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Potential Future Edits Noted (-)

TECHNICAL MEMORANDUM

Evaluate Loadings using MDLs for NDs

From: Bruce Tiffany
To: File
Cc:
Date: December 6, 2007
Re: King County Sanitary Sewer System - Characterization Sampling for Selected Phthalates and Benzyl Alcohol in the Lower Duwamish Basin – 2003 to 2006

INTRODUCTION

As part of the Lower Duwamish Waterway cleanup process, the first Early Action sediment cleanup was conducted in 2003 and 2004 near the Duwamish/Diagonal Combined Sewer Overflow/Storm Drain (CSO/SD) outfall. The remediation of this site involved a combination of sediment removal followed by capping of the remaining sediment with clean material (EBDRP 2005).

The Duwamish/Diagonal CSO/SD outfall is estimated to discharge approximately 1,100 million gallons per year (MGY) of stormwater (Ecology 2004) and approximately 12 MGY of combined stormwater/sanitary wastewater from the Hanford #1 King County CSO (Hanford at Rainier). The east side of the Duwamish Siphon King County CSO also is located near the Duwamish/Diagonal CSO/SD outfall and is estimated to discharge approximately 2 MGY of combined stormwater/sanitary wastewater (King County 2006).

Following the remedial action at the Duwamish/Diagonal site, annual monitoring of surface sediments has occurred annually. This monitoring is conducted to evaluate the effectiveness of controlling upland sources to minimize or prevent the recontamination of site sediments. Results from the 2005 monitoring indicated that the sediments in the Duwamish/Diagonal Early Action Area were being recontaminated with benzyl alcohol (BA), benzyl butyl phthalate (BzBP), and bis-(2-ethylhexyl) phthalate (BEHP) (EBDRP 2007).

Basis for IU sampling

This sediment recontamination prompted King County to undertake sampling within the King County sewerage system to evaluate if there are locations in the system where these chemicals appear in greater amounts. This sampling involved looking at key nodes within the wastewater network. For this study, the key "nodes" in the system were located at King County wastewater pump stations. The results from these pump stations were compared with results from samples collected from the influent of King County's two large wastewater treatment plants. Discharges from industrial users of the King County sanitary sewer system also were evaluated to see if there are controllable sources of BA, BzBP, and BEHP. Industrial users were sampled in the Duwamish/Diagonal (Hanford #1) and Duwamish Siphon CSO basins. Results are also included for industrial users that are routinely sampled for semivolatile organic compounds (e.g., BA, BzBP and BEHP).

— Pump Station Sampling: 9/2003 – 9/2004 (Simultaneous w/ Du/Diag-Sed. Remediation)
— Diag. Siphon + Duwamish Hanford: 2/2006
— IU/IUs: Jan. to Dec. 2006

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INFORMATION ON TARGET CHEMICALS

To provide background for this technical memorandum, information is presented on the characteristics and properties of BA, BzBP and BEHP. Except where noted, the Hazardous Substance Data Bank was the source of the information (HSDB 2007).

Benzyl Alcohol (BA)

- **Sources:** Used as a photographic developer, chemical intermediate, solvent and color developer in cosmetic products. Occurs naturally in flower oils and material exuded from trees. Reported concentrations in food : Non-alcoholic beverages – 15 ppm; ice cream, ices, etc. – 160 ppm; candy – 47 ppm; baked goods – 220 ppm; gelatins & puddings – 21 to 45 ppm; chewing gum – 1,200 ppm.
- **Properties:** Based on the high water solubility and the low coefficients for water-to-organic carbon partitioning (Koc) and water-to-octanol partitioning (Kow), BA is expected to be present primarily in the aqueous phase and not partition appreciably to organic carbon or non-aqueous phase liquids (NAPLs).
    - Solubility: 35,000 mg/L (at 20°C)
    - Koc = <5 to 15
    - Log Kow = 1.10

Benzyl Butyl Phthalate (BzBP)

- **Sources:** Used as a plasticizer and organic intermediate. Plasticizer for PVC-based flooring products, polyvinyl acetate emulsion adhesives, and other plastics.
- **Properties:** Particulate-phase BzBP is removed from the atmosphere by wet and dry deposition. In water, BzBP is expected to adsorb to sediment or particulate matter given its Koc value.
    - Solubility: 0.71 mg/L (temperature not specified)
    - Log Koc = >4.7
    - Log Kow = 4.91

Bis(2-Ethylhexyl) Phthalate (BEHP)

- **Sources:** Approximately 95% of the BEHP produced is used as a plasticizer for PVC. These products include wall coverings, tablecloths, floor tiles, furniture upholstery, shower curtains, garden hoses, automobile upholstery, sheeting for wire and cable, and

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flexible tubing. Minor uses include solvent in erasable ink, cosmetics, vacuum pump oil, dielectric fluid for electrical transformers, and other uses (ATSDR 2002).

- **Properties:** BEHP will exist in both the vapor and particulate phases in the ambient atmosphere. Particulate-phase BEHP is removed from the atmosphere by wet and dry deposition.
  - Solubility: 0.284 mg/L (at 24°C)
  - Koc = 87,420 to 510,000 (Log Koc = 4.9 to 5.7)
  - Log Kow = 7.60

2006 Sampling of King County Wastewater Treatment Plants

The King County Wastewater Treatment Division conducts semi-annual sampling for a broad suite of parameters at its two large wastewater treatment plants – South (Renton) and West Point. These sampling events are required in the NPDES permits for the treatment plants. The sampling is scheduled to conduct one sampling event during the dry season and another during the wet season. Per sampling event, one 24-hour composite sample is collected at the West Point Treatment Plant and three consecutive days of 24-hour composite samples are collected at the South Treatment Plant.

The 2006 results for BA, BzBP, and BEHP are provided in **Table A-1** in **Appendix A**. A summary of the results is provided in **Table 1**.

Benzyl Alcohol (BA)

The following ranges were observed per treatment plant:

- **South:** 20.8 to 63.9 µg/L and 12.2 to 30.0 lbs/day
- **West Point:** 23.0 to 75.3 µg/L and 33.8 to 52.3 lbs/day

Benzyl Butyl Phthalate (BzBP)

The following ranges were observed per treatment plant:

- **South:** 2.35 to 4.90 µg/L and 1.4 to 2.5 lbs/day
- **West Point:** 0.85 to 2.59 µg/L and 1.2 to 1.8 lbs/day

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Bis(2-Ethylhexyl) Phthalate (BEHP)

The following ranges were observed per treatment plant:

- **South:** 10.4 to 13.9 µg/L and 5.6 to 9.0 lbs/day
- **West Point:** 4.61 to 13.7 µg/L and 6.8 to 9.5 lbs/day

To provide perspective to these results, residential/commercial monitoring data from EPA indicated a 0.02 to 22 µg/L range for BEHP (EPA 2004).

2003 TO 2006 SAMPLING OF KING COUNTY PUMP STATIONS AND CSO LOCATIONS

In 2003 and 2004, the King County Industrial Waste Program collected wastewater samples at several King County wastewater pump stations that are tributary to the West Point wastewater treatment plant. These pump stations were selected to evaluate the BzBP and BEHP wastewater concentrations at three stations along the Lower Duwamish Waterway (E. Marginal Way PS, W. Marginal Way PS, Duwamish PS), one station located in a separated sanitary sewer service area (Matthews Park PS), and one station located in a combined stormwater/sanitary sewer service area (Interbay PS).

Sampling at each pump station occurred by collecting continuous 24-hour composite samples each day for approximately seven days. Separate sampling rounds were performed in dry and wet seasons to evaluate if dry or wet weather conditions impacted sample results.

At the beginning and end of each sampling round, equipment blank samples were collected from the automated sampling apparatus.

In February 2006, King County Industrial Waste Program staff collected wastewater samples at two CSO locations that are tributary to the Duwamish/Diagonal CSO/SD outfall. These CSO locations were the aftbay of the Duwamish Siphon and the Bayview/Hanford #1 discharge structure.

The 2003 to 2006 results for BzBP and BEHP are provided in **Table B-1** in **Appendix B**. A summary of the results is provided in **Table 2**.

Benzyl Butyl Phthalate (BzBP)

The following are the ranges and median values from the data collected (detects only):

- **East Marginal Way PS:** 0.6 – 4.0 µg/L, Median: 2.1 µg/L
- **West Marginal Way PS:** 1.0 – 7.3 µg/L, Median: 2.4 µg/L
- **Duwamish PS:** 0.9 – 69.8 µg/L, Median: 1.5 µg/L

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- **Matthews Park PS:** 1.1 – 1.9 µg/L, Median: 1.4 µg/L
- **Interbay PS**: 1.5 – 3.1 µg/L, Median: 2.0 µg/L
- **Duwamish Siphon (Aftbay)**: 0.9 µg/L (one detected value)
- **Bayview/Hanford #1**: 1.2 – 2.0 µg/L

Results for BzBP ranged from a low of 0.6 µg/L (E. Marginal Way PS) to a high of 69.8 µg/L (Duwamish PS). Median BzBP values ranged from 1.4 µg/L (Matthews Park PS) to 2.4 µg/L (W. Marginal Way PS).

There was very little variability in the results from the residential service area (Matthews Park PS – Range: 1.1 to 1.9 µg/L), slightly more variability in the combined service area (Interbay PS – Range: 1.5 to 3.1 µg/L), and more variability in the more industrialized basins (E. Marginal Way PS – Range: 0.6 to 4.0 µg/L; W. Marginal Way PS – Range: 1.0 to 7.3 µg/L; Duwamish PS – Range: 0.9 to 69.8 µg/L).

There was very little variability in the results obtained from dry weather and wet weather sampling events (see **Table B-1**).

Bis(2-Ethylhexyl) Phthalate (BEHP)

The following are the ranges and median values from the data collected:

- **East Marginal Way PS:** 1.6 – 35.0 µg/L, Median: 6.1 µg/L (Equipment Blanks: 0.8 – 6.0 µg/L)
- **West Marginal Way PS:** 8.7 – 148 µg/L, Median: 13.4 µg/L (Equipment Blanks: 1.1 – 10.9 µg/L)
- **Duwamish PS:** 7.3 – 39.5 µg/L, Median: 11.5 µg/L (Equipment Blanks: 1.0 – 13.5 µg/L)
- **Matthews Park PS:** 5.2 – 11.4 µg/L, Median: ~~8.2~~ µg/L (Equipment Blanks: 0.5 – 1.9 µg/L) 10.0 SET
- **Interbay PS**: 7.1 – 26.3 µg/L, Median: ~~6.1~~ µg/L (Equipment Blanks: 0.79 – 6.03 µg/L)
- **Duwamish Siphon (Aftbay)**: 9.1 – 12.5 µg/L
- **Bayview/Hanford #1**: 6.4 – 8.1 µg/L

Results for BEHP ranged from a low of 1.6 µg/L (E. Marginal Way PS) to a high of 148 µg/L (W. Marginal Way PS). Median BEHP values ranged from 6.1 µg/L (E. Marginal Way PS) to 13.4 µg/L (W. Marginal Way PS).

There was very little variability in the results from the residential service area (Matthews Park PS – Range: ~~5.5~~ 5.2 to 11.4 µg/L). There was more variability in the results from the E. Marginal Way PS (Range: 1.6 to 35 µg/L), but the mean and median results were the lowest of the five pump stations sampled. There was not a great deal of variability between the results from W. Marginal Way PS, Duwamish PS, and Interbay PS. The only outlier was a value of 148 µg/L for

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the W. Marginal Way PS. Aside from this value, the value ranges from these three stations were fairly similar.

There was very little variability in the results obtained from dry weather and wet weather sampling events (see **Table B-1**).

The 2003 to 2004 sampling at the pump stations indicated significant problems with blank contamination. This was attributed to BEHP in the flexible tubing of the sampling apparatus. The associated sample results from these pump stations should be considered biased high for BEHP. For subsequent sampling events Teflon tubing was substituted for the flexible tubing.

2006 Sampling of Industrial Users of the King County Sewerage System

In 2006 King County Industrial Waste Program staff collected samples from industrial users of the King County sewerage system, with an emphasis on industrial users located within Lower Duwamish Waterway CSO basins. The samples collected were analyzed for BA, BzBP and BEHP. **Appendix C** contains the following results from this sampling:

- **Table C-1:** Presents industrial users identified for sampling and sorted according to industrial category. Selected companies from different industrial categories were identified for sampling.
- **Table C-2:** Presents results for industrial users sorted by CSO basin.
- **Table C-3:** Presents results for industrial users sorted by industry type.

As presented in **Table C-1** a total of 57 industrial users were identified for study. Of these industrial users, 37 were identified for sampling. The companies identified for sampling are presented on **Figures 1** and **2** according to their Industrial Waste Program permit or discharge authorization number.

