

Tables

Table 1
Sediment Samples Collected Near the King County Lease Parcels Source Control Area

Location Name	Date Collected	Collection Depth (feet)	Event Name	Source
WQABRAN-430	3/6/1997	Surface	King County CSO Water Quality Assessment	King County 1999
WQABRAN-431	3/12/1997			
WQABRAN-432	3/27/1997			
WQABRAN-433	4/3/1997			
WQABRAN-434	4/8/1997			
WQABRAN-435	4/17/1997			
WQABRAN-436	4/24/1997			
WQABRAN-437	5/1/1997			
WQABRAN-438	5/8/1997			
WQABRAN-439	5/15/1997			
WQABRAN-440	5/20/1997			
WQABRAN-441	5/28/1997			
WQABRAN-442	6/3/1997			
EST202	9/17/1997	Surface	NOAA Site Characterization	NOAA 1998
EST203				
EIT085				
EST215				
CH0030				
CH1034				
EIT086				
DR087	8/17/1998	Surface	EPA Site Inspection	Weston 1999
DR022				
DR023				
DR024				
DR025				
DR062				
DR063				
DR086				
DR088				
A1				
C2	0 to 4			
C3	4 to 5			
LDW-SS37	1/18/2005	Surface	LDW RI Phase 2 Round 1	Windward 2005a
LDW-SS40				
LDW-SS42				
LDW-SS35	3/8/2005	Surface	LDW RI Phase 2 Round 2	Windward 2005b
LDW-SS39				
LDW-SC22	2/13/2006	0 to 1	LDW Subsurface Sediment 2006	Windward 2007a
LDW-SC20		1 to 2		
		2 to 4		
	0 to 2			
LDW-SC18	2 to 4			
	4 to 6			
	8 to 10			
LDW-SC23	2/16/2006	0 to 1		
		1 to 2		
		2 to 4		
		0 to 0.5		
		0 to 2		
		0.5 to 1		
		1 to 1.5		
		1.5 to 2		
		2 to 2.5		
		2 to 4		
		2.5 to 3		
3 to 3.5				
3.5 to 4				
4 to 6				
6 to 8				
8 to 10				
LDW-SS321	10/4/2006	Surface	LDW RI Phase 2 Round 3	Windward 2007b
LDW-SS323				
LDW-SS324				

Table 2
Chemicals Detected Above Screening Levels in Surface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
Metals											
LDW RI Phase 2 Round 2	LDW-SS39	3/11/2005	Mercury	1.09E+00	3.93		0.41	0.59	mg/kg DW	2.7	1.8
EPA Site Inspection	DR025	8/17/1998	Mercury	7.50E-01	2.54		0.41	0.59	mg/kg DW	1.8	1.3
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	Mercury	6.90E-01	2.33		0.41	0.59	mg/kg DW	1.7	1.2
EPA Site Inspection	DR087	8/12/1998	Mercury	5.50E-01	1.67		0.41	0.59	mg/kg DW	1.3	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Mercury	4.60E-01 J	2.01		0.41	0.59	mg/kg DW	1.1	<1
PAHs											
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	2-Methylnaphthalene	3.30E+00	2.01	1.64E+02	38	64	mg/kg OC	4.3	2.6
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Acenaphthene	5.20E+00	2.01	2.59E+02	16	57	mg/kg OC	16	4.5
EPA Site Inspection	DR087	8/12/1998	Acenaphthene	5.30E-01	1.67	3.17E+01	16	57	mg/kg OC	2.0	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzo(a)anthracene	3.20E+00	2.01	1.59E+02	110	270	mg/kg OC	1.4	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Benzo(a)fluoranthenes (total-calc'd)	5.10E+00	2.01	2.54E+02	230	450	mg/kg OC	1.1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Chrysene	3.70E+00	2.01	1.84E+02	110	460	mg/kg OC	1.7	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Dibenzofuran	3.50E+00	2.01	1.74E+02	15	58	mg/kg OC	12	3.0
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Fluoranthene	1.70E+01	2.01	8.46E+02	160	1200	mg/kg OC	5.3	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Fluorene	4.90E+00	2.01	2.44E+02	23	79	mg/kg OC	11	3.1
EPA Site Inspection	DR087	8/12/1998	Indeno(1,2,3-cd)pyrene	6.20E-01	1.67	3.71E+01	34	88	mg/kg OC	1.1	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Naphthalene	5.30E+00	2.01	2.64E+02	99	170	mg/kg OC	2.7	1.6
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Phenanthrene	1.50E+01	2.01	7.46E+02	100	480	mg/kg OC	7.5	1.6
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Total HPAH (calc'd)	4.20E+01	2.01	2.09E+03	960	5300	mg/kg OC	2.2	<1
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	Total LPAH (calc'd)	3.40E+01	2.01	1.69E+03	370	780	mg/kg OC	4.6	2.2
PCBs											
LDW RI Phase 2 Round 1	LDW-SS37	1/18/2005	PCBs (total calc'd)	5.10E+00	2.33	2.19E+02	12	65	mg/kg OC	18	3.4
LDW RI Phase 2 Round 2	LDW-SS35	3/8/2005	PCBs (total calc'd)	6.50E-01	2.01	3.23E+01	12	65	mg/kg OC	2.7	<1
LDW RI Phase 2 Round 1	LDW-SS40	1/18/2005	PCBs (total calc'd)	5.10E-01 J	1.89	2.70E+01	12	65	mg/kg OC	2.2	<1
LDW RI Phase 2 Round 3	LDW-SS324	10/4/2006	PCBs (total calc'd)	4.80E-01	1.05	4.57E+01	12	65	mg/kg OC	3.8	<1
LDW RI Phase 2 Round 3	LDW-SS321	10/4/2006	PCBs (total calc'd)	4.50E-01 J	1.43	3.15E+01	12	65	mg/kg OC	2.6	<1
EPA Site Inspection	DR025	8/17/1998	PCBs (total-calc'd)	1.15E+00	2.54	4.54E+01	12	65	mg/kg OC	3.8	<1
EPA Site Inspection	DR088	8/31/1998	PCBs (total-calc'd)	1.01E+00	1.68	6.01E+01	12	65	mg/kg OC	5.0	<1
EPA Site Inspection	DR087	8/12/1998	PCBs (total-calc'd)	6.96E-01	1.67	4.17E+01	12	65	mg/kg OC	3.5	<1

