



State of Oregon Department of Environmental Quality

Portland Harbor Stormwater Strategy Update

Appendix A: Concentration Data Richness by Focus Area

International Slip												
ECSI #	Site Name	Zinc		PAHs		PCBs		BEHP		TSS		
		Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	
2371	Jefferson Smurfit	38	19.39	NA	NA	8	4.47	NA	NA	17	9.77	
138	Northwest Pipe	16	8.16	NA	NA	8	4.47	NA	NA	16	9.2	
2437	RoMar	*	NA	*	NA	*	NA	*	NA	*	NA	
2362	Located within Schnitzer-Burgard Industrial Park	Boydston Metal Works	**	NA	**	NA	**	NA	**	NA	**	NA
2441		Lampros Steel	15	7.65	15	15.46	8	4.47	15	18.07	15	8.62
2355		Schnitzer Steel	51	26.02	26	26.8	45	25.14	11	13.25	52	29.89
2375		Portland Container Repair Corp	19	9.69	**	NA	4	2.23	**	NA	18	10.34
5324		Schnitzer-Burgard Industrial Park – General Data	52	26.53	51	52.58	101	56.42	52	62.65	51	29.31
2425	City of Portland OF 52D (Captures: Romar, Portland Container Repair and Boydston Metal)	5	2.55	5	5.15	5	2.79	5	6.02	5	2.87	
Total		196		97				83		174		

Notes: * Drains to Columbia Slough, one storage area drains to CoP OF 52D; ** Drains to SBIP Basin 21/CoP OF 52D

Year	Avg Zinc ug/L	Data Points
< 2010	1149.3	4
2010	867.7	7
2011	763	1
2012	759.4	26
2013	317.7	41
2014	500.9	38
2015	591.4	22
2016	267.8	48
2017	98.8	9

Year	Avg PAHs mg/L	Data Points
<2010	14.35	3
2010	8.94	8
2011	9.48	2
2012	1.39	12
2013	1.5	13
2014	2.31	16
2015	27.35	7
2016	1.78	34
2017	0.51	2

Year	Avg PCBs ug/L	Data Points
<2010	5.13	4
2010	2.03	13
2011	1.21	3
2012	0.71	24
2013	0.4	32
2014	0.27	33
2015	1.2	7
2016	0.16	60
2017	0.33	3

Year	Avg BEHP ug/L	Data Points
<2010	NA	0
2010	10	7
2011	4.8	1
2012	4.9	12
2013	9.8	14
2014	10.3	14
2015	2.6	3
2016	2.6	31
2017	0.8	1

Year	Avg TSS ug/L	Data Points
<2010	264200	5
2010	86871.4	7
2011	83300	1
2012	133960	25
2013	88912.5	40
2014	134180.6	36
2015	79614.3	14
2016	198941.5	41
2017	20000	5

River Mile 11E

ECSI #	Site Name	Zinc		PAHs		PCBs		BEHP		TSS	
		Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total
5449	Glacier NW	24	10.43			29	18.24	25	31.25	37	22.02
5561	Cargill/CLD	101	43.91			34	21.38	12	15	61	36.31
5117	PacifiCorps Albina	*	NA	*	NA	*	NA	*	NA	*	NA
2425	City of Portland- 44,45	8	3.48			8	5.03	8	10	8	4.76
178	UPRR Albina	79	34.35			67	42.14	19	23.75	44	26.19
	ODOT (WR-306A)	18	7.83			21	13.21	16	20	18	10.71
3036	Tucker Building	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1302	Master Chemical	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3215	Valvoline Inc.	*	NA	*	NA	*	NA	*	NA	*	NA
2761	WR Grace/Vermiculite	*	NA	*	NA	*	NA	*	NA	*	NA
	Total	230				159		80		168	

Notes: * Captured in CoP OF 44 or 45

Year	Avg Zinc ug/L	Data Points
<2010	224.51	39
2010	87.18	4
2011	72.55	6
2012	359.65	31
2013	422.87	37
2014	380.92	50
2015	234.53	20
2016	265.36	37
2017	119.28	6

Year	Avg PAHs ug/L	Data Points
<2010	0.80	36
2010	0.66	4
2011	0.99	6
2012	3.11	15
2013	1.39	10
2014	1.11	6
2015	2.06	13
2016	1.34	31
2017	3.67	5

Year	Avg PCBs ug/L	Data Points
<2010	0.88	43
2010	0.00	4
2011	0.02	6
2012	0.15	24
2013	0.13	23
2014	0.28	18
2015	0.19	7
2016	0.15	29
2017	0.24	5

