discharges within its respective state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
LAR12000I	Indian country within the State of Louisiana
NMR120000	State of New Mexico, except Indian country
NMR12000I	Indian country within the State of New Mexico, except Navajo Reservation Lands that are covered under Arizona permit AZR10000I and Ute Mountain Reservation Lands that are covered under Colorado permit COR10000I.
OKR12000I	Indian country within the State of Oklahoma
OKR12000F	Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).
TXR12000F	Discharges in the State of Texas that are not under the authority of the Texas Commission on Environmental Quality (formerly TNRCC), including activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline.
TXR12000I	Indian country within the State of Texas

B.7 EPA Region 7: IA, KS, MO, NE (except see Region 8 for Pine Ridge Reservation Lands)

US EPA, Region 07
NPDES Stormwater Program
901 N 5th St
Kansas City, KS 66101

The States of Iowa, Kansas, and Nebraska are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Missouri is the NPDES Permitting Authority for all discharges within its state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
IAR12000I	Indian country within the State of Iowa
KSR12000I	Indian country within the State of Kansas
NER12000I	Indian country within the State of Nebraska, except Pine Ridge Reservation lands (see Region 8)

B.8 EPA Region 8: CO, MT, ND, SD, WY, UT (except see Region 9 for Goshute Reservation and Navajo Reservation Lands), the Ute Mountain Reservation in NM, and the Pine Ridge Reservation in NE.

US EPA, Region 08
NPDES Stormwater Program
999 18th St, Suite 300
(EPR-EP)
Denver, CO 80202-2466

The States of Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
COR12000F	Areas in the State of Colorado, except those located on Indian country, subject to construction activity by a Federal Operator
COR12000I	Indian country within the State of Colorado, as well as the portion of the Ute Mountain Reservation located in New Mexico
MTR12000I	Indian country within the State of Montana
NDR12000I	Indian country within the State of North Dakota, as well as that portion of the Standing Rock Reservation located in South Dakota (except for the portion of the lands within the former boundaries of the Lake Traverse Reservation which is covered under South Dakota permit SDR10000I listed below)
SDR12000I	Indian country within the State of South Dakota, as well as the portion of the Pine Ridge Reservation located in Nebraska and the portion of the lands within the former boundaries of the Lake Traverse Reservation located in North Dakota (except for the Standing Rock Reservation which is covered under North Dakota permit NDR10000I listed above)
UTR12000I	Indian country within the State of Utah, except Goshute and Navajo Reservation lands (see Region 9)
WYR12000I	Indian country within the State of Wyoming

B.9 EPA Region 9: CA, HI, NV, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in ID, and the Fort McDermitt Reservation in OR.

US EPA, Region 09
NPDES Stormwater Program
75 Hawthorne St
San Francisco, CA 94105-3901

The States of Arizona, California and Nevada are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Hawaii is the NPDES Permitting Authority for all discharges within its state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
ASR120000	Island of American Samoa
AZR12000I	Indian country within the State of Arizona, as well as Navajo Reservation lands in New Mexico and Utah
CAR12000I	Indian country within the State of California
GUR120000	Island of Guam
JAR120000	Johnston Atoll
MPR120000	Commonwealth of the Northern Mariana Islands
MWR120000	Midway Island and Wake Island
NVR12000I	Indian country within the State of Nevada, as well as the Duck Valley Reservation in Idaho, the Fort McDermitt Reservation in Oregon and the Goshute Reservation in Utah

B.10 EPA Region 10: AK, WA, ID (except see Region 9 for Duck Valley Reservation Lands), and OR (except see Region 9 for Fort McDermitt Reservation).

US EPA, Region 10
NPDES Stormwater Program
1200 6th Ave (OW-130)
Seattle, WA 98101-1128
Phone: (206) 553-6650

The States of Oregon and Washington are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
AKR12000I	Indian country within the State of Alaska
AKR12-000F	Areas in the the Denali National Park and Preserve subject to construction by a Federal Operator
IDR120000	State of Idaho, except Indian country
IDR12000I	Indian country within the State of Idaho, except Duck Valley Reservation lands (see Region 9)
ORR12000I	Indian country within the State of Oregon, except Fort McDermitt Reservation lands (see Region 9)
WAR12000F	Areas in the State of Washington, except those located on Indian country, subject to construction activity by a Federal Operator
WAR12000I	Indian country within the State of Washington

Appendix C - Small Construction Waivers and Instructions

These waivers are only available to stormwater discharges associated with small construction activities (i.e., 1-5 acres). As the operator of a small construction activity, you may be able to qualify for a waiver in lieu of needing to obtain coverage under this general permit based on: (A) a low rainfall erosivity factor, (B) a TMDL analysis, or (C) an equivalent analysis that determines allocations for small construction sites are not needed. Each operator, otherwise needing permit coverage, must notify EPA of its intention for a waiver. It is the responsibility of those individuals wishing to obtain a waiver from coverage under this general permit to submit a complete and accurate waiver certification as described below. Where the operator changes or another is added during the construction project, the new operator must also submit a waiver certification to be waived.

C.1 Rainfall Erosivity Waiver

Under this scenario the small construction project's rainfall erosivity factor calculation ("R" in the Revised Universal Soil Loss Equation) is less than 5 during the period of construction activity. The operator must certify to EPA that construction activity will occur only when the rainfall erosivity factor is less than 5. The period of construction activity begins at initial earth disturbance and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a stabilization practice that will provide interim non-vegetative stabilization can be used for the end of the construction period, provided the operator commits (as a condition of waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization as defined in the construction general permit have been met. If use of this interim stabilization eligibility condition was relied on to qualify for the waiver, signature on the waiver with its certification statement constitutes acceptance of and commitment to complete the final stabilization process. The operator must submit a waiver certification to EPA prior to commencing construction activities.

> *Note: The rainfall erosivity factor "R" is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21–64, dated January 1997; United States Department of Agriculture (USDA), Agricultural Research Service.*

EPA has developed an online rainfall erosivity calculator to help small construction sites determine potential eligibility for the rainfall erosivity waiver. You can access the calculator from EPA's website at:www.epa.gov/npdes/stormwater/lew. The R factor can easily be calculated by using the construction site latitude/longitude or address and estimated start and end dates of construction. This calculator may also be useful in determining the time periods during which construction activity could be waived from permit coverage. You may find that moving your construction activity by a few weeks or expediting site stabilization will allow you to qualify for the waiver. Use this online calculator or the Construction Rainfall Erosivity Waiver Fact Sheet (www.epa.gov/npdes/pubs/fact3-1.pdf) to assist in determining the R Factor for your small construction site.

If you are the operator of the construction activity and eligible for a waiver based on low erosivity potential, you can submit a rainfall erosivity waiver electronically via EPA's eNOI system (www.epa.gov/npdes/cgpenoi) or provide the following information on the waiver certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The rainfall erosivity factor calculation that applies to the active construction phase at your project site; and
5. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, which certifies that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five.

You can access the waiver certification form from EPA's website at: (http://www.epa.gov/npdes/pubs/construction_waiver_form.pdf). Paper copies of the form must be sent to one of the addresses listed in Part C.4 of this section.

Note: If the R factor is 5 or greater, you cannot apply for the rainfall erosivity waiver, and must apply for NPDES permit coverage, unless you qualify for the Water Quality Waiver as described in section B below.

If your small construction project continues beyond the projected completion date given on the waiver certification, you must recalculate the rainfall erosivity factor for the new project duration. If the R factor is below five (5), you must update all applicable information on the waiver certification and retain a copy of the revised waiver as part of your records. The new waiver certification must be submitted prior to the projected completion date listed on the original waiver form to assure your exemption from permitting requirements is uninterrupted. If the new R factor is 5 or above, you must obtain NPDES permit coverage.

C.2 TMDL Waiver

This waiver is available if EPA has established or approved a TMDL that addresses the pollutant(s) of concern for the impaired water and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by EPA is available from EPA online at http://www.epa.gov/owow/tmdl/ and from state and tribal water quality agencies.

If you are the operator of the construction activity and eligible for a waiver based on compliance with an EPA-established or approved TMDL, you must provide the following information on the Waiver Certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;

3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the waterbody(s) that would be receiving stormwater discharges from your construction project;
5. The name and approval date of the TMDL;
6. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the TMDL.

C.3 Equivalent Analysis Waiver

This waiver is available for non-impaired waters only. The operator can develop an equivalent analysis that determines allocations for his/her small construction site for the pollutant(s) of concern or determines that such allocations are not needed to protect water quality. This waiver requires a small construction operator to develop an equivalent analysis based on existing in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety.

If you are a construction operator who wants to use this waiver, you must develop your equivalent analysis and provide the following information to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the waterbody(s) that would be receiving stormwater discharges from your construction project;
5. Your equivalent analysis;
6. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the equivalent analysis.

C.4 Waiver Deadlines and Submissions

1. Waiver certifications must be submitted prior to commencement of construction activities.
2. If you submit a TMDL or equivalent analysis waiver request, you are not waived until EPA approves your request. As such, you may not commence construction activities until receipt of approval from EPA.
3. Late Notifications: Operators are not prohibited from submitting waiver certifications after initiating clearing, grading, excavation activities, or other construction activities. The Agency reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and waiver authorization is granted.

Submittal of a waiver certification is an optional alternative to obtaining permit coverage for discharges of stormwater associated with small construction activity, provided you qualify for the waiver. Any discharge of stormwater associated with small construction activity not covered by either a permit or a waiver may be considered an unpermitted discharge under the Clean Water Act. As mentioned above, EPA reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and either discharge authorization is granted or a complete and accurate waiver certification is submitted. EPA may notify any operator covered by a waiver that they must apply for a permit. EPA may notify any operator who has been in non-compliance with a waiver that they may no longer use the waiver for future projects. Any member of the public may petition EPA to take action under this provision by submitting written notice along with supporting justification.

Complete and accurate Rainfall Erosivity waiver certifications not otherwise submitted electronically via EPA's eNOI system (www.epa.gov/npdes/cgpenoi) must be sent to one of the following addresses:

Regular U.S. Mail Delivery
EPA Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Overnight/Express Mail Delivery
EPA Stormwater Notice Processing Center
Room 7420
U.S. EPA
1201Constitution Avenue, NW
Washington, DC 20004

Complete and accurate TMDL or equivalent analysis waiver requests must be sent to the applicable EPA Region office specified in Appendix B.

Appendix D - Endangered Species Act Requirements

The purpose of this guidance is to assist you in complying with the requirements in Part 1.1.e of the permit requiring you to demonstrate that you meet one of the criteria listed in this appendix with respect to the protection of any and all species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or of habitat that is federally-designated as "critical habitat" under the ESA in order to be eligible for coverage under this permit.

This guidance provides you information on the following:

- **Section D.1:** ESA Eligibility Criteria
- **Section D.2:** Guidance for Determining Which ESA Criteria Applies

D.1 ESA Eligibility Criteria

You must certify in your NOI that you meet one of the eligibility criteria listed below in order to be eligible for coverage under this permit. You must also specify in the NOI the basis for your selection of the applicable eligibility criterion.

> Note: (1) Regardless of the criterion selected, you must provide documentation in your SWPPP that is sufficient to support your determination that you satisfy the requirements of the particular criterion. (2) While coordination between you and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (together, the "Services") is not necessarily required in all cases, EPA encourages you to coordinate with the Services and to do so early in the planning process prior to submitting your NOI.

Criterion A. No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of this permit.

Criterion B. The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your action area under eligibility Criterion A, C, D, E, or F and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the "action area". To certify your eligibility under this Criterion, there must be no lapse of NPDES permit coverage in the other operator's certification. By certifying eligibility under this Criterion, you agree to comply with any effluent limitations or conditions upon which the other operator's certification was based. You must include in your NOI the tracking number from the other operator's notification of authorization under this permit. If your certification is based on another operator's certification under Criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in Criterion C in your NOI form.

Criterion C. Federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in or near your site's "action area," and your site's discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat. This determination may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat. To make this certification, you must include the following in your NOI: 1) any federally listed species and/or designated habitat located in your "action area"; and 2) the distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site map with your NOI.

Criterion D. Coordination between you and the Services has been concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and must have resulted in a written concurrence from the relevant Service(s) that your site's discharges and discharge-related activities are not likely to adversely affect listed species or critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion E. Consultation between a Federal Agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has been concluded. The consultation must have addressed the effects of the construction site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat. The result of this consultation must be either:

i. a biological opinion that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or

ii. written concurrence from the applicable Service(s) with a finding that the site's discharges and discharge-related activities are not likely to adversely affect federally-listed species or federally-designated habitat.

You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion F. Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and this authorization addresses the effects of the site's discharges and discharge-related activities on federally-listed species and federally-designated critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

You must comply with any applicable terms, conditions, or other requirements developed in the process of meeting the eligibility criteria in this section to remain eligible for coverage under this permit. Documentation of these requirements must be kept as part of your SWPPP (see Part 7.2.14.1).

D.2 Guidance for Determining Which Criterion Applies

Part 1.1.5 of the permit requires that you meet one of the six criteria listed above in order to be eligible for coverage under the permit.

You must follow the procedures in Steps 1through 6 to determine the ESA criterion under which your site is eligible for permit coverage.

D.2.1 Step 1 - Determine if Your Discharges and Discharge-Related Activities Were Already Addressed in Another Operator's Valid Certification that Included Your Action Area.

- **If your discharges and discharge-related activities <u>were</u> already addressed in another operator's valid certification that included your action area** (e.g., a general contractor or developer may have completed and filed an NOI for the entire action area with the necessary ESA certifications (Criterion A, C, D, E, or F)), *you may select eligibility Criterion B on your Notice of Intent form*.

  By certifying eligibility under Criterion B, you must comply with any terms and conditions imposed under the eligibility requirements of Criterion A, C, D, E, or F to ensure that your discharges and discharge-related activities are protective of listed species and/or critical habitat.

  > Note: If you are unable to meet these eligibility requirements, then you may either establish eligibility under one of the other criterion, or you may consider applying to EPA for an individual permit.

  Under Criterion B, you must provide documentation in your SWPPP of any of these terms and conditions, as well as the other operator's basis for establishing eligibility. You must also provide a description of the basis for your selection of Criterion B on your NOI form, including the eligibility criterion (A, C, D, E, or F) that was certified to by the previous operator, and must provide the Tracking Number from the other operator's notification of authorization under this permit.

  If your certification is based on another operator's certification under criterion C, you must provide the documentation required in the NOI for criterion C, namely: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or designated critical habitat (in miles).

- **If discharges and discharge-related activities from your site <u>were not</u> addressed in another operator's valid certification that included your action area,** you must follow the applicable procedures in Steps 2 through 5 below.

D.2.2 Step 2 - Determine if Listed Threatened or Endangered Species or their Designated Critical Habitat(s) are Likely to Occur in your Site's Action Area

You must determine, to the best of your knowledge, whether species listed as either threatened or endangered, or their critical habitat(s) (see definitions of these terms in Appendix A), are located in your site's action area. To make this determination, you should first determine if listed species and/or critical habitat are expected to exist in your county or township. The local offices of the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and State or Tribal Heritage Centers often maintain lists of federally listed endangered or threatened species on their internet sites. For FWS

terrestrial and aquatic species information, you can use FWS' on-line mapping tool, the Information, Planning, and Consultation (IPAC) System, located at http://www.fws.gov/ipac/.

Note: To determine the field office that corresponds to your project site, visit http://www.fws.gov/endangered/regions/index.html and http://www.nmfs.noaa.gov/ (under the left tabe for "Regions").

In most cases, species and/or critical habitat lists allow you to determine if any such species or habitat exists in your county or township. You can also find critical habitat designations and associated requirements at 50 CFR Parts 17 and 226. http://www.access.gpo.gov.

- ***If there <u>are</u> listed species and/or critical habitat in your county or township***, you should contact your local FWS, NMFS, or State or Tribal Heritage Center to determine if the listed species are known to exist in your action area and if any critical habitat areas have been designated that overlap your action area.
    - If your local FWS, NMFS, or State or Tribal Heritage Center indicates that these species and/or critical habitat could exist in your action area, you must:
        - Do **one or more** of the following:
            - Conduct visual inspections. This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal stormwater collection systems.
            - Conduct a formal biological survey. In some cases, particularly for larger construction sites with extensive stormwater discharges, biological surveys may be an appropriate way to assess whether species are located in the action area and whether there are likely to be adverse effects to such species. Biological surveys are frequently performed by environmental consulting firms. A biological survey may in some cases be useful to conduct in conjunction with Steps Two, Three, or Four of these instructions.
            - If required, conduct an environmental assessment under the National Environmental Policy Act (NEPA). Some construction activities might require review under NEPA for specific reasons, such as federal funding or other federal involvement in the project. Note: Coverage under the CGP does not trigger such a review for individual projects/sites. EPA has complied with NEPA in the issuance of the CGP.

        and

- Follow the instructions in Steps 3 – 5 below, as applicable. Note that many but not all measures imposed to protect listed species under these steps will also protect critical habitat. Thus, meeting the eligibility requirements of this CGP may require measures to protect critical habitat that are separate from those to protect listed species.

- ***If there are <u>no</u> listed species in your county or township and <u>no</u> critical habitat areas in your action area,*** *you may check eligibility criterion A on your NOI form*. You must also provide a description of the basis for the criterion selected on your NOI form and provide documentation supporting the criterion selected in your SWPPP.

D.2.3 Step 3 - Determine if the Construction Activity's Discharges or Discharge-Related Activities Are Likely to Adversely Affect Listed Threatened or Endangered Species or Designated Critical Habitat

If in Step 2 you determine based on communication with your local FWS, NMFS, or State or Tribal Heritage Center, or other determination, that listed species and/or critical habitat could exist in your action area, you must next assess whether your discharges or discharge-related activities are likely to adversely affect listed threatened or endangered species or designated critical habitat.

Potential adverse effects from discharges and discharge-related activities include:

- *Hydrological*. Stormwater discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely. Construction activity itself may also alter drainage patterns on a site where construction occurs that can impact listed species or critical habitat.

- *Habitat*. Excavation, site development, grading, and other surface disturbance activities from construction activities, including the installation or placement of stormwater controls, may adversely affect listed species or their habitat. Stormwater may drain or inundate listed species habitat.

- *Toxicity*. In some cases, pollutants in stormwater may have toxic effects on listed species.

The scope of effects to consider will vary with each site. If you are having difficulty determining whether your project is likely to adversely affect listed species or critical habitat, or one of the Services has already raised concerns to you, you should contact the appropriate office of the FWS, NMFS or Natural Heritage Center for assistance.

- ***If adverse effects to listed threatened or endangered species or their critical habitat <u>are not</u> likely***, *then you may select eligibility criterion C on the NOI form*. You must provide the following specific information on your NOI form: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or

designated critical habitat (in miles). You must also provide a copy of your site map with your NOI.

- ***If adverse effects to listed threatened or endangered species or their critical habitat <u>are</u> likely*****,** you must follow Step 4 below.

D.2.4 Step 4 - Determine if Measures Can Be Implemented to Avoid Adverse Effects

If you make a preliminary determination in Step 3 that adverse effects from your construction activity's discharges or discharge-related activities are likely to occur, you can still receive coverage under eligibility criterion C of the CGP if appropriate measures are undertaken to avoid or eliminate the likelihood of adverse effects prior to applying for CGP coverage.

These measures may involve relatively simple changes to construction activities such as re-routing a stormwater discharge to bypass an area where species are located, relocating stormwater controls, or by modifying the "footprint" of the construction activity. If you are unable to ascertain which measures to implement to avoid the likelihood of adverse effects, you must coordinate or enter into consultation with the FWS and/or NMFS, in which case you would not be eligible for coverage under eligibility criterion C, but may instead be eligible for coverage under eligibility criterion D, E, or F (described in more detail in Step 5).

- **If you are able to install and implement appropriate measures to avoid the likelihood of adverse effects,** *then you may check eligibility criterion C on the NOI form.* The measures you adopt to avoid or eliminate adverse affects must be implemented for the duration of the construction project and your coverage under the CGP. You must also provide a description of the basis for the criterion selected , and the following specific information on your NOI form: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or designated critical habitat (in miles).

- **If you cannot ascertain which measures to implement to avoid the likelihood of adverse effects,** you must follow the procedures in Step 5**.**

D.2.5 Step 5 - Determine if the Eligibility Requirements of Criterion D, E, or F Can Be Met

If in Step 4 you cannot ascertain which measures to implement to avoid the likelihood of adverse effects, you must contact the FWS and/or NMFS. You may still be eligible for CGP coverage if any likely adverse effects can be addressed through meeting criterion D, E, or F.

- **Criterion D:** You have coordinated with the Services and have addressed the effects of your site's discharges on federally-listed threatened or endangered species and federally-designated critical habitat, which resulted in a written concurrence from the relevant Service(s) that your site's discharges are not likely to adversely affect listed species or critical habitat.

  If you have met the requirements of criterion D, *you may select eligibility criterion D on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between you and the applicable Service in your SWPPP.

- **Criterion E:** Formal or informal ESA section 7 consultation is performed with the FWS and/or NMFS and that consultation addresses the effects of your discharges and discharge-related activities on federally-listed and threatened species and designated critical habitat. In order to be eligible for coverage under this permit, consultation must result in a "no jeopardy opinion" or a written concurrence by the Service(s) on a finding that your stormwater discharge(s) and stormwater discharge-related activities are not likely to adversely affect listed species or critical habitat (For more information on consultation, see 50 CFR §402). If you receive a "jeopardy opinion," you may continue to work with the FWS and/or NMFS and your permitting authority to modify your project so that it will not jeopardize listed species or designated critical habitat.

  Note that most consultations are accomplished through informal consultation. When conducting informal ESA section 7 consultation as a non-federal representative, you must follow the procedures found in 50 CFR Part 402 of the ESA regulations. You must notify FWS and/or NMFS of your intention and agreement to conduct consultation as a non-federal representative.

  Consultation may occur in the context of another federal action at the construction site (e.g., where ESA section 7 consultation was performed for issuance of a wetlands dredge and fill permit for the project or where a NEPA review is performed for the project that incorporates a section 7 consultation). Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators may, if they wish, initiate consultation with the Services at Step Four.

  Whether ESA section 7 consultation must be performed with either the FWS, NMFS or both Services depends on the listed species that may be affected by the operator's activity. In general, NMFS has jurisdiction over marine, estuarine, and anadromous species. Operators should also be aware that while formal section 7 consultation provides protection from incidental takings liability, informal consultation does not.

  If you have met the requirements of criterion E, *you may select eligibility criterion E on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between yourself and the Services in your SWPPP.

- **Criterion F:** Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and that authorization addresses the effects of your discharge(s) and discharge-related activities on federally-listed species and designated critical habitat. You must follow FWS and/or NMFS procedures when applying for an ESA Section 10 permit (see 50 CFR §17.22(b)(1) for FWS and §222.22 for NMFS). Application instructions for section 10 permits for FWS and NMFS can be obtained by accessing the FWS and NMFS websites (http://www.fws.gov and http://www.nmfs.noaa.gov) or by contacting the appropriate FWS and NMFS regional office.

  If you have met the requirements of criterion F, *you may select eligibility criterion F on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between yourself and the Services in your SWPPP.

Appendix E – Historic Property Screening Process

Background

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal "undertakings", such as the issuance of this permit, on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. To address any issues relating to historic properties in connection with the issuance of this permit, EPA has developed the screening process in this appendix that enables construction operators to appropriately consider the potential impacts, if any, of their installation of stormwater controls on historic properties and to determine whether actions can be taken, if applicable, to mitigate any such impacts. Although the coverages of individual construction sites under this permit do not constitute separate Federal undertakings, the screening process in this appendix provides an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit.

Key Terms

Historic property- prehistoric or historic districts, sites, buildings, structures, or objects that are included in or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and remains that are related to and located within such properties

SHPO – The State Historic Preservation Officer for a particular state

THPO or Tribal representative – The Tribal Historic Preservation Officer for a particular Tribe or, if there is no THPO, the representative designated by such Tribe for NHPA purposes

Instructions for All Construction Operators

You are required to follow the screening process in this appendix to determine if your installation of stormwater controls on your site has the potential to cause effects to historic properties, and whether or not you need to contact your SHPO, THPO, or other tribal representative for further information. You may not submit your NOI until you have completed this screening process. The following four steps describe how applicants can meet the historic property requirements under this permit:

Step 1 *Are you installing any stormwater controls that require subsurface earth disturbance?*

The first step of the screening process is to determine if you will install stormwater controls that cause subsurface earth disturbance. The installation of the following types of stormwater controls require subsurface earth disturbance:

- Dikes
- Berms
- Catch Basins
- Ponds
- Ditches
- Trenches
- Culverts
- Channels
- Perimeter Drains

- Swales

Note: This list is not intended to be exhaustive. Other stormwater controls that are not on this list may involve earth-disturbing activities and must also be examined for the potential to affect historic properties.

Note: You are only required to consider earth-disturbing activities related to the installation of stormwater controls in the NHPA screening process. You are not reqired to conside other earth-disturbing activities a the site. If you are installing one of the above stormwater controls or another type of control that requires subsurface earth disturbance, your project has the potential to have an effect on historic properties. If this is the case, then you must proceed to Step 2.

If you are not installing one of the above stormwater controls or another type of control that requires subsurface earth disturbance, then you may indicate this on your NOI, and no further screening is necessary. During the 14-day waiting period after submitting your NOI, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

Step 2 *Have prior professional cultural resource surveys or other evaluations determined that historic properties do not exist, or have prior disturbances precluded the existence of historic properties?*

If you are installing a stormwater control that requires subsurface earth disturbance, you must next determine if it has already been determined that no historic properties exist on your site based on prior professional cultural resource surveys or other evaluations, or that the existence of historic properties has been precluded because of prior earth disturbances.

If prior to your project it has already been determined that no historic properties exist at your site based on available information, including information that may be provided by your applicable SHPO, THPO, or other tribal representative, then you may indicate this on your NOI, and no further screening steps are necessary. Similarly, if earth disturbances that have occurred prior to your project have eliminated the possibility that historic properties exist on your site, you may indicate this on your NOI, and no further screening steps are necessary. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If neither of these circumstances exists for your project, you must proceed to Step 3.

