Appendix III - Effluent Limitations

Parameter	Effluent Limit	Limit type based on monthly sample	Sample Type
1. Total Suspended Solids (TSS)	30 miligrams/liter (mg/l) 50 mg/l for hydrostatic testing only	monthly average	grab
2. Total Residual Chlorine (TRC)	FW[1] = 11 ug/l[2] SW[3] = 7.5 ug/l[2]	monthly average	grab
3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/l	daily maximum	grab
4. Cyanide (CN)[4]	SW = 1.0 ug/l[5] FW = 5.2 ug/l[5]	monthly average	grab
5. Benzene (B)	5.0 ug/l 50.0 ug/l - hydrostatic testing only	daily maximum	grab
6. Toluene (T)	(limited as ug/L total BTEX)	daily maximum	grab
7. Ethylbenzene (E) - 100414 -	(limited as ug/L total BTEX)	daily maximum	grab
8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX)	daily maximum	grab
9. Total BTEX[6]	100 ug/l	daily maximum	grab
10. Ethylene Dibromide (EDB) (1,2- Dibromo-methane)	0.05 ug/l	daily maximum	grab
11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l	daily maximum	grab
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	Monitor Only (ug/L)	daily maximum	grab
13. tert-Amyl Methyl Ether (TAME)	Monitor Only (ug/L)	daily maximum	grab
14. Naphthalene	20 ug/l[7]	daily maximum	grab
15. Carbon Tetrachloride	4.4 ug/l	daily maximum	grab
16. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/l	daily maximum	grab
17. 1,2 Dichlorobenzene (o-DCB)	600 ug/l	daily maximum	grab
18. 1,3 Dichlorobenzene (m-DCB)	320 ug/l	daily maximum	grab
19. Total dichlorobenzene	763 ug/l in NH only	daily maximum	grab
20. 1,1 Dichloroethane (DCA)	70 ug/l	daily maximum	grab
21. 1,2 Dichloroethane (DCA)	5.0 ug/l	daily maximum	grab
22. 1,1 Dichloroethylene (DCE)	3.2 ug/	daily maximum	grab

23. cis-1,2 Dichloro-ethylene (DCE)	**70 ug/l**	**daily maximum**	**grab**
24. Dichloromethane (Methylene Chloride)	**4.6 ug/l**	**daily maximum**	**grab**
25. Tetrachloroethylene (PCE)	**5.0 ug/l**	**daily maximum**	**grab**
26. 1,1,1 Trichloro-ethane (TCA)	**200 ug/l**	**daily maximum**	**grab**
27. 1,1,2 Trichloro-ethane (TCA)	**5.0 ug/l**	**daily maximum**	**grab**
28. Trichloroethylene (TCE)	**5.0 ug/l**	**daily maximum**	**grab**
29. Vinyl Chloride (Chloroethene)	**2.0 ug/l**	**daily maximum**	**grab**
30. Acetone	**Monitor Only (ug/L)**	**daily maximum**	**grab**
31. 1,4 Dioxane	**Monitor Only (ug/L)**	**daily maximum**	**grab**
32. Total Phenols	**300 ug/l**	**daily maximum**	**grab**
33. Pentachlorophenol (PCP)	**1.0 ug/l**	**daily maximum**	**grab**
34. Total Phthalates [8] (Phthalate esthers)	**3.0 ug/L**	**monthly average**	**grab**
35. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]	**6.0 ug/l**	**daily maximum**	**grab**
36. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	**10.0 ug/l**	**daily maximum**	**grab**
a. Benzo(a) Anthracene	**0.0038 ug/l [9]**	**daily maximum**	**grab**
b. Benzo(a) Pyrene	**0.0038 ug/l[9]**	**daily maximum**	**grab**
c. Benzo(b)Fluoranthene	**0.0038 ug/l[9]**	**daily maximum**	**grab**
d. Benzo(k)Fluoranthene	**0.0038 ug/l[9]**	**daily maximum**	**grab**
e. Chrysene	**0.0038 ug/l[9]**	**daily maximum**	**grab**
f. Dibenzo(a,h)anthracene	**0.0038 ug/l[9]**	**daily maximum**	**grab**
g. Indeno(1,2,3-cd) Pyrene	**0.0038 ug/l[9]**	**daily maximum**	**grab**
37. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	**100 ug/l**	**daily maximum**	**grab**
h. Acenaphthene	**(limited as total ug/L Group II PAHs)**	**daily maximum**	**grab**
i. Acenaphthylene	**(limited as ug/L total Group II PAHs)**	**daily maximum**	**grab**
j. Anthracene	**(limited as ug/L total Group II PAHs)**	**daily maximum**	**grab**
k. Benzo(ghi) Perylene	**(limited as ug/L total Group II PAHs)**	**daily maximum**	**grab**