mg/kg - Milligram per kilogram

ug/kg - Microgram per kilogram

DW - Dry weight

TOC - Total Organic Carbon

OC - Organic carbon normalized

SQS - SMS Sediment Quality Standard

CSL - SMS Cleanup Screening Level

SMS - Sediment Management Standard (Washington Administrative Code 173-204)

PAH - Polycyclic aromatic hydrocarbon

Total HPAH - Total high molecular weight PAH

Total LPAH - Total low molecular weight PAH

PCB - Polychlorinated biphenyl

J - Estimated value between the method detection limit and the laboratory reporting limit

Table presents detected chemicals only.

Exceedance factors are the ratio of the detected concentrations to the CSL or SQS; exceedance factors are shown only if they are greater than 1.

Sampling events are listed in Table 1.

Table 3
Chemicals Detected Above Screening Levels in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)	Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
Metals												
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0 - 2	Mercury	6.50E-01	1.58		0.41	0.59	mg/kg DW	1.6	1.1
PAHs												
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Acenaphthene	2.20E+00	1.3	1.69E+02	16	57	mg/kg OC	11	3.0
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Acenaphthene	2.10E+00	1.3	1.62E+02	16	57	mg/kg OC	10	2.8
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Acenaphthene	1.60E+00	2.29	6.99E+01	16	57	mg/kg OC	4.4	1.2
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Acenaphthene	1.50E+00	2.29	6.55E+01	16	57	mg/kg OC	4.1	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2.5 - 3	Acenaphthene	5.70E-01	1.39	4.10E+01	16	57	mg/kg OC	2.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Acenaphthene	3.70E-01	2.14	1.73E+01	16	57	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Anthracene	8.80E+00	1.3	6.77E+02	220	1200	mg/kg OC	3.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Benzo(a)anthracene	7.10E+00	1.3	5.46E+02	110	270	mg/kg OC	5.0	2.0
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Benzo(a)anthracene	3.40E+00	2.14	1.59E+02	110	270	mg/kg OC	1.4	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Benzo(a)anthracene	3.20E+00	2.14	1.50E+02	110	270	mg/kg OC	1.4	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Benzo(a)anthracene	2.80E+00	2.29	1.22E+02	110	270	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Benzo(a)anthracene	2.70E+00	2.29	1.18E+02	110	270	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Benzo(a)pyrene	3.10E+00	1.3	2.38E+02	99	210	mg/kg OC	2.4	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Benzo(a)pyrene	3.00E+00	1.3	2.31E+02	99	210	mg/kg OC	2.3	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Benzo(a)pyrene	2.60E+00	2.14	1.21E+02	99	210	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Benzo(a)pyrene	2.50E+00	2.14	1.17E+02	99	210	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Benzo(b)fluoranthene	4.40E+00	1.3	3.38E+02	230	450	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Benzo(b)fluoranthene	3.90E+00	1.3	3.00E+02	230	450	mg/kg OC	1.3	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Benzo(g,h,i)perylene	7.30E-01	1.3	5.62E+01	31	78	mg/kg OC	1.8	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Benzo(g,h,i)perylene	6.90E-01	1.3	5.31E+01	31	78	mg/kg OC	1.7	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Benzo(a)fluoranthene (total-calc'd)	6.40E+00	1.3	4.92E+02	230	450	mg/kg OC	2.1	1.1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Benzo(a)fluoranthene (total-calc'd)	6.00E+00	2.14	2.80E+02	230	450	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Chrysene	7.80E+00	1.3	6.00E+02	110	460	mg/kg OC	5.5	1.3
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Chrysene	7.20E+00	2.14	3.36E+02	110	460	mg/kg OC	3.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Chrysene	3.20E+00	2.29	1.40E+02	110	460	mg/kg OC	1.3	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Chrysene	3.10E+00	2.29	1.35E+02	110	460	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Dibenzo(a,h)anthracene	1.80E-01	1.3	1.38E+01	12	33	mg/kg OC	1.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Fluoranthene	2.40E+01	1.3	1.85E+03	160	1200	mg/kg OC	12	1.5
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Fluoranthene	1.00E+01	2.29	4.37E+02	160	1200	mg/kg OC	2.7	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Fluoranthene	7.40E+00	2.14	3.46E+02	160	1200	mg/kg OC	2.2	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Fluorene	2.00E+00	1.3	1.54E+02	23	79	mg/kg OC	6.7	1.9
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Fluorene	1.80E+00	1.3	1.38E+02	23	79	mg/kg OC	6.0	1.8
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Indeno(1,2,3-cd)pyrene	9.30E-01	1.3	7.15E+01	34	88	mg/kg OC	2.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Indeno(1,2,3-cd)pyrene	8.90E-01	1.3	6.85E+01	34	88	mg/kg OC	2.0	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Indeno(1,2,3-cd)pyrene	8.00E-01	2.14	3.74E+01	34	88	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Phenanthrene	1.20E+01	1.3	9.23E+02	100	480	mg/kg OC	9.2	1.9
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Pyrene	1.40E+01	1.3	1.08E+03	1000	1400	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Total HPAH (calc'd)	6.40E+01	1.3	4.92E+03	960	5300	mg/kg OC	5.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Total HPAH (calc'd)	3.15E+01	2.14	1.47E+03	960	5300	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3.5 - 4	Total HPAH (calc'd)	2.50E+01	2.29	1.09E+03	960	5300	mg/kg OC	1.1	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Total LPAH (calc'd)	2.50E+01	1.3	1.92E+03	370	780	mg/kg OC	5.2	2.5
Phthalates												
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Bis(2-ethylhexyl)phthalate	1.60E+00	2.14	7.48E+01	47	78	mg/kg OC	1.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	2 - 4	Bis(2-ethylhexyl)phthalate	1.60E+00	2.14	7.48E+01	47	78	mg/kg OC	1.6	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3 - 3.5	Bis(2-ethylhexyl)phthalate	8.00E-01	1.3	6.15E+01	47	78	mg/kg OC	1.3	<1