Step 3 *If you are installing any stormwater controls that require subsurface earth disturbance, you must determine if these activities will have an effect on historic properties.*

If your answer to the questions in Steps 1 and 2 is "no", *then you must assess whether your earth-disturbing activities related to the installation of stormwater controls will have an effect on historic properties. This assessment may be based on historical sources, knowledge of the area, an assessment of the types of earth-disturbing activities you are engaging in, considerations of*

any controls and/or management practices you will adopt to ensure that your stormwater control-related earth-disturbing activities will not have an effect on historic properties, and any other relevant factors. If you determine based on this assessment that earth disturbances related to the installation of yous stormwater controls will not cause effects to historic properties, you may indicate this on your NOI, and document the basis for your determinatioin in your SWPPP and no further screening steps are necessary. In this case you must also attach a copy of your site map to your NOI. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If none of the circumstances in Steps 1-3 exist for your project, you must proceed to Step 4.

Step 4: *If you are installing any stormwater controls that require subsurface earth disturbance and you have not satisfied the conditions in Steps 1-3, you must contact and consult with the appropriate historic preservation authorities.*

Where you are installing stormwater controls that require subsurface earth disturbance, and you cannot determine in Step 3 that these activities will not have effects on historic properties, then you must contact the relevant SHPO, THPO, or other tribal representative to request their views as to the likelihood that historic properties are potentially present on your site and may be impacted by the installation of these controls.

> *Note: Addresses for SHPOs and THPOs may be found on the Advisory Council on Historic Preservation's website (www.achp.gov/programs.html). In instances where a Tribe does not have a THPO you should contact the appropriate Tribal government office designated by the Tribe for this purpose when responding to this permit eligibility condition.*

You must submit the following minimum information in order to properly initiate your request for information:

1. Project name (*i.e.*, the name or title most commonly associated with your project);
2. A narrative description of the project;
3. Name, address, phone and fax number, and email address (if available) of the operator;
4. Most recent U.S. Geological Survey (USGS) map section (7.5 minute quadrangle) showing actual project location and boundaries clearly indicated; and
5. Sections of SWPPP site map (see Part 7.2.6) that show locations where stormwater controls that will cause subsurface earth disturbance will be installed (see Step 1).

Without submitting this minimum information, you will not have been considered to have properly initiated your request. You will need to provide the SHPO, THPO, or other tribal representative a minimum of15 calendar days after they receive these materials to respond to your request for information about your project. You are advised to get a receipt from the post office or other carrier confirming the date on which your letter was received.

If you do not receive a response within15 calendar days after receipt by the SHPO, THPO, or other tribal representative of your request, then you may indicate this on your NOI, and no further screening steps are necessary. Or, if the applicable SHPO, THPO, or other tribal representative responds to your request with an indication that no historic properties will be affected by the installation of stormwater controls at your site, then you may indicate this on your NOI, and no further screening steps are necessary. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If within 15 calendar days of receipt of your request the applicable SHPO, THPO, or other tribal representative responds with a request for additional information or for further consultation regarding appropriate measures for treatment or mitigation of effects on historic properties caused by the installation of stormwater controls on your site, you must comply with this request and proceed to Step 5.

Step 5: *Consultation with your applicable SHPO, THPO, or other tribal representative.*

If, following your discussions with the appropriate historic preservation authorities in Step 4, the applicable SHPO, THPO, or other tribal represenative requests additional information or further consultation, you must respond with such information or to consult to determine impacts to historic properties that may be caused by the installation of stormwater controls on your site and appropriate measures for treatment or mitigation of such impacts. If as a result of your discussions with the applicable SHPO, THPO, or tribal representative, you enter into, and comply with, a written agreement regarding treatment and/or mitigation of impacts on your site, then you may indicate this on your NOI, and no further screening steps are necessary.

If, however, agreement on an appropriate treatment or mitigation plan cannot be reached between you and the SHPO, THPO, or other tribal representative within 30 days of your response to the SHPO, THPO, or other tribal representative's request for additional information or further consultation, you may submit your NOI, but you must indicate that you have not negotiated measures to avoid or mitigate such effects. You must also include in your SWPPP the following documentation:

1. Copies of any written correspondence between you and the SHPO, THPO, or other tribal representative; and
2. A description of any significant remaining disagreements as to mitigation measures between you and the SHPO, THPO, or other tribal representative.

After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, ACHP or other tribal representative may request that EPA place a hold on authorization based upon concerns regarding potential adverse effects to historic properties. EPA, in coordination with the ACHP, will evaluate any such request and notify you if any additional measures to address adverse effects to historic properties are necessary.

Appendix F - List of Tier 3, Tier 2, and Tier 2.5 Waters

EPA's CGP has special requirements for discharges to waters designated by a state or tribe as Tier 2/2.5 or Tier 3 for antidegradation purposes under 40 CFR 131.12(a). See Parts 1.2.3 and 3.3.

The list below is provided as a resource for operators who must determine whether they discharge to a Tier 2/2.5 or Tier 3 water. Only Tier 2/2.5 or Tier 3 waters specifically identified by a water quality standard authority (e.g., a state, territory, or tribe) are identified in the table below. Many authorities evaluate the existing and protected quality of the receiving water on a pollutant-by-pollutant basis and determine whether water quality is better than the applicable criteria that would be affected by a new discharge or an increase in an existing discharge of the pollutant. In instances where water quality is better, the authority may choose to allow lower water quality, where lower water quality is determined to be necessary to support important social and economic development. Permittees are not required to identify those waters which are evaluated on an individual basis.

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
MAR120000	**Commonwealth of Massachusetts, except Indian Country lands**	
	Tier 2 and Tier 2.5 waters are identified and listed in 314 CMR 4.06 Basin Classification. (314 CMR 4 can be found at DEP's web page at http://www.mass.gov/dep/service/regulations/314cmr04.pdf)	
	Tier 2	Tier 2 waters are listed on a parameter-by-parameter basis.
	Tier 2.5	Tier 2.5 waters are listed as "outstanding resource waters" on the website: http://www.mass.gov/dep/water/laws/tblfig.pdf
NHR120000	**State of New Hampshire**	
	Tier 2/2.5	There is no list of Tier 2/Tier 2.5 waters. New dischargers should contact Ken Edwardson at Kenneth.Edwardson@des.nh.gov.
	Tier 3	Env-Ws 1708.05(a) Surface waters of national forests and surface waters designated as "natural" under RSA 483:7-a, I shall be considered outstanding resource waters (ORW). "Natural waters" are listed at http://www.gencourt.state.nh.us/rsa/html/L/483/483-15.htm. Surface waters of national forests are not included in an official list. For further questions, new dischargers should contact Thelma Murphy (EPA Region 1's stormwater coordinator) at murphy.thelma@epa.gov.
PRR120000	**Commonwealth of Puerto Rico**	
	Tier 3	Tier III waters are those which are classified as either Class SA or Class SE. Class SA waters are defined as "Coastal waters and estuarine waters of high quality and/or exceptional ecological or recreational value whose existing characteristics shall not be altered, except by natural causes, in order to preserve the existing natural phenomena." Class SA waters include bioluminiscent lagoons and bays such as La Parguera and Monsio José on the Southern Coast, Bahía de Mosquito in Vieques, and any other coastal or estuarine waters of exceptional quality of high ecological value or recreational which may be designated by Puerto Rico, through Resolution, as requiring this classification for protection of the waters. Class SE waters are defined

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		as "Surface waters and wetlands of exceptional ecological value, whose existing characteristics should not be altered in order to preserve the existing natural phenomena." Class SE waters include Laguna Tortuguero, Laguna Cartagena and any other surface water bodies of exceptional ecological value as may be designated by Puerto Rico through Resolution.
DCR120000	**District of Columbia**	
	Tier 2/2.5	Rock Creek and its tributaries and Battery Kemble Creek and its tributaries are considered Special Waters of the District of Columbia (SWDC) under its antidegradation program.
MNR12000I	**Fond du Lac Band of MN Chippewa**	
	Tier 3	Six lakes are presently identified as Tier 3: (1) Dead Fish, (2) Jaskari, (3) Miller (Mud), (4) Perch, (5) Rice Portage, (6) Wild Rice.
	Grand Portage Band of MN Chippewa	
	Tier 2/2.5	All waters, not already classified as Tier 3, are high quality Tier 2 waters. (see Grand Portage Reservation Water Quality Standards, Section VI & VII, Pages 14-16).
	Tier 3	"The portion of Lake Superior north of latitude 47 degrees, 57 minutes, 13 seconds, east of Hat Point, south of the Minnesota-Ontario boundary, and west of the Minnesota-Michigan boundary." (see Section VII, Page 16).
WIR12000I	**Lac du Flambeau Band of the Lake Superior Chippewa**	
	Tier 2	All named waters, including wetlands, not specified under an antidegradation classification.
	Tier 2.5	Bills Lake, Birch Lake, Bobidosh Lake, Bog Lake (SE SE Sec. 31, T40NR6E), Bolton Lake, Broken Bow Lake, Chewalah Lake, Clear Lake (Sec. 2, T39NR4E), Corn Great, Great, Corn Lake, Little "Least/Lesser", Crawling Stone Lake, Big, Crawling Stone Lake, Little, Crescent Lake, Crooked Lake, Big, David Lake, Ellerson Lake, Middle, Ellerson Lake, West, Elsie Lake "Boundary Lake", Fat Lake, Fence Lake, Gresham Creek, Green Lake (NW NW Sec. 19, T41R6E), Grey Lake, Gunlock Lake, Haskell Lake, Headflyer Lake (Sec. 19, T41NR5E), Highway Lake (NW NW Sec. 19, T41NR5E), Horsehead Lake (SE SW Sec. 9, T40NR5E), Hutton's Creek, Ike Walton Lake, Lily Lake (SE SW Sec. 35, T40NR5E), Little Ten Lake, Lodge Lake "L. Rice" (NW NW Sec. 8, T41NR6E), Lucy Lake, Mindys Lake (Sec. 8, T40NR5E), Minette Lake, Mitten Lake, Monk's Lake (Sec. 13, T40NR5E), Moving Cloud Lake, Mud Creek, Muskesin Lake, Patterson Lake, Placid Twin Lake (North), Placid Twin Lake (South), Plummer Lake, Poupart Lake, Prairie Lake (NE SW Sec. 13, T40NR4E), Raven Lake, Ross Allen Lake, Sand Lake, Little, Scott Lake (Sec. 22, T40N, R4E), Shishebogama Lake, Signal Lake, Snort Lake (Sec. 5, T41N, R6E), Spring Lake "Jerms", Squirrel Lake, Statenaker Lake "Hollow", Stearns Lake "Hourglass", Sugarbush "Hidden Lake" (NW NW Sec. 17, T41NR5E), Sugarbush Creek, Sugarbush Lake, Little, Sugarbush Lake, Lower, Sugarbush Lake, Middle, Sugarbush Lake, Upper, Sunfish Lake, Tippecanoe Lake, Tomahawk River, To-To Tom Lake, Toulish Lake, Trout River, Warrior Lake, White Sand Lake, Whitefish Lake

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		"Cattail Lake" (Sec. 34, T40N5R), Wishow Lake, Wyandock Lake
	Tier 3	Bear River (1st bridge to Reservation boundary), Big Springs (Sec. 25, T40NR4E), Black Lake, Cranberry Lake, Doud Lake, Eagle Lake, Gene Lake, Johnson Springs, Little Trout Lake, Lost Lake (Sect. 1, T41NR4E), Mishonagon Creek, Munnomin (Jesse, Duck) Lake, Negani (Hegani) Lake, Reservation Line Lake, Spring Creek, Tank Lake, Thomas Lake, Wild Rice Lake, Zee Lake
NMR120000	**State of New Mexico**	
	Tier 3	(1) Rio Santa Barbara, including the west, middle and east forks from their headwaters downstream to the boundary of the Pecos Wilderness; and (2) the waters within the United States forest service Valle Vidal special management unit including: (a) Rio Costilla, including Comanche, La Cueva, Fernandez, Chuckwagon, Little Costilla, Holman, Gold, Grassy, LaBelle and Vidal creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; (b) Middle Ponil creek, including the waters of Greenwood Canyon, from their headwaters downstream to the boundary of the Elliott S. Barker wildlife management area; (c) Shuree lakes; (d) North Ponil creek, including McCrystal and Seally Canyon creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; and (e) Leandro creek from its headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit. (3) the named perennial surface waters of the state, identified in Subparagraph (a) below, located within United States department of agriculture forest service wilderness. Wilderness are those lands designated by the United States congress as wilderness pursuant to the Wilderness Act. Wilderness areas included in this designation are the Aldo Leopold wilderness, Apache Kid wilderness, Blue Range wilderness, Chama River Canyon wilderness, Cruces Basin wilderness, Dome wilderness, Gila wilderness, Latir Peak wilderness, Pecos wilderness, San Pedro Parks wilderness, Wheeler Peak wilderness, and White Mountain wilderness. (a) The following waters are designated in the Rio Grande basin: (i) in the Aldo Leopold wilderness: Byers Run, Circle Seven creek, Flower canyon, Holden Prong, Indian canyon, Las Animas creek, Mud Spring canyon, North Fork Palomas creek, North Seco creek, Pretty canyon, Sids Prong, South Animas canyon, Victorio Park canyon, Water canyon; (ii) in the Apache Kid wilderness Indian creek and Smith canyon; (iii) in the Chama River Canyon wilderness: Chavez canyon, Ojitos canyon, Rio Chama; (iv) in the Cruces Basin wilderness: Beaver creek, Cruces creek, Diablo creek, Escondido creek, Lobo creek, Osha creek; (v) in the Dome wilderness: Capulin creek, Medio creek, Sanchez

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		canyon/creek; (vi) in the Latir Peak wilderness: Bull creek, Bull Creek lake, Heart lake, Lagunitas Fork, Lake Fork creek, Rito del Medio, Rito Primero, West Latir creek; (vii) in the Pecos wilderness: Agua Sarca, Hidden lake, Horseshoe lake (Alamitos), Jose Vigil lake, Nambe lake, Nat lake IV, No Fish lake, North Fork Rio Quemado, Rinconada, Rio Capulin, Rio de las Trampas (Trampas creek), Rio de Truchas, Rio Frijoles, Rio Medio, Rio Molino, Rio Nambe, Rio San Leonardo, Rito con Agua, Rito Gallina, Rito Jaroso, Rito Quemado, San Leonardo lake, Santa Fe lake, Santa Fe river, Serpent lake, South Fork Rio Quemado, Trampas lake (East), Trampas lake (West); (viii) in the San Pedro Parks wilderness: Agua Sarca, Cañon Madera, Cave creek, Cecilia Canyon creek, Clear creek (North SPP), Clear creek (South SPP), Corralitos creek, Dove creek, Jose Miguel creek, La Jara creek, Oso creek, Rio Capulin, Rio de las Vacas, Rio Gallina, Rio Puerco de Chama, Rito Anastacio East, Rito Anastacio West, Rito de las Palomas, Rito de las Perchas, Rito de los Pinos, Rito de los Utes, Rito Leche, Rito Redondo, Rito Resumidero, San Gregorio lake; (ix) in the Wheeler Peak wilderness: Black Copper canyon, East Fork Red river, Elk lake, Horseshoe lake, Lost lake, Sawmill creek, South Fork lake, South Fork Rio Hondo, Williams lake. (b) The following waters are designated in the Pecos River basin: (i) in the Pecos wilderness: Albright creek, Bear creek, Beatty creek, Beaver creek, Carpenter creek, Cascade canyon, Cave creek, El Porvenir creek, Hollinger creek, Holy Ghost creek, Horsethief creek, Jack's creek, Jarosa canyon/creek, Johnson lake, Lake Katherine, Lost Bear lake, Noisy brook, Panchuela creek, Pecos Baldy lake, Pecos river, Rio Mora, Rio Valdez, Rito Azul, Rito de los Chimayosos, Rito de los Esteros, Rito del Oso, Rito del Padre, Rito las Trampas, Rito Maestas, Rito Oscuro, Rito Perro, Rito Sebadilloses, South Fork Bear creek, South Fork Rito Azul, Spirit lake, Stewart lake, Truchas lake (North), Truchas lake (South), Winsor creek; (ii) in the White Mountain wilderness: Argentina creek, Aspen creek, Bonito creek, Little Bonito creek, Mills canyon/creek, Rodamaker creek, South Fork Rio Bonito, Turkey canyon/creek. (c) The following waters are designated in the Gila River basin: (i) in the Aldo Leopold wilderness: Aspen canyon, Black Canyon creek, Bonner canyon, Burnt canyon, Diamond creek, Falls canyon, Fisherman canyon, Running Water canyon, South Diamond creek; (ii) in the Gila wilderness: Apache creek, Black Canyon creek, Brush canyon, Canyon creek, Chicken Coop canyon, Clear creek, Cooper canyon, Cow creek, Cub creek, Diamond creek, East Fork Gila river, Gila river, Gilita creek, Indian creek, Iron creek, Langstroth canyon, Lilley canyon, Little creek, Little Turkey creek, Lookout canyon, McKenna creek, Middle Fork Gila river, Miller Spring canyon, Mogollon creek, Panther canyon, Prior creek, Rain creek, Raw Meat creek, Rocky canyon, Sacaton creek, Sapillo creek, Sheep Corral canyon, Skeleton canyon, Squaw creek, Sycamore canyon, Trail canyon, Trail creek, Trout creek, Turkey creek, Turkey Feather creek, Turnbo canyon,

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		West Fork Gila river, West Fork Mogollon creek, White creek, Willow creek, Woodrow canyon. (d) The following waters are designated in the Canadian River basin: in the Pecos wilderness Daily creek, Johns canyon, Middle Fork Lake of Rio de la Casa, Middle Fork Rio de la Casa, North Fork Lake of Rio de la Casa, Rito de Gascon, Rito San Jose, Sapello river, South Fork Rio de la Casa, Sparks creek (Manuelitas creek). (e) The following waters are designated in the San Francisco River basin: (i) in the Blue Range wilderness: Pueblo creek; (ii) in the Gila wilderness: Big Dry creek, Lipsey canyon, Little Dry creek, Little Whitewater creek, South Fork Whitewater creek, Spider creek, Spruce creek, Whitewater creek. (f) The following waters are designated in the Mimbres Closed basin: in the Aldo Leopold wilderness Corral canyon, Mimbres river, North Fork Mimbres river, South Fork Mimbres river. (g) The following waters are designated in the Tularosa Closed basin: in the White Mountain wilderness Indian creek, Nogal Arroyo, Three Rivers. (h) The wetlands designated are identified on the maps and list of wetlands within United States forest service wilderness areas designated as outstanding national resource waters published at the New Mexico state library and available on the department's website.

Appendix G – Buffer Guidance.

The purpose of this guidance is to assist you in complying with the requirements in Part 2.1.2.1 of the permit regarding the establishment of natural buffers or equivalent sediment controls. This guidance is organized as follows:

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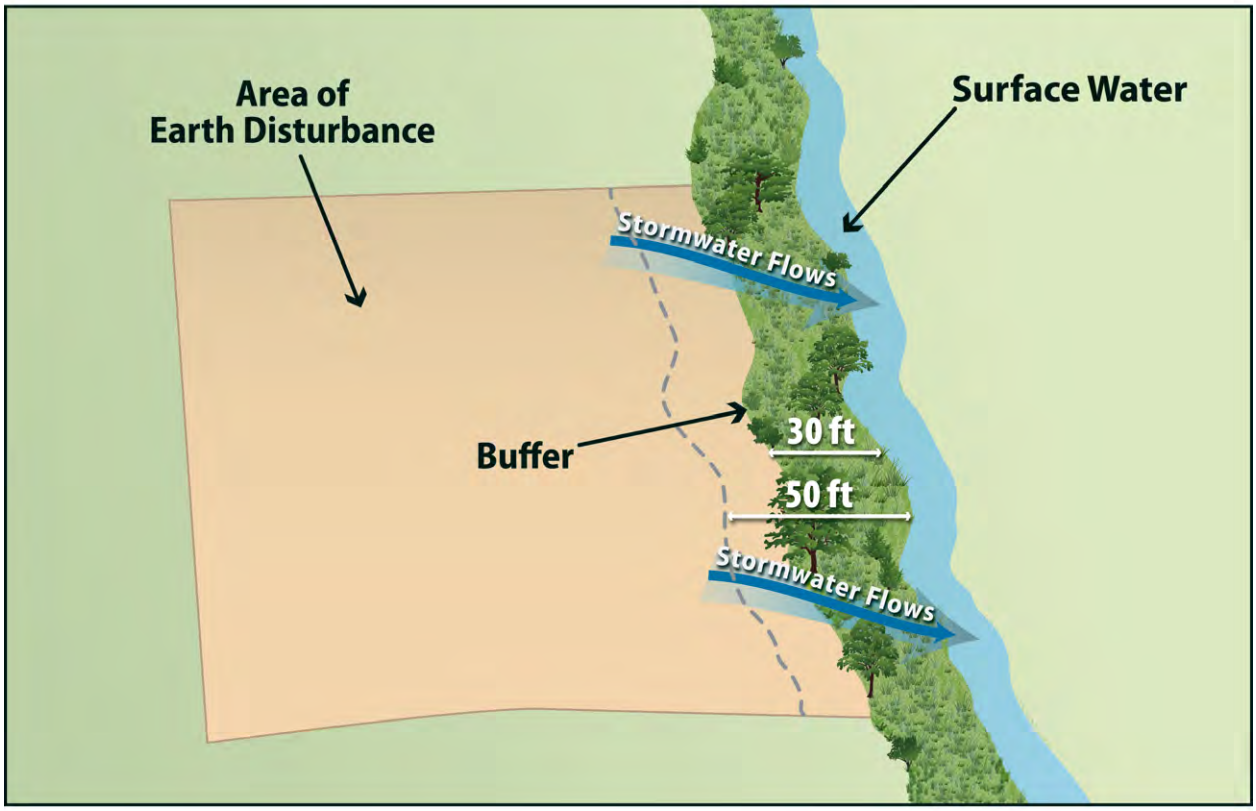
G.1 Sites That Are Required to Comply with Part 2.1.2.1

The purpose of this part is to help you determine if the requirements in Part 2.1.2.1 apply to your site.

G.1.1 Step 1 - Determine if Your Site is Within 50 Feet of a Surface Water

Part 2.1.2.1 applies to you only if your earth-disturbing activities will occur within 50 feet of a surface water that receives stormwater discharges from your site. Figure G – 1 illustrates when a site would be required to comply with the requirements in Part 2.1.2.1 due to their proximity to a surface water. If the surface water is not located within 50 feet of the earth-disturbing activities, Part 2.1.2.1 does not apply.

Figure G - 1. Example of earth-disturbing activities within 50 feet of a surface water.



If you determine that your earth-disturbing activities will occur within 50 feet of a surface water that receives stormwater discharges from your site, the requirements in Part 2.1.2.1 apply, except for certain circumstances that are described in Step 2.

Note that where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, or if a portion of area within 50 feet of the surface water is owned by another party and is not under your control, the buffer requirements in Part 2.1.2.1 still apply, but with some allowances.

Clarity about how to implement the compliance alternatives for these situations is provided in G.2.1.2 and G.2.2.2 below.

Note that EPA does not consider designed stormwater control features (*e.g., stormwater conveyance channels, storm drain inlets, stormwater basins)* that direct storm water to surface waters more than 50 feet from the disturbance to constitute surface waters for the purposes of determining if the buffer requirements apply.

G.1.2 Step 2 - Determine if Any Exceptions to the Requirements in Part 2.1.2.1 Apply

The following exceptions apply to the requirements in Part 2.1.2.1:

- If there is no discharge of stormwater to surface waters through the area between the disturbed portions of the site and any surface waters located within 50 feet of your site, you are not required to comply with the requirements in this Part. This includes situations where you have implemented controls measures, such as a berm or other barrier, that will prevent such discharges.
- Where no natural buffer exists due to preexisting development disturbances *(e.g., structures, impervious surfaces)* that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this Part.

  Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you <u>are</u> required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction for either compliance alternative 2 or 3 below, you are not expected to compensate for the reduction in buffer function that would have resulted from the area covered by these preexisting disturbances. Clarity about how to implement the compliance alternatives for these situations is provided in G.2.1.2 and G.2.2.2 below.

  If during your project, you will disturb any portion of these preexisting disturbances, the area removed will be deducted from the area treated as natural buffer.
- For "linear construction projects" (see Appendix A), you are not required to comply with this requirement if site constraints *(e.g., limited right-of-way)* prevent you from complying with the requirements of the alternatives in Part 2.1.2.1a, provided that, to the extent practicable, you limit disturbances within 50 feet of the surface water and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the surface water. You must also document in your SWPPP your rationale for why it is infeasible for you to comply with the requirements in Part 2.1.2.1a, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.
- For "small residential lot" construction *(i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre),* you have the option of complying with the requirements in Part G.2.3 of this appendix.
- The following disturbances within 50 feet of a surface water are exempt from the requirements in this Part:

  - Construction approved under a CWA Section 404 permit; or

- Construction of a water-dependent structure or water access areas *(e.g., pier, boat ramp, trail)*.

Note that you must document in your SWPPP if any disturbances related to any of the above exceptions occurs within the buffer area on your site.

G.2 COMPLIANCE ALTERNATIVES GUIDANCE

If in Part G.1 of this guidance you determine that the buffer requirements apply to your site, you have three compliance alternatives from which you can choose:

1. Provide and maintain a 50-foot buffer undisturbed natural buffer (Part 2.1.2.1a.i);[1] or
2. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (Part 2.1.2.1a.ii);[1] or
3. If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (Part 2.1.2.1a.iii).[1]

The compliance alternative selected above must be maintained throughout the duration of permit coverage.

