

Table 1-2
Estimates of Groundwater Movement
Consolidated Iron and Metal Superfund Site
Newburgh, New York

Range of Hydraulic Gradients	GW Velocity = Ki/n	feet/ day	feet/ year	Distance (ft) traveled 1914-2006	Contaminant Travel Distance from 1914-2006 (feet)											
					Using Rf from Site-Specific Calculation		Using Rf from Literature Kd Calculation									
					Ar-1254	BaP	Ar-1254	BaP	Arsenic	Cadmium	Copper	Iron	Lead	Mercury	Vanadium	Zinc
Lower End of Hydraulic Gradient	18.9 x 0.0066	0.42	151.77	13,963	0.25	0.08	0.03	0.28	85.54	35.48	0.27	105.91	2.96	2.67	2.67	42.90
	0.3															
Upper End of Hydraulic Gradient	18.9 x 0.0107	0.67	246.05	22,636	0.40	0.13	0.04	0.45	138.67	57.53	0.43	171.70	4.80	4.32	4.32	69.55
	0.3															

Notes:

K = average hydraulic conductivity: 18.9 ft/d

i = hydraulic gradient: lower end of range = 0.0036; upper end of range = 0.107

η = effective porosity: assumed to be 30 %

BaP = benzo(a)pyrene

Ar = Aroclor