

**Remediation General Permit
 Appendix III**

Effluent Limits and Monitoring Requirements by Sub-Category

Category I - Petroleum Related Site Remediation				
Sub-category A - Gasoline Only Sites				
Parameter *	CAS Number(s)	Effluent Limit	Limit type based on monthly sample	Sample Type
1. Total Suspended Solids (TSS)		30 milligrams/liter (mg/l), 50 mg/l for hydrostatic testing	monthly average	grab
3. Total Petroleum Hydrocarbons (TPH)		5.0 mg/l	daily maximum	grab
5. Benzene (B)	71432	5 ug/l , 50.0 ug/l for hydrostatic testing only	daily maximum	grab
9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴		100 ug/l	daily maximum	grab
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane)	106-93-4	0.05 ug/l	daily maximum	grab
11. Methyl-tert-Butyl Ether (MtBE)	1634-04-4	70.0 ug/l	daily maximum	grab
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75-65-0	Monitor Only (ug/L)	daily maximum	grab
13. tert-Amyl Methyl Ether (TAME)	994-05-08	Monitor Only (ug/L)	daily maximum	grab
14. Naphthalene ⁵	91-20-3	20 ug/l	daily maximum	grab

* Numbering system is provided to allow cross-referencing to Part 3 of the Notice of Intent (Contaminant Information) in Appendix V, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

Category I - Petroleum Related Site Remediation							
Sub-category A - Gasoline Only Sites							
<u>Metal parameters</u>	<u>CAS Number(s)</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) ¹¹</u>		<u>Total Recoverable Metal Limit @ H¹⁰ = 25 mg/l CaCO3 for Discharges in New Hampshire (ug/l) ¹¹</u>		<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
		<u>Freshwater</u>	<u>Saltwater</u>	<u>Freshwater</u>	<u>Saltwater</u>		
45. Lead	7439921	1.3	8.5	0.5	8.5	monthly average	grab
51. Iron	7439896	1,000		1,000		daily maximum	grab

Category I - Petroleum Related Site Remediation					
Sub-category B - Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges)					
<u>Parameter</u>	<u>CAS Number(s)</u>	<u>Effluent Limit</u>		<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
3. Total Petroleum Hydrocarbons (TPH)		5.0 mg/l		daily maximum	grab
5. Benzene (B)	71432	50.0 ug/l for hydrostatic testing only		daily maximum	grab
9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴		100 ug/l		daily maximum	grab
14. Naphthalene ⁵	91-20-3	20 ug/l		daily maximum	grab
29. Acetone	67-64-1-	Monitor Only (ug/L)		daily maximum	grab
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		10.0 ug/l		daily maximum	grab
a. Benzo(a) Anthracene ⁷	56-55-3	0.0038 ug/l		daily maximum	grab
b. Benzo(a) Pyrene ⁷	50-32-8	0.0038 ug/l		daily maximum	grab
c. Benzo(b)Fluoranthene ⁷	205-99-2	0.0038 ug/l		daily maximum	grab
d. Benzo(k)Fluoranthene ⁷	207-08-9	0.0038 ug/l		daily maximum	grab
e. Chrysene ⁷	218-01	0.0038 ug/l		daily maximum	grab
f. Dibenzo(a,h)anthracene ⁷	53-70-3	0.0038 ug/l		daily maximum	grab
g. Indeno(1,2,3-cd) Pyrene ⁷	193-39-5	0.0038 ug/l		daily maximum	grab

Category I - Petroleum Related Site Remediation				
Sub-category B - Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges)				
<u>Parameter</u>	<u>CAS Number(s)</u>	<u>Effluent Limit</u>	<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		100 ug/l	daily maximum	grab
h. Acenaphthene	83-32-9	(limited as total ug/L Group II PAHs)	daily maximum	grab
i. Acenaphthylene	208-96-8	(limited as total ug/L Group II PAHs)	daily maximum	grab
j. Anthracene	120-12-7	(limited as total ug/L Group II PAHs)	daily maximum	grab
k. Benzo(ghi) Perylene	191-24-2	(limited as total ug/L Group II PAHs)	daily maximum	grab
l. Fluoranthene	206-44-0	(limited as total ug/L Group II PAHs)	daily maximum	grab
m. Fluorene	86-73-7	(limited as total ug/L Group II PAHs)	daily maximum	grab
n. Naphthalene ⁵	91-20-3	20 ug/l	daily maximum	grab
o. Phenanthrene	85-01-8	(limited as ug/L total Group II PAHs)	daily maximum	grab
p. Pyrene	129-00-0	(limited as ug/L total Group II PAHs)	daily maximum	grab