The following provides detailed guidance for how you can comply with each of the compliance alternatives. Part G.2.1 below provides guidance on how to provide and maintain natural buffers consistent with the alternatives 1 and 2, above. Part G.2.2 below provides guidance on how to comply with the requirement to provide a 50-foot buffer equivalent through erosion and sediment controls consistent with alternatives 2 and 3, above.

G.2.1 Guidance for Providing and Maintaining Natural Buffers

The following guidance is intended to assist you in complying with the requirements to provide and maintain a natural buffer during construction. This part of the guidance applies to you if you choose either alternative 1 (50-foot buffer) or alternative 2 (a buffer of < 50 feet supplemented by additional erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), or if you are providing a buffer in compliance with one of the small residential lot compliance alternatives in Part G.2.3 below.

[1] *For the compliance alternatives in 1 and 2, you are not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists (e.g., arid and semi-arid areas). You only need to retain and protect from disturbance the natural buffer that existed prior to the commencement of construction. Any preexisting structures or impervious surfaces are allowed in the natural buffer provided you retain and protect from disturbance the natural buffer area outside the preexisting disturbance. Similarly, for alternatives 2 and 3, you are required to implement and maintain sediment controls that achieve the sediment load reduction equivalent to the undisturbed natural buffer that existed on the site prior to the commencement of construction. In determining equivalent sediment load reductions, you may consider naturally non-vegetated areas and prior disturbances. See Part G.2.2 of this Appendix for a discussion of how to determine equivalent reductions.*

G.2.1.1 *Buffer Width Measurement*

Where you are retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:

1. The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or
2. The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

Refer to Figure G – 2 and Figure G - 3. You may find that specifically measuring these points is challenging if the flow path of the surface water changes frequently, thereby causing the measurement line for the buffer to fluctuate continuously along the path of the waterbody. Where this is the case, EPA suggests that rather than measuring each change or deviation along the water's edge, it may be easier to select regular intervals from which to conduct your measurement. For instance, you may elect to conduct your buffer measurement every 5 to 10 feet along the length of the water.

Additionally, note that if earth-disturbing activities will take place on both sides of a surface water that flows through your site, to the extent that you are establishing a buffer around this water, it must be established on both sides. For example, if you choose alternative 1 above, and your project calls for disturbances on both sides of a small stream, you would need to retain the full 50 feet of buffer on both sides of the water. However, if your construction activities will only occur on one side of the stream, you would only need to retain the 50-foot buffer on the side of the stream where the earth-disturbance will occur.

Figure G - 2. This image shows buffer measurement from the ordinary high water mark of the water body, as indicated by a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, and/or the presence of litter/debris.

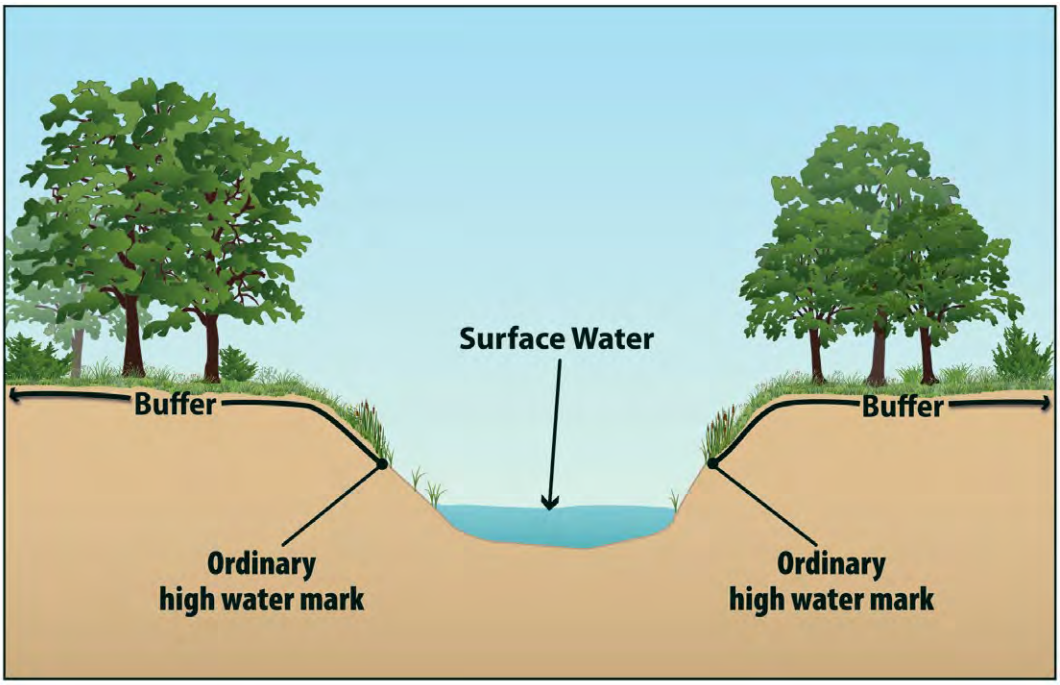
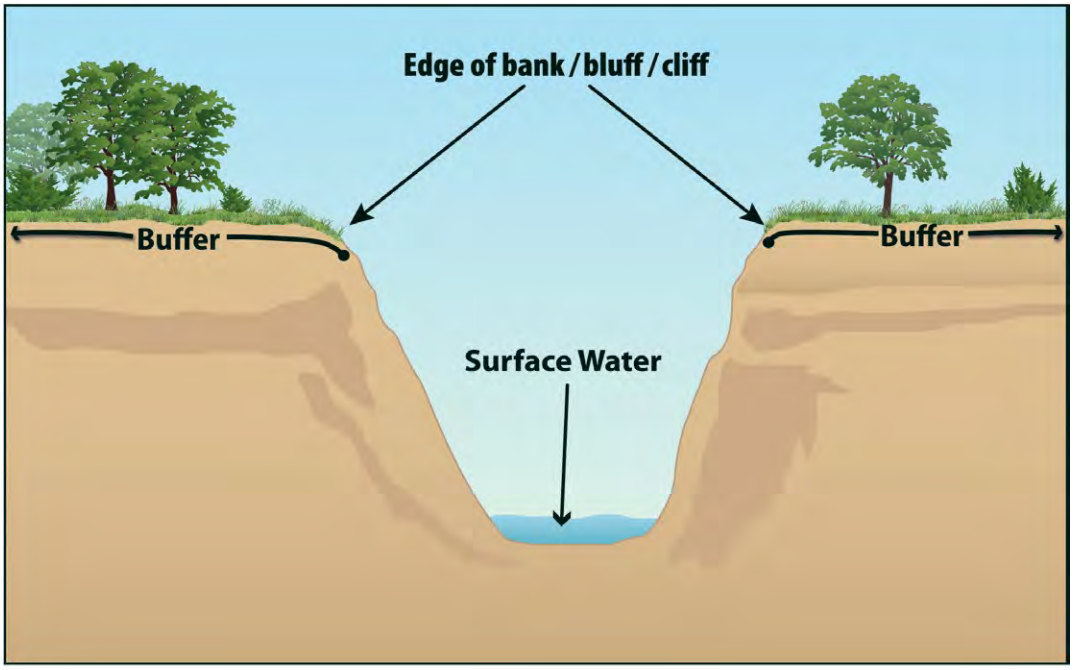


Figure G - 3. This image shows buffer measurement from the edge of the bank, bluff, or cliff, whichever is applicable.



G.2.1.2 *Limits to Disturbance Within the Buffer*

You are considered to be in compliance with this requirement if you retain and protect from construction activities the natural buffer that existed prior to the commencement of construction. If the buffer area contains no vegetation prior to the commencement of construction (e.g., sand or rocky surface), you are not required to plant any additional vegetation. As noted above, any preexisting structures or impervious surfaces are allowed in the buffer provided you retain and protect from disturbance the vegetation in the buffer outside the preexisting disturbance.

To ensure that the water quality protection benefits of the buffer are retained during construction, you are prohibited from conducting any earth-disturbing activities within the buffer during permit coverage. In furtherance of this requirement, prior to commencing earth-disturbing activities on your site, you must delineate, and clearly mark off, with flags, tape, or a similar marking device, the buffer area on your site. The purpose of this requirement is to make the buffer area clearly visible to the people working on your site so that unintended disturbances are avoided.

While you are not required to enhance the quality of the vegetation that already exists within the buffer, you are encouraged to do so where such improvements will enhance the water quality protection benefits of the buffer. (Note that any disturbances within the buffer related to buffer enhancement are permitted and do not constitute construction disturbances.) For instance, you may want to consider targeted plantings where limited vegetation exists, or replacement of existing vegetation where invasive or noxious plant species (see http://plants.usda.gov/java/noxiousDriver) have taken over. In the case of invasive or noxious species, you may want to remove and replace them with a diversity of native trees, shrubs, and herbaceous plants that are well-adapted to the climatic, soil, and hydrologic conditions on the site. You are also encouraged to limit the removal of naturally deposited leaf litter, woody debris, and other biomass, as this material contributes to the ability of the buffer to retain water and filter pollutants.

If a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you are only required to retain and protect from construction activities the portion of the buffer area that is under your control. For example, if you elect alternative 1 above (provide and maintain a 50-foot buffer), but 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you must only retain and protect from construction activities the 40-foot buffer area that occurs on the property on which your construction activities are taking place. EPA would consider you to be in compliance with this requirement regardless of the activities that are taking place in the 10-foot area that is owned by a different party than the land on which your construction activities are taking place that you have no control over.

G.2.1.3 *Discharges to the Buffer*

You must ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls (*for example, you must comply with the Part 2.1.2.2 requirement to establish sediment controls around the downslope perimeter of your site disturbances*), and if necessary to prevent erosion caused by stormwater flows within the buffer, you must use velocity dissipation devices. The purpose of this requirement is to decrease the rate of stormwater flow and

encourage infiltration so that the pollutant filtering functions of the buffer will be achieved. To comply with this requirement, construction operators typically will use devices that physically dissipate stormwater flows so that the discharge entering the buffer is spread out and slowed down.

G.2.1.4 *SWPPP Documentation*

You are required to document in your SWPPP the natural buffer width that is retained. For example, if you are complying with alternative 1, you must specify in your SWPPP that you are providing a 50-foot buffer. Or, if you will be complying with alternative 2, you must document the reduced width of the buffer you will be retaining (and you must also comply with the requirements in Part 2.1.2.1c to describe the erosion and sediment controls you will use to achieve an equivalent sediment reduction, as described in Part G.2.2 below). Note that you must also show any buffers on your site plan in your SWPPP consistent with Part 7.2.6.3. Additionally, if any disturbances related to the exceptions in Part 2.1.2.1e occur within the buffer area, you must document this in the SWPPP.

G.2.2 Guidance for Providing the Equivalent Sediment Reduction as the 50-foot Buffer

If you are selecting Alternative 2 (provide and maintain a buffer that is less than 50 feet that is supplemented by additional erosion and sediment controls that, together, achieve the equivalent sediment load reduction as the 50-foot buffer) or Alternative 3 (implement erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), the following guidance is intended to assist you in demonstrating that you will achieve the equivalent sediment reduction as the 50-foot buffer.

G.2.2.1 *Determine Whether it is Feasible to Provide a Reduced Buffer*

EPA recognizes that there will be a number of situations in which it will be infeasible to provide and maintain a buffer of any width. While some of these situations may exempt you from the buffer requirement entirely (see G.1.2), if you do not qualify for one of these exemptions, there still may be conditions or circumstances at your site that make it infeasible to provide a natural buffer. For example, there may be sites where a significant portion of the property on which the earth-disturbing activities will occur is located within the buffer area, thereby precluding the retention of natural buffer areas. EPA believes there are likely to be other examples of situations that make it infeasible to provide any buffer area.

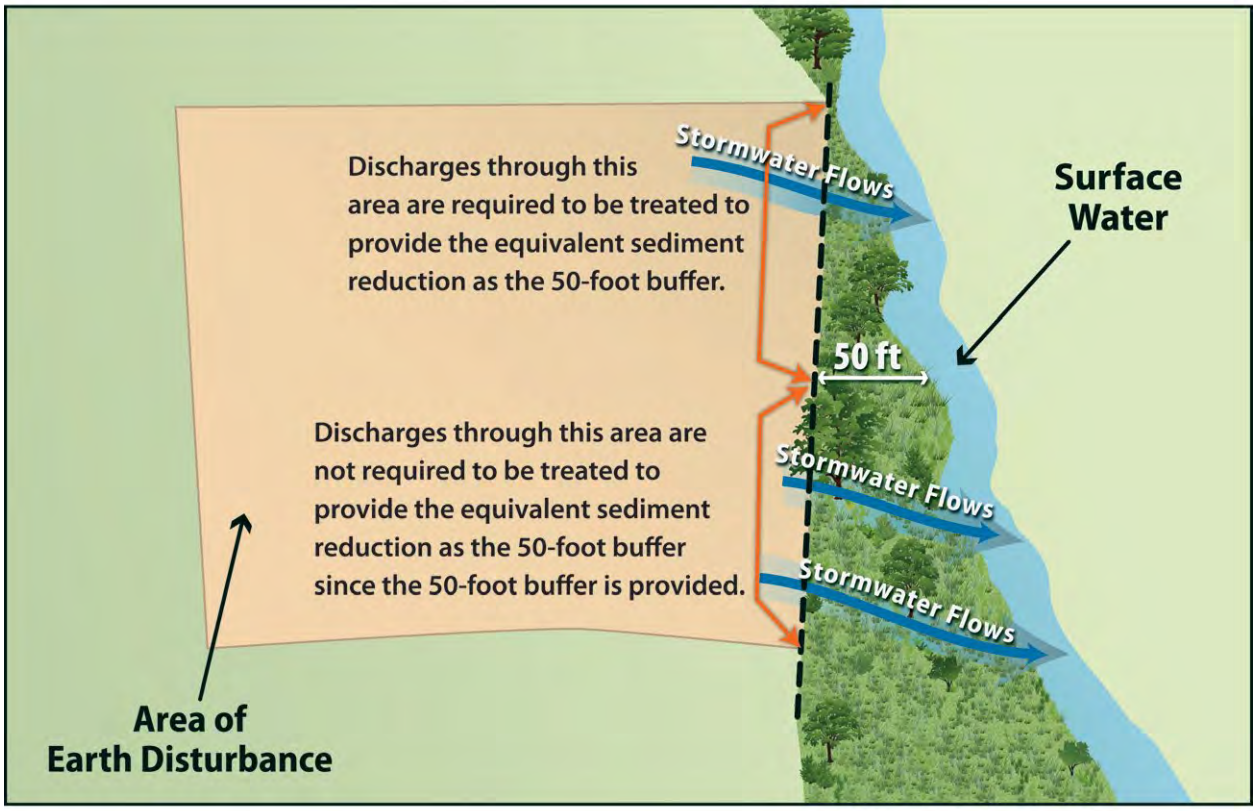
Therefore, in choosing between the 2 different compliance alternatives (Alternative 2 or 3), you should only elect to comply with Alternative 2 if it is feasible for you to retain any natural buffer on your site. (Note: For any buffer width retained, you are required to comply with the requirements in Part G.2.1, above, concerning the retention of vegetation and restricting earth disturbances.) Similarly, if you determine that it is infeasible to provide a natural buffer of any size during construction, you should elect to comply with Alternative 3. After making this determination, you should proceed to Part G.2.2.2 to determine how to provide controls that, together with any buffer areas that is being retained, if applicable, will achieve an equivalent sediment load reduction as the 50-foot buffer.

G.2.2.2 *Design Controls That Provide Equivalent Sediment Reduction as 50-foot Buffer*

You must next determine what additional controls must be implemented on your site that, alone or in combination with any retained natural buffer, achieve a reduction in sediment equivalent to that achieved by a 50-foot buffer.

Note that if only a portion of the natural buffer is less than 50 feet, you are only required to implement erosion and sediment controls that achieve the sediment load reduction equivalent to the 50-foot buffer for discharges through that area. You would not be required to provide treatment of stormwater discharges that flow through 50 feet or more of natural buffer. See Figure G - 4.

Figure G - 4 Example of how to comply with the requirement to provide the equivalent sediment reduction when only a portion of your earth-disturbances discharge to a buffer of less than 50-feet.



To comply with this requirement, you are required to do the following:

Step1 - Estimate the sediment reduction expected from your site if you had retained a 50-foot natural buffer;

Step 2 - Design controls that alone or in combination with any width of buffer retained achieve the equivalent sediment removal efficiency as that expected from the 50-foot buffer; and

Step 3 - Document in your SWPPP how your controls will achieve the equivalent sediment removal efficiency of the 50-foot buffer.

Guidelines to help you work through these requirements are provided below.

a. Step 1 - Estimate the Sediment Reduction from the 50-foot Buffer

In order to design controls that match the sediment removal efficiency of a 50-foot buffer, you first need to know what this efficiency is for your site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of sediment controls used to reduce the discharge of sediment prior to the buffer. EPA has simplified this calculation by developing buffer performance tables covering a range of vegetation and soil types for the areas covered by the CGP. See Attachment 1, Tables G - 8 through G - 15. Note: buffer performance values in Tables G - 8 through G - 15 represent the percent of sediment captured through the use of perimeter controls (e.g., silt fences) and 50-foot buffers at disturbed sites of fixed proportions and slopes.[2]

Using Tables G - 8 through G - 15 (see Attachment 1), you can determine the sediment removal efficiency of a 50-foot buffer for your geographic area by matching the vegetative cover type that best describes your buffer area and the type of soils that predominate at your site. For example, if your site is located in Massachusetts (Table G - 9), and your buffer vegetation corresponds most closely with that of tall fescue grass, and the soil type at your site is best typified as sand, your site's sediment removal efficiency would be 81 percent.

In this step, you should choose the vegetation type in the tables that most closely matches the vegetation that would exist naturally in the buffer area on your site regardless of the condition of the buffer. However, because you are not required to plant any additional vegetation in the buffer area, in determining what controls are necessary to meet this sediment removal equivalency in Step 2 below, you will be able to take credit for this area as a fully vegetated "natural buffer."

Similarly, if a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you can treat the area of land not

[2] EPA used the following when developing the buffer performance tables:

- The sediment removal efficiencies are based on the U.S. Department of Agriculture's RUSLE2 ("Revised Universal Soil Loss Equation 2") model for slope profiles using a 100-foot long denuded slopes.
- Sediment removal was defined as the annual sediment delivered at the downstream end of the 50-foot natural buffer (tons/yr/acre) divided by the annual yield from denuded area (tons/yr/acre).
- As perimeter controls are also required by the CGP, sediment removal is in part a function of the reduction due to a perimeter control (i.e., silt fence) located between the disturbed portion of the site and the upstream edge of the natural buffer and flow traveling through a 50-foot buffer of undisturbed natural vegetation.
- It was assumed that construction sites have a relatively uniform slope without topographic features that accelerate the concentration for erosive flows.
- It was assumed that vegetation has been removed from the disturbed portion of the site and a combination of cuts and fills have resulted in a smooth soil surface with limited retention of near-surface root mass

To represent the influence of soil, EPA analyzed 11 general soil texture classifications in its evaluation of buffer performance. To represent different types of buffer vegetation, EPA evaluated 4 or more common vegetative types for each state/territory covered under the permit. For each vegetation type evaluated, EPA considered only permanent, non-grazed and non-harvested vegetation, on the assumption that a natural buffer adjacent to the surface water will typically be undisturbed. EPA also evaluated slope steepness and found that sediment removal efficiencies present in Tables G -8 through G - 15 are achievable for slopes that are less than nine percent.

under control as having the equivalent vegetative cover and soil type that predominates on the portion of the property on which your construction activities are occurring.

> *For example, if your earth-disturbances occur within 50 feet of a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10 foot area adjacent to the stream as having the equivalent soil and vegetation type as predominates in the 40 foot area under your control. You would then make the same assumption in Step 2 for purposes of determining the equivalent sediment removal.*

Alternatively, you may do your own calculation of the effectiveness of the 50-foot buffer based upon your site-specific conditions, and may use this number as your sediment removal equivalency standard to meet instead of using Tables G - 8 through G - 15. This calculation must be documented in your SWPPP.

b. <u>Step 2 - Design Controls That Match the Sediment Removal Efficiency of the 50-foot Buffer</u>

Once you have determined the estimated sediment removal efficiency of a 50-foot buffer for your site in Step 1, you will be required to select stormwater controls that will provide an equivalent sediment load reductions. These controls can include the installation of a single designed control, such as a sediment pond, additional perimeter controls, or other type of device. Alternatively, you may elect to install a combination of stormwater controls and to retain some amount of a buffer. Whichever control(s) you select, you must demonstrate in your SWPPP that the controls will provide at a minimum the same sediment removal capabilities as the 50-foot buffer (Step 1). You are allowed to take credit for the removal efficiencies of your required perimeter controls in your calculation of equivalency, because these were included in calculating the buffer removal efficiencies in tables G - 8 through G - 15. (Note: You are reminded that the controls must be kept in effective operating condition until you have completed final stabilization on the disturbed portions of the site discharging to the surface water.)

To make the determination that your controls and/or buffer area achieve an equivalent sediment load reduction as the 50-foot buffer, you will need to use a model or other type of calculator. As mentioned above, there are a variety of models available that can be used to support your calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other models. A couple of examples are provided in Attachment 3 to help illustrate how this determination could be made.

If you are retaining a buffer of less than 50 feet, you may take credit for the removal that will occur from the reduced buffer and only need to provide additional controls to make up the difference between the removal efficiency of a 50 foot buffer and the removal efficiency of the narrower buffer. For example, if you are retaining a 30 foot buffer, you can account for the sediment removal provided by the 30-foot buffer retained, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided. To do this, you would plug the width of the buffer that is

retained into RUSLE or another model, along with other stormwater controls that will together achieve a sediment reduction equivalent to a natural 50-foot buffer.

As described in Step 1 above, you can take credit for the area you have retained as a "natural buffer" as being fully vegetated, regardless of the condition of the buffer area.

> *For example, if your earth-disturbances occur 30 feet from a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10-foot area as a natural buffer, regardless of the activities that are taking place in the area. Therefore, you can assume (for purposes of your equivalency calculation) that your site is providing the sediment removal equivalent of a 30-foot buffer, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided.*

c. Step 3 - Document How Site-Specific Controls Will Achieve the Sediment Removal Efficiency of the 50-foot Buffer

In Steps 1 and 2, you determined both the expected sediment removal efficiency of a 50-foot buffer at your site, and you used this number as a performance standard to design controls to be installed at your site, which alone or in combination with any retained natural buffer, achieves the expected sediment removal efficiency of a 50-foot buffer at your site. The final step is to document in your SWPPP the information you relied on to calculate the equivalent sediment reduction as an undisturbed natural buffer.

EPA will consider your documentation to be sufficient if it generally meets the following:

- For Step 1, refer to the table in Attachment 1 that you used to derive your estimated 50-foot buffer sediment removal efficiency performance. Include information about the buffer vegetation and soil type that predominate at your site, which you used to select the sediment load reduction value in Tables G - 8 through G - 15. Or, if you conducted a site-specific calculation for sediment removal efficiency, provide the specific removal efficiency, and the information you relied on to make your site-specific calculation.
- For Step 2: (1) Specify the model you used to estimate sediment load reductions from your site; and (2) the results of calculations showing how your controls will meet or exceed the sediment removal efficiency from Step 1.

If you choose Alternative 3, you must also include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

G.2.3 Small Residential Lot Compliance Alternatives

A **small residential lot** is a lot or grouping of lots being developed for residential purposes that will disturb less than 1 acre of land, but that is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

In this part of Appendix G, EPA provides additional compliance alternatives for operators of small residential lots. In accordance with Part 2.1.2.1e.iv, operators of small residential lots who do not provide a 50-foot buffer are not required to make the demonstration outlined in Part G.2.2.2. Instead, qualifying operators can comply with the buffer requirement by choosing to implement a set of traditional sediment and erosion controls from the menu of practices provided in Part G.2.3.2.

EPA has developed two different alternatives for compliance. The following steps describe how a small residential lot operator would achieve compliance with these 2 alternatives.

G.2.3.1 *Step 1 – Determine if You are Eligible for the Small Residential Lot Compliance Alternatives*

In order to be eligible for the small residential lot compliance alternatives, the following conditions must be met:

a. The lot or grouping of lots meets the definition of "small residential lot"; and

b. The operator must comply with all other requirements in Part 2.1.2.1, including:

i. Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer;

ii. Document in the SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and

iii. Delineate, and clearly mark off, with flags, tape, or other similar marking device, all natural buffer areas.

G.2.3.2 *Step 2 – Implement the Requirements of the Small Residential Lot Compliance Alternative Selected*

You must next choose from one of two small residential lot compliance alternatives and implement the stormwater control practices associated with that alternative.

Note: The compliance alternatives provided below are not mandatory. Operators of small residential lots can alternatively choose to comply with the any of the options that are available to other sites in Part 2.1.2.1a, described in Parts G.2.1 and G.2.2 in this appendix.

a. <u>Small Residential Lot Compliance Alternative 1</u>

Alternative 1 is a straightforward tiered- technology approach that specifies the controls that a small residential lot must implement based on the buffer width retained. To achieve compliance with Alternative 1, you must implement the

controls specified in Table G – 1 based on the buffer width to be retained. See footnote 3, below, for a description of the controls you must implement.

For example, if you are an operator of a small residential lot that will be retaining a 35-foot buffer and you choose Small Residential Lot Compliance Alternative 1, you must implement double perimeter controls between earth disturbances and the surface water.

In addition to implementing the applicable control, you must also document in your SWPPP how you will comply with Alternative 1.

Table G - 1. Alternative 1 Requirements[3]

Retain 50-foot Buffer	Retain <50 and >30 foot Buffer	Retain ≤ 30 foot Buffer
No Additional Requirements	Double Perimeter Controls	Double Perimeter Controls and 7-Day Site Stabilization

b. <u>Small Residential Lot Compliance Alternative 2</u>

Alternative 2 specifies the controls that a builder of a small lot must implement based on both the buffer width retained and their risk of sediment discharge. By incorporating the sediment risk, this approach may result in the implementation of controls that are more appropriate for the site's specific conditions.