Tables C-2 and **C-3** present the results for BA, BzBP and BEHP. These results are further classified according to concentration, using the following categories per target chemical:

- **BA:** > 250 µg/L, >100 µg/L, <100 µg/L (Note: 2006 Treatment Plant Range = 20.8 – 75.3 µg/L)
- **BzBP:** > 50 µg/L, >10 µg/L, <10 µg/L (Note: 2006 Treatment Plant Range = 0.85 – 4.9 µg/L)
- **BEHP:** > 100 µg/L, >20 µg/L, <20 µg/L (Note: 2006 Treatment Plant Range = 4.61 – 13.9 µg/L)

Based on these categories, the following industries were identified per analtye:

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Benzyl Alcohol (BA)

Industrial Categories with BA <100 µg/L:

Barrel Cleaning	Hospital
Boat/Shipyard	Metal Finishing
Cement/Readymix	Metal Recycling
Container Washing	Photo Processing
Decant Station (Vactor)	Pressure Washing
Food Processing	Rendering
Fuel – Bulk Storage	Solid Waste – Transfer Facility
Fueling Facility	Transportation Facility
General Type	Trucked Waste
Groundwater Remediation – Petroleum	Vehicle Washing

Industrial Categories with BA >100 µg/L:

Centralized Waste Treatment	Paint Manufacturing
Laundry – Linen	

Industrial Categories with BA >250 µg/L:

Laundry – Linen

Benzyl Butyl Phthalate (BzBP)

Industrial Categories with BzBP <10 µg/L:

Barrel Cleaning	Groundwater Remediation – Petroleum
Boat/Shipyard	Hospital
Cement/Readymix	Laundry – Linen
Centralized Waste Treatment	Metal Finishing
Container Washing	Metal Recycling
Decant Station (Vactor)	Photo Processing
Fuel – Bulk Storage	Transportation Facility
Fueling Facility	Trucked Waste
General Type	Vehicle Washing

Industrial Categories with BzBP >10 µg/L:

Food Processing	Pressure Washing

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Industrial Categories with BzBP >50 µg/L:

Pressure Washing

Bis(2-Ethylhexyl) Phthalate (BEHP)

Industrial Categories with BEHP <20 µg/L:

Boat/Shipyard	Metal Recycling
Cement/Readymix	Paint Manufacturing
Centralized Waste Treatment	Photo Processing
Fuel – Bulk Storage	Solid Waste – Transfer Facility
Fueling Facility	Transportation Facility
Groundwater Remediation – Petroleum	Trucked Waste
Hospital	Vehicle Washing
Metal Finishing	

Industrial Categories with BEHP >20 µg/L:

Barrel Cleaning	General Type
Container Washing	Laundry – Linen
Decant Station (Vactor)	Pressure Washing
Food Processing	Rendering

Industrial Categories with BEHP >100 µg/L:

Barrel Cleaning	General Type
Container Washing	Pressure Washing
Food Processing	

One day "snapshot"

For all of the industrial users sampled, flow rate information was collected for the day of sampling. This information was used, along with the reported target chemical concentration data from each industrial user, to estimate an aggregate industrial wastewater concentration. These data are presented in **Table 3**. Because of the difficulties of sampling all of these industries on the same day, this approach was used to estimate the industrial wastewater component. The following average values were calculated:

- **BA:** 30.27µg/L (Note: 2006 Treatment Plant Range = 20.8 – 75.3 µg/L)
- **BzBP:** 0.81 µg/L (Note: 2006 Treatment Plant Range = 0.85 – 4.9 µg/L)
- **BEHP:** 11.87 µg/L (Note: 2006 Treatment Plant Range = 4.61 – 13.9 µg/L)

[Total Industrial Discharge Rate: 1.034 million gallons per day (MGD)]

To evaluate what these concentrations mean in the context of total loadings to the wastewater treatment plants, it is useful to compare the estimated total industrial loads with the influent

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wastewater loadings at the treatment plants. Since industrial users comprise less than 5% of the total wastewater flow to King County treatment plants, this figure is used as a conservative estimate of industrial flow. Using the treatment plant range of loadings from **Table 1**, a typical treatment plant influent flow rate of approximately 100 MGD, and assuming an industrial flow of 5.17 MGD (i.e., 5 x 1.034 MGD – again, a conservative estimate), the following are the calculated ranges of estimated percent loadings from the industrial users:

- **BA:** 2 to 11%
- **BzBP:** 1 to 3%
- **BEHP:** 5 to 9%

Based on the results of this analysis, even if it were possible to completely eliminate the industrial loadings of BA, BzBP and BEHP from the influent of the wastewater treatment plants, there would still be significant loadings from non-controllable sources (e.g., domestic dischargers, etc.).

CONCLUSION

The results of sampling industrial users for BA, BzBP and BBP indicate that, in aggregate, the industrial wastewater component is within the concentration range for wastewater received at the two large King County wastewater treatment plants. However, certain industries, although small in discharge volume, still need attention when conducting pretreatment inspections. The industries worthy of primary attention include the following:

- Barrel Cleaning
- Container Washing
- Pressure Washing

The chief concern with these facilities is to ensure that the wastestream receives adequate treatment for removal of oil and particulate matter. The typical pretreatment for these wastestreams would be the use of an oil-water separator or some form of gravitational settling. The primary mechanism being removal of particulate matter, since the selected phthalates generally ~~absorb~~ adsorb to particulate matter – although solubility in oil also can be a concern.

The industries of secondary concern include the following:

- Laundries
- Food Processing

Both of these industries are difficult to control from a pretreatment perspective. Laundries and food processing facilities both use chemical products which are extremely difficult to remove from their respective wastestreams. As with other wastestreams, efforts to remove particulate material can be beneficial.

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In conclusion, sampling in the King County sewerage system for BA, BzBP and BEHP did not indicate significant variability in the sample results. In particular, for BzBP and BEHP, there was little variability between combined and separated sewer service areas, domestic vs. industrial wastewater (as calculated from summation of loadings from individual dischargers), and dry vs. wet weather sampling. These target chemicals are ubiquitous in the environment. Although the continued application of standard pretreatment technologies can provide some degree of benefit, these alone will not be able to overcome the higher mass loading from domestic sources that are beyond the jurisdiction of a delegated pretreatment authority such as the King County Industrial Waste Program.

REFERENCES

ATSDR. 2002. Toxicological Profile for Di(2-Ethylhexyl)Phthalate. U.S. Department of Health and Human Services/Public Health Service/Agency for Toxic Substances and Disease Registry. September 2002.

EBDRP. 2005. Duwamish/Diagonal CSO/SD Sediment Remediation Project - Closure Report. Elliott Bay/Duwamish Restoration Program Panel. Panel Publication No. 39.

EBDRP. 2007. Duwamish/Diagonal CSO/SD Sediment Remediation Project – 2005 Monitoring Report. Elliott Bay/Duwamish Restoration Program Panel. Panel Publication No. 40.

Ecology. 2004. Lower Duwamish Waterway Source Control Action Plan for the Duwamish/Diagonal Way Early Action Cleanup. Publication No. 04-09-003. December 2004.

EPA. 2004. Local Limits Development Guidance. U.S. Environmental Protection Agency. Publication No. 833-R-04-002A. July 2004.

HSDB. 2007. Hazardous Substance Data Bank (URL: http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB). United States National Library of Medicine/TOXNET Toxicology Data Network/Hazardous Substance Data Bank. Accessed: 06/12/07

King County. 2006. 2005 CSO Control Program Review. King County Department of Natural Resources and Parks. April 2006.

FIGURES

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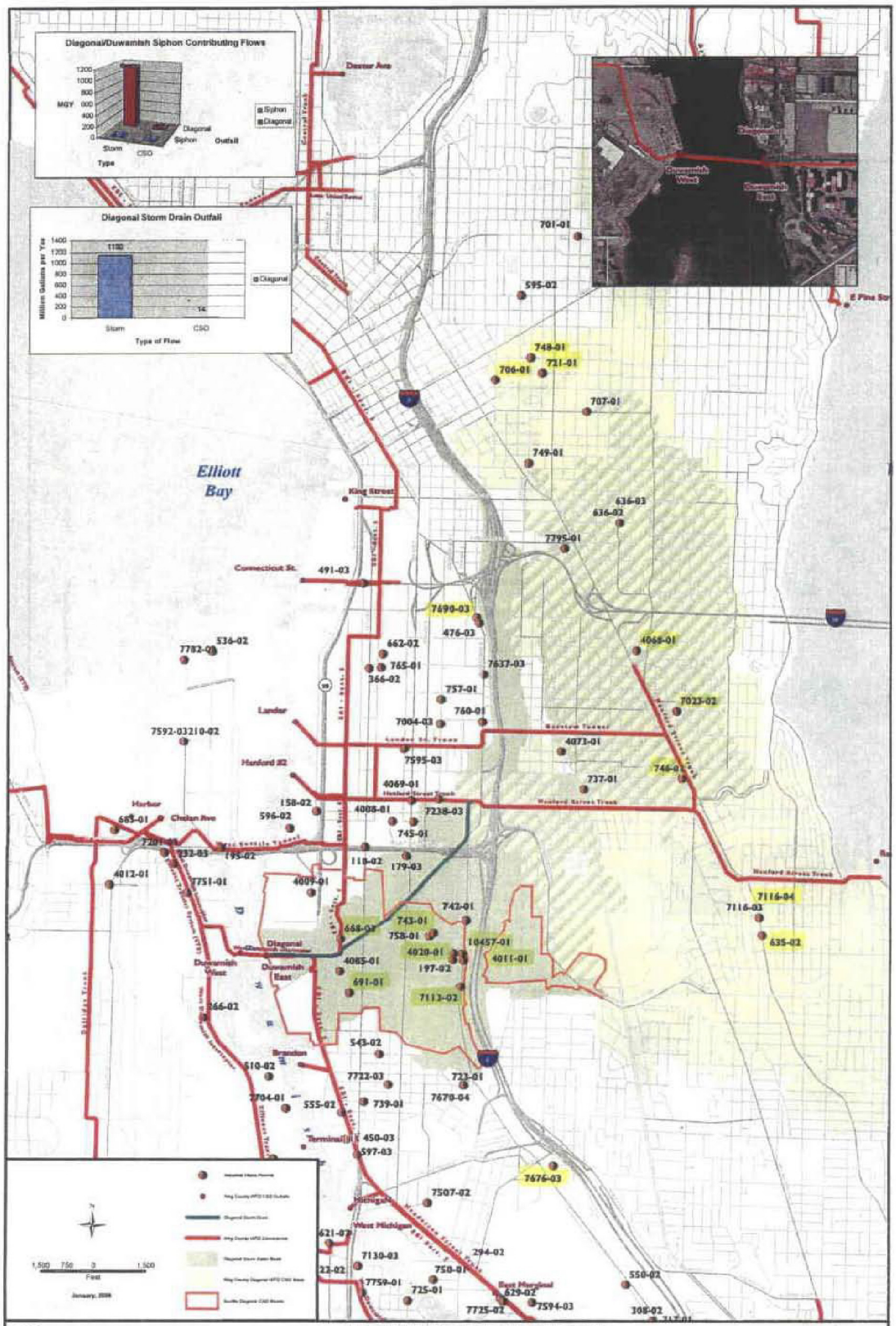

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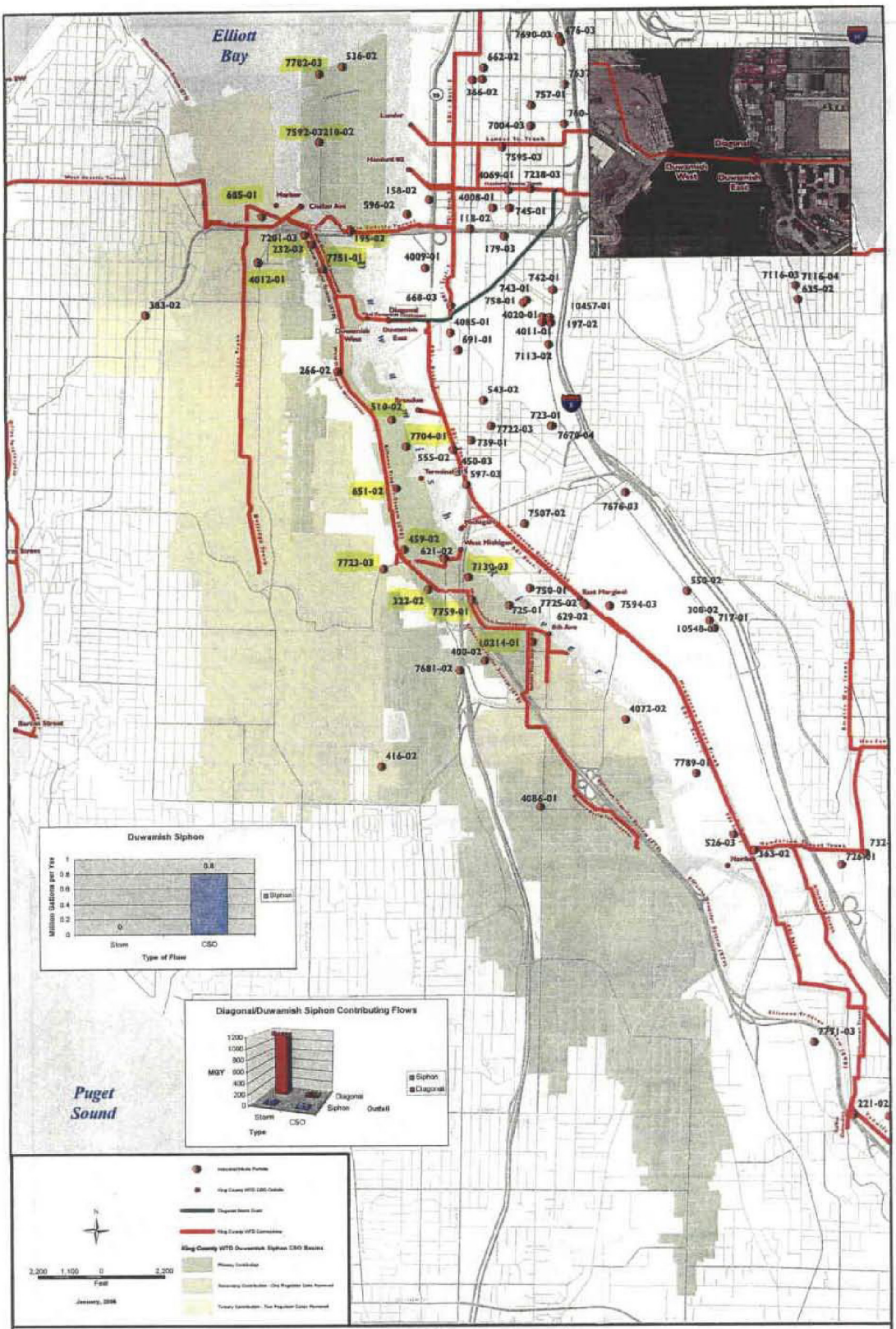