Category I - Petroleum Related Site Remediation							
Sub-category B - Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges)							
<u>Metal parameters</u>	<u>CAS Number(s)</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) ¹¹</u>		<u>Total Recoverable Metal Limit @ H¹⁰ = 25 mg/l CaCO3 for Discharges in New Hampshire (ug/l) ¹¹</u>		<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
		<u>Freshwater</u>	<u>Saltwater</u>	<u>Freshwater</u>	<u>Saltwater</u>		
42. Chromium III (trivalent)	16065831	48.8	100	27.7	100	monthly average	grab
43. Chromium VI (hexavalent)	18540299	11.4	50.3	11.4	50.3	monthly average	grab
47. Nickel	7440020	29	8.2	16.1	8.2	monthly average	grab
50. Zinc	7440666	66.6	85.6	37	85.6	monthly average	grab
51. Iron	7439896	1,000		1,000		daily maximum	grab

Category I - Petroleum Related Site Remediation				
Sub-category C - Petroleum Sites with Additional Contamination				
Category II - Non Petroleum Site Remediation				
Sub-category B - VOC Sites with Additional Contamination				
Category III - Contaminated Construction Dewatering				
Sub-category A - General Urban Fill Sites				
Sub-category B - Known Contaminated Sites				
Category IV - Miscellaneous Related Discharges				
Sub-category A - Aquifer Pump Testing to Evaluate Formerly Contaminated Sites				
Sub-category B - Well Development/Rehabilitation at Contaminated/Formally Contaminated Sites				
Sub-category D - Long-Term Remediation of Contaminated Non-residential Sumps and Dikes				
Sub-category E - Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit)				
Parameter	CAS Number(s)	Effluent Limit	Limit type based on monthly sample	Sample Type
1. Total Suspended Solids (TSS)		30 milligrams/liter (mg/l), 50 mg/l for hydrostatic testing	monthly average	grab
2. Total Residual Chlorine (TRC) ¹		Freshwater = 11 ug/l Saltwater = 7.5 ug/l	monthly average	grab
3. Total Petroleum Hydrocarbons (TPH)		5.0 mg/l	daily maximum	grab
4. Cyanide (CN) ^{2,3}	57125	Freshwater = 5.2 ug/l Saltwater = 1.0 ug/l	monthly average	grab
5. Benzene (B)	71432	50.0 ug/l for hydrostatic testing only	daily maximum	grab
6. Toluene (T)	108883	(limited as ug/L total BTEX)	daily maximum	grab
7. Ethylbenzene (E)	100-41-4	(limited as ug/L total BTEX)	daily maximum	grab
8. (m,p,o) Xylenes (X)	108-88-3; 106-42-3; 95-47-6; 1330-20-7	(limited as ug/L total BTEX)	daily maximum	grab
9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴		100 ug/l	daily maximum	grab
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane)	106-93-4	0.05 ug/l	daily maximum	grab
11. Methyl-tert-Butyl Ether (MtBE)	1634-04-4	70.0 ug/l	daily maximum	grab

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Sub-category E - Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit)				
Parameter	CAS Number(s)	Effluent Limit	Limit type based on monthly sample	Sample Type
12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	75-65-0	Monitor Only (ug/L)	daily maximum	grab
13. tert-Amyl Methyl Ether (TAME)	994-05-08	Monitor Only (ug/L)	daily maximum	grab
14. Naphthalene ⁵	91-20-3	20 ug/l	daily maximum	grab
15. Carbon Tetrachloride	56-23-5	4.4 ug/l	daily maximum	grab
16. 1,2 Dichlorobenzene (o-DCB)	95-50-1	600 ug/l	daily maximum	grab
17. 1,3 Dichlorobenzene (m-DCB)	541-73-1	320 ug/l	daily maximum	grab
18. 1,4 Dichlorobenzene (p-DCB)	106-46-7	5.0 ug/l	daily maximum	grab
18a. Total dichlorobenzene		763 ug/l - NH only	daily maximum	grab
19. 1,1 Dichloroethane (DCA)	75-34-3	70 ug/l	daily maximum	grab
20. 1,2 Dichloroethane (DCA)	107-06-2	5.0 ug/l	daily maximum	grab
21. 1,1 Dichloroethene (DCE)	75-35-4	3.2 ug/l	daily maximum	grab
22. cis-1,2 Dichloroethene (DCE)	156-59-2	70 ug/l	daily maximum	grab
23. Methylene Chloride	75-09-2	4.6 ug/l	daily maximum	grab
24. Tetrachloroethene (PCE)	127-18-4	5.0 ug/l	daily maximum	grab
25. 1,1,1 Trichloro-ethane (TCA)	71-55-6	200 ug/l	daily maximum	grab
26. 1,1,2 Trichloro-ethane (TCA)	79-00-5	5.0 ug/l	daily maximum	grab
27. Trichloroethene (TCE)	79-01-6	5.0 ug/l	daily maximum	grab