Step 1 – Determine Your Site's Sediment Risk Level

To meet the requirements of Alternative 2, you must first determine your site's sediment discharge "risk level" based on the site's slope, location, and soil type. To help you to determine your site's sediment risk level, EPA has developed five different tables for different slope conditions. You must select the table that most closely corresponds to your site's average slope.

For example, if your site's average slope is 7 percent, you would use Table G – 4 to determine your site's sediment risk.

After you determine which table applies to your site, you must then use the table to determine the "risk level" (e.g., "low", "moderate", or "high") that corresponds to your site's location and predominant soil type.[4]

For example, based on Table G - 3, a site located in New Hampshire with a 4 percent average slope and with predominately sandy clay loam soils would fall into the "moderate" risk level.

[3] **Description of Additional Controls Applicable to Small Residential Lot Compliance Alternatives 1 and 2:**

- **No Additional Requirements:** If you implement a buffer of 50 feet or greater, then you are not subject to any additional requirements. Note that you are required to install perimeter controls between the disturbed portions of your site and the buffer in accordance with Part 2.1.2.2.
- **Double Perimeter Control:** In addition to the reduced buffer width retained on your site, you must provide a double row of perimeter controls between the disturbed portion of your site and the surface water spaced a minimum of 5 feet apart.
- **Double Perimeter Control and 7-Day Site Stabilization:** In addition to the reduced buffer width retained on your site and the perimeter control implemented in accordance with Part 2.1.2.2, you must provide a double row of perimeter controls between the disturbed portion of your site and the surface water spaced a minimum of 5 feet apart, and you are required to complete the stabilization activities specified in Parts 2.2.1.2a and/or 2.2.1.2b within 7 calendar days of the temporary or permanent cessation of earth-disturbing activities.

[4] One source for determining your site's predominant soil type is the USDA's Web Soil Survey located at http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

Table G - 2. Risk Levels for Sites with Average Slopes of ≤ 3 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	Moderate	Moderate	Moderate	High
Puerto Rico	Moderate	Moderate	Moderate	Moderate	High
Virgin Islands	Low	Moderate	Low	Moderate	Moderate
American Samoa	Moderate	Moderate	Moderate	Moderate	High
Massachusetts and New Hampshire	Low	Moderate	Low	Low	Moderate
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Low
Washington D.C.	Low	Moderate	Low	Low	Moderate

Table G - 3. Risk Levels for Sites with Average Slopes of > 3 Percent and ≤ 6 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	Moderate	Moderate	Moderate	High
Puerto Rico	Moderate	Moderate	Moderate	Moderate	High
Virgin Islands	Moderate	Moderate	Moderate	Moderate	High
American Samoa	High	High	Moderate	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Low	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Moderate
Washington D.C.	Moderate	Moderate	Moderate	Moderate	High

Table G - 4. Risk Levels for Sites with Average Slopes of > 6 Percent and ≤ 9 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	High	Moderate	High	High
Puerto Rico	Moderate	High	Moderate	Moderate	High
Virgin Islands	Moderate	Moderate	Moderate	Moderate	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Moderate	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Moderate
Washington D.C.	Moderate	Moderate	Moderate	Moderate	High

Table G - 5. Risk Levels for Sites with Average Slopes of > 9 Percent and ≤ 15 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	High	High	High	High	High
Puerto Rico	High	High	High	High	High
Virgin Islands	Moderate	High	Moderate	High	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Moderate	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Moderate	Low	Moderate	Moderate
Washington D.C.	Moderate	High	Moderate	Moderate	High

Table G - 6. Risk Levels for Sites with Average Slopes of > 15 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	High	High	High	High	High
Puerto Rico	High	High	High	High	High
Virgin Islands	High	High	High	High	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	High	High	Moderate	High	High
Idaho	Low	Low	Low	Low	Moderate
New Mexico	Moderate	Moderate	Moderate	Moderate	High
Washington D.C.	High	High	Moderate	High	High

Step 2 – Determine Which Additional Controls Apply

Once you determine your site's "risk level", you must next determine the additional controls you need to implement on your site, based on the width of buffer you plan to retain. Table G - 7 specifies the requirements that apply based on the "risk level" and buffer width retained. See footnote 3, above, for a description of the additional controls that are required.

> *For example, if you are the operator of a small residential lot that falls into the "moderate" risk level, and you decide to retain a 20-foot buffer, using Table G-7 you would determine that you need to implement double perimeter controls to achieve compliance with Part 2.1.2.1.*

You must also document in your SWPPP your compliance with Alternative 2.

Table G - 7. Alternative 2 Requirements[2]

Risk Level Based on Estimated Soil Erosion	Retain ≥ 50' Buffer	Retain <50' and >30' Buffer	Retain ≤30' and >10' Buffer	Retain ≤ 10' Buffer
Low Risk	No Additional Requirements	No Additional Requirements	Double Perimeter Control	Double Perimeter Control
Moderate Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization
High Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization	Double Perimeter Control and 7-Day Site Stabilization

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ATTACHMENT 1

Sediment Removal Efficiency Tables[5]

EPA recognizes that very high removal efficiencies, even where theoretically achievable by a 50-foot buffer, may be very difficult to achieve in practice using alternative controls. Therefore in the tables below, EPA has limited the removal efficiencies to a maximum of 90%. Efficiencies that were calculated at greater than 90% are shown as 90%, and this is the minimum percent removal that must be achieved by alternative controls.

Table G - 8. Estimated 50-foot Buffer Performance in Idaho*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Tall Fescue Grass	42	52	44	48	85
Medium-density Weeds	28	30	28	26	60
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	25	26	24	24	55
Northern Mixed Prairie Grass	28	30	28	26	50
Northern Range Cold Desert Shrubs	28	28	24	26	50

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 9. Estimated 50-foot Buffer Performance in Massachusetts and New Hampshire*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Warm-season Grass (i.e., Switchgrass, Lemongrass)	79	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	78	90	90	90	90
Tall Fescue Grass	76	90	81	89	90
Medium-density Weeds	66	76	60	72	66

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

[5] The buffer performances were calculated based on a denuded slope upgradient of a 50-foot buffer and a perimeter controls, as perimeter controls are a standard requirement (see Part 2.1.2.2).

Table G - 10. Estimated 50-foot Buffer Performance in New Mexico*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Tall Fescue grass	71	85	80	86	90
Medium-density Weeds	56	73	55	66	78
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	53	70	51	62	67
Southern Mixed Prairie Grass	53	71	52	63	50
Southern Range Cold Desert Shrubs	56	73	55	65	53

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 11. Estimated 50-foot Buffer Performance in Washington, DC*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Warm-season Grass (i.e., Switchgrass, Lemongrass)	82	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	81	90	90	90	90
Tall Fescue Grass	79	90	83	89	90
Medium-density Weeds	71	79	66	75	74

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 12. Estimated 50-foot Buffer Performance in American Samoa*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	82	90	90	90	83
Warm-season Grass (i.e., Switchgrass, Lemongrass)	82	90	90	90	85
Dense Grass	82	90	90	90	83
Tall Fescue Grass	82	89	82	89	79
Medium-density Weeds	70	73	62	75	59

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 13. Estimated 50-foot Buffer Performance in Guam*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	80	90	90	90	89
Warm-season Grass (i.e., Switchgrass, Lemongrass)	80	90	90	90	90
Dense Grass	79	90	90	90	89
Tall Fescue Grass	76	90	80	88	87
Medium-density Weeds	63	73	53	68	61

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 14. Estimated 50-foot Buffer Performance in Puerto Rico*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	83	90	90	90	90
Warm-season Grass (i.e., Switchgrass, Lemongrass)	83	90	90	90	90
Dense Grass	83	90	90	90	90
Tall Fescue Grass	82	90	84	90	89
Medium-density Weeds	72	78	65	76	64

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 15. Estimated 50-foot Buffer Performance in Virgin Islands*

Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	85	90	90	90	90
Warm-season Grass (i.e., Switchgrass, Lemongrass)	86	90	90	90	90
Dense Grass	85	90	90	90	90
Tall Fescue Grass	85	90	88	90	89
Medium-density Weeds	75	77	71	78	63

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

ATTACHMENT 2

Using the Sediment Removal Efficiency Tables – Questions and Answers

- *What if my specific buffer vegetation is not represented in Tables G - 8 through G - 15?* Tables G - 8 through G - 15 provide a wide range of factors affecting buffer performance; however, there may be instances where the specific buffer vegetation type on your site is not listed. If you do not see a description of the type of vegetation present at your site, you should choose the vegetation type that most closely matches the vegetation type on your site. You can contact your local Cooperative Extension Service Office (www.csrees.usda.gov/Extension) for assistance in determining the vegetation type in Tables G - 8 through G - 15 that most closely matches your site-specific vegetation.
- *What if there is high variability in local soils?* EPA recognizes that there may be a number of different soil type(s) on any given construction site. General soil information can be obtained from USDA soil survey reports (http://websoilsurvey.nrcs.usda.gov) or from individual site assessments performed by a certified soil expert. Tables G - 8 through G - 15 present eleven generic soil texture classes, grouping individual textures where EPA has determined that performance is similar. If your site contains different soil texture classes, you should use the soil type that best approximates the predominant soil type at your site.
- *What if my site slope is greater than 9 percent after final grade is reached?* As indicated in the buffer performance tables, the estimated sediment removal efficiencies are associated with disturbed slopes of up to 9 percent grade. Where your graded site has an average slope of greater than 9 percent, you should calculate a site-specific buffer performance.
- *How do I calculate my own estimates for sediment reduction at my specific site?* If you determine that it is necessary to calculate your own sediment removal efficiency using site-specific conditions (e.g., slopes at your site are greater than 9 percent), you can do so by choosing from a range of available mathematical models that are available to facilitate this calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other equivalent models.
- *What is my estimated buffer performance if my site location is not represented by Tables G - 8 through G - 15?* If your site is located in an area not represented by Tables G - 8 through G - 15, you should use the table that most closely approximates conditions at your site. You may also choose to conduct a site-specific calculation of the buffer performance.
- *What if only a portion of my site drains to the buffer area?* If only a portion of your site drains to a surface water, where that water is within 50 feet of your construction activities, you are only required to meet the equivalency requirement for the stormwater flows corresponding to those portions of the site. See Example 2 below for an example of how this is expected to work.

ATTACHMENT 3

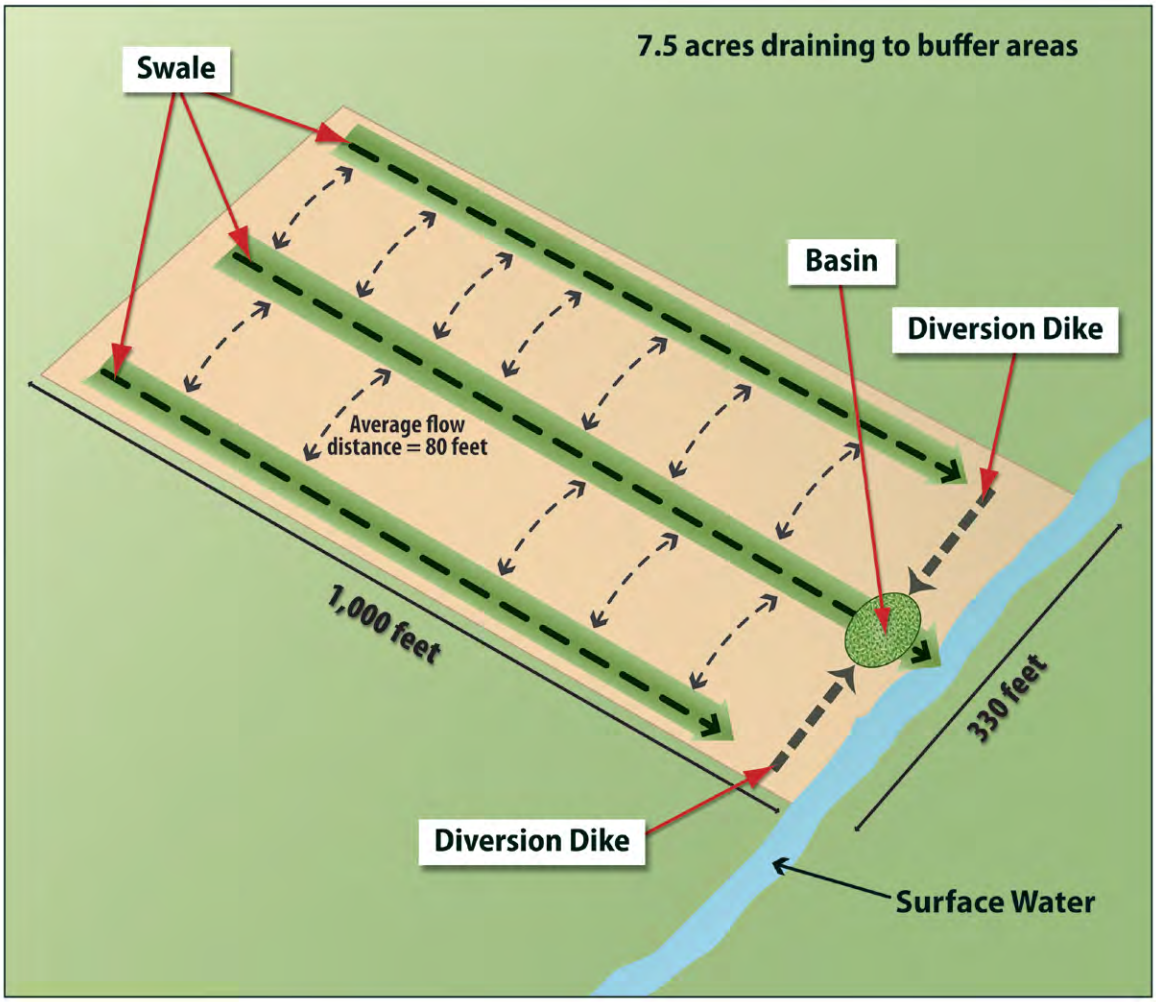
Examples of How to Use the Sediment Removal Efficiency Tables

Example 1. Comparatively Wet Location (7.5 acre site located in Massachusetts)

The operator of a 7.5-acre construction site in Massachusetts has determined that it is infeasible to establish a buffer of any size on their site, and is now required to select and install controls that will achieve an equivalent sediment load reduction as that estimated in G - 9 for their site conditions. The first step is to identify what percentage of eroded sediment is estimated to be retained from a 50-foot buffer. For this example, it is assumed that the site has a relatively uniform gentle slope (3 percent), so Table G - 9 can be used to estimate the 50-foot buffer sediment load reduction. If the site's buffer vegetation is best typified by cool-season dense grass and the underlying soil is of a type best described as loamy sand, the 50-foot buffer is projected to capture 90 percent of eroded sediment from the construction site.

The second step is to determine what sediment controls can be selected and installed in combination with the perimeter controls already required to be implemented at the site (see Part 2.1.2.2), which will achieve the 90 percent sediment removal efficiency from Table G - 9. For this example, using the RUSLE2 profile model, it was determined that installing a pair of shallow-sloped diversion ditches to convey runoff to a well-designed and maintained sediment basin provides 99 percent sediment removal. Because the estimated sediment reduction is greater than the required 90 percent that a 50-foot buffer provides, the operator will have met the buffer requirements. See Figure G - 5. The operator could also choose a different set of controls, as long as they achieve at least a 90 percent sediment removal efficiency.

Figure G - 5. Example 1 – Equivalent Sediment Load Reductions at a 7.5 ac Site in MA.



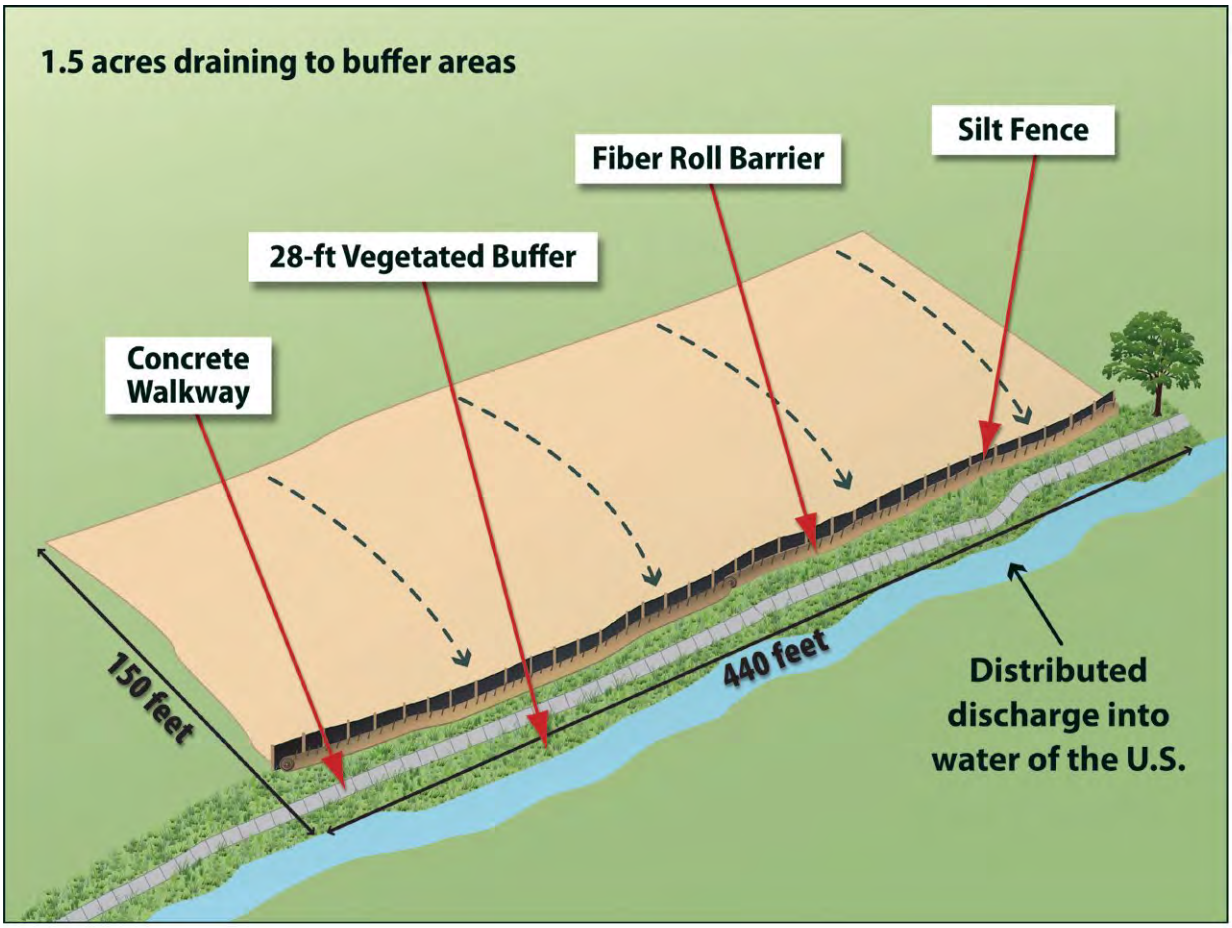
Example 2. Arid Location With Pre-existing Disturbances in the Natural Buffer (6.5 acre site located in New Mexico)

An operator of a site in New Mexico determines that it is not practicable to provide a 50-foot buffer, but a 28-foot buffer can be provided. Because the operator will provide a buffer that is less than 50 feet, the operator must determine which controls, in combination with the 28-foot buffer, achieve a sediment load reduction equivalent to the 50-foot buffer. In this example, the project will disturb 6.5 acres of land, but only 1.5 acres of the total disturbed area drains to the buffer area. Within the 28-foot buffer area is a preexisting concrete walkway. Similar to Example 1, the equivalence analysis starts with Step 1 (Part G.2.2.2) with a review of the New Mexico buffer performance (Table G - 10). The operator determines that the predominate vegetation type in the buffer area is prairie grass and the soil type is similar to silt, and that the site is of a uniform, shallow slope (e.g., 3 percent grade). Although the operator will take credit for the disturbance caused by the concrete walkway as a natural buffer in Step 2, here the operator can treat the entire buffer area as being naturally vegetated with prairie grass. Based on this information, the operator refers to Table G - 10 to estimate that the 50-foot buffer would retain 50 percent of eroded soil.

The second step is to determine, based on the 50 percent sediment removal efficiency found in Table G - 10, what sediment controls in combination with the 28-foot buffer area, can be

implemented to reduce sediment loads by 50 percent or more. The operator does not have to account the reduction in buffer function caused by the preexisting walkway, and can take credit for the entire 28-foot buffer being fully vegetated in the analysis. For this example, using the RUSLE2 profile model, the operator determined that installing a fiber roll barrier between the silt fence (already required by Part 2.1.2.2) and the 28-foot buffer will achieve an estimated 84 percent sediment removal efficiency. See Figure G - 6. Note that this operator is subject to the requirement in Part 2.1.2.1b.i to ensure that discharges through the silt fence, fiber roll barrier, and 28-foot buffer do not cause erosion within the buffer. The estimated sediment reduction is greater than the required 50 percent; therefore the operator will have met the buffer alternative requirement.

Figure G - 6. Example 2 – Equivalent Sediment Load Reductions at a 6.5 ac Site in NM.



Appendix H – 2-Year, 24-Hour Storm Frequencies

Part 2.1.3.2 of the permit indicates that if you install a sediment basin, one of the design requirements is to provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained. This appendix is intended to provide a guide to permittees to determine the volume of precipitation associated with their local 2-year, 24-hour storm event.

The permittee should start out by determining their local 2-year, 24-hour storm volume. The rainfall frequency atlases, technical papers, and the Precipitation Frequency Data Server (PFDS) developed by the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) serve as national standards for rainfall intensity at specified frequencies and durations in the United States. Operators of construction projects subject to the numeric effluent limits can use these standards to determine their local 2-year, 24-hour storm. Table H-1 identifies methods for determining precipitation frequency based on permit area. EPA notes that permittees may also use alternative peer-reviewed data sources not listed in Table H - 1 to determine the 2-year, 24-hour storm for their site.

Table H -1 – Method to Determine Precipitation Frequency Based on Permit Area

PERMIT AREA	METHOD TO DETERMINE PRECIPITATION FREQUENCY
District of Columbia	PFDS; NOAA Atlas 14, Vol. 2
Idaho	NOAA Atlas 2, Vol. 5; Technical Paper 40
Massachusetts	Technical Paper 40
New Hampshire	Technical Paper 40
New Mexico	PFDS; Technical Paper 40
Selected Pacific Islands	PFDS; Technical Paper 40
Puerto Rico and the U.S Virgin Islands	PFDS; Technical Paper 40
Other	PFDS; Technical Paper 40; NOAA Atlas 2 or 14

How to Determine Your Local 2-year, 24-hour Storm Size

Projects located in the **District of Columbia, New Mexico, Puerto Rico, U.S. Virgin Islands, or Pacific Island**s can use the PFDS at http://hdsc.nws.noaa.gov/hdsc/pfds/index.html or use NOAA's Atlas 14 Volumes 2, 3, and 5, respectively at http://www.nws.noaa.gov/oh/hdsc/currentpf.htm to determine their precipitation frequency.

The PFDS is an easy to use, point-and-click interface to official U.S. precipitation frequency estimates and intensities. The opening PFDS screen is a clickable map of the United States. Upon clicking on a state, a state-specific interface appears. From this page the user selects the following:

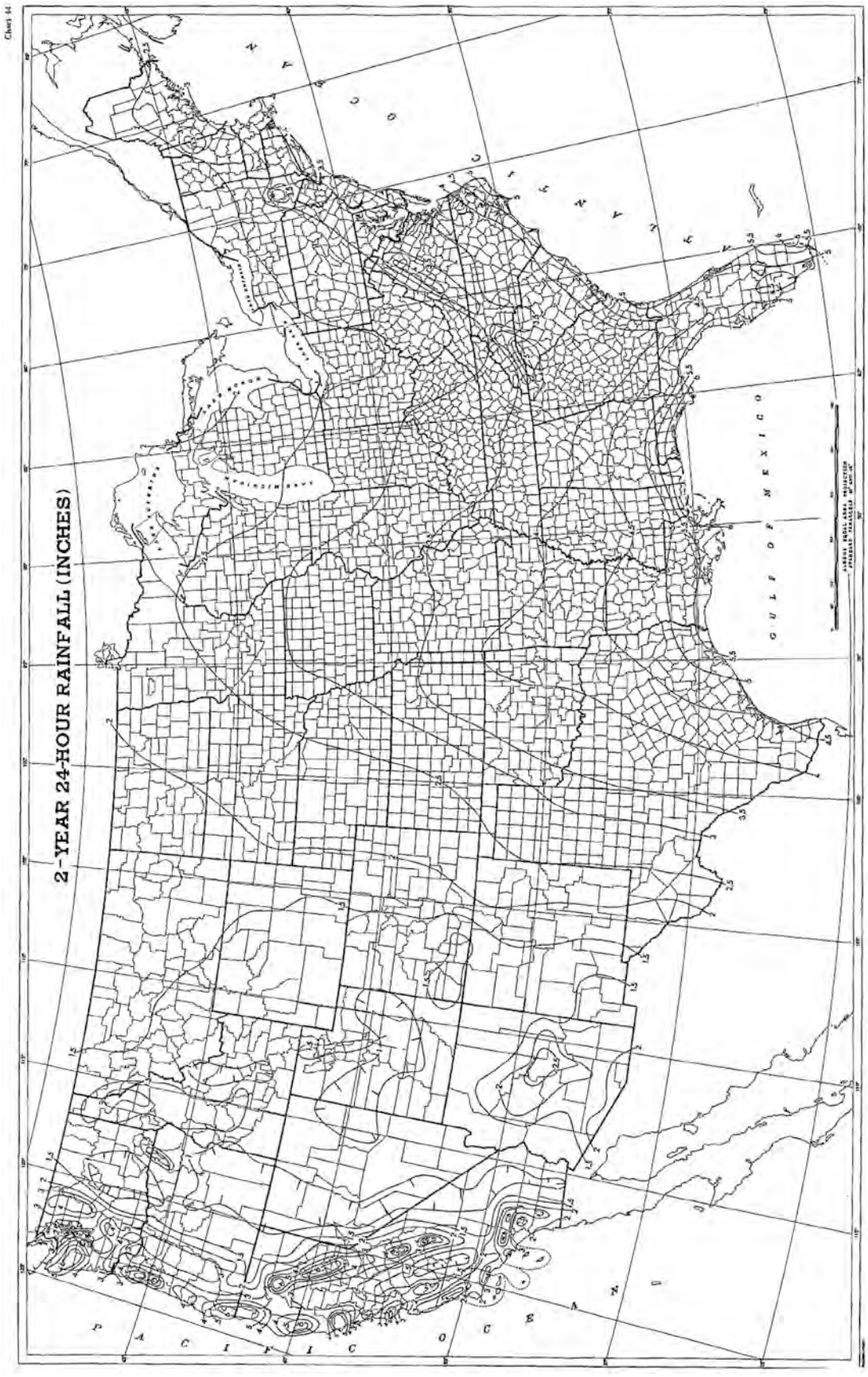
- A location: Either via clicking on the map or manually entering a longitude/latitude coordinate;
- Type of output: Depth-Duration Frequency (DDF) or Intensity-Duration-Frequency (IDF)
- Units: millimeters or inches; and
- Type of estimate: Point or areal.