l. Fluoranthene	**(limited as ug/L total Group II PAHs)**	**daily maximum**	**grab**
m. Fluorene	**(limited as ug/L total Group II PAHs)**	**daily maximum**	**grab**
n. Naphthalene	**20 ug/l**	**daily maximum**	**grab**
o. Phenanthrene	**(limited as ug/L total Group II PAHs)**	**daily maximum**	**grab**
p. Pyrene	**(limited as ug/L total Group II PAHs)**	**daily maximum**	**grab**
38. Total Polychlorinated Biphenyls (PCBs)[10]	**0.000064 ug/L[11]**	**daily maximum**	**grab**

Metal parameters	**Total Recoverable Metal Limit @ H = 50 mg/l CaCO3[12] for discharges in Massachusetts (ug/l)**	**Total Recoverable Metal Limit @ H = 25 mg/l CaCO3[13] for Discharges in New Hampshire (ug/l)**	**Averaging Time**	**Sample Type**
39. Antimony	**5.6**	**5.6**	**daily maximum**	**grab**
40. Arsenic	**FW = 10** **SW = 36**	**FW = 10** **SW = 36**	**monthly average**	**grab**
41. Cadmium	**FW = 0.2** **SW = 8.9**	**FW = 0.8** **SW = 9.3**	**monthly average**	**grab**
42. Chromium III (trivalent)	**FW = 48.8** **SW = 100**	**FW = 27.7** **SW = 100**	**monthly average**	**grab**
43. Chromium VI (hexavalent)	**FW = 11.4** **SW = 50.3**	**FW = 11.4** **SW = 50.3**	**monthly average**	**grab**
44. Copper	**FW = 5.2** **SW = 3.7**	**FW = 2.9** **SW = 3.7**	**monthly average**	**grab**
45. Lead	**FW = 1.3** **SW = 8.5**	**FW = 0.5** **SW = 8.5**	**monthly average**	**grab**
46. Mercury	**FW = 0.9** **SW = 1.1**	**FW = 0.9** **SW = 1.1**	**monthly average**	**grab**
47. Nickel	**FW = 29.0** **SW = 8.2**	**FW = 16.1** **SW = 8.2**	**monthly average**	**grab**
48. Selenium	**FW = 5.0** **SW = 71**	**FW = 5.0** **SW = 71**	**monthly average**	**grab**
49. Silver	**FW = 1.2** **SW = 2.2**	**FW = 0.4** **SW = 2.2**	**daily maximum**	**grab**
50. Zinc	**FW = 66.6** **SW = 85.6**	**FW = 37** **SW = 85.6**	**monthly average**	**grab**
51. Iron	**1,000**	**1,000**	**daily maximum**	**grab**

1. FW = fresh water.

2. Although the maximum values for TRC are 11 ug/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).

3. SW = salt water.

4. Limits for cyanide are based on EPA's water quality criteria expressed as micrograms (ug) of free cyanide per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

5. 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).

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

7. 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.

8. The sum of individual phthalate compounds.

9. 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.

10. 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 Aroclor analyses."*

11. 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).

12. Assumes FW Hardness Value (H) = 50 mg/l as $CaCO_3$ in MA: Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc which are Hardness Dependent.

13. Assumes FW Hardness Value (H) = 25 mg/L in NH for: Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc which are Hardness Dependent.