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Sub-category E - Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit)				
Parameter	CAS Number(s)	Effluent Limit	Limit type based on monthly sample	Sample Type
28. Vinyl Chloride (Chloroethene)	75-01-4	2.0 ug/l	daily maximum	grab
29. Acetone	67-64-1-	Monitor Only (ug/L)	daily maximum	grab
30. 1,4 Dioxane	123-91-1	Monitor Only (ug/L)	daily maximum	grab
31. Total Phenols	108-95-2	300 ug/l	daily maximum	grab
32. Pentachlorophenol (PCP)	87-86-5	1.0 ug/l	daily maximum	grab
33. Total Phthalates (Phthalate esters) ⁶		3.0 ug/L	monthly average	grab
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117-81-7	6.0 ug/l	daily maximum	grab
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		10.0 ug/l	daily maximum	grab
a. Benzo(a) Anthracene ⁷	56-55-3	0.0038 ug/l	daily maximum	grab
b. Benzo(a) Pyrene ⁷	50-32-8	0.0038 ug/l	daily maximum	grab
c. Benzo(b)Fluoranthene ⁷	205-99-2	0.0038 ug/l	daily maximum	grab
d. Benzo(k)Fluoranthene ⁷	207-08-9	0.0038 ug/l	daily maximum	grab
e. Chrysene ⁷	218-01	0.0038 ug/l	daily maximum	grab
f. Dibenzo(a,h)anthracene ⁷	53-70-3	0.0038 ug/l	daily maximum	grab
g. Indeno(1,2,3-cd) Pyrene ⁷	193-39-5	0.0038 ug/l	daily maximum	grab

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Parameter	CAS Number(s)	Effluent Limit	Limit type based on monthly sample	Sample Type
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		100 ug/l	daily maximum	grab
h. Acenaphthene	83-32-9	(limited as total ug/L Group II PAHs)	daily maximum	grab
i. Acenaphthylene	208-96-8	(limited as total ug/L Group II PAHs)	daily maximum	grab
j. Anthracene	120-12-7	(limited as total ug/L Group II PAHs)	daily maximum	grab
k. Benzo(ghi) Perylene	191-24-2	(limited as total ug/L Group II PAHs)	daily maximum	grab
l. Fluoranthene	206-44-0	(limited as total ug/L Group II PAHs)	daily maximum	grab
m. Fluorene	86-73-7	(limited as total ug/L Group II PAHs)	daily maximum	grab
n. Naphthalene ⁵	91-20-3	20 ug/l	daily maximum	grab
o. Phenanthrene	85-01-8	(limited as ug/L total Group II PAHs)	daily maximum	grab
p. Pyrene	129-00-0	(limited as ug/L total Group II PAHs)	daily maximum	grab
37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	85-68-7; 84-74-2; 117-84-0; 84-66-2; 131-11-3; 117-81-7.	0.000064 ug/L	daily maximum	grab
38. Chloride	16887006	Monitor only	daily maximum	grab