King County
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Figure 2
Duwamish Siphon CSO Basins

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TABLES

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Table 1

2006 Range of Values Per Wastewater Treatment Plant – South (Renton) and West Point

Benzyl Alcohol - Min	20.8	ug/L		12.2 lbs/day
Benzyl Alcohol - Max	75.3	ug/L		52.3 lbs/day
Benzyl Butyl Phthalate - Min	0.85	ug/L		1.2 lbs/day
Benzyl Butyl Phthalate - Max	4.9	ug/L		2.5 lbs/day
Bis(2-Ethylhexyl)Phthalate - Min	4.61	ug/L		5.6 lbs/day
Bis(2-Ethylhexyl)Phthalate - Max	13.9	ug/L		9.5 lbs/day
Discharge Rate - Min				56.2 mgd
Discharge Rate - Max				176.2 mgd

Table 2

Summary of Pump Station and CSO Sampling for Bis-(2-Ethylhexyl) Phthalate and Benzyl Butyl Phthalate

Bis-(2-Ethylhexyl) Phthalate	*E. Marginal Way PS*	*W. Marginal Way PS*	*Duwamish PS*	*Matthews Park PS*	*Interbay PS*	*Duwamish Siphon (Aftbay)*	Bayview/ Hanford #1
Minimum	1.6 µg/L	8.7 µg/L	7.3 µg/L	5.2 µg/L	7.1 µg/L	9.1 µg/L	6.4 µg/L
Maximum	35 µg/L	148 µg/L	39.5 µg/L	11.4 µg/L	26.3 µg/L	12.5 µg/L	8.1 µg/L
Mean	7.7 µg/L	20.3 µg/L	12.4 µg/L	8.3 µg/L	10.8 µg/L	11.0 µg/L	7.5 µg/L
Median	6.1 µg/L	13.4 µg/L	11.5 µg/L	8.1 µg/L	10.0 µg/L	-	-
N	26	26	24	18	17	3	4

Benzyl Butyl Phthalate	*E. Marginal Way PS*	*W. Marginal Way PS*	*Duwamish PS*	*Matthews Park PS*	*Interbay PS*	*Duwamish Siphon (Aftbay)*	Bayview/ Hanford #1
Minimum	0.6 µg/L	1.0 µg/L	0.9 µg/L	1.1 µg/L	1.5 µg/L	0.9 µg/L	1.2 µg/L
Maximum	4.0 µg/L	7.3 µg/L	69.8 µg/L	1.9 µg/L	3.1 µg/L	0.9 µg/L	2.0 µg/L
Mean	2.0 µg/L	2.5 µg/L	7.9 µg/L	1.4 µg/L	2.1 µg/L	0.9 µg/L	1.6 µg/L
Median	2.1 µg/L	2.4 µg/L	1.5 µg/L	1.4 µg/L	2.0 µg/L	-	-
N	19	15	22	18	18	1	4

Notes:
PS = Pump Station
Results collected from dry and wet weather sampling events.
Only detected values used in the analysis. No corrections made for non-detected values.

Table 3

2006 Sampling of King County Industrial Users – Summary of Results per Service Area

Industrial Users Sampled - West Side of Lower Duwamish Waterway (W)

Totals	VALUE	UNITS	-	-	LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			2.58E-03	1.70
Benzyl Butyl Phthalate	-	-			2.61E-03	1.73
Bis(2-Ethylhexyl)Phthalate	-	-			1.60E-02	10.56
Discharge Rate	0.181	MGD				

Industrial Users Sampled - East Side of Lower Duwamish Waterway - Tributary to SPU CSO (E/SPU CSO)

High conc. but low vol. (31,100 gpd)

Totals	VALUE	UNITS	-	-	LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			0.00E+00	0.00
Benzyl Butyl Phthalate	-	-			1.62E-03	6.34
Bis(2-Ethylhexyl)Phthalate	-	-			2.46E-02	96.42
Discharge Rate	0.031	MGD				

Industrial Users Sampled - East Side of Lower Duwamish Waterway - Tributary to KC CSO (E/KC CSO)

Totals	VALUE	UNITS	-	-	LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			2.17E-01	53.18
Benzyl Butyl Phthalate	-	-			2.80E-03	0.69
Bis(2-Ethylhexyl)Phthalate	-	-			5.04E-02	12.35
Discharge Rate	0.489	MGD				

Industrial Users Sampled - Outside Lower Duwamish Waterway

Totals	VALUE	UNITS	-	-	LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			4.14E-02	14.92
Benzyl Butyl Phthalate	-	-			0.00E+00	0.00
Bis(2-Ethylhexyl)Phthalate	-	-			1.14E-02	4.12
Discharge Rate	0.333	MGD				

Summation of Industrial Users Sampled

Totals	VALUE	UNITS	-	-	LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			2.61E-01	30.27
Benzyl Butyl Phthalate	-	-			7.03E-03	0.81
Bis(2-Ethylhexyl)Phthalate	-	-			1.02E-01	11.87
Discharge Rate	1.034	MGD				

0.12 lbs/day
x5 = 0.6 lbs/day

APPENDIX A
2006 NPDES PERMIT DATA FOR SOUTH (RENTON) AND WEST POINT TREATMENT PLANTS

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Table A-1

King County Wastewater Treatment Plants - NPDES Permit - 2006 Intensive Sampling

Site	Locator	Project	Collect Date	Sample	Matrix	Parameter	Value	Unit	Qualifier	MDL	RDL	LOADING, LBS/DAY
WEST PT INPLANT	RSAA01	421185	2/28/2006	L38189-1	LB INFLUENT	Benzyl Alcohol	23	ug/L		0.94	1.89	33.8
WEST PT INPLANT	RSAA01	421185	2/28/2006	L38189-1	LB INFLUENT	Benzyl Butyl Phthalate	0.85	ug/L	<RDL	0.57	0.943	1.2
WEST PT INPLANT	RSAA01	421185	2/28/2006	L38189-1	LB INFLUENT	Bis(2-Ethylhexyl)Phthalate	4.61	ug/L	B	0.19	0.943	6.8
WEST PT INPLANT	RSAA01	421162F	2/28/2006	L38036-3	LB INFLUENT	Discharge Rate	176.21	mgd		-	-	
WEST PT INPLANT	RSAA01	421185	8/22/2006	L40079-1	LB INFLUENT	Benzyl Alcohol	75.3	ug/L		0.94	1.89	52.3
WEST PT INPLANT	RSAA01	421185	8/22/2006	L40079-1	LB INFLUENT	Benzyl Butyl Phthalate	2.59	ug/L		0.57	0.943	1.8
WEST PT INPLANT	RSAA01	421185	8/22/2006	L40079-1	LB INFLUENT	Bis(2-Ethylhexyl)Phthalate	13.7	ug/L	B	0.19	0.943	9.5
WEST PT INPLANT	RSAA01	421162F	8/22/2006	L39803-3	LB INFLUENT	Discharge Rate	83.32	mgd		-	-	

Site	Locator	Project	Collect Date	Sample	Matrix	Parameter	Value	Unit	Qualifier	MDL	RDL	LOADING, LBS/DAY
RENTON INPLANT	B5001	421186B	2/13/2006	L38076-4	LB INFLUENT	Benzyl Alcohol	35.5	ug/L		0.95	1.9	28.3
RENTON INPLANT	B5001	421186B	2/13/2006	L38076-4	LB INFLUENT	Benzyl Butyl Phthalate	2.35	ug/L		0.57	0.952	1.9
RENTON INPLANT	B5001	421186B	2/13/2006	L38076-4	LB INFLUENT	Bis(2-Ethylhexyl)Phthalate	11.3	ug/L	B	0.19	0.952	9.0
RENTON INPLANT	B5001	421162C	2/13/2006	L38014-2	LB INFLUENT	Discharge Rate	95.6	mgd		-	-	
RENTON INPLANT	B5001	421186B	2/14/2006	L38077-4	LB INFLUENT	Benzyl Alcohol	20.8	ug/L		0.95	1.9	15.7
RENTON INPLANT	B5001	421186B	2/14/2006	L38077-4	LB INFLUENT	Benzyl Butyl Phthalate	2.59	ug/L		0.57	0.952	2.0
RENTON INPLANT	B5001	421186B	2/14/2006	L38077-4	LB INFLUENT	Bis(2-Ethylhexyl)Phthalate	11.1	ug/L	B	0.19	0.952	8.4
RENTON INPLANT	B5001	421162C	2/14/2006	L38014-3	LB INFLUENT	Discharge Rate	90.6	mgd		-	-	
RENTON INPLANT	B5001	421186B	2/15/2006	L38078-4	LB INFLUENT	Benzyl Alcohol	26	ug/L		0.95	1.9	21.1
RENTON INPLANT	B5001	421186B	2/15/2006	L38078-4	LB INFLUENT	Benzyl Butyl Phthalate	2.81	ug/L		0.57	0.952	2.3
RENTON INPLANT	B5001	421186B	2/15/2006	L38078-4	LB INFLUENT	Bis(2-Ethylhexyl)Phthalate	10.4	ug/L	B	0.19	0.952	6.4
RENTON INPLANT	B5001	421162C	2/15/2006	L38023-1	LB INFLUENT	Discharge Rate	97.3	mgd		-	-	
RENTON INPLANT	B5001	421186B	9/12/2006	L40235-1	LB INFLUENT	Benzyl Alcohol	63.9	ug/L		0.94	1.89	30.0
RENTON INPLANT	B5001	421186B	9/12/2006	L40235-1	LB INFLUENT	Benzyl Butyl Phthalate	3.04	ug/L		0.57	0.943	1.4
RENTON INPLANT	B5001	421186B	9/12/2006	L40235-1	LB INFLUENT	Bis(2-Ethylhexyl)Phthalate	11.9	ug/L		0.19	0.943	5.6
RENTON INPLANT	B5001	421162C	9/12/2006	L40097-3	LB INFLUENT	Discharge Rate	56.2	mgd		-	-	
RENTON INPLANT	B5001	421186B	9/13/2006	L40236-1	LB INFLUENT	Benzyl Alcohol	26.1	ug/L		0.94	1.89	12.4
RENTON INPLANT	B5001	421186B	9/13/2006	L40236-1	LB INFLUENT	Benzyl Butyl Phthalate	3.39	ug/L		0.57	0.943	1.6
RENTON INPLANT	B5001	421186B	9/13/2006	L40236-1	LB INFLUENT	Bis(2-Ethylhexyl)Phthalate	12.6	ug/L		0.19	0.943	6.0
RENTON INPLANT	B5001	421162C	9/13/2006	L40099-1	LB INFLUENT	Discharge Rate	56.9	mgd		-	-	
RENTON INPLANT	B5001	421186B	9/14/2006	L40237-1	LB INFLUENT	Benzyl Alcohol	24.1	ug/L		0.94	1.89	12.2
RENTON INPLANT	B5001	421186B	9/14/2006	L40237-1	LB INFLUENT	Benzyl Butyl Phthalate	4.9	ug/L		0.57	0.943	2.5
RENTON INPLANT	B5001	421186B	9/14/2006	L40237-1	LB INFLUENT	Bis(2-Ethylhexyl)Phthalate	13.9	ug/L		0.19	0.943	7.0
RENTON INPLANT	B5001	421162C	9/14/2006	L40099-2	LB INFLUENT	Discharge Rate	60.7	mgd		-	-	

2006 Range of Values Per Wastewater Treatment Plan - South (Renton) and West Point

Benzyl Alcohol - Min	20.8	ug/L	12.2 lbs/day
Benzyl Alcohol - Max	75.3	ug/L	52.3 lbs/day
Benzyl Butyl Phthalate - Min	0.85	ug/L	1.2 lbs/day
Benzyl Butyl Phthalate - Max	4.9	ug/L	2.5 lbs/day
Bis(2-Ethylhexyl)Phthalate - Min	4.61	ug/L	5.6 lbs/day
Bis(2-Ethylhexyl)Phthalate - Max	13.9	ug/L	9.5 lbs/day
Discharge Rate - Min			56.2 mgd
Discharge Rate - Max			176.2 mgd