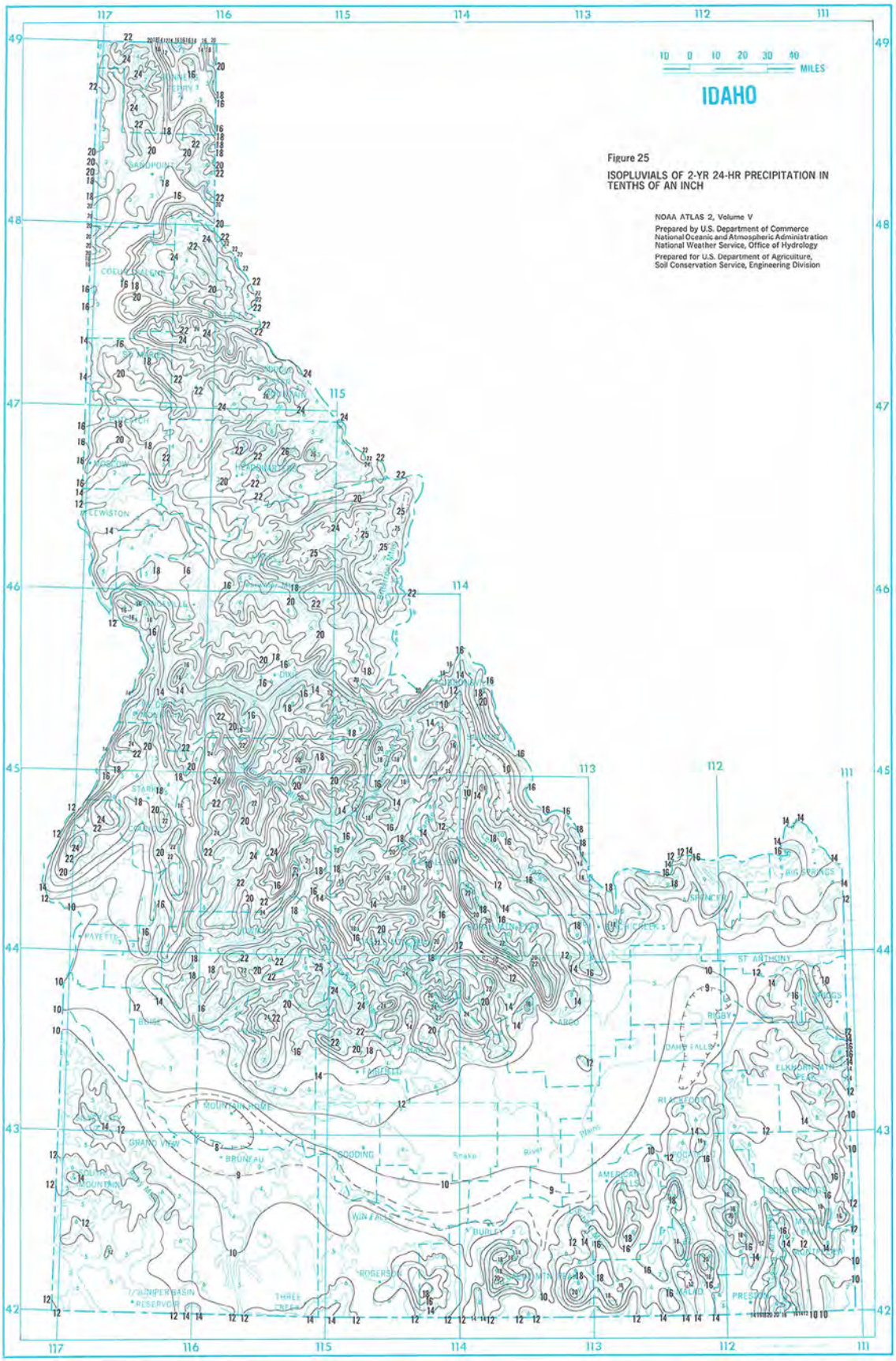
Additionally, PFDS also serves as a tool for providing references and other information for other current precipitation frequency standards that are not yet updated.

Projects located in the **District of Columbia, Puerto Rico, U.S. Virgin Islands, or Pacific Islands** can use NOAA's Atlas 14 Volumes 2, 3, and 5, respectively at http://www.nws.noaa.gov/oh/hdsc/currentpf.htm or access the PFDS at http://hdsc.nws.noaa.gov/hdsc/pfds/index.html to determine their precipitation frequency.

Projects located in **Massachusetts and New Hampshire**, or other areas not covered by the PFDS or NOAA Atlases will need to use TP-40 to identify the precipitation frequency. TP-40 provides a map of the continental U.S. for the 2-year, 24-hour rainfall. TP40 can be accessed at http://www.nws.noaa.gov/oh/hdsc/PF_documents/TechnicalPaper_No40.pdf. (See also attached map of TP-40)

Projects located in **Idaho** can use the NOAA Atlas 2, Vol. 5 to determine their precipitation frequency. NOTE: Precipitation Frequencies on the NOAA Atlas 2, Vol. 5 are in tenths of an inch and will have to be converted to inches to determine precipitation frequency. NOAA Atlas 2, Vol. 5 can be accessed at http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas2_Volume5.pdf. (See also attached map of NOAA Atlas 2, Vol. 5)


2-YEAR 24-HOUR RAINFALL (INCHES)
GULF OF MEXICO
PACIFIC OCEAN


10 0 10 20 30 40
MILES
IDAHO
Figure 25
ISOPLUVIALS OF 2-YR 24-HR PRECIPITATION IN TENTHS OF AN INCH
NOAA ATLAS 2, Volume V
Prepared by U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Department of Agriculture,
Soil Conservation Service, Engineering Division

Appendix I - Standard Permit Conditions

Standard permit conditions in Appendix I are consistent with the general permit provisions required under 40 CFR 122.41.

I.1 Duty To Comply.

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

I.1.1 You must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards, even if the permit has not yet been modified to incorporate the requirement.

I.1.2 Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (61 FR 252, December 31, 1996, pp. 69359-69366, as corrected in 62 FR 54, March 20, 1997, pp.13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every 4 years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties following were adjusted for inflation starting in 1996.

I.1.2.1 *Criminal Penalties.*

a. *Negligent Violations.* The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than $2,500 nor more than $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation or by imprisonment of not more than two years, or both.

b. *Knowing Violations.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

c. *Knowing Endangerment.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than $250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon

conviction of violating the imminent danger provision be subject to a fine of not more than $1,000,000 and can fined up to $2,000,000 for second or subsequent convictions.

d. *False Statement.* The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

I.1.2.2 *Civil Penalties.* The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $37,500 per day for each violation).

I.1.2.3 *Administrative Penalties.* The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows

a. *Class I Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $37,500).

b. *Class II Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $177,500).

I.2 Duty to Reapply.

If you wish to continue an activity regulated by this permit after the expiration date of this permit, you must apply for and obtain authorization as required by the new permit once EPA issues it.

I.3 Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for you in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

I.4 Duty to Mitigate.

You must take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

I.5 Proper Operation and Maintenance.

You must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by you to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by you only when the operation is necessary to achieve compliance with the conditions of this permit.

I.6 Permit Actions.

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

I.7 Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privileges.

I.8 Duty to Provide Information.

You must furnish to EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), within a reasonable time, any information that EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to EPA or an authorized representative upon request, copies of records required to be kept by this permit.

I.9 Inspection and Entry.

You must allow EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), upon presentation of credentials and other documents as may be required by law, to:

I.9.1 Enter upon your premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

I.9.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

I.9.3 Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.9.4 Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

I.10 Monitoring and Records.

I.10.1 Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity.

I.10.2 You must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date the permit expires or the date the permittee's authorization is terminated. This period may be extended by request of EPA at any time.

I.10.3 Records of monitoring information must include:

I.10.3.1 The date, exact place, and time of sampling or measurements;

I.10.3.2 The individual(s) who performed the sampling or measurements;

I.10.3.3 The date(s) analyses were performed

I.10.3.4 The individual(s) who performed the analyses;

I.10.3.5 The analytical techniques or methods used; and

I.10.3.6 The results of such analyses.

I.10.4 Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the permit.

I.10.5 The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

I.11 Signatory Requirements.

I.11.1 All applications, including NOIs, must be signed as follows:

I.11.1.1 For a corporation: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

I.11.1.2 For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

I.11.1.3 For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive

officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

I.11.2 Your SWPPP, including changes to your SWPPP, inspection reports, and any other compliance documentation required under this permit, must be signed by a person described in Appendix I, Subsection I.11.1 above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

I.11.2.1 The authorization is made in writing by a person described in Appendix I, Subsection I.11.1;

I.11.2.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

I.11.2.3 The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

I.11.3 Changes to Authorization. If an authorization under Part 1.7 is no longer accurate because a different operator has responsibility for the overall operation of the construction site, a new NOI satisfying the requirements of Part 1.7 must be submitted to EPA. See Table 1 in Part 1.7.2 of the permit. However, if the only change that is occurring is a change in contact information or a change in the facility's address, the operator need only make a modification to the existing NOI submitted for authorization.

I.11.4 Any person signing documents in accordance with Appendix I, Subsections I.11.1 or I.11.2 above must include 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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I.11.5 For persons signing documents electronically, in addition to meeting other applicable requirements in Appenidx I, Subsection I.11, such signatures must meet the same signature, authentication, and identity-proofing standards set forth at 40 CFR § 3.2000(b) for electronic reports (including robust second-factor authentication).

I.11.6 The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

I.12 Reporting Requirements.

I.12.1 Planned changes. You must give notice to EPA as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

I.12.1.1 The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

I.12.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).

I.12.2 Anticipated noncompliance. You must give advance notice to EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

I.12.3 Transfers. This permit is not transferable to any person except after notice to EPA. Where a facility wants to change the name of the permittee, the original permittee (the first owner or operators) must submit a Notice of Termination pursuant to Part 8. The new owner or operator must submit a Notice of Intent in accordance with Part 1.7 and Table 1. See also requirements in Appendix I, Subsections I.11.1 and I.11.2.

I.12.4 Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.

I.12.4.1 Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by EPA for reporting results of monitoring of sludge use or disposal practices.

I.12.4.2 If you monitor any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by EPA.

I.12.5 Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

I.12.6 Twenty-four hour reporting. In addition to reports required elsewhere in this permit:

I.12.6.1 You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances. A written submission must also be provided within five days of the time you become aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

I.12.6.2 The following shall be included as information which must be reported within 24 hours under this paragraph.

a. Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(m)(3)(ii))

b. Any upset which exceeds any effluent limitation in the permit

c. Violation of a maximum daily discharge limit for any numeric effluent limitation. (See 40 CFR 122.44(g).)

I.12.6.3 EPA may waive the written report on a case-by-case basis for reports under Appendix I, Subsection I.12.6.2 if the oral report has been received within 24 hours.

I.12.7 Other noncompliance. You must report all instances of noncompliance not reported under Appendix I, Subsections I.12.4, I.12.5, and I.12.6, at the time monitoring reports are submitted. The reports must contain the information listed in Appendix I, Subsection I.12.6.

I.12.8 Other information. Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permitting Authority, you must promptly submit such facts or information.

I.13 Bypass.

I.13.1 Definitions.

I.13.1.1 Bypass means the intentional diversion of waste streams from any portion of a treatment facility See 40 CFR 122.41(m)(1)(i).

I.13.1.2 Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. See 40 CFR 122.41(m)(1)(ii).

I.13.2 Bypass not exceeding limitations. You may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Appendix I, Subsections I.13.3 and I.13.4. See 40 CFR 122.41(m)(2).

I.13.3 Notice.

I.13.3.1 Anticipated bypass. If you know in advance of the need for a bypass, you must submit prior notice, if possible at least ten days before the date of the bypass. See 40 CFR 122.41(m)(3)(i).

I.13.3.2 Unanticipated bypass. You must submit notice of an unanticipated bypass as required in Appendix I, Subsection I.12.6 (24-hour notice). See 40 CFR 122.41(m)(3)(ii).

I.13.4 Prohibition of bypass. See 40 CFR 122.41(m)(4).

I.13.4.1 Bypass is prohibited, and EPA may take enforcement action against you for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. You submitted notices as required under Appendix I, Subsection I.13.3.

I.13.4.2 EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above in Appendix I, Subsection I.13.4.1.

I.14 Upset.

I.14.1 Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

I.14.2 Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix I, Subsection I.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. See 40 CFR 122.41(n)(2).

I.14.3 Conditions necessary for a demonstration of upset. See 40 CFR 122.41(n)(3). A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.14.3.1 An upset occurred and that you can identify the cause(s) of the upset;

I.14.3.2 The permitted facility was at the time being properly operated; and

I.14.3.3 You submitted notice of the upset as required in Appendix I, Subsection I.12.6.2.b (24 hour notice).

I.14.3.4 You complied with any remedial measures required under Appendix I, Subsection I.4.

I.14.4 Burden of proof. In any enforcement proceeding, you, as the one seeking to establish the occurrence of an upset, have the burden of proof. See 40 CFR 122.41(n)(4).

I.15 Retention of Records.

Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of EPA at any time.

I.16 Reopener Clause.

I.16.1 Procedures for modification or revocation. Permit modification or revocation will be conducted according to 40 CFR §122.62, §122.63, §122.64 and §124.5.

I.16.2 Water quality protection. If there is evidence indicating that the stormwater discharges authorized by this permit cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standard, you may be required to obtain an individual permit in accordance with Part 1.7.5 of this permit, or the permit may be modified to include different limitations and/or requirements.

I.16.3 Timing of permit modification. EPA may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines that may be promulgated in the course of the current permit cycle.

I.17 Severability.

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. EPA's intent is that the permit is to remain in effect to the extent possible; in the event that any part of this permit is invalidated, EPA will advise the regulated community as to the effect of such invalidation.

Appendix J - Notice of Intent (NOI) Form and Instructions

Part 1.7.1 requires you to use the electronic NOI system, or "eNOI" system, to prepare and submit your NOI. However, if you are given approval by the EPA Regional Office to use a paper NOI form, and you elect to use it, you must complete and submit the following form.

NPDES FORM 3510-9	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER AN NPDES GENERAL PERMIT	Form Approved. OMB No. 2040-0004

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the operator identified in Section II of this form meets the eligibility requirements of Parts 1.1 and 1.2 of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in Part 8 of the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form.

I. Approval to Use Paper NOI Form

Have you been given approval from the Regional Office to use this paper NOI form*? ☐ YES ☐ NO

If yes, provide the reason you need to use this paper form, the name of the EPA Regional Office staff person who approved your use of this form, and the date of approval:

Reason for using paper form: _____

Name of EPA staff person: _____

Date approval obtained: _____

*** Note: You are required to obtain approval from the applicable Regional Office prior to using this paper NOI form.**

II. Permit Information

Tracking Number (EPA Use Only):

Permit Number: (see Appendix B of the CGP for the list of eligible permit numbers)

III. Operator Information

Name:

Phone: - - Ext. Fax (optional): - -

E-mail:

IRS Employer Identification Number (EIN): –

Point of Contact:

First Name, Middle Initial, Last Name:

Mailing Address:

Street:

City: State: Zip Code: -

NOI Preparer (Complete if NOI was prepared by someone other than the certifier):

Prepared by:

First Name, Middle Initial, Last Name:

Organization:

Phone: - - Ext. Fax (optional): - -

E-mail:

IV. Project/Site Information

Project/Site Name:

Project/Site Address:

Street/Location:

City: State: Zip Code: -

County or similar government subdivision:

For the project/site for you are seeking permit coverage, provide the following information:

Latitude/Longitude (Use one of three possible formats, and specify method):

Latitude 1. ___ ___° ___ ___' ___ ___" N (degrees, minutes, seconds)
2. ___ ___° ___ ___. ___ ___' N (degrees, minutes, decimal)
3. ___ ___. ___ ___ ___ ___° N (degrees decimal)

Longitude 1. ___ ___ ___° ___ ___' ___ ___" W (degrees, minutes, seconds)
2. ___ ___ ___° ___ ___. ___ ___' W (degrees, minutes, decimal)
3. ___ ___ ___. ___ ___ ___ ___° W (degrees decimal)

Latitude/Longitude Data Source: ☐ U.S.G.S. topographic map ☐ EPA web site ☐ GPS ☐ Other: _____

If you used a U.S.G.S. topographic map, what was the scale? _____

Horizontal Reference Datum: ☐ NAD 27 ☐ NAD 83 or WGS 84 ☐ Unknown

Is your project/site located in Indian Country lands, or located on a property of religious or cultural significance to an Indian tribe? ☐ YES ☐ NO

If yes, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property: _____

Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? ☐ YES ☐ NO

Estimated Project Start Date: / / Estimated Project Completion Date: / /

Estimated Area to be Disturbed (to the nearest quarter acre): .

Have earth-disturbing activities commenced on your project/site? ☐ YES ☐ NO

If yes, is your project an "emergency-related project? ☐ YES ☐ NO

Have stormwater discharges from your project/site been covered previously under an NPDES permit? ☐ YES ☐ NO

If yes, provide the Tracking Number if you had coverage under EPA's CGP or the NPDES permit number if you had coverage under an EPA individual permit:

V. Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☐ YES ☐ NO

Are there any surface waters within 50 feet of your project's earth disturbances? ☐ YES ☐ NO

Receiving Waters and Wetlands Information: (Attach a separate list if necessary)

Provide the name(s) of the first surface water that received stormwater directly from your site and/or from the MS4:	**Provide the names of any impaired waters to which you discharge and the pollutant(s) for which they are impaired**		**Provide the names of any waters to which you discharge for which there is an EPA approved or established TMDL, the name of the TMDL, and the pollutant(s) for which there is a TMDL**		
	Surface water name:	**Pollutant(s) causing the impairment:**	**Surface water name:**	**TMDL name:**	**Pollutant(s) for which there is a TMDL:**

Impaired Waters

Describe the methods you used to complete the above table:

Are any of the surface waters to which you discharge designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) or as a Tier 3 water (Outstanding Natural Resource Water)? (See Appendix F).

☐ YES ☐ NO

If yes, name(s) of receiving water(s) and its designation (Tier 2, Tier 2.5 or Tier 3): _____

VI. Chemical Treatment Information

Will you use polymers, flocculants, or other treatment chemicals at your construction site? ☐ YES ☐ NO

If yes, will you use cationic treatment chemicals at your construction site*? ☐ YES ☐ NO

If yes, have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI*? ☐ YES ☐ NO

If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

Please indicate the treatment chemicals that you will use: _____

* Note: You are ineligible for coverage under this permit unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

VII. Stormwater Pollution Prevention Plan (SWPPP) Information

Has the SWPPP been prepared in advance of filing this NOI? ☐ YES ☐ NO

SWPPP Contact Information:

First Name, Middle Initial Last Name:

Organization Name:

Phone: - - Ext. Fax (optional): - -

E-mail:

VIII. Endangered Species Protection

Using the instructions in Appendix D of the CGP, under which criterion listed in Appendix D are you eligible for coverage under this permit (only check 1 box)?

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F

Provide a brief summary of the basis for criterion selection listed in Appendix D (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service, specific study): _____

If you select criterion B, provide the Tracking Number from the other operator's notification of authorization under this permit:

If you select criterion C, you must attach a copy of your site map (see Part 7.2.6 of the permit), and you must answer the following questions:

What federally-listed species or federally-designated critical habitat are located in your "action area": _____

What is the distance between your site and the listed species or critical habitat (miles): _____

If you select criterion D, E, or F, attach copies of any letters or other communications between you and the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

IX. Historic Preservation

Are you installing any stormwater controls as described in Appendix E that require subsurface earth disturbance? (Appendix E, Step 1) ☐ YES ☐ NO

If yes, have prior surveys or evaluations conducted on the site have already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix E, Step 2) ☐ YES ☐ NO

If no, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? (Appendix E, Step 3) ☐ YES ☐ NO

If no, did the SHPO, THPO, or other tribal representative (whichever applies) respond to you within the 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? (Appendix E, Step 4) ☐ YES ☐ NO

If yes, describe the nature of their response:

☐ Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions

☐ No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls

☐ Other: _____

_____

X. Certification Information

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 gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: _____

Title: _____

Signature: _____ Date: ___ / ___ / ____

Email: _____

Instructions for Completing EPA Form 3510-9

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form Date (2/16) This Form Replaces Form 3510-9 (11/08) Form Approved OMB No. 2040-0004

Who Must File an NOI Form

Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et. seq.; the Act), federal law prohibits stormwater discharges from certain construction activities to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) permit. Operator of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an NPDES general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with the permit conditions. If you have questions about whether you need a NPDES stormwater permit, or if you need information to determine whether EPA or your state agency is the permitting authority, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755.

Completing the Form

Obtain and read a copy of the 2012 Construction General Permit, viewable at www.epa.gov/npdes/stormwater/cgp. To complete this form, type or print uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755. Please submit the original document with signature in ink - do not send a photocopied signature.

Section I. Approval to Use Paper NOI Form

You must indicate whether you have been given approval by the EPA Regional Office to use a paper NOI. Note that you are not authorized to use this paper NOI form unless the Regional Office has approved its use. Verbal approval from the Regional Office is sufficient. Where you have obtained approval to use this form, indicate the reason you need to use this form, the name of the EPA Regional Office staff person who provided approval for use of this form, and the date that approval was provided. See www.epa.gov/npdes/stormwater/contacts for a list of EPA Regional Office contacts.

Section II. Permit Number

Provide the number of the permit under which you are applying for coverage (see Appendix B of the general permit for the list of eligible permit numbers).

Section III. Operator Information

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application. Refer to Appendix A of the permit for the definition of "operator". Provide the employer identification number (EIN from the Internal Revenue Service; IRS), also commonly referred to as your taxpayer ID. If the applicant does not have an EIN enter "NA" in the space provided. Also provide a point of contact, the operator's mailing address, telephone number, fax number (optional) and e-mail address (to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the full name, organization, phone number and email address of the NOI preparer.

Section IV. Project/Site Information

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

Provide the latitude and longitude of your facility either in degrees, minutes, seconds; degrees, minutes, decimal; or degrees decimal format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, and EPA's web-based siting tools, among others. Refer to www.epa.gov/npdes/stormwater/cgp for further guidance on the use of these methodologies. For consistency, EPA requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used. If known, enter the horizontal reference datum for your latitude and longitude. The horizontal reference datum used on USGS topographic maps is shown on the bottom left corner of USGS topographic maps; it is also available for GPS receivers. If you use EPA's web siting tool, or if you are unsure of the horizontal reference datum for your site, please check the "unknown" box.

Indicate whether the project is in Indian country lands or located on a property of religious or cultural significance to an Indian tribe, and if so, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property.

Indicate whether you are seeking coverage under this permit as a "federal operator" as defined in Appendix A.

Enter the estimated construction start and completion dates using four digits for the year (i.e., 10/06/2012). Indicate to the nearest quarter acre the estimated area to be disturbed.

Indicate whether earth-disturbing activities have already commenced on your project/site. If earth-disturbing activities have commenced on your site because stormwater discharges from the site have been previously covered under a NPDES permit, you must provide the CGP Tracking Number or the NPDES permit number if coverage was under an individual permit.

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form Date (2/16) This Form Replaces Form 3510-9 (11/08) Form Approved OMB No. 2040-0004

Section V. Discharge Information

Indicate whether discharges from the site will enter into a municipal separate storm sewer system (MS4), as defined in Appendix A.

Also, indicate whether any surface waters (as defined in Appendix A) exist either on or within 50 feet from your site. Note that if "yes", you are required to comply with the requirement in Part 2.1.2.1 of the permit to provide natural buffers or equivalent sediment controls.

You must specify the names of any surface waters that receive stormwater directly from your site and/or from the MS4 to which you discharge. You must also specify the names of any surface waters that you discharge to that are listed as "impaired" as defined in Appendix A, including any waters for which there is an approved or established TMDL, and the pollutants for which the water is impaired or for which there is a TMDL. This information will be used to determine if the site discharges to an impaired waterbody, which triggers additional requirements in Part 3.2.2 of the permit. Applicants must specify which method they used to determine whether or not their site discharges to impaired waters. Also, if a TMDL has been approved or established, identify the title or reference of the TMDL document.

Indicate whether discharges from the site will enter into a surface water that is designated as a Tier 2, Tier 2.5, or Tier 3 water. A list of Tier 2, 2.5, and 3 waters is provided as Appendix F. If the answer is "yes", name all waters designated as Tier 2, Tier 2.5, or Tier 3 to which the site will discharge.