Table 3
Chemicals Detected Above Screening Levels in Subsurface Sediment Samples
Associated with the King County Lease Parcels Source Control Area

Event Name	Location Name	Date Collected	Sample Depth (feet)		Chemical	Conc'n (mg/kg DW)	TOC %	Conc'n (mg/kg OC)	SQS	CSL	Units	SQS Exceedance Factor	CSL Exceedance Factor
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	3	3.5	Bis(2-ethylhexyl)phthalate	7.80E-01	1.3	6.00E+01	47	78	mg/kg OC	1.3	<1
PCBs													
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	0	2	PCBs (total calc'd)	3.20E+00	1.49	2.15E+02	12	65	mg/kg OC	18	3.3
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	4	6	PCBs (total calc'd)	8.80E-01	1.46	6.03E+01	12	65	mg/kg OC	5.0	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	2	4	PCBs (total calc'd)	6.00E-01	1.5	4.00E+01	12	65	mg/kg OC	3.3	<1
LDW Subsurface Sediment 2006	LDW-SC20	2/15/2006	4	6	PCBs (total calc'd)	4.00E-01	2.22	1.80E+01	12	65	mg/kg OC	1.5	<1
LDW Subsurface Sediment 2006	LDW-SC23	2/16/2006	6	8	PCBs (total calc'd)	4.00E-01	2.25	1.78E+01	12	65	mg/kg OC	1.5	<1

mg/kg - Milligram per kilogram

ug/kg - Microgram per kilogram

DW - Dry weight

TOC - Total Organic Carbon

OC - Organic carbon normalized

SQS - SMS Sediment Quality Standard

CSL - SMS Cleanup Screening Level

SMS - Sediment Management Standard (Washington Administrative Code 173-204)

PAH - Polycyclic aromatic hydrocarbon

Total HPAH - Total high molecular weight PAH

Total LPAH - Total low molecular weight PAH

PCB - Polychlorinated biphenyl

B - The analyte was found in the associated method blank at a level that is significant relative to the sample result

J - Estimated value between the method detection limit and the laboratory reporting limit

Three TOC results were provided in the LDW RI data set for sample LDW-SC20 8-10 feet. The three TOC results for the sample were averaged for the purpose of calculated the mg/kg OC-normalized concentration.

Table presents detected chemicals only.

Exceedance factors are the ratio of the detected concentrations to the CSL or SQS; exceedance factors are shown only if they are greater than 1.