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APPENDIX B
SANITARY SEWER CHARACTERIZATION SAMPLING FOR PHTHALATES

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Table B-1
Sanitary Sewer Characterization Sampling for Phthalates

East Marginal Way Pump Station

Locate	Labsampic	Collectdate	Matrix	Bis(2-Ethylhexyl)Phthalate	Units	MDL	RDL	Qual	Benzyl Butyl Phthalate	Units	MDL	RDL	Qual
A4491	L29489-1	9/2/2003	LN BLANK WTR	1.52	ug/L	0.24	1.18			ug/L	0.71	1.18	<MDL
A4491	L29574-1	9/5/2003	LN BLANK WTR	1.21	ug/L	0.19	0.971	B		ug/L	0.58	0.971	<MDL
A4491	L29581-1	9/7/2003	LN BLANK WTR	2.87	ug/L	0.2	0.98			ug/L	0.59	0.98	<MDL
A4491	L29479-1	9/2/2003	LF SEWER WTR	6.5	ug/L	0.2	0.99		2.89	ug/L	0.59	0.99	
A4491	L29490-1	9/2/2003	LF SEWER WTR	5.38	ug/L	0.19	0.971		2.72	ug/L	0.58	0.971	
A4491	L29479-2	9/3/2003	LF SEWER WTR	5.78	ug/L	0.19	0.971	B	3.07	ug/L	0.58	0.971	
A4491	L29479-3	9/4/2003	LF SEWER WTR	7.05	ug/L	0.2	1.01	B	4.03	ug/L	0.61	1.01	
A4491	L29479-4	9/5/2003	LF SEWER WTR	7.37	ug/L	0.2	1		2.75	ug/L	0.6	1	
A4491	L29579-1	9/5/2003	LF SEWER WTR	5.74	ug/L	0.2	1.01		2.08	ug/L	0.61	1.01	
A4491	L29479-6	9/7/2003	LF SEWER WTR	4.69	ug/L	0.2	0.98		3.3	ug/L	0.59	0.98	
A4491	L29582-1	9/7/2003	LF SEWER WTR	3.86	ug/L	0.2	0.98		3.35	ug/L	0.59	0.98	
A4491	L29479-7	9/8/2003	LF SEWER WTR	6.97	ug/L	0.19	0.943		1.33	ug/L	0.57	0.943	
	dr	weather	median	**5.78**					**2.89**				
A4491	L31239-1	3/30/2004	LN BLANK WTR	6.03	ug/L	0.2	1.02	B		ug/L	0.61	1.02	<MDL
A4491	L31670-1	4/7/2004	LN BLANK WTR	0.79	ug/L	0.19	0.962	<RDL,B		ug/L	0.58	0.962	<MDL
A4491	L31240-1	3/30/2004	LF SEWER WTR	11.8	ug/L	0.2	1	B	0.9	ug/L	0.6	1	<RDL
A4491	L31580-1	3/30/2004	LF SEWER WTR	11.5	ug/L	0.2	1.02	B	0.93	ug/L	0.61	1.02	<RDL
A4491	L31580-2	3/31/2004	LF SEWER WTR	3.79	ug/L	0.19	0.926	B	0.74	ug/L	0.56	0.926	<RDL
A4491	L31580-3	4/1/2004	LF SEWER WTR	8.74	ug/L	0.19	0.962		1.34	ug/L	0.58	0.962	
A4491	L31580-4	4/2/2004	LF SEWER WTR	6.77	ug/L	0.19	0.962	B	1.47	ug/L	0.58	0.962	
A4491	L31580-5	4/3/2004	LF SEWER WTR	1.8	ug/L	0.2	1.02	B		ug/L	0.61	1.02	<MDL
A4491	L31580-6	4/4/2004	LF SEWER WTR	1.55	ug/L	0.19	0.962	B	0.72	ug/L	0.58	0.962	<RDL
A4491	L31580-7	4/5/2004	LF SEWER WTR	5.91	ug/L	0.2	1		0.63	ug/L	0.6	1	<RDL
A4491	L31649-1	4/5/2004	LF SEWER WTR	6.21	ug/L	0.2	1			ug/L	0.6	1	<MDL
	wet	weather	median	**6.21**					**0.90**				
A4491	L33378-1	9/21/2004	LN BLANK WTR	4.49	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4491	L33485-1	9/28/2004	LN BLANK WTR	0.971	ug/L	0.19	0.962	B		ug/L	0.58	0.962	<MDL
A4491	L33361-2	9/22/2004	LF SEWER WTR	35	ug/L	0.19	0.962		2.66	ug/L	0.58	0.962	
A4491	L33361-1	9/22/2004	LF SEWER WTR	6.03	ug/L	0.19	0.962		2.22	ug/L	0.58	0.962	
A4491	L33361-3	9/23/2004	LF SEWER WTR	4.7	ug/L	1.9	9.62	<RDL		ug/L	5.8	9.62	<MDL
A4491	L33361-4	9/24/2004	LF SEWER WTR	6.9	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4491	L33361-5	9/25/2004	LF SEWER WTR	15.4	ug/L	0.2	1			ug/L	0.6	1	<MDL
A4491	L33361-6	9/26/2004	LF SEWER WTR	9.12	ug/L	0.19	0.962		0.73	ug/L	0.58	0.962	<RDL
A4491	L33361-7	9/27/2004	LF SEWER WTR	5.1	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4491	L33486-1	9/27/2004	LF SEWER WTR	5.37	ug/L	0.22	1.09			ug/L	0.65	1.09	<MDL
	dry	weather	median	**6.47**					**2.22**				
Summary (Dry & Wet Weather) (Detects Only)			Minimum	**1.55**	ug/L				**0.63**	ug/L			
			Maximum	**35**	ug/L				**4.03**	ug/L			
			Mean	**7.66**	ug/L				**1.99**	ug/L			
			Median	**6.12**	ug/L				**2.08**	ug/L			
			n	**26**	-				**19**	-			

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Table B-1
Sanitary Sewer Characterization Sampling for Phthalates

West Marginal Way Pump Station Locator	Labsample	Collectdate	Matrix	Bis(2-Ethylhexyl)Phthalate	Units	MDL	RDL	Qual	Benzyl Butyl Phthalate	Units	MDL	RDL	Qual
A4492	L29493-1	9/2/2003	LN BLANK WTR	2.77	ug/L	0.22	1.1			ug/L	0.66	1.1	<MDL
A4492	L29575-1	9/5/2003	LN BLANK WTR	3.6	ug/L	0.19	0.952	B		ug/L	0.57	0.952	<MDL
A4492	L29584-1	9/7/2003	LN BLANK WTR	5.83	ug/L	0.19	0.952			ug/L	0.57	0.952	<MDL
A4492	L29482-1	9/2/2003	LF SEWER WTR	11	ug/L	0.2	1			ug/L	0.6	1	<MDL
A4492	L29494-1	9/2/2003	LF SEWER WTR	11.3	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4492	L29482-2	9/3/2003	LF SEWER WTR	13.1	ug/L	0.2	0.99		2.1	ug/L	0.59	0.99	
A4492	L29482-3	9/4/2003	LF SEWER WTR	12.4	ug/L	0.19	0.971		1.78	ug/L	0.58	0.971	
A4492	L29482-4	9/5/2003	LF SEWER WTR	**148**	ug/L	0.21	1.04		1.41	ug/L	0.63	1.04	
A4492	L29576-1	9/5/2003	LF SEWER WTR	10.5	ug/L	0.19	0.962		1	ug/L	0.58	0.962	
A4492	L29482-5	9/6/2003	LF SEWER WTR	9.52	ug/L	0.19	0.943		2.46	ug/L	0.57	0.943	
A4492	L29482-6	9/7/2003	LF SEWER WTR	14.9	ug/L	0.19	0.962		2.74	ug/L	0.58	0.962	
A4492	L29585-1	9/7/2003	LF SEWER WTR	15.6	ug/L	0.21	1.04		2.97	ug/L	0.63	1.04	
A4492	L29482-7	9/8/2003	LF SEWER WTR	11.1	ug/L	0.19	0.952		1.46	ug/L	0.57	0.952	
dry	weather		median	**11.9**					**1.94**				
A4492	L31247-1	3/30/2004	LN BLANK WTR	10.9	ug/L	0.2	1	B		ug/L	0.6	1	<MDL
A4492	L31674-1	4/7/2004	LN BLANK WTR	1.74	ug/L	0.27	1.35			ug/L	0.81	1.35	<MDL
A4492	L31248-1	3/31/2004	LF SEWER WTR	52.3	ug/L	0.2	1.02		3.01	ug/L	0.61	1.02	
A4492	L31246-2	3/31/2004	LF SEWER WTR	14.2	ug/L	0.19	0.926	B	2.66	ug/L	0.56	0.926	
A4492	L31246-3	4/1/2004	LF SEWER WTR	19	ug/L	0.19	0.962		1.85	ug/L	0.58	0.962	
A4492	L31246-4	4/2/2004	LF SEWER WTR	17	ug/L	0.19	0.962		2.36	ug/L	0.58	0.962	
A4492	L31246-5	4/3/2004	LF SEWER WTR	14.9	ug/L	0.2	1		3.37	ug/L	0.6	1	
A4492	L31246-7	4/5/2004	LF SEWER WTR	13.3	ug/L	0.19	0.962		1.36	ug/L	0.58	0.962	
A4492	L31651-1	4/5/2004	LF SEWER WTR	14.8	ug/L	0.21	1.04			ug/L	0.63	1.04	<MDL
wet	weather		median	**14.9**					**2.5**				
A4492	L33382-1	9/21/2004	LN BLANK WTR	2.35	ug/L	0.19	0.962	B		ug/L	0.58	0.962	<MDL
A4492	L33488-1	9/28/2004	LN BLANK WTR	1.06	ug/L	0.19	0.943			ug/L	0.57	0.943	<MDL
A4492	L33365-1	9/21/2004	LF SEWER WTR	13.2	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4492	L33383-1	9/21/2004	LF SEWER WTR	15	ug/L	0.21	1.04			ug/L	0.63	1.04	<MDL
A4492	L33365-2	9/22/2004	LF SEWER WTR	12.6	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4492	L33365-3	9/23/2004	LF SEWER WTR	13.1	ug/L	0.2	1			ug/L	0.6	1	<MDL
A4492	L33365-4	9/24/2004	LF SEWER WTR	13.1	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4492	L33365-5	9/25/2004	LF SEWER WTR	20.5	ug/L	2.1	10.4		7.3	ug/L	6.3	10.4	<RDL
A4492	L33365-6	9/26/2004	LF SEWER WTR	8.67	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4492	L33365-7	9/27/2004	LF SEWER WTR	15.1	ug/L	0.19	0.926			ug/L	0.56	0.926	<MDL
A4492	L33487-1	9/27/2004	LF SEWER WTR	13.4	ug/L	0.19	0.926			ug/L	0.56	0.926	<MDL
dry	weather		median	**13.2**					**7.3**				
Summary (Dry & Wet Weather) Detects Only)			Minimum	**8.67**	ug/L				**1**	ug/L			
			Maximum	**148**	ug/L				**7.3**	ug/L			
			Mean	**20.29**	ug/L				**2.52**	ug/L			
			Median	**13.35**	ug/L				**2.36**	ug/L			
			n	**26**	-				**15**	-			

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Table B-1
Sanitary Sewer Characterization Sampling for Phthalates

