

**Table 4-15. Comparison of Critical Source Results Before and After BMP Implementation**

Class Constituent	DL	Units	Auto Dismantling-Control					Auto Dismantling-BMP					BMP	
			No. of Samples	Percent Detects	Mean	Median	CV	No. of Samples	Percent Detects	Mean	Median	CV	Post BMP Median	Percent Change
<b>Miscellaneous Constituents</b>														
Oil and Grease	1	mg/l	98	56	7.4	1.6	2.08	24	92	7.0	5.2	0.92	Increased	222%
TPH as Gasoline	0.5	mg/l	105	9	S.I.D.	S.I.D.	S.I.D.	24	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
TPH as Diesel	0.5	mg/l	105	2	S.I.D.	S.I.D.	S.I.D.	22	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
<b>Indicator Bacteria<sup>1</sup></b>														
Total Coliform	20	MPN/100ml	24	100	361,667	300,000	0.69	24	100	603,375	300,000	0.96	No Change	0%
Fecal Coliform	20	MPN/100ml	24	100	169,651	130,000	1.01	24	100	416,708	300,000	1.00	Increased	131%
Ratio Fecal Coliform/Total Coliform			0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
Fecal Streptococcus	20	MPN/100ml	24	100	407,167	240,000	1.63	24	100	951,542	300,000	2.08	Increased	25%
Fecal Enterococcus	20	MPN/100ml	24	100	216,883	110,000	1.63	24	100	480,429	240,000	2.10	Increased	118%
<b>General Minerals</b>														
COD	5	mg/l	35	100	114	84	0.91	6	83	72	62	0.83	Decreased	-26%
pH	0-14		133	100	6.6	6.5	0.06	26	100	6.4	6.4	0.03	Decreased	-2%
Specific Conductance	1.0	umhos/cm	131	100	203	189	0.58	26	100	145	131	0.46	Decreased	-31%
Total Dissolved Solids	2.0	mg/l	27	100	104	90	0.43	6	100	71	66	0.38	Decreased	-27%
Total Suspended Solids	2.0	mg/l	29	100	71	50	0.73	6	100	58	56.5	0.53	Increased	13%
MBAS	0.05	mg/l	35	60	0.17	0.08	1.54	6	100	0.10	0.09	0.28	Increased	8%
Total Organic Carbon	1.0	mg/l	31	100	22	18	0.59	6	100	13	12	0.23	Decreased	-34%
<b>Metals</b>														
Dissolved Aluminum	100	µg/l	37	41	189	50	1.84	6	0	&	&	&	Possible Decrease	0%
Total Aluminum	100	µg/l	37	100	918	329	2.57	6	50	115	90	0.75	Decreased	-73%
Dissolved Cadmium	1	µg/l	37	54	1.6	1.0	1.09	6	33	1.0	0.5	0.80	Decreased	-50%
Total Cadmium	1	µg/l	37	81	2.6	2.0	0.88	6	83	1.7	1.4	0.77	Decreased	-31%
Dissolved Chromium	5	µg/l	37	14	S.I.D.	S.I.D.	S.I.D.	6	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
Total Chromium	5	µg/l	37	46	6.0	2.5	1.07	6	17	&	&	&	Possible Decrease	0%
Dissolved Copper	5	µg/l	37	100	42	31	0.91	6	100	18	14	0.51	Decreased	-54%
Total Copper	5	µg/l	37	100	62	42	0.96	6	100	25	21	0.59	Decreased	-51%
Dissolved Iron	100	µg/l	37	41	307	50	2.23	6	33	108	50	0.83	No Change	0%
Total Iron	100	µg/l	37	95	1580	650	2.21	6	67	215	210	0.71	Decreased	-68%
Dissolved Lead	5	µg/l	37	38	20	2.5	3.03	6	17	&	&	&	Possible Decrease	0%
Total Lead	5	µg/l	37	100	46	17	2.12	6	67	6.4	5.9	0.63	Decreased	-65%
Dissolved Nickel	5	µg/l	37	95	16	15	0.65	6	83	8.5	7.2	0.52	Decreased	-51%
Nickel	5	µg/l	37	100	20	17	0.60	6	100	12	11	0.33	Decreased	-35%
Dissolved Zinc	50	µg/l	37	100	283	192	1.06	6	100	228	202	0.53	Increased	5%
Total Zinc	50	µg/l	37	100	355	254	0.86	6	100	281	252	0.43	Decreased	-1%
<b>SVOCs</b>														
Bis(2-ethylhexyl)phthalate	3	µg/l	105	98	33	26	0.90	22	95	33	11	2.09	Decreased	-57%
PAHs <sup>2</sup>	0.5-5.0	µg/l	105	0	S.I.D.	S.I.D.	S.I.D.	22	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
All other SVOCs	0.5-1.0	µg/l	105	0	S.I.D.	S.I.D.	S.I.D.	22	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	

1 Indicator Bacteria tested during 1999-2000 storm season only

2 PAHs tested during 1999-2000 storm season only

S.I.D. = Statistically Invalid Data, not enough data above detection limit collected

& = Statistically valid data in the control sites but detected in less than 20% of the samples in the BMP sites

CV = Coefficient of variation

DL = Detection Limit

Possible Decrease = Less than 20% detects BMP, but existing data shows a possible lowered median.