Sampling events are listed in Table 1.

Table 4
CSO/EOF Discharges to the Lower Duwamish Waterway

Outfall	Type (Owner)	Discharge Serial Number	Location	Average Overflow Frequency (events/year) 2000 to 2007	Annual average volume (mgy) 2000 to 2007
Diagonal Avenue S ^a	CSO (SPU) SD (SPU)	NA	RM 0.5 E	20.1	15.8 ^b
Hanford No. 1 ^c	CSO (King County)	031	RM 0.5 E	9	18.75
Duwamish pump station East	CSO (King County)	035	RM 0.5 E	<1.0	0.51
Duwamish pump station West	CSO (King County)	034	RM 0.5 W	<1.0	0.60
S Brandon Street	CSO (King County)	041	RM 1.1 E	23	31.63
Terminal 115	CSO (King County)	038	RM 1.9 W	3	3.52
S Brighton Street	CSO (SPU) SD (SPU)	NA	RM 2.1 E	NA ^g	NA
King County Airport SD#3/PS44 EOF ^d	SD (King County) EOF (SPU)	NA	RM 2.8 E	NA	NA
E Marginal Way S. pump station	EOF (King County)	043	RM 2.8 E	None recorded	NA
8 th Avenue S	CSO (King County)	040	RM 2.8 W	0	0
King County Airport SD#2/PS78 EOF ^e	SD (King County) EOF (SPU)	NA	RM 3.8 E	NA	NA
Michigan Street	CSO (King County)	039	RM 1.9 E	11	17.58
W Michigan	CSO (King County)	042	RM 2.0 W	4	1.23
Norfolk	CSO (King County) SD (King County) EOF (SPU) ^f	044	RM 4.8 E	4	0.28

a - The Diagonal Avenue S. SD outfall is shared by stormwater and seven separate overflow points, including the City's Diagonal CSOs and the County's Hanford No. 1 CSO. The overflow frequency and volume listed are for the Diagonal CSOs only.

b - This average volume does not include the contribution from King County's Hanford No. 1 CSO, but does include the remaining seven overflow points that discharge through the Diagonal Avenue S. CSO/SD.

c - Hanford No. 1 discharges to the LDW through the Diagonal Avenue S. SD.

d - SPU Pump Station 44 discharges via EOF No. 117 to King County Airport SD#3 at Slip 4.

e - SPU Pump Station 78 discharges via EOF No. 156 to King County Airport SD#2, near Boeing Isaacson.

f - SPU Pump Station 17 discharges to the Norfolk CSO/SD.

g - Has not overflowed since monitoring began in March 2000.

mgy - million gallons per year

NA - Not available

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID ¹
23766347	80 S Hudson Street Site	SES Seattle	80 S Hudson Street						●	●			1
59441643	Ace Radiator	None	311 S Brandon Street								●		2
63478536	Air Products Manufacturing Corp Seattle	None	5801A East Marginal Way S		●								3
57633623	Air Tec Co. Parcel C	Air Tec Co. Inc., Leavitt Shay Real Estate Co.	5701 1st Avenue S	■		●			●	●			4
26737544	Aleutian Constructors	Cleancescapes	5939 4th Avenue S										5
2992519	AM International	None	5901 4th Avenue S										7
98441868	Amalgamated Sugar Co Seattle	Amalgamated Sugar Co	5400 Denver Avenue S							●			8
47512364	American Dry Ice Orcas	None	672 S Orcas Street		●								9
6346940	American Motor Freight LLC	None	5700 6th Avenue S, Suite 203		●								10
12467128	American Technical Coatings Inc.	None	666 S Fidalgo Street										11
27632327	AR Torrico Sons Shipping Inc	Seattle Biodiesel LLC	6335 1st Avenue S										12
61212661	Argo Blower & Mfg Co Inc	None	5400 E Marginal Way S		●								13
18398858	Argo TOFC	Union Pacific Railroad Co Dawson Street, Dow Chemical	4th Avenue S & Dawson Street							●			14
55897213	Art Brass Plating	None	5815 4th Avenue S										15
88531932	Art Brass Plating Inc Seattle	Helen V. Warner	5516 3rd Avenue S		●	●		●					16
9399901	AT&T Wireless Marginal Way & Alaskan	None	4797 1st Avenue S										17
63217123	Bank & Office Interiors	Ener-G Foods Inc.,	5990 1st Avenue S		●								18
14379672	Battery Systems, Inc.	Allied Battery Co. Inc Seattle, Allied Battery Inc S Brandon, Allied Battery Seattle	105 S Brandon Street		●								19
96937296	Beckwith Kuffel Inc	Beckwith & Kuffel Inc.	5930 1st Avenue S							●			20
91823668	Berg Evans Chain Co	None	217 S Findlay Street										21
32698478	Big Johns Truck Repair Inc Seattle	None	5622-1/2 1st Avenue S										22
86499282	Bindery	None	215 S Bennett Street										23
7118747	Blaser Die Casting Co.	Blaser Tool & Mold Co., Scougal Rubber Corporation	5700 3rd Avenue S			●							24
415282	Blue Nile Inc.	None	5907 4th Avenue S										25
47157762	Bob's Texaco Service	None	5304 1st Avenue S						●	●			26
63627615	Branom Instrument Co Inc	None	5500 4th Avenue S										27
65697348	Burgess Enterprises	Duwamish Marine Center, Samson Tug & Barge, Ray Burgess Co.	6361 1st Avenue S							●			28
37332122	Burlington Env Philip Services Corp	None	402 S Dawson Up Tracks										29
46161728	BYG Cooperative	Abhe Svodboda Inc, SES Inc West Pac Environmental	74 S Hudson Street Warehouse		●								30
77372687	Byrne Specialty Gases, Inc. MEAD		118 S Mead Street										31
70313617	Cadman Seattle Inc	Cadman Inc Seattle, Cadman Seattle, Lehigh Northwest	5225 East Marginal Way S	■	●		●	●		●		◆	32