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Sub-category E - Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit)							
<u>Metal parameters</u>	<u>CAS Number(s)</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l)¹¹</u>		<u>Total Recoverable Metal Limit @ H¹⁰ = 25 mg/l CaCO₃ for Discharges in New Hampshire (ug/l)¹¹</u>		<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
		<u>Freshwater</u>	<u>Saltwater</u>	<u>Freshwater</u>	<u>Saltwater</u>		
39. Antimony	7440360	5.6		5.6		daily maximum	grab
40. Arsenic	7440382	10	36	10	36	monthly average	grab
41. Cadmium	7440439	0.2	8.9	0.8	9.3	monthly average	grab
42. Chromium III (trivalent)	16065831	48.8	100	27.7	100	monthly average	grab
43. Chromium VI (hexavalent)	18540299	11.4	50.3	11.4	50.3	monthly average	grab
44. Copper	7440508	5.2	3.7	2.9	3.7	monthly average	grab
45. Lead	7439921	1.3	8.5	0.5	8.5	monthly average	grab
46. Mercury	7439976	0.9	1.1	0.9	1.1	monthly average	grab
47. Nickel	7440020	29	8.2	16.1	8.2	monthly average	grab
48. Selenium	7782492	5	71	5	71	monthly average	grab
49. Silver	7440224	1.2	2.2	0.4	2.2	daily maximum	grab
50. Zinc	7440666	66.6	85.6	37	85.6	monthly average	grab
51. Iron	7439896	1,000		1,000		daily maximum	grab

Category II - Non Petroleum Site Remediation				
Sub-category A - Volatile Organic Compound (VOC) Only Sites				
Parameter	CAS Number(s)	Effluent Limit	Limit type based on monthly sample	Sample Type
3. Total Petroleum Hydrocarbons (TPH)		5.0 mg/l	daily maximum	grab
9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴		100 ug/l	daily maximum	grab
15. Carbon Tetrachloride	56-23-5	4.4 ug/l	daily maximum	grab
16. 1,2 Dichlorobenzene (o-DCB)	95-50-1	600 ug/l	daily maximum	grab
17. 1,3 Dichlorobenzene (m-DCB)	541-73-1	320 ug/l	daily maximum	grab
18. 1,4 Dichlorobenzene (p-DCB)	106-46-7	5.0 ug/l	daily maximum	grab
18a. Total dichlorobenzene		763 ug/l - NH only	daily maximum	grab
19. 1,1 Dichloroethane (DCA)	75-34-3	70 ug/l	daily maximum	grab
20. 1,2 Dichloroethane (DCA)	107-06-2	5.0 ug/l	daily maximum	grab
21. 1,1 Dichloroethene (DCE)	75-35-4	3.2 ug/	daily maximum	grab
22. cis-1,2 Dichloroethene (DCE)	156-59-2	70 ug/l	daily maximum	grab
23. Methylene Chloride	75-09-2	4.6 ug/l	daily maximum	grab
24. Tetrachloroethene (PCE)	127-18-4	5.0 ug/l	daily maximum	grab
25. 1,1,1 Trichloro-ethane (TCA)	71-55-6	200 ug/l	daily maximum	grab
26. 1,1,2 Trichloro-ethane (TCA)	79-00-5	5.0 ug/l	daily maximum	grab
27. Trichloroethene (TCE)	79-01-6	5.0 ug/l	daily maximum	grab
28. Vinyl Chloride (Chloroethene)	75-01-4	2.0 ug/l	daily maximum	grab
29. Acetone	67-64-1-	Monitor Only (ug/L)	daily maximum	grab
30. 1,4 Dioxane	123-91-1	Monitor Only (ug/L)	daily maximum	grab
31. Total Phenols	108-95-2	300 ug/l	daily maximum	grab
32. Pentachlorophenol (PCP)	87-86-5	1.0 ug/l	daily maximum	grab
33. Total Phthalates (Phthalate esthers) ⁶		3.0 ug/L	monthly average	grab
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	117-81-7	6.0 ug/l	daily maximum	grab

Category II - Non Petroleum Site Remediation				
Sub-category A - Volatile Organic Compound (VOC) Only Sites				
<u>Parameter</u>	<u>CAS Number(s)</u>	<u>Effluent Limit</u>	<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	85-68-7; 84-74-2; 117-84-0; 84-66-2; 131-11-3; 117-81-7.	0.000064 ug/L	daily maximum	grab

Category II - Non Petroleum Site Remediation							
Sub-category A - Volatile Organic Compound (VOC) Only Sites							
<u>Metal parameters</u>	<u>CAS Number(s)</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l)¹¹</u>		<u>Total Recoverable Metal Limit @ H¹⁰ = 25 mg/l CaCO3 for Discharges in New Hampshire (ug/l)¹¹</u>		<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
		<u>Freshwater</u>	<u>Saltwater</u>	<u>Freshwater</u>	<u>Saltwater</u>		
51. Iron	7439896	1,000		1,000		daily maximum	grab