Year	Avg BEHP ug/L	Data Points
<2010	7.1	19
2010	9.8	4
2011	NA	NA
2012	3.1	4
2013	9.8	4
2014	6.8	4
2015	NA	NA
2016	3.1	24
2017	3.3	2

Year	Avg TSS ug/L	Data Points
<2010	51000	4
2010	20900	4
2011	28417	6
2012	94300	29
2013	209692	39
2014	112821	28
2015	18477	13
2016	58208	37
2017	26625	8

Swan Island Lagoon

ECSI #	Site Name	Zinc		PAHs		PCBs		BEHP		TSS	
		Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total
2425	City of Portland (Ofs M-1, M-2, M-3, M-4, M-5)	4	0.87	4	3.67	NA	NA	4	6.9	4	1.25
271	Portland Shipyard OUI/Vigor	146	31.74	21	19.27	46	23.35	4	6.9	74	23.2
5685	EWH, LLC (Service steel)	87	18.91	30	27.52	45	22.84	6	10.34	86	26.96
1430	Estey(Automatic Vending)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
115	Freightliner Parts Manufacturing Plant	103	22.39	13	11.93	41	20.81	16	27.59	42	13.17
2366	Freightliner - Truck Manufacturing Plant	65	14.13	29	26.61	14	7.11	25	43.1	55	17.24
260	Office Depot Island Holdings	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1840	GI Trucking	12	2.61	NA	NA	12	6.09	NA	NA	28	8.78
4461	Lynden Farms (ATC Leasing)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3807	Roadway Express	4	0.87	NA	NA	4	2.03	NA	NA	4	1.25
2365	Fred Devine	4	0.87	3	2.75	8	4.06	3	5.17	NA	NA
5109	US Navy Reserve	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1338	USCG - Portland Station	35	7.61	9	8.26	27	13.71	NA	NA	26	8.15
Total		460		109		197		58		319	

Year	Avg Zinc ug/L	Data Points
<2010	257.29	28
2010	NA	0
2011	245	2
2012	267.82	57
2013	466.42	77
2014	300.14	115
2015	386.9	80
2016	287.83	58
2017	293.54	43

Year	Avg PAHs ug/L	Data Points
<2010	0.85	31
2010	NA	NA
2011	0.23	2
2012	NA	NA
2013	NA	NA
2014	0.54	44
2015	0.80	13
2016	0.66	12
2017	0.81	7

Year	Avg PCBs ug/L	Data Points
<2010	0.16	31
2012	0.22	21
2013	0.14	36
2014	0.05	71
2015	0.06	23
2016	0.10	7
2017	0.10	6

Year	Avg BEHP ug/L	Data Points
<2010	5.51	18
2010	NA	0
2011	1.26	2
2012	NA	0
2013	21	2
2014	2.59	25
2015	1.32	4
2016	1.01	5
2017	1.93	2

Year	Avg TSS ug/L	Data Points
<2010	14833.33	12
2010	NA	NA
2011	7000	1
2012	22284.31	51
2013	46527.03	74
2014	28416.7	96
2015	32713.51	37
2016	14541.67	24
2017	26541.67	24

River Mile 6-8W

ECSI #	Site Name	Zinc		PAHs		PCBs		BEHP		TSS	
		Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total
183	Siltronic Corporation	69	13.56	10	5.35	5	3.23	NA	NA	34	8.61
398	Arkema	19	3.73	17	9.09	4	2.58	5	4.1	32	8.1
2425	City of Portland (Ofs 22, 22C, 22B)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
117	GS Roofing	94	18.47	22	11.76	NA	NA	19	15.57	43	10.89
155	Rhone Poulenc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
49	Gould	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
395	Schnitzer Investment - Doane Lake/Air Liquide	34	6.68	21	11.23	10	6.45	NA	NA	17	4.3
1398	Metro Central Transfer Station	55	10.81	35	18.72	13	8.39	17	13.93	56	14.18
160	Kinder Morgan/Shell	22	4.32	4	2.14	4	2.58	32	26.23	22	5.57
25	Chevron - Willbridge Distribution Terminal	36	7.07	8	4.28	23	14.84	4	3.28	36	9.11
177	Conoco Phillips/Unocal	60	11.79	18	9.63	30	19.35	NA	NA	60	15.19
	McCall Marine Terminal	20	3.93	6	3.21	NA	NA	NA	NA	20	5.06
134	McCall Oil	25	4.91	27	14.44	14	9.03	15	12.3	8	2.03
	ODOT (CoP OF-22A, CoP OF-22C, WR-205, WR-206)	4	0.79	4	2.14	NA	NA	4	3.28	3	0.76
84	Gasco	20	3.93	11	5.88	16	10.32	4	3.28	22	5.57
1641	USACE- Portland Moorings	29	5.7	4	2.14	18	11.61	2	1.64	21	5.32
1549	Willbridge Bulk Fuel Area	22	4.32	NA	NA	18	11.61	20	16.39	21	5.32
	Total	509		187		155		122		395	