**Table 4-15. Comparison of Critical Source Results Before and After BMP Implementation**

Class Constituent	DL	Units	Auto Repair-Control					Auto Repair-BMP					BMP	
			No. of Samples	Percent Detects	Mean	Median	CV	No. of Samples	Percent Detects	Mean	Median	CV	Post BMP Median	Percent Change
<b>Miscellaneous Constituents</b>														
Oil and Grease	1	mg/l	97	63	10	3.2	1.62	24	100	10	6.6	0.79	Increased	105%
TPH as Gasoline	0.5	mg/l	98	0	S.I.D.	S.I.D.	S.I.D.	24	4	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
TPH as Diesel	0.5	mg/l	97	0	S.I.D.	S.I.D.	S.I.D.	23	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
<b>Indicator Bacteria<sup>1</sup></b>														
Total Coliform	20	MPN/100ml	21	100	44,510	500	4.40	24	100	97,426	40,000	1.06	Increased	7900%
Fecal Coliform	20	MPN/100ml	21	100	4,935	300	3.95	24	100	51,568	19,500	1.51	Increased	6400%
Ratio Fecal Coliform/Total Coliform			9	100	39%	33%	0.58	2	S.I.D.	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
Fecal Streptococcus	20	MPN/100ml	21	100	4,368	1,300	1.48	24	100	53,939	22,500	1.30	Increased	1631%
Fecal Enterococcus	20	MPN/100ml	21	100	2,873	700	2.16	24	100	21,169	5,000	1.85	Increased	614%
<b>General Minerals</b>														
COD	5	mg/l	29	97	112	62	1.40	7	71	97	46	1.51	Decreased	-27%
pH	0-14		118	100	6.5	6.6	0.11	28	100	6.0	6.0	0.09	Decreased	-9%
Specific Conductance	1.0	umhos/cm	120	100	114	81	0.96	28	100	60	50	0.75	Decreased	-39%
Total Dissolved Solids	2.0	mg/l	23	100	60	48	0.68	7	100	49	32	0.61	Decreased	-33%
Total Suspended Solids	2.0	mg/l	27	100	184	121	1.17	7	100	144	86	1.06	Decreased	-29%
MBAS	0.05	mg/l	31	55	0.20	0.066	1.66	7	100	0.14	0.15	0.32	Increased	124%
Total Organic Carbon	1.0	mg/l	28	100	25.9	13.2	1.47	7	100	21	11	1.14	Decreased	-17%
<b>Metals</b>														
Dissolved Aluminum	100	µg/l	32	34	151	50	1.20	7	0	&	&	&	Possible Decrease	0%
Total Aluminum	100	µg/l	32	81	876	385	1.88	7	14	&	&	&	Possible Decrease	-87%
Dissolved Cadmium	1	µg/l	31	26	1.02	0.50	1.03	7	0	&	&	&	Possible Decrease	0%
Total Cadmium	1	µg/l	31	58	2.35	1.70	1.21	7	14	&	&	&	Possible Decrease	-71%
Dissolved Chromium	5	µg/l	32	13	S.I.D.	S.I.D.	S.I.D.	7	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
Total Chromium	5	µg/l	32	47	7.6	2.5	1.22	7	0	&	&	&	Possible Decrease	0%
Dissolved Copper	5	µg/l	32	91	40	29.2	0.85	7	100	35	22.0	1.04	Decreased	-25%
Total Copper	5	µg/l	32	94	76	51	1.45	7	100	43	28	0.89	Decreased	-45%
Dissolved Iron	100	µg/l	32	53	366	95	1.78	7	29	99	50	0.89	Decreased	-47%
Total Iron	100	µg/l	32	84	2820	1119	1.72	7	57	224	260	0.78	Decreased	-77%
Dissolved Lead	5	µg/l	32	66	48	13	1.86	7	100	47	43	0.83	Increased	220%
Total Lead	5	µg/l	32	81	246	51	3.50	7	100	75	60	0.68	Increased	18%
Dissolved Nickel	5	µg/l	32	56	7.2	5.3	0.77	7	14	&	&	&	Possible Decrease	-53%
Nickel	5	µg/l	32	78	33	12	3.18	7	43	9.7	2.5	1.15	Decreased	-79%
Dissolved Zinc	50	µg/l	32	88	232	189	0.98	7	100	221	229	0.43	Increased	21%
Total Zinc	50	µg/l	32	94	466	276	1.75	7	100	263	256	0.39	Decreased	-7%
<b>SVOCs</b>														
Bis(2-ethylhexyl)phthalate	3	µg/l	97	90	32	18	1.07	23	96	53	26	1.98	Increased	44%
PAHs <sup>2</sup>	0.5-5.0	µg/l	98	0	S.I.D.	S.I.D.	S.I.D.	23	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
All other SVOCs	0.5-1.0	µg/l	98	0	S.I.D.	S.I.D.	S.I.D.	23	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	