Category II - Non Petroleum Site Remediation				
Sub-category C - Primarily Heavy Metal Sites				
<u>Parameter</u>	<u>CAS Number(s)</u>	<u>Effluent Limit</u>	<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
1. Total Suspended Solids (TSS)		30 milligrams/liter (mg/l), 50 mg/l for hydrostatic testing	monthly average	grab
4. Cyanide (CN) ^{2,3}	57125	Freshwater = 5.2 ug/l Saltwater = 1.0 ug/l	monthly average	grab
15. Carbon Tetrachloride	56-23-5	4.4 ug/l	daily maximum	grab
16. 1,2 Dichlorobenzene (o-DCB)	95-50-1	600 ug/l	daily maximum	grab
17. 1,3 Dichlorobenzene (m-DCB)	541-73-1	320 ug/l	daily maximum	grab

Category II - Non Petroleum Site Remediation				
Sub-category C - Primarily Heavy Metal Sites				
<u>Parameter</u>	<u>CAS Number(s)</u>	<u>Effluent Limit</u>	<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
18. 1,4 Dichlorobenzene (p-DCB)	106-46-7	5.0 ug/l	daily maximum	grab
18a. Total dichlorobenzene	n/a	763 ug/l - NH only	daily maximum	grab
19. 1,1 Dichloroethane (DCA)	75-34-3	70 ug/l	daily maximum	grab
20. 1,2 Dichloroethane (DCA)	107-06-2	5.0 ug/l	daily maximum	grab
21. 1,1 Dichloroethene (DCE)	75-35-4	3.2 ug/l	daily maximum	grab
22. cis-1,2 Dichloroethene (DCE)	156-59-2	70 ug/l	daily maximum	grab
23. Methylene Chloride	75-09-2	4.6 ug/l	daily maximum	grab
24. Tetrachloroethene (PCE)	127-18-4	5.0 ug/l	daily maximum	grab
25. 1,1,1 Trichloro-ethane (TCA)	71-55-6	200 ug/l	daily maximum	grab
26. 1,1,2 Trichloro-ethane (TCA)	79-00-5	5.0 ug/l	daily maximum	grab
27. Trichloroethene (TCE)	79-01-6	5.0 ug/l	daily maximum	grab
28. Vinyl Chloride (Chloroethene)	75-01-4	2.0 ug/l	daily maximum	grab

Category II - Non Petroleum Site Remediation							
Sub-category C - Primarily Heavy Metal Sites							
<u>Metal parameters</u>	<u>CAS Number(s)</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l)¹¹</u>		<u>Total Recoverable Metal Limit @ H¹⁰ = 25 mg/l CaCO₃ for Discharges in New Hampshire (ug/l)¹¹</u>		<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
		<u>Freshwater</u>	<u>Saltwater</u>	<u>Freshwater</u>	<u>Saltwater</u>		
39. Antimony	7440360	5.6		5.6		daily maximum	grab
40. Arsenic	7440382	10	36	10	36	monthly average	grab
41. Cadmium	7440439	0.2	8.9	0.8	9.3	monthly average	grab
42. Chromium III (trivalent)	16065831	48.8	100	27.7	100	monthly average	grab
43. Chromium VI (hexavalent)	18540299	11.4	50.3	11.4	50.3	monthly average	grab
44. Copper	7440508	5.2	3.7	2.9	3.7	monthly average	grab
45. Lead	7439921	1.3	8.5	0.5	8.5	monthly average	grab
46. Mercury	7439976	0.9	1.1	0.9	1.1	monthly average	grab
47. Nickel	7440020	29	8.2	16.1	8.2	monthly average	grab
48. Selenium	7782492	5	71	5	71	monthly average	grab
49. Silver	7440224	1.2	2.2	0.4	2.2	daily maximum	grab
50. Zinc	7440666	66.6	85.6	37	85.6	monthly average	grab
51. Iron	7439896	1,000		1,000		daily maximum	grab

Category IV - Miscellaneous Related Discharges					
Sub-category C - Hydrostatic Testing of Pipelines and Tanks					
<u>Parameter</u>	<u>CAS Number(s)</u>	<u>Effluent Limit</u>		<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
1. Total Suspended Solids (TSS)		30 milligrams/liter (mg/l), 50 mg/l for hydrostatic testing		monthly average	grab
2. Total Residual Chlorine (TRC) ¹		Freshwater = 11 ug/l Saltwater = 7.5 ug/l		monthly average	grab
3. Total Petroleum Hydrocarbons (TPH)		5.0 mg/l		daily maximum	grab