Year	Avg Zinc ug/L	Data Points
<2010	151	64
2010	124	23
2011	252	18
2012	195	55
2013	288	84
2014	236	84
2015	192	71
2016	145	64
2017	144	46

Year	Avg PAHs ug/L	Data Points
<2010	8.99	63
2010	3.85	17
2011	0.20	18
2012	0.34	21
2013	0.64	10
2014	0.29	19
2015	3.92	14
2016	1.21	15
2017	1.19	10

Year	Avg PCBs ug/L	Data Points
<2010	0.35	20
2010	0.24	6
2011	NA	NA
2012	0.16	16
2013	0.13	35
2014	0.08	28
2015	0.15	13
2016	0.19	15
2017	0.22	9

Year	Avg BEHP ug/L	Data Points
<2010	2.11	36
2010	1.43	23
2011	2.12	18
2012	5.07	25
2013	4.43	12
2014	1.79	6
2015	1.91	2
2016	NA	0
2017	NA	0

Year	Avg TSS ug/L	Data Points
<2010	14434	57
2010	21559	23
2011	18000	1
2012	64042	55
2013	41780	81
2014	26448	69
2015	37922	49
2016	24042	36
2017	17375	24

River Mile 9W

ECSI #	Site Name	Zinc		PAHs		PCBs		BEHP		TSS	
		Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total	Data Points	% of Total
2426	Christenson Oil-Plant Number 1	12	2.07	4	1.22	8	1.91	4	1.74	7	1.29
169	Texaco Portland Terminal	10	1.73	1	0.31	5	1.19	NA	NA	10	1.84
4784	Container Management Services	46	7.94	23	7.03	27	6.44	NA	NA	30	5.52
330	Univar	45	7.77	39	11.93	45	10.74	44	19.13	45	8.29
69	Wilhelm Trucking	35	6.04	23	7.03	28	6.68	17	7.39	35	6.45
1405	Carson Oil-NW 35 th Avenue	4	0.69	NA	NA	11	2.63	NA	NA	8	1.47
29	Columbia American Planting Co.	4	0.69	4	1.22	4	0.95	NA	NA	4	0.74
4015	Container Recovery/OBRC	29	5.01	8	2.45	13	3.1	8	3.48	14	2.58
1155	Gunderson Inc.	220	38	126	38.53	142	33.89	96	41.74	221	40.7
100	BNSF Guilds Lake Yard	60	10.36	43	13.15	49	11.69	37	16.09	61	11.23
2454	Calbag/BDC NW Front	38	6.56	28	8.56	33	7.88	NA	NA	43	7.92
1239	Front LP Properties	52	8.98	20	6.12	42	10.02	16	6.96	48	8.84
4655	Greenway Recycling	16	2.76	0	NA	4	0.95	NA	NA	9	1.66
2425	City of Portland (Ofs 19 & 19A)	8	1.38	8	2.45	8	1.91	8	3.48	8	1.47
Total		579		327		419		230		543	

Year	Avg Zinc ug/L	Data Points
<2010	907.59	46
2010	154.43	4
2011	355.28	31
2012	164.76	74
2013	345.75	88
2014	232.19	96
2015	420.07	56
2016	298.38	104
2017	659.80	80

Year	Avg PAHs ug/L	Data Points
<2010	0.65	24
2010	1.17	4
2011	0.13	31
2012	3.90	41
2013	0.39	16
2014	1.13	49
2015	0.86	24
2016	0.72	72
2017	0.37	66

Year	Avg PCBs ug/L	Data Points
<2010	0.30	33
2010	0.13	4
2011	0.13	31
2012	0.12	64
2013	0.07	67
2014	0.06	65
2015	0.09	19
2016	0.04	67
2017	0.03	69

Year	Avg BEHP ug/L	Data Points
<2010	6.31	29
2010	NA	0
2011	1.03	21
2012	2.18	34
2013	11.19	16
2014	1.25	9
2015	NA	0
2016	2.14	56
2017	12.50	65

Year	Avg TSS ug/L	Data Points
<2010	39439	41
2010	NA	0
2011	63266	23
2012	66736	72
2013	44683	88
2014	43009	85
2015	44327	49
2016	46037	104
2017	47637	81