Duwamish Pump Station

Locator	Labsample	Collectdate	Matrix	Bis(2-Ethylhexyl)Phthalate	Units	MDL	RDL	Qual	Benzyl Butyl Phthalate	Units	MDL	RDL	Qual
A4497	L29497-1	9/2/2003	LN BLANK WTR	1.48	ug/L	0.26	1.28			ug/L	0.77	1.28	<MDL
A4497	L29577-1	9/5/2003	LN BLANK WTR	0.965	ug/L	0.19	0.962	B		ug/L	0.58	0.962	<MDL
A4497	L29580-1	9/7/2003	LN BLANK WTR	1.03	ug/L	0.19	0.943	B		ug/L	0.57	0.943	<MDL
A4497	L29485-1	9/2/2003	LF SEWER WTR	10.1	ug/L	0.2	0.98		0.85	ug/L	0.59	0.98	<RDL
A4497	L29498-1	9/2/2003	LF SEWER WTR	10.8	ug/L	0.19	0.971		1.02	ug/L	0.58	0.971	
A4497	L29485-2	9/3/2003	LF SEWER WTR	9.61	ug/L	0.2	0.99		1.82	ug/L	0.59	0.99	
A4497	L29485-3	9/4/2003	LF SEWER WTR	10.3	ug/L	0.2	0.98		1.42	ug/L	0.59	0.98	
A4497	L29485-4	9/5/2003	LF SEWER WTR	7.31	ug/L	0.19	0.952		0.9	ug/L	0.57	0.952	<RDL
A4497	L29561-1	9/5/2003	LF SEWER WTR	12.2	ug/L	0.19	0.952		1.34	ug/L	0.57	0.952	
A4497	L29485-7	9/8/2003	LF SEWER WTR	11.7	ug/L	0.2	0.98		1.27	ug/L	0.59	0.98	
A4497	L29562-1	9/8/2003	LF SEWER WTR	12.4	ug/L	0.2	0.98		1.79	ug/L	0.59	0.98	
	dry	weather	median	**10.6**					**1.31**				
A4497	L31578-1	3/30/2004	LN BLANK WTR	10.6	ug/L	0.2	1.02	B		ug/L	0.61	1.02	<MDL
A4497	L31675-1	4/7/2004	LN BLANK WTR	13.5	ug/L	0.21	1.04			ug/L	0.63	1.04	<MDL
A4497	L31579-1	3/30/2004	LF SEWER WTR	13.5	ug/L	0.19	0.926	B	2.3	ug/L	0.56	0.926	
A4497	L31632-1	3/30/2004	LF SEWER WTR	13.3	ug/L	0.2	1.02	B	2.37	ug/L	0.61	1.02	
A4497	L31632-2	3/31/2004	LF SEWER WTR	11.5	ug/L	0.2	1.02	B	1.95	ug/L	0.61	1.02	
A4497	L31632-3	4/1/2004	LF SEWER WTR	12.2	ug/L	0.2	0.98		1.29	ug/L	0.59	0.98	
A4497	L31632-5	4/3/2004	LF SEWER WTR	12.3	ug/L	0.2	1		2.16	ug/L	0.6	1	
A4497	L31632-6	4/4/2004	LF SEWER WTR	10	ug/L	0.19	0.962		1.56	ug/L	0.58	0.962	
A4497	L31632-7	4/5/2004	LF SEWER WTR	10.7	ug/L	0.24	1.19		1.42	ug/L	0.71	1.19	
A4497	L31652-1	4/5/2004	LF SEWER WTR	13.7	ug/L	0.26	1.28		1.49	ug/L	0.77	1.28	
	wet	weather	mean	**12.3**					**1.76**				
A4497	L33384-1	9/21/2004	LN BLANK WTR	2.97	ug/L	0.19	0.962	B		ug/L	0.58	0.962	<MDL
A4497	L33489-1	9/28/2004	LN BLANK WTR	0.985	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4497	L33368-2	9/22/2004	LF SEWER WTR	10.7	ug/L	0.21	1.04			ug/L	0.63	1.04	<MDL
A4497	L33385-1	9/22/2004	LF SEWER WTR	10.5	ug/L	0.2	1		1.15	ug/L	0.6	1	
A4497	L33368-3	9/23/2004	LF SEWER WTR	11.5	ug/L	0.21	1.04		4.31	ug/L	0.63	1.04	
A4497	L33368-4	9/24/2004	LF SEWER WTR	9.65	ug/L	0.19	0.962		2.08	ug/L	0.58	0.962	
A4497	L33368-5	9/25/2004	LF SEWER WTR	8.75	ug/L	0.19	0.962			ug/L	0.58	0.962	<MDL
A4497	L33368-6	9/26/2004	LF SEWER WTR	39.5	ug/L	0.19	0.962		0.91	ug/L	0.58	0.962	<RDL
A4497	L33368-7	9/27/2004	LF SEWER WTR	13.1	ug/L	0.2	1		69.5	ug/L	0.6	1	
A4497	L33490-1	9/27/2004	LF SEWER WTR	13	ug/L	0.19	0.962		69.8	ug/L	0.58	0.962	
	dry	weather	median	**11.1**					**3.20**				
Summary (Dry & Wet Weather)			Minimum	**7.31**	ug/L				**0.85**	ug/L			
(Detects Only)			Maximum	**39.5**	ug/L				**69.8**	ug/L			
			Mean	**12.43**	ug/L				**7.85**	ug/L			
			Median	**11.50**	ug/L				**1.53**	ug/L			
			n	**24**	-				**22**	-			

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Table B-1
Sanitary Sewer Characterization Sampling for Phthalates

Matthews Park Pump Station - Separated Sewer Characterization

Locator	Labsample	Collectdate	Matrix	Bis(2-Ethylhexyl)Phthalate	Units	MDL	RDL	Qual	Benzyl Butyl Phthalate	Units	MDL	RDL	Qual
A2019	L29534-1	9/2/2003	LN BLANK WTR	0.59	ug/L	0.19	0.962	<RDL,B		ug/L	0.58	0.962	<MDL
A2019	L29572-1	9/5/2003	LN BLANK WTR	1.25	ug/L	0.19	0.962	B		ug/L	0.58	0.962	<MDL
A2019	L29579-1	9/7/2003	LN BLANK WTR	0.94	ug/L	0.19	0.952	<RDL,B		ug/L	0.57	0.952	<MDL
A2019	L29515-1	9/2/2003	LF SEWER WTR	8.03	ug/L	0.19	0.952		1.49	ug/L	0.57	0.952	
A2019	L29535-1	9/2/2003	LF SEWER WTR	8.34	ug/L	0.19	0.943		1.28	ug/L	0.57	0.943	
A2019	L29515-2	9/3/2003	LF SEWER WTR	7.9	ug/L	0.19	0.943	B	1.9	ug/L	0.57	0.943	
A2019	L29515-3	9/4/2003	LF SEWER WTR	8.26	ug/L	0.2	0.98	B	1.86	ug/L	0.59	0.98	
A2019	L29515-4	9/5/2003	LF SEWER WTR	7.22	ug/L	0.2	1.02		1.54	ug/L	0.61	1.02	
A2019	L29559-1	9/5/2003	LF SEWER WTR	5.2	ug/L	0.2	1.02		1.31	ug/L	0.61	1.02	
A2019	L29515-5	9/6/2003	LF SEWER WTR	7.68	ug/L	0.19	0.962		1.07	ug/L	0.58	0.962	
A2019	L29515-6	9/7/2003	LF SEWER WTR	7.98	ug/L	0.19	0.952		1.51	ug/L	0.57	0.952	
A2019	L29560-1	9/7/2003	LF SEWER WTR	10.2	ug/L	0.2	1.02		1.56	ug/L	0.61	1.02	
A2019	L29515-7	9/8/2003	LF SEWER WTR	11.4	ug/L	0.2	0.98		1.08	ug/L	0.59	0.98	
	dry	weather	median	**8.01**					**1.50**				
A2019	L31235-1	3/30/2004	LN BLANK WTR	1.9	ug/L	0.19	0.926	B		ug/L	0.56	0.926	<MDL
A2019	L31642-1	4/6/2004	LN BLANK WTR	0.45	ug/L	0.19	0.943	<RDL,B		ug/L	0.57	0.943	<MDL
A2019	L31236-1	3/30/2004	LF SEWER WTR	7.57	ug/L	0.19	0.926	B	1.13	ug/L	0.56	0.926	
A2019	L31243-1	3/30/2004	LF SEWER WTR	8.82	ug/L	0.19	0.926	B	1.17	ug/L	0.56	0.926	
A2019	L31243-2	3/31/2004	LF SEWER WTR	9.59	ug/L	0.19	0.926	B	1.79	ug/L	0.56	0.926	
A2019	L31243-3	4/1/2004	LF SEWER WTR	7.05	ug/L	0.19	0.926	B	1.06	ug/L	0.56	0.926	
A2019	L31243-4	4/2/2004	LF SEWER WTR	8.92	ug/L	0.19	0.926		1.47	ug/L	0.56	0.926	
A2019	L31243-5	4/3/2004	LF SEWER WTR	9.11	ug/L	0.19	0.926		1.38	ug/L	0.56	0.926	
A2019	L31243-6	4/4/2004	LF SEWER WTR	9.53	ug/L	0.19	0.926		1.62	ug/L	0.56	0.926	
A2019	L31243-7	4/5/2004	LF SEWER WTR	6.47	ug/L	0.19	0.962		1.17	ug/L	0.58	0.962	
	wet	weather	median	**8.87**					**1.28**				
Summary (Dry & Wet Weather)			Minimum	**5.2**	ug/L				**1.06**	ug/L			
(Detects Only)			Maximum	**11.4**	ug/L				**1.9**	ug/L			
			Mean	**8.29**	ug/L				**1.41**	ug/L			
			Median	**8.15**	ug/L				**1.43**	ug/L			
			n	**18**	-				**18**	-			

Interbay Pump Station - Combined Sewer Characterization

Locator	Labsample	Collectdate	Matrix	Bis(2-Ethylhexyl)Phthalate	Units	MDL	RDL	Qual	Benzyl Butyl Phthalate	Units	MDL	RDL	Qual
A4006	L29501-1	9/2/2003	LN BLANK WTR	0.86	ug/L	0.24	1.22	<RDL,B		ug/L	0.73	1.22	<MDL
A4006	L29570-1	9/5/2003	LN BLANK WTR	5.69	ug/L	0.2	1.02	B		ug/L	0.61	1.02	<MDL
A4006	L29586-1	9/8/2003	LN BLANK WTR	1.39	ug/L	0.2	1.02			ug/L	0.61	1.02	<MDL
A4006	L29476-2	9/3/2003	LF SEWER WTR	10.1	ug/L	0.19	0.935		2	ug/L	0.56	0.935	
A4006	L29502-1	9/3/2003	LF SEWER WTR	26.3	ug/L	0.19	0.962		2.04	ug/L	0.58	0.962	
A4006	L29476-3	9/4/2003	LF SEWER WTR	12	ug/L	0.21	1.04		2	ug/L	0.63	1.04	
A4006	L29476-4	9/5/2003	LF SEWER WTR	7.54	ug/L	0.2	0.98		1.66	ug/L	0.59	0.98	
A4006	L29571-1	9/5/2003	LF SEWER WTR	9.49	ug/L	0.22	1.09		1.84	ug/L	0.65	1.09	
A4006	L29476-5	9/6/2003	LF SEWER WTR	11.2	ug/L	0.21	1.04		2.52	ug/L	0.63	1.04	
A4006	L29476-6	9/7/2003	LF SEWER WTR	13	ug/L	0.2	1		3.06	ug/L	0.6	1	
A4006	L29476-7	9/8/2003	LF SEWER WTR	7.11	ug/L	0.19	0.962		2.26	ug/L	0.58	0.962	
A4006	L29583-1	9/8/2003	LF SEWER WTR	8.41	ug/L	0.2	0.99		2.8	ug/L	0.59	0.99	
	dry	weather	median	**10.10**					**2.04**				
A4006	L31574-1	3/30/2004	LN BLANK WTR	5.57	ug/L	0.2	1	B		ug/L	0.6	1	<MDL
A4006	L31672-1	4/7/2004	LN BLANK WTR	0.65	ug/L	0.21	1.04	<RDL,B		ug/L	0.63	1.04	<MDL
A4006	L31572-1	3/30/2004	LF SEWER WTR	12.2	ug/L	0.19	0.926	B	2.63	ug/L	0.56	0.926	
A4006	L31571-1	3/30/2004	LF SEWER WTR		ug/L	0.2	1	<MDL	2.78	ug/L	0.6	1	
A4006	L31571-2	3/31/2004	LF SEWER WTR	9.09	ug/L	0.19	0.926	B	2.19	ug/L	0.56	0.926	
A4006	L31571-3	4/1/2004	LF SEWER WTR	7.89	ug/L	0.19	0.943		2.22	ug/L	0.57	0.943	
A4006	L31571-4	4/2/2004	LF SEWER WTR	11.1	ug/L	0.19	0.926		1.54	ug/L	0.56	0.926	
A4006	L31571-5	4/3/2004	LF SEWER WTR	10.8	ug/L	0.19	0.926		1.77	ug/L	0.56	0.926	
A4006	L31571-6	4/4/2004	LF SEWER WTR	9.95	ug/L	0.2	1.02		1.67	ug/L	0.61	1.02	
A4006	L31571-7	4/5/2004	LF SEWER WTR	7.99	ug/L	0.19	0.943		1.5	ug/L	0.57	0.943	
A4006	L31648-1	4/5/2004	LF SEWER WTR	9.93	ug/L	0.21	1.04		1.64	ug/L	0.63	1.04	
	wet	weather	median	**9.94**					**1.77**				
Summary (Dry & Wet Weather)			Minimum	**7.11**	ug/L				**1.5**	ug/L			
(Detects Only)			Maximum	**26.3**	ug/L				**3.06**	ug/L			
			Mean	**10.83**	ug/L				**2.12**	ug/L			
			Median	**9.95**	ug/L				**2.02**	ug/L			
			n	**17**	-				**18**	-			

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Table B-1
Sanitary Sewer Characterization Sampling for Phthalates

Duwamish/Diagonal Combined Sewer Characterization Sampling - DUWAMISH SIPHON (AFTBAY)

Locator		Collectdate	Matrix	**Bis(2-Ethylhexyl)Phthalate**	Units	MDL	RDL	Qual	**Benzyl Butyl Phthalate**	Units	MDL	RDL	Qual
A00601		2/25/2006	LF SEWER WTR	12.5	ug/L	0.21	1.04			ug/L	0.63	1.04	<MDL
A00601		2/26/2006	LF SEWER WTR	11.4	ug/L	0.21	1.04			ug/L	0.63	1.04	<MDL
A00601		2/28/2006	LF SEWER WTR	9.12	ug/L	0.21	1.04		0.9	ug/L	0.63	1.04	<RDL
			Mean	**11.0**	ug/L								

Duwamish/Diagonal Combined Sewer Characterization Sampling - BAYVIEW DS/ HANFORD #1