Category IV - Miscellaneous Related Discharges				
Sub-category C - Hydrostatic Testing of Pipelines and Tanks				
Parameter	CAS Number(s)	Effluent Limit	Limit type based on monthly sample	Sample Type
4. Cyanide (CN) ^{2,3}	57125	Freshwater = 5.2 ug/l Saltwater = 1.0 ug/l	monthly average	grab
5. Benzene (B)	71432	50.0 ug/l for hydrostatic testing only	daily maximum	grab
9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴		100 ug/l	daily maximum	grab
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane)	106-93-4	0.05 ug/l	daily maximum	grab
11. Methyl-tert-Butyl Ether (MtBE)	1634-04-4	70.0 ug/l	daily maximum	grab
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75-65-0	Monitor Only (ug/L)	daily maximum	grab
13. tert-Amyl Methyl Ether (TAME)	994-05-08	Monitor Only (ug/L)	daily maximum	grab
14. Naphthalene ⁵	91-20-3	20 ug/l	daily maximum	grab
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)		10.0 ug/l	daily maximum	grab
a. Benzo(a) Anthracene ⁷	56-55-3	0.0038 ug/l	daily maximum	grab
b. Benzo(a) Pyrene ⁷	50-32-8	0.0038 ug/l	daily maximum	grab
c. Benzo(b)Fluoranthene ⁷	205-99-2	0.0038 ug/l	daily maximum	grab
d. Benzo(k)Fluoranthene ⁷	207-08-9	0.0038 ug/l	daily maximum	grab
e. Chrysene ⁷	218-01	0.0038 ug/l	daily maximum	grab
f. Dibenzo(a,h)anthracene ⁷	53-70-3	0.0038 ug/l	daily maximum	grab
g. Indeno(1,2,3-cd) Pyrene ⁷	193-39-5	0.0038 ug/l	daily maximum	grab
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)		100 ug/l	daily maximum	grab
h. Acenaphthene	83-32-9	(limited as total ug/L Group II PAHs)	daily maximum	grab
i. Acenaphthylene	208-96-8	(limited as total ug/L Group II PAHs)	daily maximum	grab
j. Anthracene	120-12-7	(limited as total ug/L Group II PAHs)	daily maximum	grab
k. Benzo(ghi) Perylene	191-24-2	(limited as total ug/L Group II PAHs)	daily maximum	grab
l. Fluoranthene	206-44-0	(limited as total ug/L Group II PAHs)	daily maximum	grab
m. Fluorene	86-73-7	(limited as total ug/L Group II PAHs)	daily maximum	grab

Category IV - Miscellaneous Related Discharges				
Sub-category C - Hydrostatic Testing of Pipelines and Tanks				
<u>Parameter</u>	<u>CAS Number(s)</u>	<u>Effluent Limit</u>	<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
n. Naphthalene ⁵	91-20-3	20 ug/l	daily maximum	grab
o. Phenanthrene	85-01-8	(limited as ug/L total Group II PAHs)	daily maximum	grab
p. Pyrene	129-00-0	(limited as ug/L total Group II PAHs)	daily maximum	grab

Category IV - Miscellaneous Related Discharges							
Sub-category C - Hydrostatic Testing of Pipelines and Tanks							
<u>Metal parameters</u>	<u>CAS Number(s)</u>	<u>Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO3 for discharges in Mass. (ug/l) ¹¹⁻¹²</u>		<u>Total Recoverable Metal Limit @ H¹⁰ = 25 mg/l CaCO3 for Discharges in New Hampshire (ug/l) ¹¹⁻¹²</u>		<u>Limit type based on monthly sample</u>	<u>Sample Type</u>
		<u>Freshwater</u>	<u>Saltwater</u>	<u>Freshwater</u>	<u>Saltwater</u>		
42. Chromium III (trivalent)	16065831	48.8	100	27.7	100	monthly average	grab
43. Chromium VI (hexavalent)	18540299	11.4	50.3	11.4	50.3	monthly average	grab
45. Lead	7439921	1.3	8.5	0.5	8.5	monthly average	grab
47. Nickel	7440020	29	8.2	16.1	8.2	monthly average	grab
50. Zinc	7440666	66.6	85.6	37	85.6	monthly average	grab
51. Iron	7439896	1,000		1,000		daily maximum	grab

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., 20 ug/l).

² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms (ug/L) of free cyanide 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).