Section VI. Chemical Treatment Information

Indicate whether the site will use polymers, flocculants, or other treatment chemicals. Indicate whether the site will employ cationic treatment chemicals. If the answer is "yes" to either question, indicate which chemical(s) you will use. Note that you are not eligible for coverage under this permit to use cationic treatment chemicals unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards. If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards. Examples of cationic treatment chemicals include, but are not limited to, cationic polyacrylamide (C-PAM), PolyDADMAC (POLYDIALLYLDIMETHYLAMMONIUM CHLORIDE), and chitosan.

Section VII. Stormwater Pollution Prevention Plan (SWPPP) Information

All sites eligible for coverage under this permit are required to prepare a SWPPP in advance of filing the NOI, in accordance with Part 7. Indicate whether the SWPPP has been prepared in advance of filing the NOI.

Indicate the street, city, state, and zip code where the SWPPP can be found. Indicate the contact information (name, organization, phone, fax (optional), and email) for the person who developed the SWPPP for this project.

Section VIII. Endangered Species Information

Using the instructions in Appendix D, indicate under which criterion (i.e., A, B, C, D, E, or F) of the permit the applicant is eligible with regard to protection of federally listed endangered and threatened species and designated critical habitat. A description of the basis for the criterion selected must also be provided.

If criterion B is selected, provide the Tracking Number for the other operator who had previously certified their eligibility under criterion A, C, D, E, or F. The Tracking Number was assigned when the operator received coverage under this permit, and is included in the notice of authorization.

If criterion C is selected, you must attach copies of your site map. See Part 7.2.6 of the permit for information about what is required to be in your site map. You must also specify the federally-listed species or federally-designated critical habitat that are located in the "action area" of the project, and provide the distance between the construction site and any listed endangered species or their critical habitat.

If criterion D, E, or F is selected, attach copies of any communications between you and the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

Section IX. Historic Preservation

Use the instructions in Appendix E to complete the questions on the NOI form regarding historic preservation.

Section X. Certification Information

All applications, including NOIs, must be signed as follows:

For a corporation: By a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA). Include the name and title of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered eligible for permit coverage.

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form Date (2/16) This Form Replaces Form 3510-9 (11/08) Form Approved OMB No. 2040-0004

Modifying Your NOI

If after submitting your NOI you need to correct or update any fields on this NOI form, you may do so by submitting a paper modification form, which you can obtain at the following link: http://www.epa.gov/npdes/pubs/cgp_modify.pdf

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch 2136, U.S. Environmental Protection, Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

Submitting Your Form

Submit your NOI form by mail to one of the following addresses:

For Regular U.S. Mail Delivery:
Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

For Overnight/Express Mail Delivery:
Stormwater Notice Processing Center
EPA East Building - Room 7420
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Visit this website for instructions on how to submit electronically:
www.epa.gov/npdes/stormwater/cgpenoi

Appendix K - Notice of Termination (NOT) Form and Instructions

Part 8.3 requires you to use the electronic NOI system, or "eNOI" system, to prepare and submit your NOT. However, where your EPA Regional Office specifically authorizes you to use a paper NOT form, you are required to complete and submit the following form.

NPDES FORM 3510-13	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF TERMINATION (NOT) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER AN NPDES GENERAL PERMIT	Form Approved. OMB No. 2040-0004

Submission of this Notice of Termination constitutes notice that the operator identified in Section II of this form is no longer authorized discharge pursuant to the NPDES Construction General Permit (CGP) from the site identified in Section III of this form. All necessary information must be included on this form. Refer to the instructions at the end of this form.

I. Approval to Use Paper NOT Form

Have you been given approval from the Regional Office to use this paper NOT form*? ☐ YES ☐ NO

*** Note: You must have been given approval by the Regional Office prior to using this paper NOT form.**

II. Permit Information

NPDES Stormwater General Permit Tracking Number:

Reason for Termination (Check only one):

- ☐ You have completed earth-disturbing activities at your site, and you have met all other requirements in Part 8.2.1.
- ☐ Another operator has assumed control over all areas of the site and that operator has submitted an NOI and obtained coverage under the CGP.
- ☐ You have obtained coverage under an individual permit or another general NPDES permit addressing stormwater discharges from the construction site.

III. Operator Information

Name:

IRS Employer Identification Number (EIN): –

Mailing Address:

Street:

City: State: Zip Code: -

Phone: - - Ext. Fax (optional): - -

E-mail:

IV. Project/Site Information

Project/Site Name:

Project/Site Address:

Street/Location:

City: State: Zip Code: -

County or similar government subdivision:

V. Certification Information

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 gathered and evaluated 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, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name:

Title:

Signature: _____ Date: / /

Email:

Instructions for Completing EPA Form 3510-13

Notice of Termination (NOT) of Coverage Under an NPDES General Permit for Stormwater Discharges Associated with Construction Activity

NPDES Form Date (2/16) This Form Replaces Form 3510-13 (12/08) Form Approved OMB No. 2040-0004

Who May File an NOT Form

Permittees who are presently covered under the EPA-issued 2012 Construction General Permit (CGP) for Stormwater Discharges Associated with Construction Activity may submit an NOT form when: (1) earth-disturbing activities at the site are completed and the conditions in Parts 8.2.1.1 thru 8.2.1.5 are met; or (2) the permittee has transferred all areas under its control to another operator, and that operator has submitted and obtained coverage under this permit; or (3) the permittee has obtained coverage under a different NPDES permit for the same discharges.

Completing the Form

Type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755. Please submit original document with signature in ink - do not send a photocopied signature.

Section I. Approval to Use Paper NOT Form

You must indicate whether you have been given approval by the EPA Regional Office to use a paper NOT. Note that you are not authorized to use this paper NOT form unless the Regional Office has approved its use.

Section II. Permit Number

Enter the existing NPDES Stormwater General Permit Tracking Number assigned to the project by EPA's Stormwater Notice Processing Center. If you do not know the permit tracking number, refer to http://www.epa.gov/npdes/stormwater/cgp or contact EPA's NOI Processing Center at (866) 352-7755.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box. Check only one:

You have completed earth-disturbing activities at your site and, if applicable, construction support activities covered by this permit (see Part 1.6.3) and you have met all other requirements in Part 8.2.1.

Another operator has assumed control over all areas of the site and that operator has submitted an NOI and obtained coverage under the CGP.

You have obtained coverage under an individual permit or another general NPDES permit addressing stormwater discharges from the construction site.

Section III. Operator Information

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application and is covered by the permit tracking number identified in Section I. Refer to Appendix A of the permit for the definition of "operator". Provide the employer identification number (EIN from the Internal Revenue Service; IRS). If the applicant does not have an EIN enter "NA" in the space provided. Enter the complete mailing address, telephone number, and email address of the operator. Optional: enter the fax number of the operator.

Section IV. Project/Site Information

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for termination of permit coverage to be valid.

Section V. Certification Information

All applications, including NOIs, must be signed as follows:

For a corporation: By a responsible corporate officer. For the purpose of this Part, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated NOT form will not be considered valid termination of permit coverage.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per notice, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include the OMB number on any correspondence. Do not send the completed form to this address.

Notice of Termination (NOT) of Coverage Under an NPDES General Permit for Stormwater Discharges Associated with Construction Activity

NPDES Form Date (2/16) This Form Replaces Form 3510-13 (12/08) Form Approved OMB No. 2040-0004

Submitting Your Form:
Submit your NOI form by mail to one of the following addresses:

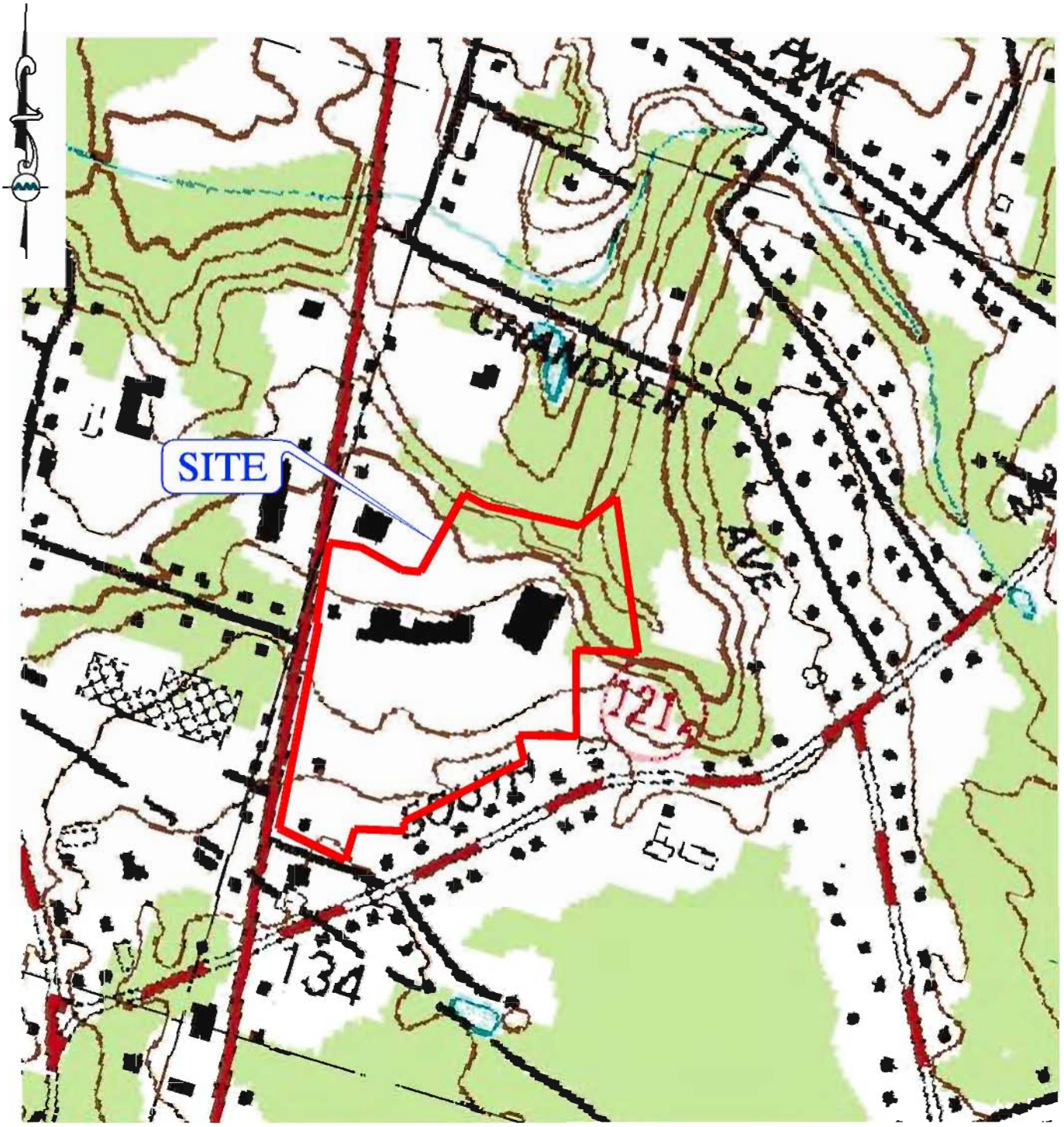
For Regular U.S. Mail Delivery:
Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

For Overnight/Express Mail Delivery:
Stormwater Notice Processing Center
EPA East Building - Room 7420
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Visit this website for instructions on how to submit electronically:
www.epa.gov/npdes/stormwater/cgpenoi

APPENDIX C

MAPS



PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil & structural engineers • land surveyors
environmental consultants • landscape architects
250 COMMERCIAL STREET
SUITE 1001
MANCHESTER, NH 03101
TEL: (603) 627-5500
FAX: (603) 627-5501

PROJECT:

PROPOSED WALGREENS PHARMACY
9 PLAISTOW RD.
PLAISTOW, NH

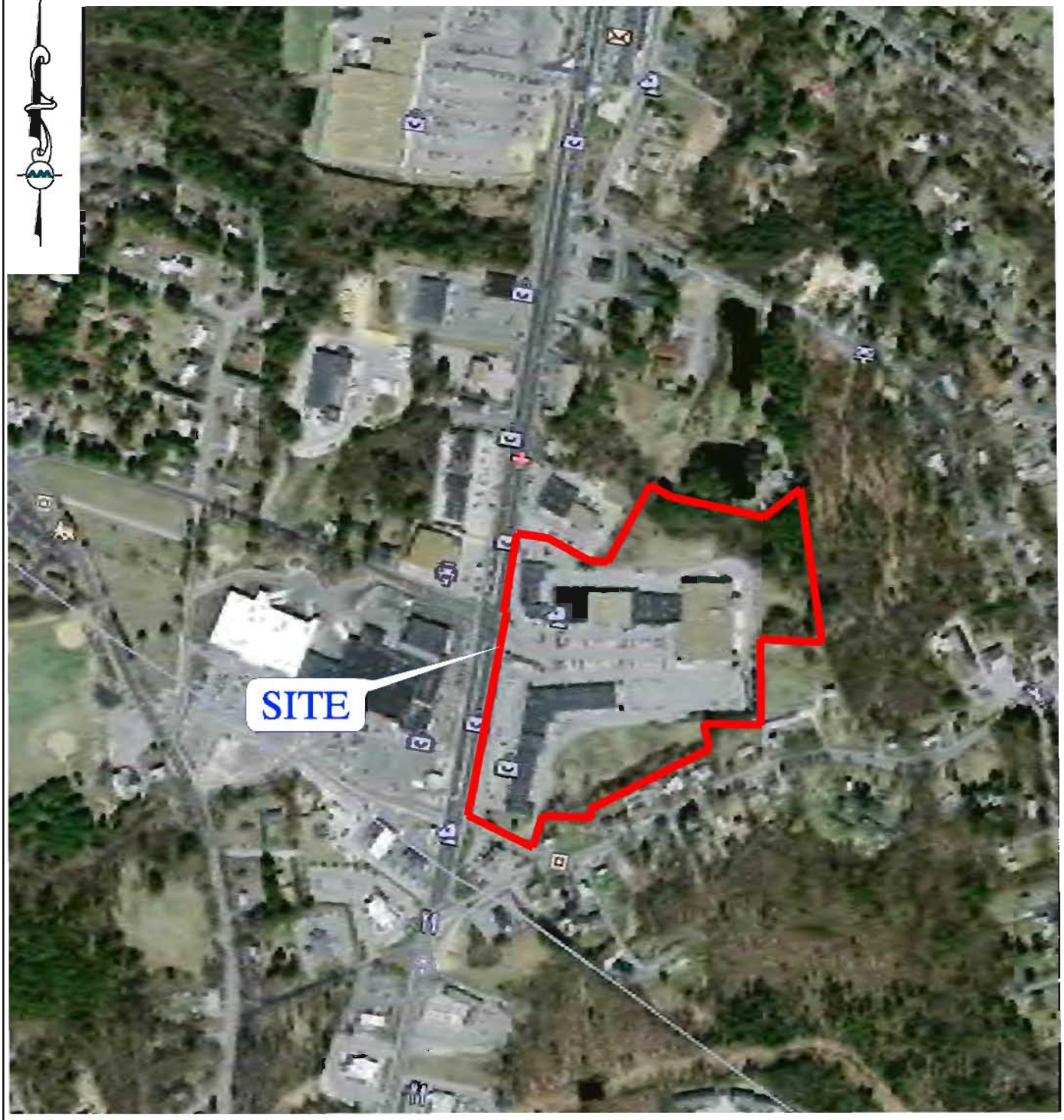
LOCUS/USGS MAP

PROJECT NO.C-1235-15B		DATE:	4/25/12
SCALE:	1" = 500'	DWG. NAME:	FIGURES
DESIGNED BY:	AB	CHECKED BY:	RC

APPLICANT: TAURUS PLAISTOW INVESTORS

Figure No.

1



PROPOSED PHARMACY

- 29B WOODBRIDGE FINE SNADY LOAM, 3-8% SLOPES
- 299 - UDORTHENTS, SMOOTHED
- 699 URBAN LAND
- 26B WINDSOR LOAMY SAND, 3-8% SLOPES
- 26E WINDSOR LOAMY SAND, 15-60% SLOPES
- 531B SCIO VERY FINE SANDY LOAM, 0-5% SLOPES

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.

civil & structural engineers • land surveyors
environmental consultants • landscape architects

250 COMMERCIAL STREET
SUITE 1001
MANCHESTER, NH 03101
TEL: (603) 627-5500
FAX: (603) 627-5501

PROJECT:

PROPOSED WALGREENS PHARMACY
9 PLAISTOW RD.
PLAISTOW, NH

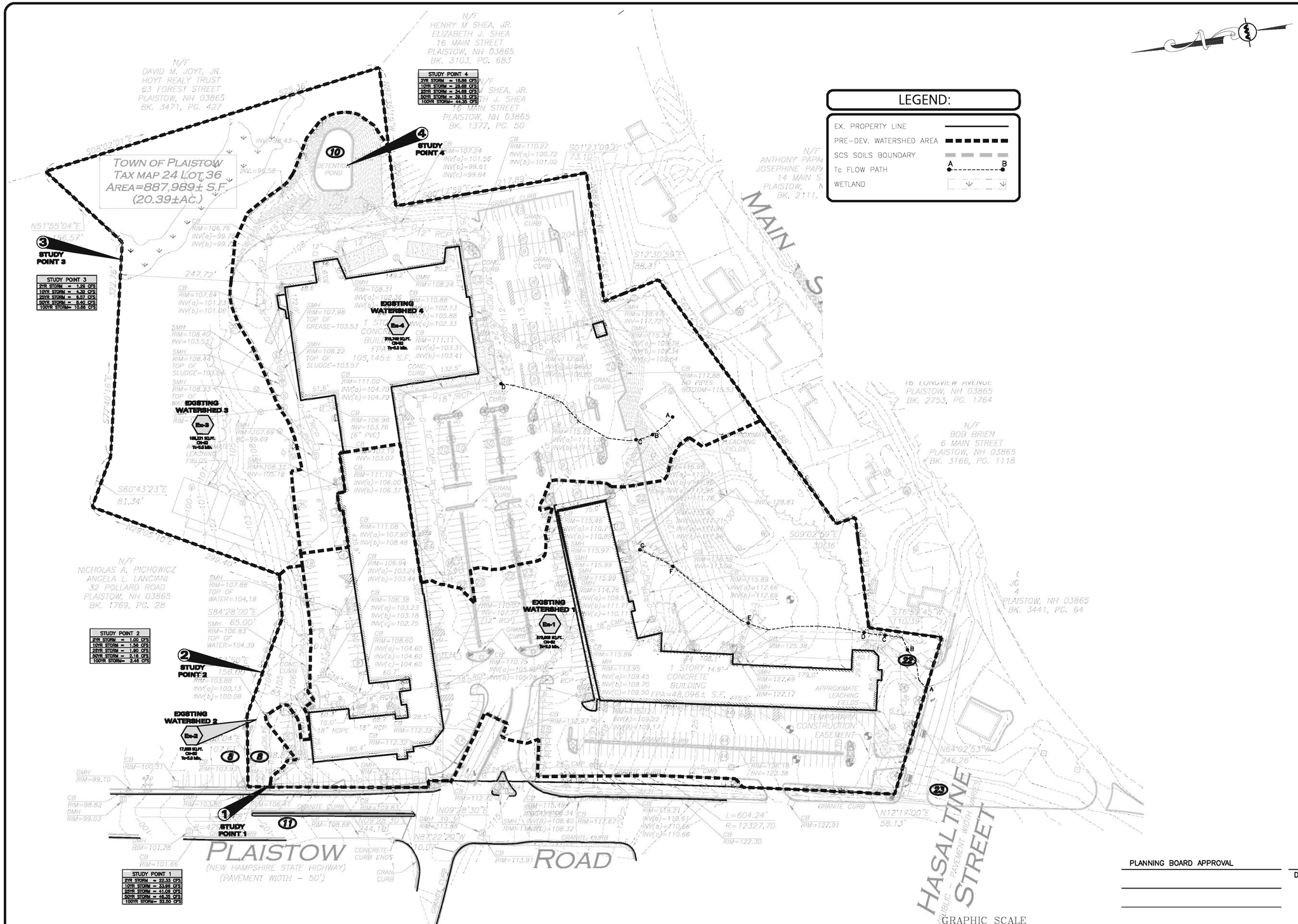
NRCS SOIL MAP

PROJECT NO.C-1235-15B		DATE:	04/25/12
SCALE:	1" =200'	DWG. NAME:	FIGURES
DESIGNED BY:	AB	CHECKED BY:	RC

APPLICANT: TAURUS PLAISTOW INVESTORS

Figure No.

3



PLANNING BOARD APPROVAL — DATE

R:\PROJECTS\1235-15B\CIVIL\DRAWINGS\CURRENT\C-1235-15-WATERSEHD-EXISTING.DWG

TAURUS PLAISTOW INVESTORS
LIMITED PATNERSHIPS
22 BATTERYMARCH STREET
BOSTON, MA 02109

DATE

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
TAURUS PLAISTOW INVESTORS
LIMITED PATNERSHIPS
22 BATTERYMARCH STREET
BOSTON, MA 02109

PROJECT:
Walgreens
STORE #15464
TAX MAP 24 LOT 36
9 PLAISTOW ROAD
PLAISTOW, NH

PROJECT NO.	1235-15B	DATE:	03/05/12
SCALE:	1"=60'	DWG. NAME:	C1235-15
DESIGNED BY:	AB	CHECKED BY:	RC

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil & structural engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
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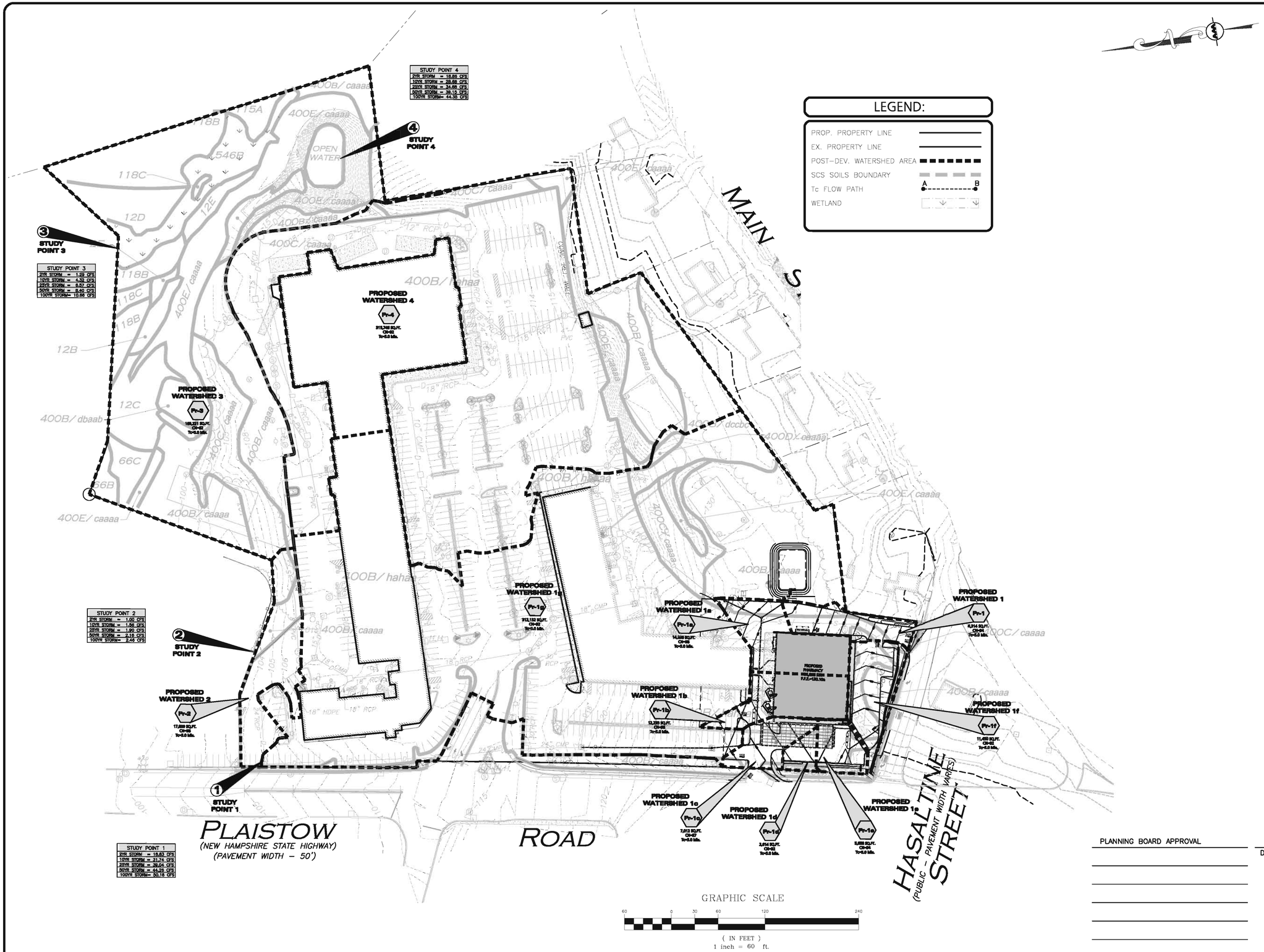
FAX: (603) 627-5501
WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

DRAWING TITLE: EXISTING WATERSHED PLAN

SHEET No. EWP



PLANNING BOARD APPROVAL

DATE

R:\PROJECTS\1235-15B\CIVIL\DRAWINGS\CURRENT\C-1235-15-WATERSEHD-PROPOSED.DWG

TAURUS PLAISTOW INVESTORS
LIMITED PATNERSHIPS
22 BATTERYMARCH STREET
BOSTON, MA 02109

DATE

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
TAURUS PLAISTOW INVESTORS
LIMITED PATNERSHIPS
22 BATTERYMARCH STREET
BOSTON, MA 02109

PROJECT:
Walgreens
STORE #15464
TAX MAP 24 LOT 36
9 PLAISTOW ROAD
PLAISTOW, NH

PROJECT NO.	1235-15B	DATE:	03/05/12
SCALE:	1"=60'	DWG. NAME:	C1235-15
DESIGNED BY:	AB	CHECKED BY:	RC

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil & structural engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
250 COMMERCIAL STREET
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WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

DRAWING TITLE:
PROPOSED WATERSHED PLAN

SHEET No.
PWP

EROSION CONTROL AND SEDIMENT CONTROL NOTES

1. SEE SHEET ABB–1 FOR ABBREVIATIONS & NOTES.

2. AS CONSTRUCTION DISTURBANCE IS GREATER THAN 1 ACRE, A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT NOI, AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WILL NEED TO BE SUBMITTED TO THE EPA NEW ENGLAND AND NH DES. THE NPDES PERMIT FOR STORM WATER DISCHARGE, & CONSTRUCTION GENERAL PERMIT NOI WILL BE REQUIRED TO BE SUBMITTED AT LEAST 7 DAYS PRIOR TO COMMENCING CONSTRUCTION.