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID ¹
11598755	Capital Industries Inc	None	5801 3rd Avenue S		●	●							33
99747798	Cenveo Graphic Arts Center	Graphic Arts Center, The Allied Printers	832 S Fidalgo Street		●								34
2253	Certaineed Gypsum Manufacturing	BPB Gypsum, James Hardie Gypsum, Certaineed Gypsum, Lone Star Northwest, Norwest Gypsum	5931 East Marginal Way S		●		●		●	●	●		35
9361279	Charles H Lilly Co	Chas H Lilly CO	5200 Denver Avenue S										37
74478588	Charles H Lilly Co	Chas H Lilly CO	6000 East Marginal Way S										36
1792892	Chevron 90636	Chevron 0636, Chevron SS 90636	5940 East Marginal Way S		●				●	●			38
NA	City of Seattle - SPU Materials Storage Yard	Fray Equipment Co	5821 1st Avenue S					●					129
83494216	Clough Equipment Co S Front S	None	515 S Front Street										39
54757868	Consolidated Freightways Seattle	Shippers Transport Express, Consolidated Freightways UST 11012	6050 East Marginal Way S		●	●			●	●			40
21759322	Continental Industries	None	222 S Orcas Street										41
2363	Craig Taylor Equipment	None	5030 1st Avenue S							●	●		42
53625878	Dawson Street Land Co	None	56 S Dawson Street		●								43
343781	Denco Sales Co	None	711 S Fidalgo Street		●								44
99894694	Don's Radiator	None	5626 1st Avenue S										45
36961494	Dow Chemical USA Michigan Div	Union Pacific Railroad, Union Pacific Railroad Transfer Facility, Argo TOFC, UPRR Diesel Shop, UPRR SEA, Union Pacific Railroad Co. Dawson Street	4th Avenue S & Dawson Street										46
75459442	Draper Machine Works Inc	Draper Machine Works Company, Howard Cooper	5055 4th Avenue S	■					●	●			47
74936217	Dresser Rand	None	225 S Lucile Street		●								48
2521	Drive Line Services of Seattle Inc	None	108 S Brandon Street		●						●		49
21945598	Duwamish Marine Center	Samson Tug & Barge, Burgess Enterprises	6365 1st Avenue S			●							50
87626746	Eagle Systems, Inc.	Milwaukee Motor Transportation Co.	53 S Dawson Street							●			51
22245293	Emerald City Disposal Dawson St	Allied Waste Services, Environmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal, West Pac Environmental	54 S Dawson Street	■	●					●			52
78563473	Emerald City Freight Distribution	None	6003 6th Avenue S										53
7307167	Ener-G Foods Inc.	Bank & Office Interiors	5960 1st Avenue S		●							◆	54

**Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database**

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID ¹
36716241	Environmental Transport Inc	Allied Waste Services, Emerald City Disposal Dawson St, NW Waste Emerald City Disposal, Seattle Disposal, West Pac Environmental	54 S Dawson Street	■					●	●			55
2337	Frank's Used Cars	None	6309 East Marginal Way S			●							56
62393528	Fray Equipment Co	City of Seattle - SPU Materials Storage Yard	5821 1st Avenue S							●			57
78676691	Fred Hutchinson Cancer Research Center	Fred Hutchinson CRC / (Former Vincent Metal Goods), Fred Hutchinson Cancer Research CNTR/AKA Vincent Metal Goods, Metal Goods Service Center, Qwest Replacement Project Facility, Vincent Metal Goods Seattle Branch	4755 1st Avenue S		●					●	●		58
15892877	Fryer Knowles Inc	None	211 S Dawson Street										59
73183189	Furniture Spa Inc	Sharps Automotive, Inc.	126 S Findlay Street		●					●			60
83552111	GE Aircraft Engines	None	637 S Lucile Street										61
95662832	GE Aircraft Engines Front St	None	540 S Front Street										62
31535274	GE Lighting Seattle Distribution Center	None	549 S Dawson Street		●								63
2522	General Electric Aviation Div	GE Aviation, General Electric Co. Dawson Street	220 S Dawson Street	■	●	●		●					64
96679259	Georgetown Center	Former Gull Station	NW Corner of Corson Avenue S & S Michigan Street								●		65
95534411	Glacier Northwest East Marginal Way	Kaiser Cement, Lone Star Cement, CEMEX, Slip 2 Duwamish Bank Stabilization	5975 East Marginal Way S		●		●	●	●	●			66
35148584	Greater Seattle Floors	Greater Seattle Floors, LLC	5517 6th Avenue S		●								67
37836248	JA Jack & Sons, Inc.	None	5427 Ohio Avenue S	■			●			●		◆	68
NA	Kamco Seafood, Inc.	None	128 S Orcas Street					●					128
6878135	Kettells	None	5800 4th Avenue S							●			69
5145176	Lehigh Northwest	Lehigh Northwest Dredge	5225 East Marginal Way S	■								◆	70
96377286	Leone VanValkenburg Trust	Exide Technologies Seattle, GNB Battery Technologies	5200 4th Avenue S		●								71
71277652	Lockwood Marine Inc	None	6502 East Marginal Way S										72
2226	Longview Fibre Paper & Packaging Inc	Longview Fibre Company	5901 East Marginal Way S		●	●	●	●	●	●		◆	73
67737549	Loomis Fargo & Co	Loomis Armored Inc	5200 East Marginal Way S	■					●	●			74
13593282	Mail Dispatch, Inc.	None	917 S Nebraska							●			75
80333167	Manson Construction	Manson Construction & Engineering	5209 E Marginal Way S	■	●					●			76
2254	Master Builders	A&C Construction	64 S Lucile Street								●		77
87686611	McKinstry Co	None	4975 A 3rd Avenue S		●								78

Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID ¹
61127232	McKinstry Co 215 Hudson St	None	215 S Hudson Street		●								79
85743277	McKinstry Co 5005	None	5005 3rd Avenue S										80
28755278	McKinstry Co Ste B	None	4975 B 3rd Avenue S										81
36652818	Meshier Supply	None	5001 1st Avenue S							●			82
91681677	Michigan Properties	None	5035 1st Avenue S										83
96851494	Mobile Crane Co Inc	Western Bridge Co.	5900 2nd Avenue S		●					●	●		84
46977612	Moore Data Mgmt Svcs Div	None	725 S Fidalgo Street										85
74398946	NAPA Auto Parts Seattle	Genuine Parts Co, Genuine Parts Co. Seattle	5201 4th Avenue S										86
73845797	National Transfer Inc. Seattle	Seadrunar Recycling	5265 Utah Avenue S	■					●	●			87
19371183	Nivas Business Corp	None	6100 6th Avenue S										88
61549757	North Coast Refrigeration Inc	Northcoast Refrigeration Inc.	5047 Colorado Avenue S		●					●			89
44927387	Northwest Corporate Park Building U	None	520 S Brandon Street							●			90
59769876	Northwest Sign Supply	None	5300 4th Avenue S		●								91
57957617	Olympic Medical Corp 1st Ave S	None	5900 1st Avenue S		●								92
29775533	Orcas Business Park LLC	None	650 S Orcas Street		●								93
12545978	Ostex Intl Inc 5955 Airport Way	None	5955 Airport Way S										94
17634	Ott Real Estate Property	None	5903 1st Avenue S								●		95
63721371	Pacific Marine Testing Co	None	5807 4th Avenue S										96
27585467	PNB Building	None	707 S Orcas Street	■					●	●			97
91919568	Proliance International Inc	115 S Dawson Street, Modine Aftermarket Holdings Inc, Modine Western	115 S Dawson Street		●						●		98
73466467	Rental Service Corporation 565	Alpine Equipment Rentals & Supply, Hexcel Medical Division, Prime Equipment 565 Seattle	5421 1st Avenue S		●					●			100
55698119	Riveretzs Auto Care	Winters Investment LP, Former Georgetown Gasco/Tesoro	6185 4th Avenue S						●	●			101
2450	Sahlberg Equipment	Society of Saint Vincent de Paul, US Bank AJ Sahlberg Trust	5950 4th Avenue S	■	●	●							102
94925241	Saint Gobain Containers Inc	Ball Glass, Ball-Foster Glass, Ball-Incon, Northwestern Glass Company, Incon Packaging	5801 East Marginal Way S		●		●	●	●	●		◆	103
1020256	Samson Tug & Barge Co Inc Transporter	Duwamish Marine Center, Burgess Enterprises	6365 1st Avenue S		●							◆	104
59148337	Seacast Inc Seattle	None	207 S Bennett Street		●								105
49423263	Seadrunar Recycling	National Transfer Inc.	28 S Brandon Street	■	●								99
44186982	Sears Roebuck & Co UST 7837	None	4786 1st Avenue S							●			106
5023482	Seattle Biodiesel LLC	AR Torrico Sons Shipping Inc, General Biodiesel Seattle	6333 1st Avenue S		●		●			●			107

**Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database**

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID ¹
18582122	SES Inc West Pac Environmental	BYG Coop, Abhe Svodboda Inc.	74 S Hudson Street		●								108
19688471	Shell Oil Products US SAP 121430	Shell 600 Michigan, Texaco 121430, Texaco Station 632320400 UST 4487, Texaco Station Michigan	600 S Michigan Street	■	●	●			●	●			109
23243637	Simon Golub & Sons Inc	None	5506 6th Avenue S		●								110
85783156	Smith Williston	None	201 S Bennett Street		●								111
5184	St Vincent De Paul Council Seattle	St Vincent De Paul, Sahlberg Equipment	5972 4th Avenue S										131
41677496	Sudden Printing	None	571 S Michigan Street										112
47666565	TW Express	None	7901 1st Avenue S										113
74589256	Union Pacific Motor	None	420 S Dawson Street						●	●			114
44577768	Union Pacific Railroad Co. Dawson Street	Argo TOFC, UPRR Diesel Shop, UPRR SEA, Union Pacific Railroad Transfer Facility	402 S Dawson Street		●		●						115
9953954	United Western Supply	Western Utilities Supply Co., Iconco	5245 East Marginal Way S	■	●							◆	116
33482323	UPS Seattle Export	None	500 S Front Street		●								117
21503	U.S. Starcraft	None	5210 Utah Avenue S		●								130
21468652	Valco Graphics Inc Seattle	None	674 S Orcas Street										118
3258153	Washington Machine Works	None	5211 1st Avenue S, Unit C, Door 4		●								119
72999973	Wear Cote Northwest Inc	None	5811 4th Avenue S										120
4961762	West Pac Environmental	Allied Waste Services, Emerald City Disposal Dawson St, Environmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal	55 S Dawson Street	■									121
28825715	West Pac Environmental Inc	Allied Waste Services, Emerald City Disposal Dawson St, Environmental Transport Inc., NW Waste Emerald City Disposal, Seattle Disposal	54 S Dawson Street, Suite 100	■									122
39473625	Western Cartage Inc	None	5050 1st Avenue S							●			123
39352815	Western Parcel Express Seattle	Air Data Express, Inc.	525 S Front Street	■					●	●	●		124
33942516	Western Union Telephone Co. UST 97407	None	808 S Fidalgo Street							●			125
56533162	Westmar Services Inc	Airgas Dry Ice	5930 6th Avenue S							●			126
49738534	WW Grainger Inc, Seattle	None	4930 3rd Avenue S										127

**Table 5
Facilities within the S Brandon Street CSO Basin that are Listed in the Ecology Facility/Site Database**

Facility/ Site ID	Facility Name	Alternate Name(s)	Facility Address	KCLP Data Gaps Report	Active EPA ID No.	Ecology CSCSL	NPDES Permit	KCIW Discharge Authorization or Permit	LUST	UST	Ecology NFA Determination	EPA CERCLA Section 104(e) Request for Information Letter	Map ID ¹
----------------------	---------------	-------------------	------------------	-----------------------------	-------------------------	------------------	-----------------	---	------	-----	---------------------------------	--	------------------------

¹ - See Appendix C-2. Map indicates the detail map on which the facility is plotted and the Map ID number identifies the facility.

Color indicates that a facility is discussed in the Data Gaps Report or SCAP associated with the listed source control area(s):

EAA-1 RM 0.1 to 0.9 East, Duwamish/Diagonal Way
RM 0.9 to 1.0 East, Slip 1
RM 1.2 to 1.7 East, St. Gobain to Glacier Northwest
RM 1.7 to 2.0 East, Slip 2 to Slip 3

- - Additional information regarding this facility is available in Sections 4.0 and 5.0 of the KC Lease Parcels Data Gaps Report.
- - Additional information regarding this facility is available on the accompanying tables.
- ◆ - EPA has sent a CERCLA Section 104(e) Request for Information Letter to this facility or property owner.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