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**Table 4-15. Comparison of Critical Source Results Before and After BMP Implementation**

Class Constituent	DL	Units	Fabricated Metal-Control					Fabricated Metal-BMP					BMP	
			No. of Samples	Percent Detects	Mean	Median	CV	No. of Samples	Percent Detects	Mean	Median	CV	Post BMP Median	Percent Change
<b>Miscellaneous Constituents</b>														
Oil and Grease	1	mg/l	49	73	13.6	3.5	1.98	20	85	5	3.9	0.92	Increased	11%
TPH as Gasoline	0.5	mg/l	49	0	S.I.D.	S.I.D.	S.I.D.	20	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
TPH as Diesel	0.5	mg/l	49	0	S.I.D.	S.I.D.	S.I.D.	20	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
<b>Indicator Bacteria<sup>1</sup></b>														
Total Coliform	20	MPN/100ml	15	100	288,713	30,000	2.17	20	100	61,506	1,300	3.26	Decreased	-96%
Fecal Coliform	20	MPN/100ml	15	100	84,875	14,000	1.67	20	100	56,419	415	3.58	Decreased	-97%
Ratio Fecal Coliform/Total Coliform			2	S.I.D.	S.I.D.	S.I.D.	S.I.D.	2	S.I.D.	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
Fecal Streptococcus	20	MPN/100ml	15	100	286,931	9,000	1.92	20	100	59,740	500	1.73	Decreased	-94%
Fecal Enterococcus	20	MPN/100ml	15	100	236,303	1,400	2.37	20	100	16,939	95	2.08	Decreased	-93%
<b>General Minerals</b>														
COD	5	mg/l	15	93	87	76	0.64	6	83	42	49	0.65	Decreased	-35%
pH	0-14		64	100	6.1	6.0	0.10	23	100	6.1	6.0	0.07	Decreased	-1%
Specific Conductance	1.0	umhos/cm	64	100	122	89	1.12	23	100	51	30	1.94	Decreased	-67%
Total Dissolved Solids	2.0	mg/l	15	100	69	64	0.55	6	100	22	22	0.33	Decreased	-66%
Total Suspended Solids	2.0	mg/l	15	100	318	176	1.72	6	100	97	99	0.57	Decreased	-44%
MBAS	0.05	mg/l	15	100	0.27	0.25	0.63	6	67	0.060	0.057	0.58	Decreased	-77%
Total Organic Carbon	1.0	mg/l	15	100	22	23	0.70	6	100	5.2	5.2	0.31	Decreased	-78%
<b>Metals</b>														
Dissolved Aluminum	100	µg/l	15	87	434	205	0.99	6	67	633	129	1.39	Decreased	-37%
Total Aluminum	100	µg/l	15	100	1859	1020	1.55	6	83	670	211	1.28	Decreased	-79%
Dissolved Cadmium	1	µg/l	15	33	0.93	0.50	0.87	6	0	&	&	&	Possible Decrease	0%
Total Cadmium	1	µg/l	15	53	1.5	1.2	1.04	6	17	&	&	&	Possible Decrease	-58%
Dissolved Chromium	5	µg/l	15	27	7.4	2.5	1.74	6	0	&	&	&	Possible Decrease	0%
Total Chromium	5	µg/l	15	53	12	7.1	1.55	6	0	&	&	&	Possible Decrease	-65%
Dissolved Copper	5	µg/l	15	100	285	122	1.33	6	100	42	25	0.89	Decreased	-80%
Total Copper	5	µg/l	15	100	475	235	1.26	6	100	39	30	0.66	Decreased	-87%
Dissolved Iron	100	µg/l	15	100	719	511	0.75	6	67	405	280	1.10	Decreased	-45%
Total Iron	100	µg/l	15	100	2054	942	1.27	6	67	548	460	0.96	Decreased	-51%
Dissolved Lead	5	µg/l	15	100	54	36	0.85	6	50	31	10	1.56	Decreased	-72%
Total Lead	5	µg/l	15	100	151	126	1.04	6	100	51	13	1.39	Decreased	-89%
Dissolved Nickel	5	µg/l	15	93	58	20	1.73	6	0	&	&	&	Possible Decrease	-87%
Nickel	5	µg/l	15	100	72	23	1.51	6	17	&	&	&	Possible Decrease	-89%
Dissolved Zinc	50	µg/l	15	100	494	373	0.92	6	100	268	210	0.54	Decreased	-44%
Total Zinc	50	µg/l	15	100	574	449	0.79	6	100	310	299	0.43	Decreased	-34%
<b>SVOCs</b>														
Bis(2-ethylhexyl)phthalate	3	µg/l	49	86	14	9	1.24	20	95	20	8.3	1.81	Decreased	-3%
PAHs <sup>2</sup>	0.5-5.0	µg/l	49	0	S.I.D.	S.I.D.	S.I.D.	20	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	
All other SVOCs	0.5-1.0	µg/l	49	0	S.I.D.	S.I.D.	S.I.D.	20	0	S.I.D.	S.I.D.	S.I.D.	S.I.D.	

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