3. OWNER AND CONTRACTOR ARE RESPONSIBLE FOR COMPLIANCE WITH THE CONSTRUCTION GENERAL PERMIT NOI. COPIES OF ALL SWPPP REPORTS SHALL BE PROVIDED TO THE TOWN OF PLAISTOW WITHIN 3 DAYS OF EACH INSPECTION.

4. APPLICABLE WORK AND MATERIALS SHALL COMPLY WITH ALL TOWN OF PLAISTOW, NH DES, NH REGULATIONS AND CODES AND O.S.H.A. STANDARDS. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE SITE PLAN REGULATIONS FROM THE TOWN OF PLAISTOW, NH PLANNING BOARD, AND THE PUBLIC WORKS DEPARTMENT SPECIFICATIONS, USDA SOIL CONSERVATION SERVICE VEGETATIVE PRACTICES IN SITE DEVELOPMENT.

5. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES, AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK.

6. ALL DISTURBED AREAS NOT OTHERWISE NOTED SHALL RECEIVE 6" OF SUITABLE LOAM & SEED UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. TEMPORARY SEEDING MIX SHALL BE APPLIED AT RATE OF 5 LBS PER 1,000 S.F. WITH A MIXTURE OF 40% CREEPING RED FESCUE, 20% ANNUAL RYE GRASS, 20% KENTUCKY BLUEGRASS, 10% RED TOP, & 10% PERENNIAL RYE GRASS. CONTRACTOR SHALL AVOID PLANTING ANY INVASIVE SPECIES OR PROHIBITED PLANTS (AS LISTED ON THE "NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST") IN ACCORDANCE WITH THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800.

7. AREAS WITH OVER 3:1 SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET OR JUTE MESH.

8. SILT CONTROL SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE TO MAINTAIN SEDIMENT ON SITE. ANY MODIFICATIONS TO SILT CONTROLS SHOWN ON THE APPROVED PLANS AS A RESULT OF ACTUAL FIELD CONDITIONS OR CONSTRUCTION PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH B.M.P. (BEST MANAGEMENT PRACTICES) PER THE E.P.A. 1992 "STORMWATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES" MANUAL. ANY SUCH MODIFICATIONS SHALL BE INSTALLED AS APPROVED BY THE ENGINEER.

9. AREAS OF EXPOSED SOIL UNDERGOING CONSTRUCTION THAT WILL NOT BE COVERED AND OR FINISHED GRADED WITHIN 7 DAYS OF EXPOSURE SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL MEASURES WITHIN 7 DAYS OF DISTURBANCE. TEMPORARY EROSION CONTROL MEASURES SHALL INCLUDE EROSION CONTROL MESH, NETTING OR MULCH AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND SHOWN ON THE DESIGN PLANS. IF HAY OR STRAW MULCH IS USED IT SHALL BE APPLIED AT THE RATE OF 1.5 TO 2 TONS PER ACRE OR 70 TO 90 LBS. PER 1,000 S.F. APPLICATION AREA SHALL BE SUFFICIENTLY COVERED WITH MULCH TO AVOID ANY VISIBLE SOIL EXPOSURE. MULCH SHALL BE KEPT MOIST TO AVOID LOSS DUE TO WIND. MULCH AND NETTING SHALL BE APPLIED IN THE BASE OF ALL GRASSED WATERWAYS AND IN VEGETATIVE SLOPES WHICH EXCEED 15% AND DISTURBED AREAS WITHIN 100 FEET OF WETLANDS OR STREAMS.

10. IF DISTURBED AREAS DO NOT RECEIVE FINAL SEEDING BY SEPTEMBER 15 OF THE CONSTRUCTION YEAR, THEN ALL DISTURBED AREAS SHALL BE SEEDED WITH A WINTER COVER CROP AT THE RATE OF 2 LBS PER 1,000 SQUARE FEET. WINTER SEEDING SHALL BE COVERED WITH EROSION CONTROL MESH (MULCH AND NETTING). HEAVY GRADE MATS SHALL BE USED IN THE BASE OF ALL GRASSED WATERWAYS, ON VEGETATED SLOPES IN EXCESS OF 15%, AND ANY DISTURBED AREAS WITHIN 100 FEET OF WETLANDS OR STREAMS. MULCH AND NETTING SHALL ALSO BE PROVIDED FOR ADDITIONAL WINTER PROTECTION.

11. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR LESS THAN 90 DAYS SHALL BE COVERED WITH HAY AND MULCH (AT 100LBS/1,000 SF), OR WITH AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR 90 DAYS OR MORE SHALL BE SEEDED WITH WINTER RYE (FOR FALL SEEDING AT 3LB/1,000 SF) OR OATS (FOR SUMMER SEEDING AT 2LB/1,000 SF) AND THEN COVERED WITH HAY MULCH (AT 100LB/1,000 SF) OR AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL. LOAM SHALL BE STOCKPILED AT LOCATIONS DESIGNATED BY THE OWNER AND ENGINEER.

12. ALL FILTER BARRIERS, SILT SACKS, AND EROSION CONTROL MEASURES SHALL BE INSTALLED ACCORDING TO THE STORMWATER POLLUTION PREVENTION PLANS. THESE SHALL BE MAINTAINED DURING CONSTRUCTION TO REMOVE SEDIMENT FROM RUNOFF WATER. ALL THE FILTER BARRIERS AND EROSION CONTROL BERMS SHALL BE INSPECTED AFTER ANY RAINFALL OR RUNOFF EVENT, MAINTAINED AND CLEANED UNTIL ALL AREAS HAVE AT LEAST 85–90% VIGOROUS PERENNIAL COVER OF GRASSES.

13. A WATERING TRUCK SHALL BE USED TO PERIODICALLY SPRINKLE CONSTRUCTION AREAS IN ORDER TO KEEP THE LEVEL OF DUST TO A MINIMUM DURING THE DRY MONTHS AND AS REQUIRED IN ACCORDANCE WITH ENV–A1000.

14. THE PROJECTS MUST MEET THE REQUIREMENTS AND INTENT OF NH RSA 430:53 TITLE XL AGRICULTURE, HORTICULTURE AND ANIMAL HUSBANDRY, CHAPTER 430, INSECT PESTS AND PLANT DISEASES, INVASIVE SPECIES AND AGR 3800 RELATIVE TO INVASIVE SPECIES.

15. THE CONTRACTOR SHALL USE EXTREME CAUTION TO AVOID ALLOWING SEDIMENTS TO ENTER THE STORM DRAIN SYSTEM DURING CONSTRUCTION. CATCH BASIN INLETS SHALL ALSO BE PROTECTED DURING CONSTRUCTION BY THE USE OF STONE INLET PROTECTION AROUND EACH INLET. SILT SACKS SHALL ALSO BE INSTALLED IN ALL EXISTING BASINS. INLET PROTECTION MAY BE REMOVED ONLY AFTER FINISHED AREAS ARE PAVED AND THE VEGETATED SLOPES ARE ESTABLISHED WITH AT LEAST 85–90% OF VIGOROUS PERENNIAL GROWTH.

16. REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON THE COMPLETION OF CONSTRUCTION. FOLLOWING SEED BED PREPARATION ALL AREAS NOT NOTED TO RECEIVE COVER SHALL BE LOAM AND SEEDED. AREAS SEEDED BETWEEN MAY 15 TO AUGUST 15TH SHALL BE COVERED WITH HAY OR STRAW MULCH. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHALL BE ACHIEVED PRIOR TO OCTOBER 15TH. HAY AND STRAW MULCHES SHALL BE ANCHORED WITH MULCH NETTING OR TACKIFIER SO THAT THEY ARE NOT BLOWN AWAY BY WIND OR WASHED AWAY BY FLOWING WATER. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 1.5 TO 2 TONS PER ACRE OR 70 TO 90 LBS. PER 1,000 S.F.

17. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS FOR TEMPORARY SEEDED AREAS MAY BE APPLIED AS FOLLOWS:
    - 10–10–10 FERTILIZER (N–P205–K20 OR EQUAL)- APPLICATION RATE= 25 LBS/1,000 S.F.
    - GROUND LIMESTONE (85% OF TOTAL CARBONATES. LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT 50% WILL PASS A 100 MESH SIEVE AND 90% WILL PASS THROUGH A 20 MESH SIEVE. APPLICATION RATE= 100 LB/1,000 S.F.
    - WHEN FERTILIZER IS APPLIED WITHIN 100' OF ANY RIVER, STREAM, POND, OR LAKE IT SHALL BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER.

17. LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE PER SPECIFICATIONS. LOAM SHALL BE FREE OF SOIL & CLAY LUMPS, STONES, WEEDS, ROOTS OR OTHER DELETERIOUS MATERIAL AND MEET THE LOAM SPECIFICATION DETAIL.

18. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISHED SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.

19. AT THE OWNER'S DISCRETION ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED TO MAINTAIN STABILITY OF EARTHWORKS AND FINISHED GRADED AREAS. THE CONTRACTOR, AT HIS EXPENSE, WILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY ADDITIONAL MEASURES AS SPECIFIED BY THE OWNER. THIS INCLUDES BUT IS NOT LIMITED TO REQUESTS BY NH DES AND THE MUNICIPALITY, AS AUTHORIZED BY THE OWNER.

20. TOTAL LAND AREA IS 20.39± ACRES. TOTAL DISTURBED AREA = 2.30 ACRES± (NPDES NOI CONSTRUCTION GENERAL PERMIT IS REQUIRED)

21. INSPECTIONS AND MONITORING MAINTENANCE MEASURES SHALL BE APPLIED DURING THE ENTIRE CONSTRUCTION CYCLE. WEEKLY INSPECTIONS SHALL BE HELD THROUGH THE DURATION OF CONSTRUCTION ACTIVITY. WEEKLY INSPECTION REPORTS SHALL BE MAINTAINED IN THE CONTRACTORS FIELD OFFICE. IN ADDITION TO THE NORMAL WEEKLY INSPECTIONS, THE CONTRACTOR SHALL PERFORM AN INSPECTION OF ALL EROSION CONTROL MEASURES AFTER EACH RAINFALL AT A MINIMUM OF (1/2" OR GREATER OF RAINFALL) OR RUNOFF EVENT, AND PERFORM THE NECESSARY REPAIRS. THE INSPECTIONS SHALL INCLUDE BUT NOT BE LIMITED TO THE SITE'S DOWN STREAM DISCHARGE POINTS. THE CONTRACTOR SHALL MAINTAIN A LOG IN ACCORDANCE WIT THE PLANS, NHDES, AND TOWN OF PLAISTOW, NH.

22. IF ANY EVIDENCE OF SEDIMENTATION IS OBSERVED IN THE INLETS, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, PROVIDE A PLAN TO THE ENGINEER TO REMOVE ANY ACCUMULATED SEDIMENT IN THESE AREAS. THE CONTRACTOR SHALL ALSO IMMEDIATELY PROVIDE ADDITIONAL ON SITE EROSION AND SEDIMENTATION CONTROL MEASURES TO PREVENT FURTHER DEGRADATION OF THE AREA.

23. FOLLOWING THE TEMPORARY OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA BIMONTHLY TO ENSURE THE AREAS HAVE A MINIMUM OF 85–90% VEGETATED VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW UP INSPECTIONS IN THE EVEN OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

24. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT–OF–WAY MUST BE REMOVED IMMEDIATELY.

25. STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH STAKED HAYBALES AND/OR SILTATION FENCES TO PREVENT AND/OR CONTROL SILTATION AND EROSION.

26. ALL EXISTING & PROPOSED CATCH BASINS SUBJECT TO STORMWATER RUNOFF DURING CONSTRUCTION SHALL HAVE STONE INLET PROTECTION AND SILT SACKS INSTALLED OR AS DIRECTED BY THE OWNER/ENGINEER. NO SEDIMENTATION SHALL ENTER THE ON–SITE OR OFF–SITE DRAINAGE SYSTEMS AT ANY TIME.

27. CONTRACTOR TO CONTROL FUGITIVE DUST IN ACCORDANCE WITH ENV–A 1002. CONTRACTOR TO PREVENT, ABATE, AND CONTROL THE EMISSION OF FUGITIVE DUST, INCLUDING BUT NOT LIMITED TO THE FOLLOWING METHODS: WETTING, COVERING, SHIELDING OR VACUUMING.

28. IF DEWATERING IS NECESSARY IT SHALL ONLY BE COMPLETED AS FOLLOWS: THE DISCHARGE SHALL BE STOPPED IMMEDIATELY IF THE RECEIVING AREA SHOWS ANY SIGN OF INSTABILITY OR EROSION. ALL CHANNELS, SWALES, AND DITCHES DUG FOR DISCHARGING WATER FROM THE EXCAVATED AREA SHALL BE STABLE PRIOR TO DIRECTING DISCHARGE TO THEM. IF A CONSTRUCTION EQUIPMENT BUCKET IS USED, IT SHALL EMPTY THE MATERIAL TO A STABLE AREA. NO DEWATERING SHALL OCCUR DURING PERIODS OF INTENSE, HEAVY RAIN. FLOW TO THE SEDIMENT REMOVAL STRUCTURE SHALL NOT EXCEED THE STRUCTURES CAPACITY TO SETTLE AND FILTER FLOW OR IS VOLUME CAPACITY. WHENEVER POSSIBLE, THE DISCHARGE FROM THE SEDIMENT REMOVAL STRUCTURE SHALL DRAIN TO A WELL–VEGETATED BUFFER BY SHEET FLOW WHILE MAXIMIZING THE DISTANCE TO THE NEAREST WATER RESOURCE AND MINIMIZING THE SLOPE OF THE BUFFER AREA. THERE SHALL BE NO DIRECT DISCHARGE TO EXISTING WETLANDS OR STREAMS. ALL DISCHARGE SHALL BE IN COMPLIANCE WITH STATE, LOCAL, AND FEDERAL REQUIREMENTS.

29. ALL TREE STUMPS WILL BE GROUND INTO MULCH ON SITE AND USED FOR EROSION CONTROL OR REMOVED BY TRUCK FOR RETAIL SALE

CONSTRUCTION GENERAL PERMIT NOTES AND NARRATIVE

NARRATIVE: THE STORMWATER POLLUTION PREVENTION PLANS TOGETHER WITH AN EXISTING CONDITIONS PLAN, AND GRADING PLAN ARE THE TOTAL EROSION CONTROL MEASURES.

THE STORMWATER POLLUTION PREVENTION PLANS CONSIST OF:
- NOTES SHEET SWPPP–1 & SWPPP–2,
- THE STORMWATER PREVENTION POLLUTION PLAN SWPPP–3 SHOWING THE EROSION CONTROL MEASURES,
- THE STORMWATER PREVENTION POLLUTION DETAILS; D–1

THE EROSION CONTROL PLAN WILL BE IMPLEMENTED TO:

A. TREAT EROSION AS SOON AS POSSIBLE AFTER DISTURBANCE.

B. PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA AND ENTERING THE WETLANDS.

C. CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED TO MINIMIZE EROSION.

D. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.

MAINTENANCE
ALL MEASURES STATED ON THIS STORMWATER POLLUTION PREVENTION PLANS, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A HEALTHY STAND OF GRASS IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.

3. FILTER BARRIERS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE FILTER BARRIERS WHEN IT REACHES 6" IN HEIGHT OR AS REQUESTED BY THE OWNER OR ENGINEER.

4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.

5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.

6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.

GENERAL SEQUENCE OF CONSTRUCTION:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCES.

2. PREPARE TEMPORARY PARKING AND STORAGE AREA. UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, WHEEL WASH, CONCRETE WASHOUT, MASONS AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., DENOTE THEM ON THE SITE MAPS IMMEDIATELY AND NOTE ANY CHANGES IN THE LOCATIONS AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

3. CONSTRUCT THE FILTER BARRIERS ON THE SITE AND AT THE PERIMETER PRIOR TO ALL EARTHMOVING ACTIVITIES.

4. CLEAR AND GRUB THE SITE.

5. CONSTRUCT THE TEMPORARY SEDIMENTATION AND SEDIMENT TRAP BASINS AS NECESSARY.

6. CONSTRUCT STORMWATER DETENTION AREAS AND SWALES. NOTE, SWALES AND DETENTION AREAS SHALL BE STABILIZED PRIOR TO DIRECTING STORMWATER TO THEM.

7. HALT ALL ACTIVITIES AND CONTACT THE CIVIL ENGINEERING CONSULTANT TO PERFORM INSPECTION OF BMPS. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE–CONSTRUCTION MEETING WITH ENGINEER AND ALL GROUND DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

8. BEGIN GRADING THE SITE.

9. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.

10. TEMPORARILY SEED DENUDED AREAS. ALL CUT AND FILL SLOPES SHALL BE SEEDED / LOAMED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.

11. INSTALL BUILDING, UTILITIES, STORM SEWERS, CURBS AND GUTTERS. INSTALL INLET PROTECTION DEVICES AROUND ALL STORM DRAIN STRUCTURES.

12. INSTALL RIP RAP AROUND OUTLET STRUCTURES.

13. FINALIZE ROADWAY GRADING, AND PREPARE SITE FOR PAVING. NOTE, ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.

14. PAVE SITE.

15. COMPLETE FINISH GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.

15. ONCE SITE IS STABILIZED, REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES (AFTER APPROVAL BY CIVIL ENGINEER, OWNER, TOWN OF PLAISTOW, AND NHDES).

NH DES ALTERATION OF TERRAIN (ENV-WQ 1500) REQUIREMENTS:

THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE NH DES, ALTERATION OF TERRAIN REGULATIONS; INCLUDING BUT NOT LIMITED TO ENV–WQ 1500 AND THE SECTIONS BELOW:

PART ENV–WQ 1505 REQUIREMENTS TO PROTECT WATER QUALITY DURING TERRAIN ALTERATION ACTIVITIES

ENV–WQ 1505.01 WATER QUALITY DEGRADATION PROHIBITED.
NO PERSON UNDERTAKING ANY TERRAIN–ALTERATION ACTIVITY SHALL CAUSE OR CONTRIBUTE TO, OR ALLOW THE ACTIVITY TO CAUSE OR CONTRIBUTE TO, ANY VIOLATIONS OF THE SURFACE WATER QUALITY STANDARDS ESTABLISHED IN ENV–WQ 1700.

ENV–WQ 1505.02 MAXIMUM OPEN AREA ALLOWED.

THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY TIME BEFORE DISTURBED AREAS ARE STABILIZED.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

- BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
- A MINIMUM OF 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED
- A MINIMUM OF 3 INCHES OF NON–EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED
- OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

(A) ALL AREAS OF UNSTABILIZED SOIL SHALL BE:
(1) TEMPORARILY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 45 DAYS OF INITIAL DISTURBANCE, UNLESS A SHORTER TIME IS SPECIFIED BY LOCAL AUTHORITIES, THE CONSTRUCTION SEQUENCE APPROVED AS PART OF THE ISSUED PERMIT, OR AN INDEPENDENT MONITOR; AND

(2) PERMANENTLY STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 3 DAYS OF FINAL GRADING.

(B) EXCEPT AS FURTHER LIMITED BY (E), BELOW, THE AREA OF UNSTABILIZED SOIL SHALL NOT EXCEED 5 ACRES AT ANY TIME UNLESS THE APPLICANT:

(1) SUBMITS DOCUMENTATION THAT THE REQUIRED AREAS OF EARTH CUTS AND FILLS ARE SUCH THAT AN AREA OF DISTURBANCE OF 5 ACRES OR LESS WOULD UNREASONABLY LIMIT THE CONSTRUCTION SCHEDULE;

(2) SUBMITS A CONSTRUCTION SEQUENCE PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC (CERTIFIED PROFESSIONAL EROSION CONTROL AND SEDIMENT CONTROL) SPECIALIST; AND

(3) EMPLOYS AN ENVIRONMENTAL MONITOR DURING CONSTRUCTION.

(C) SUBJECT TO (D) BELOW, THE ENVIRONMENTAL MONITOR SHALL:

(1) INSPECT THE PROJECT SITE AT LEAST ONCE EACH WEEK FROM THE START OF TERRAIN ALTERATION ACTIVITIES UNTIL ALL TERRAIN ALTERATION ACTIVITIES ARE COMPLETED AND THE SITE IS STABILIZED;

(2) IN ADDITION TO REGULAR WEEKLY INSPECTIONS, INSPECT THE PROJECT SITE DURING ANY RAIN EVENT IN WHICH 0.5 INCH OF PRECIPITATION OR MORE FALLS WITHIN A 24 HOUR PERIOD, PROVIDED THE ENVIRONMENTAL MONITOR IS UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THE RAIN EVENT

(3) SUBMIT A WRITTEN REPORT, STAMPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, TO THE DEPARTMENT WITHIN 24 HOURS OF EACH INSPECTION THAT:

A. DESCRIBES THE PROGRESS OF THE PROJECT, INCLUDING WHETHER ALL CONDITIONS OF THE PERMIT ARE BEING MET AND, IF NOT, WHICH REQUIREMENTS ARE NOT BEING MET;

B. IF ANY REQUIREMENTS ARE NOT BEING MET, AN EXPLANATION OF THE CORRECTIVE ACTION(S) THAT WILL BE OR ARE BEING TAKEN TO BRING THE PROJECT INTO COMPLIANCE WITH APPLICABLE REQUIREMENTS AND THE DEADLINE BY WHICH SUCH ACTIONS WILL BE COMPLETED; AND

C. INCLUDES PHOTOGRAPHS OF THE SITE THAT ARE REPRESENTATIVE OF THE PROJECT; AND

PLANNING BOARD APPROVAL _____ DATE _____

CONTINUED NEXT PAGE

CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL
CPESC
Michael Malynowski
No. 5843

MICHAEL A. MALYNOWSKI No. 12205 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
9/27/12

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
3	09-28-12	WALGREENS SUBMITTAL
2	07-16-12	REVISED PER PEER REVIEW & NHDOT
1	06-28-12	REVISED PER PEER REVIEW

APPLICANT\OWNER:
TAURUS PLAISTOW INVESTORS
LIMITED PATNERSHIPS
22 BATTERYMARCH STREET
BOSTON, MA 02109

PROJECT:
Walgreens
STORE #15464
TAX MAP 24 LOT 38
5 - 9 PLAISTOW ROAD
PLAISTOW, NH

PROJECT NO.	1235-15B	DATE:	05/30/12
SCALE:	1" = 20'	DWG. NAME:	C1235-15
DESIGNED BY:	AB	CHECKED BY:	RC

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
civil & structural engineering ◆ land surveying
environmental consulting ◆ landscape architecture
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WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE: STORMWATER POLLUTION PREVENTION PLAN

SHEET No. SWPPP-1

NH DES ALTERATION OF TERRAIN (ENV-WQ 1500) REQUIREMENTS CONTINUED:

(4) RETAIN A COPY OF THE REPORT PREPARED PURSUANT TO (3), ABOVE, ON-SITE FOR REVIEW DURING SITE INSPECTIONS BY FEDERAL, STATE, AND LOCAL OFFICIALS.

(D) ROUTINE INSPECTION FREQUENCY MAY BE REDUCED FROM ONCE EACH WEEK TO AT LEAST ONCE EACH MONTH IF EITHER OF THE FOLLOWING CONDITIONS IS MET:

(1) WORK HAS BEEN SUSPENDED AND THE ENTIRE SITE IS STABILIZED IN ACCORDANCE WITH ENV-WQ 1505.03; OR

(2) RUNOFF IS UNLIKELY BECAUSE:

A. THE GROUND IS FROZEN OR THE SITE IS COVERED WITH SNOW OR ICE; AND

B. THE PROJECT IS IN AN AREA WHERE FROZEN CONDITIONS ARE ANTICIPATED TO CONTINUE FOR MORE THAN ONE MONTH

(E) IF THE SITE IS WITHIN 50 FEET OF SURFACE WATER, HAS A GRADE OF 25% OR GREATER, OR CONTAINS SOILS HAVING AN ERODIBILITY FACTOR OF 0.4 OR GREATER, OR ANY COMBINATION OF THESE, THE OWNER SHALL COMPLY WITH (B) THROUGH (D), ABOVE, REGARDLESS OF THE SIZE OF THE OPEN AREA.

ENV-WQ 1505.03 STABILIZATION.

A SITE SHALL BE DEEMED TO BE STABILIZED WHEN IT IS IN A CONDITION IN WHICH THE SOILS ON THE SITE WILL NOT ERODE UNDER THE CONDITIONS OF A 10-YEAR STORM, SUCH AS BUT NOT LIMITED TO:

(A) IN AREAS THAT WILL NOT BE PAVED, A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED, A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED, OR EROSION CONTROL BLANKETS HAVE BEEN INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.03; OR

(B) IN AREAS TO BE PAVED, BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2006, ITEM NO. 304.1 OR 304.2 HAVE BEEN INSTALLED.

ENV-WQ 1505.04 STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL.