CSCSL - Confirmed or Suspected Contaminated Sites List

CSO - Combined Sewer Overflow

EAA - Early Action Area

EPA - U.S. Environmental Protection Agency

KCIW - King County Industrial Waste

KCLP - King County Lease Parcels

LUST - Leaking Underground Storage Tank

NFA - No Further Action

NPDES - National Pollutant Discharge Elimination System

RM - River Mile

UST - Underground Storage Tank

Table 6
Summary of Data Gaps
King County Lease Parcels Source Control Area

Facility	Data Gap
Public Outfalls	
S Brandon Street CSO, Dock Pipe #2 Outfall (Outfall 2244) and Outfall No. 2007	<i>Stormwater Discharge</i>
	Data on contaminant concentrations in storm drain solids within the Cadman and Lehigh Northwest and J.A. Jack storm drain systems are needed to evaluate whether contaminants are being transported to LDW sediments via Outfalls 2244 and 2007.
	<i>Combined Sewer Discharge</i>
	Data on contaminant concentrations in CSO discharges are needed to evaluate whether the S Brandon Street CSO is a significant source of contaminants to LDW sediments.
	Additional information is needed to determine if undocumented and unregulated industrial operations are occurring within the S Brandon Street CSO basin that may be an ongoing source of sediment recontamination.
Adjacent Properties	
Manson Construction Company¹	<i>Stormwater Discharge and Surface Runoff/Spills</i>
	A facility inspection is need to determine if stormwater is discharged to the sanitary sewer or the LDW and to determine if the catch basin shown on DPD files and observed by King County personnel is connected to the storm drain system at the Cadman facility. A follow-up inspection is needed to determine if corrective measures have been implemented to ensure operations at Manson Construction are in compliance with applicable regulations and BMPs to prevent the release of contaminants to the LDW.
	A facility plan showing the locations of all catch basins and storm drains (if any) as well as an evaluation of the slope of impervious surfaces and any associated surface water collection and/or discharge points is needed to evaluate the potential for contaminant transport to the LDW via surface runoff.
	<i>Groundwater Discharge</i>
	No laboratory data from site assessment(s) and remediation at the Manson Construction parcel were found in the files reviewed by SAIC. Additional information is needed to evaluate if contaminant concentrations in soil and groundwater beneath this facility have the potential to re-contaminate the sediments associated with the KC Lease Parcels source control area.
	<i>Bank Erosion/Leaching</i>
	Additional information on the construction of the banks in this area is needed. Residual soil contamination may be present at this property; therefore, if bank erosion is likely, then data on contaminant concentrations in bank soils are necessary to evaluate the potential for sediment recontamination via this pathway.

¹The action items identified in the Slip 1 SCAP (Ecology 2009f) adequately address the above data gaps associated with the LDW sediments to the west of the Manson Construction property.

Table 6
Summary of Data Gaps
King County Lease Parcels Source Control Area

Facility	Data Gap
Cadman and Lehigh Northwest	<i>Stormwater Discharge and Surface Runoff/Spills</i>
	A follow-up business inspection of Cadman and Lehigh is needed to verify compliance with Ecology's recommendations, applicable regulations, and BMPs to prevent the release of contaminants to the LDW.
	A review of the updated SWPPP, when completed, is needed to ensure compliance with Ecology's requirements.
	<i>Bank Erosion/Leaching</i>
	Additional information on the construction of the banks in this area is needed.
United Western Supply	<i>Stormwater Discharge and Surface Runoff/Spills</i>
	A business inspection of UWS and the buildings on the southern portion of the property is needed to verify compliance with applicable regulations and BMPs to prevent the release of contaminants to the LDW.
	A review of the 1997 environmental assessment, prepared by Boateng, is needed to identify potential pollutant sources associated with UWS. The complete Boateng report was not available for review by SAIC during preparation of this Data Gaps Report.
	<i>Bank Erosion/Leaching</i>
	Additional information on the construction of the banks in this area is needed.
J.A. Jack & Sons	<i>Stormwater Discharge and Surface Runoff/Spills</i>
	A follow-up business inspection of J.A. Jack is needed to verify compliance with corrective actions identified by Ecology in 2007 and SPU in 2009, applicable regulations, and BMPs to prevent the release of contaminants to the LDW.
	The onsite stormwater collection system needs to be evaluated to determine its efficiency since Ecology inspectors observed stormwater flowing to the catch basins on the St. Gobain property.
	<i>Groundwater Discharge</i>
	Information is needed regarding the groundwater quality in the infiltration gallery in order to determine if sediment COCs are present in groundwater and if these COCs may be transported to the LDW.
	<i>Surface Runoff and Bank Erosion/Leaching</i>
	Additional information is needed to determine if J.A. Jack has re-graded the area adjacent to the LDW and beneath the barge-to-land conveyer system.
	Additional information is needed to determine if the discharges from the Pinch Point area are permissible and if these discharges are a potential source of sediment recontamination.
Additional information is needed to determine if the discharges from the Pinch Point area are permissible and if these discharges are a potential source of sediment recontamination.	

Table 6
Summary of Data Gaps
King County Lease Parcels Source Control Area

Facility	Data Gap
Properties in the Michigan Street CSO Basin	
Bob's Texaco Service and Chevron 9-0636	<i>Combined Sewer Discharges</i>
	These properties need to be evaluated to determine the potential for sediment recontamination, if any, that may be associated with these facilities.
All Properties	Information on current activities at this property is needed to assess the potential for sediment recontamination associated with the property, including the locations of catch basins and storm drains, status and location of hazardous materials or potentially harmful chemicals/wastes stored or used at the facilities, and the adequacy of containment systems (if any).