Locator		Collectdate	Matrix	**Bis(2-Ethylhexyl)Phthalate**	Units	MDL	RDL	Qual	**Benzyl Butyl Phthalate**	Units	MDL	RDL	Qual
A00603		2/26/2006	LF SEWER WTR	7.34	ug/L	0.21	1.04		1.61	ug/L	0.63	1.04	
A00603		2/27/2006	LF SEWER WTR	6.4	ug/L	0.21	1.04		1.4	ug/L	0.63	1.04	
A00603		2/28/2006	LF SEWER WTR	8.08	ug/L	0.21	1.04		1.21	ug/L	0.63	1.04	
A00603		3/1/2006	LF SEWER WTR	8.14	ug/L	0.21	1.04		1.99	ug/L	0.63	1.04	
			Mean	**7.5**	ug/L				**1.6**	ug/L			

Notes: LF SEWER WTR = Wastewater sample
LN BLANK WTR = Equipment blank associated w/wastewater samples

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APPENDIX C

KING COUNTY INDUSTRIAL WASTE PROGRAM – 2006 SAMPLING OF SANITARY SEWER INDUSTRIAL USERS

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Table C-1
Industrial Waste Program - 2006 Sampling of Industrial Users
Industrial Users Selected for BNA Sampling

NAME	LOCATION_STREET	CITY	LOCATION_ZIP	PERMIT	LOCATOR	CSO AREA (*)	COMPANY TYPE	Sampled
Industrial Container Services (ICS)(pka PalEx and IFCC Systems)	7152 1ST AVENUE SOUTH	SEATTLE	98108	7130-03	A4073	W	BARREL CLEANING	X
Seattle Barrel Company	4716 AIRPORT WAY SOUTH	SEATTLE	98108	7113-02	A4089	E / SPU CSO	BARREL CLEANING	X
Duwamish Shipyard	5658 W. MARGINAL WAY SW	SEATTLE	98106	7704-02	A43971	W	BOAT/SHIPYARD	X
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	7782-03	A41027	W	BOAT/SHIPYARD	X
Ralph's Concrete Pumping	816 POPLAR PLACE SOUTH	SEATTLE	98144	7795-01	A51251	E / KC CSO	CEMENT/READYMIX	
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WAY	SEATTLE	98108	232-03	A4431	W	CEMENT/READYMIX	X
Northwest Container Services, Inc.	6110 WEST MARGINAL WAY SW	SEATTLE	98106	651-02	A4522	W	CONTAINER WASHING	X
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND W. HALLIDAY ST.	SEATTLE		415-02	A4437	NA	DECANT STATION	X
Seattle, City of-SPU - West Seattle Vactor Decant	9200 8TH AVE SW	SEATTLE	98126	416-02	A44238	W	DECANT STATION	
Gai's Bakery-Weller St.	2006 S. WELLER STREET	SEATTLE	98144	636-03	NC1130	E / KC CSO	FOOD PROCESSING-BAKERY	
Schwartz Brothers Bakery	617 S. NEVADA STREET	SEATTLE	98108	743-01	A45511	E / SPU CSO	FOOD PROCESSING-BAKERY	X
Beecher's Cheese Aging Facility	4318 6TH AVE SOUTH	SEATTLE	98108	758-01	A45641	E / SPU CSO	FOOD PROCESSING-DAIRY	
WestFarm Foods/Darigold - Rainier	4058 RAINIER AVENUE S.	SEATTLE	98118	7116-04	A50311	E / KC CSO	FOOD PROCESSING-DAIRY	X
Mondo and Sons	4225 RAINIER AVENUE SOUTH	SEATTLE	98118	635-02	A5074	E / KC CSO	FOOD PROCESSING-MEATS	X
Oberto Sausage Company - Airport Way	2005 AIRPORT WAY SOUTH	SEATTLE	98134	7637-03	A4193	E / SPU CSO	FOOD PROCESSING-MEATS	
Da Vinci Gourmet/Kerry	7224 FIRST AVENUE S.	SEATTLE	98108	7759-01	A45311	W	FOOD PROCESSING-OTHER	X
Thanh Son Tofu	118 12TH AVENUE	SEATTLE	98122	749-01	A51271	E / KC CSO	FOOD PROCESSING-OTHER	
Plymouth Poultry	4500 7TH AVE. S.	SEATTLE	98108	197-02	A4419	E / SPU CSO	FOOD PROCESSING-POULTRY	
Sea Freeze Limited Partnership	206 S.W. MICHIGAN ST.	SEATTLE	98106	621-02	A42301	W	FOOD PROCESSING-SEAFOOD	
Pepsi-Cola Company	2300 26TH AVE. SOUTH	SEATTLE	98144	7023-02	A50061	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	X
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	7592-03	A4326	W	FUELING FACILITY	X
Rainier Petroleum Corporation	1711 13TH AVE SW	SEATTLE	98134	536-02	A44791	W	FUELING FACILITY	
Alaska Marine Lines Inc.	5600 W. MARGINAL WAY S.	SEATTLE	98106	459-02	A4409	W	GENERAL TYPE	X
Northwest Dyeworks Inc.	4505 AIRPORT WAY SOUTH	SEATTLE	98108	4011-01	A44851	E / SPU CSO	GENERAL TYPE	X
Seattle, City of-Department of Transportation	4200 AIRPORT WAY SOUTH	SEATTLE	98108	742-01	A45501	E / SPU CSO	GENERAL TYPE	
South Park Industrial Properties, L.L.C.	9567 8TH AVE SOUTH	SEATTLE	98108	4086-01	A45701	W	GROUNDWATER REMEDIATION - ORGAN	
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER STREET	SEATTLE	98134	210-03	A43261	W	GROUNDWATER REMEDIATION - PETROLEUM	X
Bloch Steel Industries	4580 COLORADO AVE.	SEATTLE	98134	4085-01	A45681	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	
Enodis Corporation	1761 22ND AVENUE S.	SEATTLE	98144	4068-01	A45571	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	X
Union Pacific Railroad - Argo Yard (Remediation)	4300 COLORADO AVENUE S.	SEATTLE	98108	668-03	A4505	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	X
Washington Federal Savings and Loan Association	SW HUDSON & W. MARGINAL WY SW	SEATTLE	98106	266-03	A4426	W	GROUNDWATER REMEDIATION - PETROLEUM	
Swedish Medical Center/Firsthill	747 BROADWAY AVENUE	SEATTLE	98122	706-01	A51151	E / KC CSO	HOSPITAL	X
Swedish Medical Center/Providence	500 17TH AVENUE	SEATTLE	98122	707-01	A51161	E / KC CSO	HOSPITAL	
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA STREET	SEATTLE	98122	721-01	A5101	E / KC CSO	LAUNDRY - LINEN	X
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE SOUTH	SEATTLE	98144	746-01	A51261	E / KC CSO	LAUNDRY - LINEN	X
Alaskan Copper Works - Marginal Way	3600 EAST MARGINAL WAY	SEATTLE	98134	7201-03	A4009	W	METAL FINISHING - CFR 433	
Magnetic And Penetrant Services Co.	8135 FIRST AVENUE S.	SEATTLE	98108	7681-02	A4370	W	METAL FINISHING - CFR 433	
Pioneer Industries	7000 HIGHLAND PARKWAY SW	SEATTLE	98106	7723-03	A4328	W	METAL FINISHING - CFR 433	X
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106-1100	4012-01	A40191	W	METAL RECYCLING	X
Aspen Paints	1128 SW SPOKANE STREET	SEATTLE	98134	195-02	A4215	W	PAINT MANUFACTURING	X
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	748-01	A51281	E / KC CSO	PHOTO PROCESSING	X
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY SOUTH	SEATTLE	98108	10457-01	A45771	E / SPU CSO	PRESSURE WASHING	X
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	10214-01	A45781	W	PRESSURE WASHING	X

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Table C-1
Industrial Waste Program - 2006 Sampling of Industrial Users
Industrial Users Selected for BNA Sampling

NAME	LOCATION_STREET	CITY	LOCATION_ZIP	PERMIT	LOCATOR	CSO AREA (*)	COMPANY TYPE	Sampled
Pacific Rendering Co., Inc.	4023 WEST MARGINAL WAY SOUTH	SEATTLE	98106	7751-01	A4510	W	RENDERING	X
Seattle, City of-SWD - South Recycling and Disposal Station	8100 SECOND AVE SOUTH	SEATTLE	98106	400-02	A43222	W	SOLID WASTE - TRANSFER FAC	
Waste Management of Seattle - W. Marginal Way	7201 W. MARGINAL WAY SW	SEATTLE	98106	322-02	A4434	W	SOLID WASTE - TRANSFER FAC	X
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	691-02	A4532	E / SPU CSO	SOLID WASTE - TRANSFER FAC	X
Eagle Marine Services, Ltd	3200 WEST MARGINAL WAY - TERMINAL 5	SEATTLE	98106	685-02	A4530	W	TRANSPORTATION FACILITY	X
Ferguson Construction	7433 5TH AVENUE SOUTH	SEATTLE	98108	725-01	A45421	W	VEHICLE WASHING	
Glacier Northwest (DA #510)	5900 WEST MARGINAL WAY SW	SEATTLE	98106	510-02	A4472	W	VEHICLE WASHING	X
Seattle, City of-Seattle City Light - South Service Center	3613 4TH AVENUE SOUTH	SEATTLE	98134	179-03	A41964	E / SPU CSO	VEHICLE WASHING	
Union Pacific Railroad - Lucile Street	736 S. LUCILE STREET	SEATTLE	98108	723-01	A45411	E / SPU CSO	VEHICLE WASHING	
United Parcel Service - Seattle	4455 7TH AVENUE SOUTH	SEATTLE	98108	4020-01	A45361	E / SPU CSO	VEHICLE WASHING	X
Emerald Recycling	1500 AIRPORT WAY S.	SEATTLE	98134	7690-03	A42241		CENTRALIZED WASTE TREATMENT	X
Marine Vacuum Service	1516 SOUTH GRAHAM ST.	SEATTLE	98108	7676-04	A4297		CENTRALIZED WASTE TREATMENT	X
Time Oil Company	2737 WEST COMMODORE WAY	SEATTLE	98199	7689-03	A4257		FUEL - BULK STORAGE	X
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL WAY S, TERM 25	SEATTLE	98134	7783-01	A45551		TRUCKED WASTE	X

Notes:

CSO AREA	Description	
E / KC CSO (Hanford #1)	Company is located East of Duwamish Waterway & is tributary to KC's CSO from Hanford Trunk into Duwam	(*)
E / SPU CSO	Company is located East of Duwamish Waterway & is tributary to SPU's CSO's into Duwamish Diagonal stor	(*)
W	Company is located West of Duwamish Waterway & is tributary to KC CSO's into Duwamish Siphon	(*)
blank	Company is located outside of subject CSO area	(*)

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- BBP will in PVA Primers (Low MW)
- PVA: Polyvinyl Alcohol

Table C-2
Industrial Waste Program - 2006 Sampling of Industrial Users
Results Sorted According to Area