THE METHODS DESCRIBED IN ENV-WQ 1506.01 THROUGH ENV-WQ 1506.13, USED INDIVIDUALLY OR IN COMBINATION TO MEET THE REQUIREMENT OF ENV-WQ 1505.01, SHALL BE ACCEPTABLE METHODS FOR MINIMIZING POLLUTANT DISCHARGES FROM ANY TERRAIN-ALTERATION PROJECT, INCLUDING PROJECTS THAT ARE SUBJECT TO ENV-WQ 1503.03 RELATIVE TO GENERAL PERMITS BY RULE, FROM THE TIME THAT WORK STARTS ON A PROJECT UNTIL THE SITE IS PERMANENTLY STABILIZED, PROVIDED THAT THE METHODS:

(A) SHALL BE CONSIDERED AS MINIMUM STANDARDS, WITH THE MORE PROTECTIVE REQUIREMENTS APPLYING, FOR PROJECTS SUBJECT TO ENV-WQ 1503.05; AND

(B) ARE IMPLEMENTED IN ACCORDANCE WITH THE INDIVIDUAL CRITERIA SPECIFIED FOR EACH METHOD.

ENV-WQ 1505.05 COLD WEATHER SITE STABILIZATION.

(A) TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE ADDITIONAL STABILIZATION TECHNIQUES SPECIFIED IN THIS SECTION SHALL BE EMPLOYED DURING THE PERIOD FROM NOVEMBER 30 THROUGH MAY 1.

(B) THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO ONE ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY THE DEPARTMENT.

(C) ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY NOVEMBER 30, OR WHICH ARE DISTURBED AFTER NOVEMBER 30, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING OR TACKIFIER, OR 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).

(D) ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY NOVEMBER 30, OR WHICH ARE DISTURBED AFTER NOVEMBER 30, SHALL BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH

(E) INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX, MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H), SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH.

(F) INSTALLATION OF EROSION CONTROL BLANKETS SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.

(G) ALL PROPOSED STABILIZATION IN ACCORDANCE WITH (C) OR (D), ABOVE, SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.

(H) ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY NOVEMBER 30, OR WHICH ARE DISTURBED AFTER NOVEMBER 30, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.

(I) AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2006, ITEM NO. 304.1 OR 304.2.

PART ENV-WQ 1506 METHODS FOR EROSION AND SEDIMENT CONTROL DURING TERRAIN ALTERATION ACTIVITIES

ENV-WQ 1506.01 EROSION CONTROL METHODS: TEMPORARY AND PERMANENT MULCHING.

MULCHING SHALL BE USED ONLY AS FOLLOWS:

(A) HAY AND STRAW MULCHES SHALL BE ANCHORED WITH MULCH NETTNG OR TACKIFIER SO THAT THEY ARE NOT BLOWN AWAY BY WIND OR WASHED AWAY BY FLOWING WATER;

(B) MULCH MATERIALS SHALL BE SELECTED BASED UPON SOILS, SLOPE, FLOW CONDITIONS, AND TIME OF YEAR;

(C) HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 1.5 TO 2 TONS PER ACRE OR 70 TO 90 POUNDS PER 1,000 SQUARE FEET;

(D) WOOD CHIPS OR GROUND BARK SHALL BE APPLIED AT 2 TO 6 INCHES DEEP AT A RATE OF 10 TO 20 TONS PER ACRE OR 460 TO 920 POUNDS PER 1,000 SQUARE FEET;

(E) JUTE AND FIBROUS MATS AND WOOD EXCELSIOR SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS; AND

(F) EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H) SHALL BE PLACED AT A MINIMUM THICKNESS OF 2 INCHES.

EROSION CONTROL REPORT

PROJECT: PROPOSED RETAIL DEVELOPMENT — DATE:
ADDRESS: 9 PLAISTOW ROAD – PLAISTOW, NH

STRUCTURE OR TASK	MAINTENANCE	MAINTENANCE PERFORMED: DATE	BY:	MAINTENANCE NOTES:	METHOD/MAINT. ACTIVITY	NOTES/REMARKS
STREET SWEEPING	MARCH	X	X	X	SWEEP/POWER BROOM OR VACUUM PARKING LOTS	SWEEP PAVED AREAS AS NEEDED, BUT NOT LESS THAN (4) TIMES PER YEAR.
	JUNE	X	X	X		
	SEPTEMBER	X	X	X		SUBMIT INFORMATION THAT CONFIRMS THAT ALL STREET SWEEPINGS HAVE BEEN DISPOSED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS
	DECEMBER	X	X	X		
DEEP SUMP CATCH BASINS	MARCH	X	X	X	CLAM SHELL OR VACUUM SUMPS.	CLEAN WHEN SEDIMENT IS 6" DEEP
	JUNE	X	X	X		
	SEPTEMBER	X	X	X		SUBMIT INFORMATION THAT CONFIRMS THAT ALL CATCH BASIN SEDIMENTS HAVE BEEN DISPOSED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
	DECEMBER	X	X	X		
ADS WATER QUALITY UNIT	MARCH	X	X	X	REFER TO ADS MAINT. PACKAGE FOR THE INSPECTION AND CLEANING PROCEDURE.	INSPECT AT LEAST FOUR TIMES ANNUALLY AS WELL AS FOLLOWING STORMS EXCEEDING 1" OF RAINFALL. CLEAN SEDIMENT AS REQUIRED BY MANUFACTURER.
	JUNE	X	X	X		
	SEPTEMBER	X	X	X		SUBMIT INFORMATION THAT CONFIRMS THAT ALL CATCH BASIN SEDIMENTS HAVE BEEN DISPOSED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
	DECEMBER	X	X	X		
UNDERGROUND INFILTRATION SYSTEM	MARCH	X	X	X	REFER TO STORMTECH MAINT. PACKAGE FOR THE INSPECTION AND CLEANING PROCEDURE.	INSPECT AT LEAST FOUR TIMES ANNUALLY AS WELL AS FOLLOWING STORMS EXCEEDING 1" OF RAINFALL. CLEAN SEDIMENT AS REQUIRED BY MANUFACTURER.
	JUNE	X	X	X		
	SEPTEMBER	X	X	X		SUBMIT INFORMATION THAT CONFIRMS THAT ALL CATCH BASIN SEDIMENTS HAVE BEEN DISPOSED IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
	DECEMBER	X	X	X		
MOSQUITO CONTROL		X	X	X	CB MANAGEMENT TARGETED LARVICIDING TREATMENT TO CB'S AND AT ALL STORM DRAINS TO CONTROL MOSQUITOES IN THEIR AQUATIC STAGES.	SURVEILLANCE IS A NON CHEMICAL INSPECTION METHOD THAT INVOLVES CLASSIFICATION OF MOSQUITO BREEDING SITES, LARVAL PRESENTS, AND SURVEY.
SNOW STORAGE	ALL SNOW EVENTS	X	X	X	DEBRIS SHALL BE CLEARED FROM THE SITE AND PROPERLY DISPOSED OF NO LATER THAN THE END SNOW SEASON. (NO LATER THAN MAY 15)	AVOID DUMPING SNOW REMOVAL OVER CB'S, IN DETENTION BASINS, SEDIMENT FORE BAYS, RIVERS, WETLANDS, AND FLOOD PLAIN. SEE SITE PLAN FOR LOCATIONS)

LONG TERM OPERATIONS AND MAINTENANCE PLAN

PROJECT: PROPOSED RETAIL DEVELOPMENT — DATE:
ADDRESS: 9 PLAISTOW ROAD – PLAISTOW, NH

STRUCTURE OR TASK	WEEKLY INSPECTION SCHEDULE/OR AFTER 1/2" RAINFALL	INSPECTION PERFORMED: DATE	BY:	METHOD/MAINT. ACTIVITY	NOTES/REMARKS
TEMPORARY STONE CHECK DAMS	X	X	X	SEDIMENT ACCUMULATION UP-GRADIENT OF THE STONE CHECK DAMS GREATER THAN 6" IN DEPTH SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.	X
	X	X	X		
	X	X	X		
	X	X	X		
STRAW BALES	X	X	X	SEDIMENT ACCUMULATION UP-GRADIENT OF THE TUBULAR SEDIMENT CONTROL GREATER THAN 6" IN DEPTH SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.	X
	X	X	X		
	X	X	X		
	X	X	X		
CATCH BASIN INLET PROTECTION 1.STONE INLET PROTECTION 2. SILT SACKS	X	X	X	WHEN THE SEDIMENT IS EXITING THE SITE, AND AS SHOWN ON THE PLAN, SILT SACKS SHALL BE INSTALLED IN ALL CATCH BASINS ADJACENT TO THE SITE. SEDIMENT ACCUMULATION ON ALL ADJACENT CATCH BASIN INLETS SHALL BE REMOVED AND THE SILT SACK REPLACED IF TORN OR DAMAGED. REMOVE SILT AND REPLACE CRUSHED STONE AND FILTER FABRIC AT EACH CATCH BASIN WITH CRUSHED STONE INLET PROTECTION	X
	X	X	X		
	X	X	X		
	X	X	X		
CONSTRUCTION ENTRANCES	X	X	X	WHEN SILT IS ACCUMULATING IN THE CONSTRUCTION ENTRANCE, THEN THE CONSTRUCTION ENTRANCE SHALL BE CLEANED AND STONE REPLACED AS NECESSARY.	X
	X	X	X		
	X	X	X		
	X	X	X		

DEICING LOG

PROJECT: PROPOSED RETAIL DEVELOPMENT — DATE:
ADDRESS: 9 PLAISTOW ROAD – PLAISTOW, NH

MONTH/YEAR	TYPE OF MATERIAL USED	FREQUENCY	AMOUNT USED
X	X	X	X
	X	X	X
	X	X	X
	X	X	X

PARTY RESPONSIBLE FOR ATTACHED PLANS: TAURUS PLAISTOW INVESTORS LIMITED PATNERSHIPS

ADDRESS: 22 BATTERYMARCH STREET BOSTON, MA 02109
CONTACT: EDWARD VYDRA
PHONE: 617.357.4440 EXT. 222

SIGNATURE OF RESPONSIBLE PARTY:

MAINTENANCE RESPONSIBILITIES – ALL POST-CONSTRUCTION MAINTENANCE ACTIVITIES SHALL BE DOCUMENTED AND KEPT ON FILE AND MADE AVAILABLE TO THE PROPER TOWN AND STATE AUTHORITIES UPON REQUEST.

PLANNING BOARD APPROVAL — DATE

R: \PROJECTS\1235-15B\CIVIL\DRAWINGS\CURRENT\C-1235-15-SWPPP REVISED.DWG

CERTIFIED EROSION AND SEDIMENT CONTROL PROFESSIONAL — CPESC — Michael Mahonowski No. 6843

MICHAEL A. MALYNOWSKI No. 12205 LICENSED PROFESSIONAL ENGINEER — STATE OF NEW HAMPSHIRE — 9/27/12

PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
3	09-28-12	WALGREENS SUBMITTAL
2	07-16-12	REVISED PER PEER REVIEW & NHDOT
1	06-28-12	REVISED PER PEER REVIEW

APPLICANT\OWNER:
TAURUS PLAISTOW INVESTORS
LIMITED PATNERSHIPS
22 BATTERYMARCH STREET
BOSTON, MA 02109

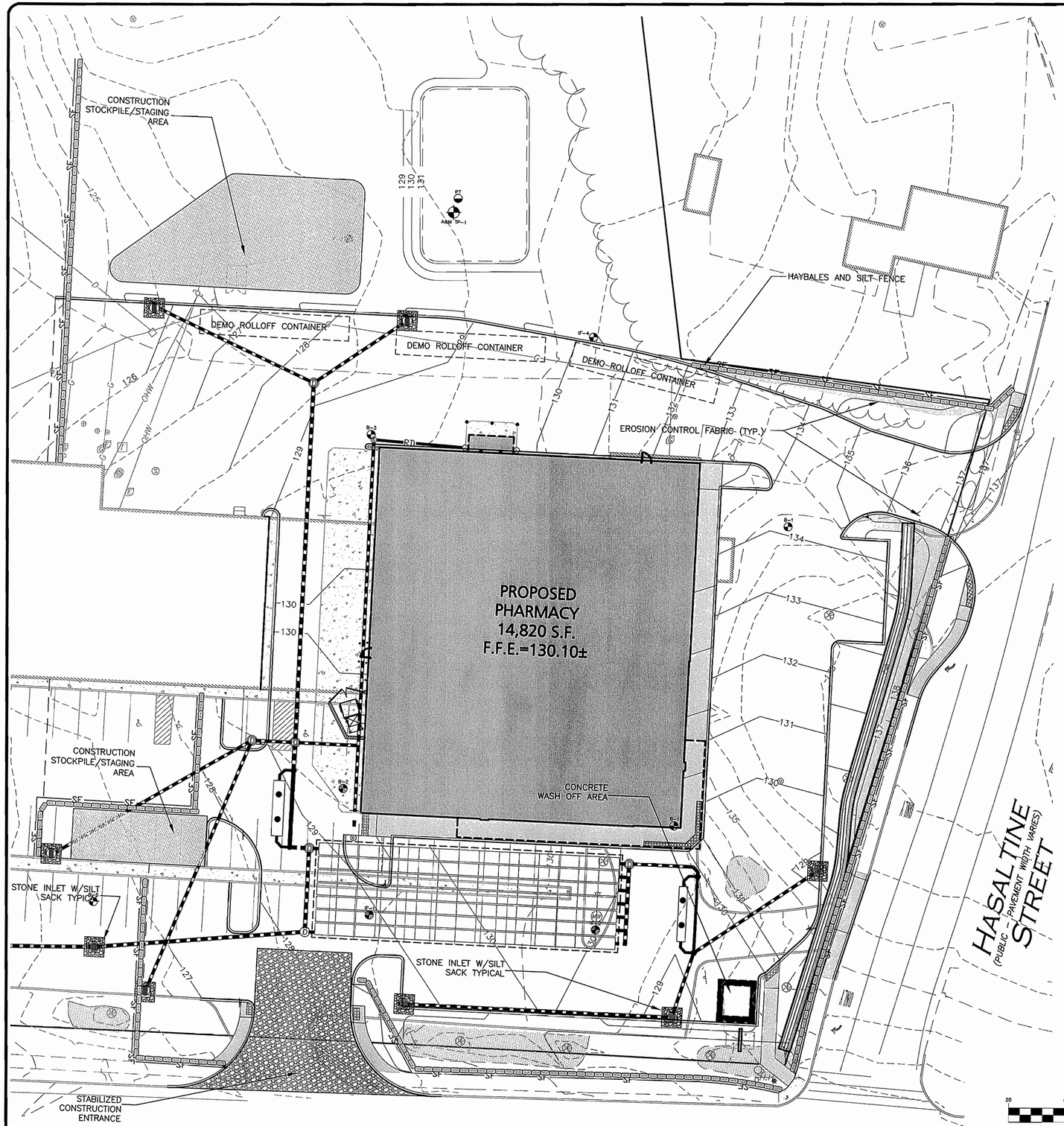
PROJECT:
Walgreens
STORE #15464
TAX MAP 24 LOT 38
5 - 9 PLAISTOW ROAD
PLAISTOW, NH

PROJECT NO.	1235-15B	DATE:	05/30/12
SCALE:	1" = 20'	DWG. NAME:	C1235-15
DESIGNED BY:	AB	CHECKED BY:	RC

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
civil & structural engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
250 COMMERCIAL STREET
SUITE 1001
MANCHESTER, NH 03101
TEL: (603) 627-5500
FAX: (603) 627-5501
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE: STORMWATER POLLUTION PREVENTION PLAN

SHEET No. SWPPP-2



LEGEND:

- SILT FENCE ——SF——
- HAYBALE LINE
- EROSION CONTROL FABRIC
- STONE INLET W/SILT SACK
- STABILIZED CONST. ENTRANCE
- STOCKPILE/CONSTRUCTION STAGING AREA

USGS LOCUS MAP
1"=500'

PROJECT DESCRIPTION:
THE PROJECT CONSISTS OF A 887,989 +/- S.F. SITE WITH A PROPOSED 14,820 S.F.RETAIL BUILDING AND ASSOCIATED SITE IMPROVEMENTS INCLUDING DRAINAGE, SEWER, LANDSCAPING, AND PARKING.

1. SEE SHEET ABB-1 FOR ABBREVIATIONS & NOTES AND SWPP-1 & 2 FOR NOTES.

2. SEE SHEET 1 FOR EXISTING CONDITIONS.

3. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

PLANNING BOARD APPROVAL — DATE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

R:\PROJECTS\1235-15B\CIVIL\DRAWINGS\CURRENT\C-1235-15-SWPPP REVISED.DWG

CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL
CPESC
Michael Malynowski
No. 5843

STATE OF NEW HAMPSHIRE
MICHAEL A. MALYNOWSKI
No. 12205
LICENSED PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

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1	06-28-12	REVISED PER PEER REVIEW

APPLICANT\OWNER:
TAURUS PLAISTOW INVESTORS
LIMITED PATNERSHIPS
22 BATTERYMARCH STREET
BOSTON, MA 02109

PROJECT:
Walgreens
STORE #15464
TAX MAP 24 LOT 38
5 - 9 PLAISTOW ROAD
PLAISTOW, NH

PROJECT NO.	1235-15B	DATE:	05/30/12
SCALE:	1" = 20'	DWG. NAME:	C1235-15
DESIGNED BY:	AB	CHECKED BY:	RC

PREPARED BY:
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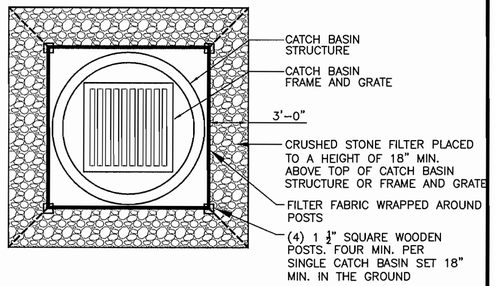
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

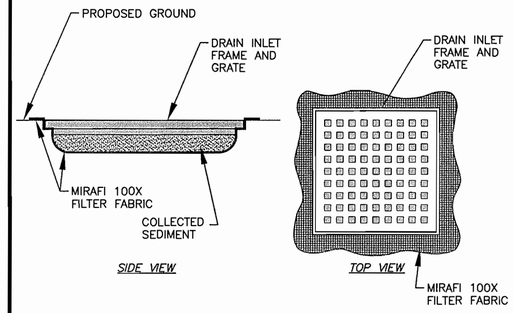
DRAWING TITLE:
STORMWATER POLLUTION PREVENTION PLAN

SHEET No.
SWPPP-3



NOTES:
1. INSPECT WEEKLY OR AFTER EACH 1/2" OF RAINFALL AND REPAIR OR REPLACEMENT OF STONE AND FILTER FABRIC SHALL BE MADE PROMPTLY IF DAMAGED OR AS DIRECTED.
2. CONTRACTOR SHALL REMOVE SEDIMENT ACCUMULATION ONCE IT REACHES A DEPTH OF 6" MAX.

CRUSHED STONE CATCH BASIN INLET PROTECTION
NOT TO SCALE

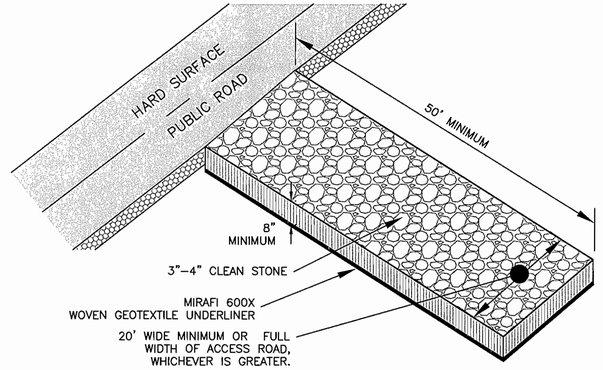


NOTE:

1. FILTER FABRIC SHALL BE SECURELY IN PLACE UNDERNEATH GRATE.

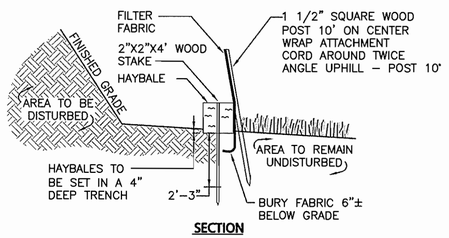
2. FREQUENT INSPECTIONS SHALL BE CONDUCTED AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY IF NECESSARY.

TYPICAL SILT SACK DETAIL
NOT TO SCALE



CONSTRUCTION ENTRANCE
NOT TO SCALE

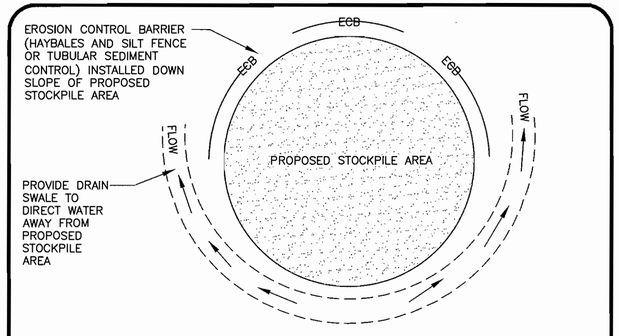
PLAN VIEW



SECTION

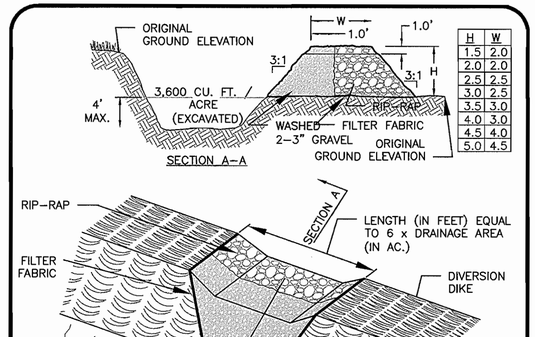
NOTE:
DEPTH TO BE 2' UNLESS POST IS TO BE SET IN PEAT THEN 3' OR DEPTH POSSIBLE BY PUSHING BY HAND SHALL BE REQUIRED.

SILT FENCE AND HAYBALE DETAIL
NOT TO SCALE



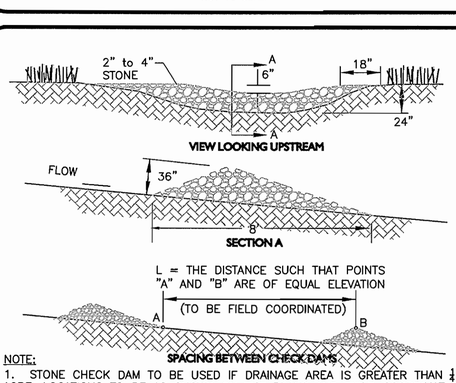
NOTES:
1. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR LESS THAN 90 DAYS SHALL BE COVERED WITH HAY AND MULCH (AT 100LBS/1,000 SF), OR WITH AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.
2. SOIL AND FILL STOCKPILES EXPECTED TO REMAIN IN PLACE FOR 90 DAYS OR MORE SHALL BE SEEDED WITH WINTER RYE (FOR FALL SEEDING AT 3LB/1,000 SF) OR OATS (FOR SUMMER SEEDING AT 2LB/1,000 SF) AND THEN COVERED WITH HAY MULCH (AT 100LB/1,000 SF) OR AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.

STOCKPILE PROTECTION DETAIL
NOT TO SCALE



H	W
1.5	2.0
2.0	2.0
2.5	2.5
3.0	2.5
3.5	3.0
4.0	3.0
4.5	4.0
5.0	4.5

TEMPORARY SEDIMENT AREA
NOT TO SCALE



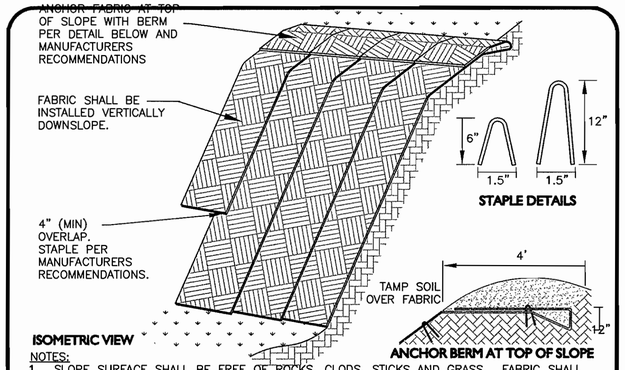
NOTE:

1. STONE CHECK DAM TO BE USED IF DRAINAGE AREA IS GREATER THAN ½ ACRE. LOCATIONS TO BE AS SHOWN ON THE PLANS AND FIELD COORDINATED.

2. KEY STONE INTO CHANNEL BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 18" TO PREVENT FLOW AROUND THE DAM.

3. CONTRACTOR TO INSPECT CHECK DAMS AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL EVENTS. CONTRACTOR TO REPAIR AND REPLACE THE STONE AS NECESSARY.

STONE CHECK DAM DETAIL
NOT TO SCALE



NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. FABRIC SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING FABRIC. PLACE FABRIC WITHIN 24 HOURS AFTER SEEDING.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
4. CHOOSE MATERIAL BASED ON SLOPE, SOILS, AND APPLICATION.
5. EROSION CONTROL FABRIC IS REQUIRED ON ALL SLOPES GREATER THAN 3:1.
6. PROVIDE SHOP DRAWING FOR APPROVAL PRIOR TO INSTALLATION.

EROSION CONTROL FABRIC DETAIL
NOT TO SCALE

PLANNING BOARD APPROVAL

DATE

R: \PROJECTS\1235-15B\CIVIL\DRAWINGS\CURRENT\C-1235-15-DETAILS.DWG

STATE OF NEW HAMPSHIRE – PROFESSIONAL ENGINEER – MICHAEL A. MALYNOWSKI No. 12207 LICENSED 9/27/12

PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
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PROJECT NO.	1235-15B	DATE:	05/30/12
SCALE:	AS NOTED	DWG. NAME:	C1235-15
DESIGNED BY:	AB	CHECKED BY:	RC

PREPARED BY:

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WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE: DETAILS

SHEET No. D-1

Attachment 6
EPA NPDES RGP Authorization to Discharge
(Date of Issue:)