

Appendix D. Typical Stormwater Pollutant EMCs

Typical Pollutant EMCs Found in Stormwater Runoff by Source Area*			
Source Area Unit	TSS mg/L	TP mg/L	TN mg/L ³
RESIDENTIAL (general) ⁴	100	0.40	2.2
Med. Density Residential ⁵	85	0.52	5.15
Residential roof	19 ¹	0.11 ²	1.5
Residential street	172 ¹	0.55 ²	1.4
Driveway	173 ¹	0.56 ²	2.1
COMMERCIAL (general) ⁵	77	0.33	2.97
Commercial roof	9 ¹	0.14 ²	2.1
Commercial street	468 ¹		
Commercial/ Residential parking	27 ¹	0.15 ²	1.9
INDUSTRIAL (general) ⁵	149	0.32	3.97
Industrial roof	17 ¹		
Industrial parking	228 ¹		
Heavy industrial	124 ¹		
HIGHWAY (general) ⁵	141	0.43	2.65
Urban highway	142 ¹	0.32 ²	3
Rural highway	51 ¹		22
Lawns	80 ¹	2.1 ²	9.1
Landscaping	37 ¹		
Urban open ⁵	51	0.11	1.74
Rural open/forest ⁵	51	0.11	1.78
Ag/pasture ⁵	145	0.37	5.98
Water/wetland ⁵	6	0.08	1.38

Sources: 1: Claytor and Schueler (1996)
2: Average of Steuer et al. (1997), Bannerman (1993) and Waschbusch (2000)
3: Steuer et al. (1997)
4: Caraco (2001), default values averaged from several individual assessments
5: Camp, Dresser, and McKee, *Merrimack River Watershed Assessment Study, Draft Screening Level Model*, January 2004.

*To address the concerns associated with the application of chlorides and other deicing materials, NHDES requests the development of a Road Salt and Deicing Minimization Plan when a development will create one acre or more of pavement, including parking lots and roadways. The plan should address the policies that the development will keep in place to minimize salt and other deicer use after the project has been completed. The plan should include tracking the use of salt and other deicers for each storm event and compiling salt use data annually.

New Hampshire does not yet have salt reduction guidance, but recommends following the guidelines available in the Minnesota Snow and Ice Control handbook, available at: <http://www.mnltap.umn.edu/pdf/snowicecontrolhandbook.pdf>. Deicing application rate guidelines and a form for tracking salt and other deicer usage are included in Appendix C.