COMPANY NAME	LOCATION_STREET	CITY	LOCATION_ZIP	CSO AREA (*)	COMPANY TYPE	PERMIT#	LOCATOR #	LIMS #	SAMPLE DATE	PARAMETER	VALUE	UNITS	QUAL	MDL	LOADING LBS/DAY
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106	W	METAL RECYCLING	4012-01	A40191	L39993-3	9-Aug-06	Benzyl Alcohol		UGL	<MDL	1.2	0.00E+00
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106	W	METAL RECYCLING	4012-01	A40191	L39993-3	9-Aug-06	Benzyl Butyl Phthalate		UGL	<MDL	0.71	0.00E+00
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106	W	METAL RECYCLING	4012-01	A40191	L39993-3	9-Aug-06	Bis(2-Ethylhexyl)Phthalate	1.4	UGL	B	0.24	2.34E-04
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106	W	METAL RECYCLING	4012-01	A40191	L39993-2	9-Aug-06	Discharge Rate	0.02	MGD			
Industrial Container Services (ICS)(pka PalEx and IFCO Systems)	7152 1ST AVENUE SO	SEATTLE	98108	W	BARREL CLEANING	7130-03	A4073	L41377-1	12-Dec-06	Benzyl Alcohol		UGL	<MDL	12	0.00E+00
Industrial Container Services (ICS)(pka PalEx and IFCO Systems)	7152 1ST AVENUE SO	SEATTLE	98108	W	BARREL CLEANING	7130-03	A4073	L41377-1	12-Dec-06	Benzyl Butyl Phthalate		UGL	<MDL	3	0.00E+00
Industrial Container Services (ICS)(pka PalEx and IFCO Systems)	7152 1ST AVENUE SO	SEATTLE	98108	W	BARREL CLEANING	7130-03	A4073	L41377-1	12-Dec-06	Bis(2-Ethylhexyl)Phthalate	70	UGL		2	3.54E-03
Industrial Container Services (ICS)(pka PalEx and IFCO Systems)	7152 1ST AVENUE SO	SEATTLE	98108	W	BARREL CLEANING	7130-03	A4073	L41377-1	12-Dec-06	Discharge Rate	0.006055				
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7762-03	A41027	L39058-2	9-May-06	Benzyl Alcohol		UGL	<MDL	0.94	0.00E+00
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7762-03	A41027	L39058-2	9-May-06	Benzyl Butyl Phthalate		UGL	<MDL	0.57	0.00E+00
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7762-03	A41027	L39058-2	9-May-06	Bis(2-Ethylhexyl)Phthalate	3.03	UGL		0.19	1.44E-03
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7762-03	A41027	L39064-2	9-May-06	Discharge Rate	0.05589	MGD			
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7762-03	A41028	L39045-2	24-May-06	Benzyl Alcohol	1.9	UGL	<RDL	1	7.58E-04
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7762-03	A41028	L39045-2	24-May-06	Benzyl Butyl Phthalate	4.23	UGL		0.63	1.69E-03
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7762-03	A41028	L39045-2	24-May-06	Bis(2-Ethylhexyl)Phthalate	2.74	UGL		0.21	1.09E-03
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7762-03	A41028	L39045-1	24-May-06	Discharge Rate	0.04785	MGD			
Aspen Paints	1128 SW SPOKANE ST	SEATTLE	98134	W	PAINT MANUFACTURING	195-02	A4215	L39891-3	26-Jul-06	Benzyl Alcohol	110	UGL	<RDL	100	9.17E-06
Aspen Paints	1128 SW SPOKANE ST	SEATTLE	98134	W	PAINT MANUFACTURING	195-02	A4215	L39891-3	26-Jul-06	Benzyl Butyl Phthalate		UGL	<MDL	60	0.00E+00
Aspen Paints	1128 SW SPOKANE ST	SEATTLE	98134	W	PAINT MANUFACTURING	195-02	A4215	L39891-3	26-Jul-06	Bis(2-Ethylhexyl)Phthalate		UGL	<MDL	20	0.00E+00
Aspen Paints	1128 SW SPOKANE ST	SEATTLE	98134	W	PAINT MANUFACTURING	195-02	A4215	L39891-1	26-Jul-06	Discharge Rate	0.0001	MGD			
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	W	FUELING FACILITY	7592-03	A4326	L41013-1	7-Nov-06	Benzyl Alcohol		UGL	<MDL	10	0.00E+00
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	W	FUELING FACILITY	7592-03	A4326	L41013-1	7-Nov-06	Benzyl Butyl Phthalate		UGL	<MDL	6	0.00E+00
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	W	FUELING FACILITY	7592-03	A4326	L41013-1	7-Nov-06	Bis(2-Ethylhexyl)Phthalate	2.9	UGL	<RDL	2	2.18E-04
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	W	FUELING FACILITY	7592-03	A4326	L41015-1	7-Nov-06	Discharge Rate	0.009	MGD			
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER ST	SEATTLE	98134	W	GROUNDWATER REMEDIATION - PETROLEUM	210-03	A43261	L40056-2	16-Aug-06	Benzyl Alcohol		UGL	<MDL	1.1	0.00E+00
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER ST	SEATTLE	98134	W	GROUNDWATER REMEDIATION - PETROLEUM	210-03	A43261	L40056-2	16-Aug-06	Benzyl Butyl Phthalate		UGL	<MDL	0.65	0.00E+00
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER ST	SEATTLE	98134	W	GROUNDWATER REMEDIATION - PETROLEUM	210-03	A43261	L40056-2	16-Aug-06	Bis(2-Ethylhexyl)Phthalate	3.35	UGL	B	0.22	4.61E-05
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER ST	SEATTLE	98134	W	GROUNDWATER REMEDIATION - PETROLEUM	210-03	A43261	L40056-2	16-Aug-06	Discharge Rate	0.00172	MGD			
Pioneer Industries	7000 HIGHLAND PARK	SEATTLE	98108	W	METAL FINISHING - CFR 433	7723-03	A4328	L39548-2	20-Jun-06	Benzyl Alcohol		UGL	<MDL	1	0.00E+00
Pioneer Industries	7000 HIGHLAND PARK	SEATTLE	98108	W	METAL FINISHING - CFR 433	7723-03	A4328	L39548-2	20-Jun-06	Benzyl Butyl Phthalate		UGL	<MDL	0.53	0.00E+00
Pioneer Industries	7000 HIGHLAND PARK	SEATTLE	98108	W	METAL FINISHING - CFR 433	7723-03	A4328	L39548-2	20-Jun-06	Bis(2-Ethylhexyl)Phthalate	1.06	UGL	B	0.21	2.82E-05
Pioneer Industries	7000 HIGHLAND PARK	SEATTLE	98108	W	METAL FINISHING - CFR 433	7723-03	A4328	L39548-1	20-Jun-06	Discharge Rate	0.00318	MGD			
Duwamish Shipyard	5658 W. MARGINAL W	SEATTLE	98106	W	BOAT/SHIPYARD	7704-02	A43971	L41079-2	9-Nov-06	Benzyl Alcohol		UGL	<MDL	1.1	0.00E+00
Duwamish Shipyard	5658 W. MARGINAL W	SEATTLE	98106	W	BOAT/SHIPYARD	7704-02	A43971	L41079-2	9-Nov-06	Benzyl Butyl Phthalate		UGL	<MDL	0.65	0.00E+00
Duwamish Shipyard	5658 W. MARGINAL W	SEATTLE	98106	W	BOAT/SHIPYARD	7704-02	A43971	L41079-2	9-Nov-06	Bis(2-Ethylhexyl)Phthalate	0.81	UGL	<RDL	0.22	5.07E-06
Duwamish Shipyard	5658 W. MARGINAL W	SEATTLE	98106	W	BOAT/SHIPYARD	7704-02	A43971	L41052-2	9-Nov-06	Discharge Rate	0.00075	MGD			
Alaska Marine Lines Inc.	5600 W. MARGINAL W	SEATTLE	98106	W	GENERAL TYPE	459-02	A4409	L40195-3	31-Aug-06	Benzyl Alcohol	57	UGL		10	3.07E-04
Alaska Marine Lines Inc.	5600 W. MARGINAL W	SEATTLE	98106	W	GENERAL TYPE	459-02	A4409	L40195-3	31-Aug-06	Benzyl Butyl Phthalate		UGL	<MDL	6	0.00E+00
Alaska Marine Lines Inc.	5600 W. MARGINAL W	SEATTLE	98106	W	GENERAL TYPE	459-02	A4409	L40195-3	31-Aug-06	Bis(2-Ethylhexyl)Phthalate	220	UGL		2	1.01E-03
Alaska Marine Lines Inc.	5600 W. MARGINAL W	SEATTLE	98106	W	GENERAL TYPE	459-02	A4409	L40195-1	31-Aug-06	Discharge Rate	0.00055	MGD			
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WA	SEATTLE	98108	W	CEMENT/READYMIX	232-03	A4431	L40880-3	3-Nov-06	Benzyl Alcohol		UGL	<MDL	10	0.00E+00
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WA	SEATTLE	98108	W	CEMENT/READYMIX	232-03	A4431	L40880-3	3-Nov-06	Benzyl Butyl Phthalate		UGL	<MDL	6	0.00E+00
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WA	SEATTLE	98108	W	CEMENT/READYMIX	232-03	A4431	L40880-3	3-Nov-06	Bis(2-Ethylhexyl)Phthalate	6.3	UGL	<RDL,B	2	1.58E-04
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WA	SEATTLE	98108	W	CEMENT/READYMIX	232-03	A4431	L40880-1	3-Nov-06	Discharge Rate	0.003	MGD			
Glacier Northwest (DA #510)	5900 WEST MARGINAL	SEATTLE	98106	W	VEHICLE WASHING	510-02	A4472	L40196-3	31-Aug-06	Benzyl Alcohol		UGL	<MDL	10	0.00E+00
Glacier Northwest (DA #510)	5900 WEST MARGINAL	SEATTLE	98106	W	VEHICLE WASHING	510-02	A4472	L40196-3	31-Aug-06	Benzyl Butyl Phthalate		UGL	<MDL	6	0.00E+00
Glacier Northwest (DA #510)	5900 WEST MARGINAL	SEATTLE	98106	W	VEHICLE WASHING	510-02	A4472	L40196-3	31-Aug-06	Bis(2-Ethylhexyl)Phthalate	15.6	UGL		2	1.57E-03
Glacier Northwest (DA #510)	5900 WEST MARGINAL	SEATTLE	98106	W	VEHICLE WASHING	510-02	A4472	L40196-1	31-Aug-06	Discharge Rate	0.01203	MGD			
Pacific Rendering Co., Inc.	4023 WEST MARGINAL	SEATTLE	98106	W	RENDERING	7751-01	A4510	L39235-2	22-May-06	Benzyl Alcohol		UGL	<MDL	100	0.00E+00
Pacific Rendering Co., Inc.	4023 WEST MARGINAL	SEATTLE	98106	W	RENDERING	7751-01	A4510	L39235-2	22-May-06	Benzyl Butyl Phthalate		UGL	<MDL	60	0.00E+00
Pacific Rendering Co., Inc.	4023 WEST MARGINAL	SEATTLE	98106	W	RENDERING	7751-01	A4510	L39235-2	22-May-06	Bis(2-Ethylhexyl)Phthalate	75	UGL	<RDL	20	4.75E-03
Pacific Rendering Co., Inc.	4023 WEST MARGINAL	SEATTLE	98106	W	RENDERING	7751-01	A4510	L39228-1	22-May-06	Discharge Rate	0.00758	MGD			
Northwest Container Services, Inc.	6110 WEST MARGINAL	SEATTLE	98106	W	CONTAINER WASHING	551-02	A4522	L40198-3	31-Aug-06	Benzyl Alcohol		UGL	<MDL	10	0.00E+00
Northwest Container Services, Inc.	6110 WEST MARGINAL	SEATTLE	98106	W	CONTAINER WASHING	551-02	A4522	L40198-3	31-Aug-06	Benzyl Butyl Phthalate		UGL	<MDL	6	0.00E+00
Northwest Container Services, Inc.	6110 WEST MARGINAL	SEATTLE	98106	W	CONTAINER WASHING	551-02	A4522	L40198-3	31-Aug-06	Bis(2-Ethylhexyl)Phthalate	100	UGL		2	4.41E-04
Northwest Container Services, Inc.	6110 WEST MARGINAL	SEATTLE	98106	W	CONTAINER WASHING	551-02	A4522	L40198-1	31-Aug-06	Discharge Rate	0.00529	MGD			
Eagle Marine Services, Ltd	3200 WEST MARGINAL	SEATTLE	98106	W	TRANSPORTATION FACILITY	585-02	A4530	L40152-3	24-Aug-06	Benzyl Alcohol		UGL	<MDL	10	0.00E+00
Eagle Marine Services, Ltd	3200 WEST MARGINAL	SEATTLE	98106	W	TRANSPORTATION FACILITY	585-02	A4530	L40152-3	24-Aug-06	Benzyl Butyl Phthalate		UGL	<MDL	6	0.00E+00
Eagle Marine Services, Ltd	3200 WEST MARGINAL	SEATTLE	98106	W	TRANSPORTATION FACILITY	585-02	A4530	L40152-3	24-Aug-06	Bis(2-Ethylhexyl)Phthalate	10.5	UGL		2	4.38E-04
Eagle Marine Services, Ltd	3200 WEST MARGINAL	SEATTLE	98106	W	TRANSPORTATION FACILITY	585-02	A4530	L40184-1	24-Aug-06	Discharge Rate	0.005	MGD			
DaVinci/Kerry Food & Beverage	7224 FIRST AVENUE S	SEATTLE	98108	W	FOOD PROCESSING-OTHER	7759-01	A45311	L39985-2	8-Aug-06	Benzyl Alcohol	24.5	UGL		10	1.42E-03
DaVinci/Kerry Food & Beverage	7224 FIRST AVENUE S	SEATTLE	98108	W	FOOD PROCESSING-OTHER	7759-01	A45311	L39985-2	8-Aug-06	Benzyl Butyl Phthalate	16	UGL		6	9.26E-04
DaVinci/Kerry Food & Beverage	7224 FIRST AVENUE S	SEATTLE	98108	W	FOOD PROCESSING-OTHER	7759-01	A45311	L39985-2	8-Aug-06	Bis(2-Ethylhexyl)Phthalate	16.8	UGL		2	9.72E-04
DaVinci/Kerry Food & Beverage	7224 FIRST AVENUE S	SEATTLE	98108	W	FOOD PROCESSING-OTHER	7759-01	A45311	L39985-1	8-Aug-06	Discharge Rate	0.006838	MGD			

BEHP → Industrial Container Services (ICS)(pka PalEx and IFCO Systems) 7152 1ST AVENUE SO

BA BBP MDL → Aspen Paints 1128 SW SPOKANE ST

BBP MDL → Pacific Rendering Co., Inc. 4023 WEST MARGINAL

BEHP → Northwest Container Services, Inc. 6110 WEST MARGINAL

BEHP → Alaska Marine Lines Inc. 5600 W. MARGINAL W

← MDL

← MDL

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SEA423880

Table C-2
Industrial Waste Program - 2006 Sampling of Industrial Users
Results Sorted According to Area

COMPANY NAME	LOCATION_STREET	CITY	LOCATION_ZIP	CSO AREA (*)	COMPANY TYPE	PERMIT#	LOCATOR #	LIMS #	SAMPLE DATE	PARAMETER	VALUE	UNITS	QUAL	MDL	LOADING, LBS/DAY
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	W	PRESSURE WASHING	10214-01	A45781	L40386-3	14-Sep-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	W	PRESSURE WASHING	10214-01	A45781	L40386-3	14-Sep-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	W	PRESSURE WASHING	10214-01	A45781	L40386-3	14-Sep-06	Bis(2-Ethylhexyl)Phthalate	42.8	UG/L		2	3.55E-05
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	W	PRESSURE WASHING	10214-01	A45781	L40386-2	14-Sep-06	Discharge Rate	0.0001	MGD			
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	E / SPU CSO	SOLID WASTE - TRANSFER FAC	691-02	A4532	L39097-3	14-Jun-06	Benzyl Alcohol		UG/L	<MDL	1.1	0.00E+00
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	E / SPU CSO	SOLID WASTE - TRANSFER FAC	691-02	A4532	L39097-3	14-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.65	0.00E+00
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	E / SPU CSO	SOLID WASTE - TRANSFER FAC	691-02	A4532	L39097-3	14-Jun-06	Bis(2-Ethylhexyl)Phthalate	3.62	UG/L	B	0.22	5.43E-05
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	E / SPU CSO	SOLID WASTE - TRANSFER FAC	691-02	A4532	L39097-2	14-Jun-06	Discharge Rate	0.0018	MGD			
United Parcel Service - Seattle	4455 7TH AVENUE SO	SEATTLE	98108	E / SPU CSO	VEHICLE WASHING	4020-01	A45361	L39946-3	3-Aug-06	Benzyl Alcohol		UG/L	<MDL	1	0.00E+00
United Parcel Service - Seattle	4455 7TH AVENUE SO	SEATTLE	98108	E / SPU CSO	VEHICLE WASHING	4020-01	A45361	L39946-3	3-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.63	0.00E+00
United Parcel Service - Seattle	4455 7TH AVENUE SO	SEATTLE	98108	E / SPU CSO	VEHICLE WASHING	4020-01	A45361	L39946-3	3-Aug-06	Bis(2-Ethylhexyl)Phthalate	3.75	UG/L	B	0.21	9.38E-05
United Parcel Service - Seattle	4455 7TH AVENUE SO	SEATTLE	98108	E / SPU CSO	VEHICLE WASHING	4020-01	A45361	L39946-2	3-Aug-06	Discharge Rate	0.003	MGD			
Schwartz Brothers Bakery	617 S. NEVADA STREE	SEATTLE	98108	E / SPU CSO	FOOD PROCESSING-BAKERY	743-01	A45511	L38625-1	27-Mar-06	Benzyl Alcohol		UG/L	<MDL	19	0.00E+00
Schwartz Brothers Bakery	617 S. NEVADA STREE	SEATTLE	98108	E / SPU CSO	FOOD PROCESSING-BAKERY	743-01	A45511	L38625-1	27-Mar-06	Benzyl Butyl Phthalate	47	UG/L	<RDL	11	1.08E-03
Schwartz Brothers Bakery	617 S. NEVADA STREE	SEATTLE	98108	E / SPU CSO	FOOD PROCESSING-BAKERY	743-01	A45511	L38625-1	27-Mar-06	Bis(2-Ethylhexyl)Phthalate	227	UG/L		3.7	1.44E-02
Schwartz Brothers Bakery	617 S. NEVADA STREE	SEATTLE	98108	E / SPU CSO	FOOD PROCESSING-BAKERY	743-01	A45511	L38622-1	27-Mar-06	Discharge Rate	0.00762	MGD			
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	PRESSURE WASHING	10457-01	A45771	L39945-3	3-Aug-06	Benzyl Alcohol		UG/L	<MDL	190	0.00E+00
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	PRESSURE WASHING	10457-01	A45771	L39945-3	3-Aug-06	Benzyl Butyl Phthalate	72	UG/L	<RDL	50	2.40E-04
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	PRESSURE WASHING	10457-01	A45771	L39945-3	3-Aug-06	Bis(2-Ethylhexyl)Phthalate	702	UG/L		20	2.34E-03
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	PRESSURE WASHING	10457-01	A45771	L39945-2	3-Aug-06	Discharge Rate	0.0004	MGD			
Seattle Barrel Company	4716 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	BARREL CLEANING	7113-02	A4089	L40641-1	5-Oct-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Seattle Barrel Company	4716 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	BARREL CLEANING	7113-02	A4089	L40641-1	5-Oct-06	Benzyl Butyl Phthalate	5.2	UG/L	<RDL	6	2.99E-04
Seattle Barrel Company	4716 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	BARREL CLEANING	7113-02	A4089	L40641-1	5-Oct-06	Bis(2-Ethylhexyl)Phthalate	120	UG/L		2	6.01E-03
Seattle Barrel Company	4716 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	BARREL CLEANING	7113-02	A4089	L40643-1	5-Oct-06	Discharge Rate	0.005715	MGD			
Northwest Dyeworks Inc	4505 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	GENERAL TYPE	4011-01	A44451	L39930-2	3-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Northwest Dyeworks Inc	4505 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	GENERAL TYPE	4011-01	A44451	L39930-2	3-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Northwest Dyeworks Inc	4505 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	GENERAL TYPE	4011-01	A44451	L39939-2	3-Aug-06	Bis(2-Ethylhexyl)Phthalate	17.8	UG/L		2	1.78E-03
Northwest Dyeworks Inc	4505 AIRPORT WAY S	SEATTLE	98108	E / SPU CSO	GENERAL TYPE	4011-01	A44451	L39930-1	3-Aug-06	Discharge Rate	0.008512	MGD			
Union Pacific Railroad - Argo Yard	4300 COLORADO AVE	SEATTLE	98108	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	668-03	A4505	L39487-3	2-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Union Pacific Railroad - Argo Yard	4300 COLORADO AVE	SEATTLE	98108	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	668-03	A4505	L39487-3	2-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Union Pacific Railroad - Argo Yard	4300 COLORADO AVE	SEATTLE	98108	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	668-03	A4505	L39487-3	2-Aug-06	Bis(2-Ethylhexyl)Phthalate	13.6	UG/L		2	3.97E-04
Union Pacific Railroad - Argo Yard	4300 COLORADO AVE	SEATTLE	98108	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	668-03	A4505	L39487-2	2-Aug-06	Discharge Rate	0.0035	MGD			
Pepsi-Cola Company	2300 26TH AVE. SOUT	SEATTLE	98144	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	7023-02	A50063	L38905-1	25-Apr-06	Benzyl Alcohol	82.1	UG/L		0.94	5.19E-02
Pepsi-Cola Company	2300 26TH AVE. SOUT	SEATTLE	98144	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	7023-02	A50063	L38905-1	25-Apr-06	Benzyl Butyl Phthalate	1.06	UG/L		0.57	6.81E-04
Pepsi-Cola Company	2300 26TH AVE. SOUT	SEATTLE	98144	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	7023-02	A50063	L38905-1	25-Apr-06	Bis(2-Ethylhexyl)Phthalate	1.72	UG/L	B	0.19	1.09E-03
Pepsi-Cola Company	2300 26TH AVE. SOUT	SEATTLE	98144	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	7023-02	A50063	L38900-1	25-Apr-06	Discharge Rate	0.07666	MGD			
WestFarm Foods/Dairgold - Rainier	4058 RAINIER AVENUE	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-DAIRY	7116-04	A50311	L39446-2	12-Jun-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
WestFarm Foods/Dairgold - Rainier	4058 RAINIER AVENUE	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-DAIRY	7116-04	A50311	L39446-2	12-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
WestFarm Foods/Dairgold - Rainier	4058 RAINIER AVENUE	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-DAIRY	7116-04	A50311	L39446-2	12-Jun-06	Bis(2-Ethylhexyl)Phthalate		UG/L	<MDL	2	0.00E+00
WestFarm Foods/Dairgold - Rainier	4058 RAINIER AVENUE	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-DAIRY	7116-04	A50311	L39449-1	12-Jun-06	Discharge Rate	0.144	MGD			
Mondo and Sons	4225 RAINIER AVENUE	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-MEATS	635-02	A5074	L40197-3	31-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Mondo and Sons	4225 RAINIER AVENUE	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-MEATS	635-02	A5074	L40197-3	31-Aug-06	Benzyl Butyl Phthalate	8.3	UG/L	<RDL	6	5.68E-05
Mondo and Sons	4225 RAINIER AVENUE	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-MEATS	635-02	A5074	L40197-3	31-Aug-06	Bis(2-Ethylhexyl)Phthalate	44.8	UG/L		2	3.19E-04
Mondo and Sons	4225 RAINIER AVENUE	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-MEATS	635-02	A5074	L40197-3	31-Aug-06	Discharge Rate	0.00855	MGD			
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA	SEATTLE	98122	E / KC CSO	LAUNDRY - LINEN	721-01	A5101	L39951-2	3-Aug-06	Benzyl Alcohol	259	UG/L		10	8.28E-02
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA	SEATTLE	98122	E / KC CSO	LAUNDRY - LINEN	721-01	A5101	L39951-2	3-Aug-06	Benzyl Butyl Phthalate	6.2	UG/L	<RDL	6	2.05E-03
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA	SEATTLE	98122	E / KC CSO	LAUNDRY - LINEN	721-01	A5101	L39951-2	3-Aug-06	Bis(2-Ethylhexyl)Phthalate	70.7	UG/L		2	2.18E-02
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA	SEATTLE	98122	E / KC CSO	LAUNDRY - LINEN	721-01	A5101	L39951-1	3-Aug-06	Discharge Rate	0.0368	MGD			
Swedish Medical Center/Firehill	747 BROADWAY AVEN	SEATTLE	98122	E / KC CSO	HOSPITAL	706-01	A51151	L39568-2	29-Jun-06	Benzyl Alcohol		UG/L	<MDL	1.1	0.00E+00
Swedish Medical Center/Firehill	747 BROADWAY AVEN	SEATTLE	98122	E / KC CSO	HOSPITAL	706-01	A51151	L39568-2	29-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.57	0.00E+00
Swedish Medical Center/Firehill	747 BROADWAY AVEN	SEATTLE	98122	E / KC CSO	HOSPITAL	706-01	A51151	L39568-2	29-Jun-06	Bis(2-Ethylhexyl)Phthalate	4.31	UG/L	B	0.22	5.39E-03
Swedish Medical Center/Firehill	747 BROADWAY AVEN	SEATTLE	98122	E / KC CSO	HOSPITAL	706-01	A51151	L39568-1	29-Jun-06	Discharge Rate	0.15	MGD			
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE S	SEATTLE	98144	E / KC CSO	LAUNDRY - LINEN	746-01	A51261	L39939-2	19-Jul-06	Benzyl Alcohol	124	UG/L		10	8.20E-02
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE S	SEATTLE	98144	E / KC CSO	LAUNDRY - LINEN	746-01	A51261	L39939-2	19-Jul-06	Benzyl Butyl Phthalate		UG/L	<MDL	6.1	0.00E+00
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE S	SEATTLE	98144	E / KC CSO	LAUNDRY - LINEN	746-01	A51261	L39939-2	19-Jul-06	Bis(2-Ethylhexyl)Phthalate	33.1	UG/L		2	2.19E-02
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE S	SEATTLE	98144	E / KC CSO	LAUNDRY - LINEN	746-01	A51261	L39939-2	19-Jul-06	Discharge Rate	0.088288	MGD			
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	E / KC CSO	PHOTO PROCESSING	748-01	A51281	L39938-3	19-Jul-06	Benzyl Alcohol	39.3	UG/L		11	6.01E-04
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	E / KC CSO	PHOTO PROCESSING	748-01	A51281	L39938-3	19-Jul-06	Benzyl Butyl Phthalate		UG/L	<MDL	6.6	0.00E+00
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	E / KC CSO	PHOTO PROCESSING	748-01	A51281	L39938-3	19-Jul-06	Bis(2-Ethylhexyl)Phthalate		UG/L	<MDL	2.3	0.00E+00
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	E / KC CSO	PHOTO PROCESSING	748-01	A51281	L39938-1	19-Jul-06	Discharge Rate	0.001833	MGD			
Enodis Corporation	1761 22ND AVENUE S	SEATTLE	98144	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	4068-01	A45571	L40047-3	28-Aug-06	Benzyl Alcohol		UG/L	<MDL	1.1	0.00E+00
Enodis Corporation	1761 22ND AVENUE S	SEATTLE	98144	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	4068-01	A45571	L40047-3	28-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.64	0.00E+00
Enodis Corporation	1761 22ND AVENUE S	SEATTLE	98144	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	4068-01	A45571	L40047-3	28-Aug-06	Bis(2-Ethylhexyl)Phthalate	0.94	UG/L	<RDL,B	0.21	6.32E-06

BEHP
BBP
BEHP
BEHP
BA

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Table C-2
Industrial Waste Program - 2006 Sampling of Industrial Users
Results Sorted According to Area

COMPANY NAME	LOCATION_STREET	CITY	LOCATION_ZIP	CSO AREA (*)	COMPANY TYPE	PERMIT#	LOCATOR#	LIMS #	SAMPLE DATE	PARAMETER	VALUE	UNITS	QUAL	MDL	LOADING, LBS/DAY
Enodis Corporation	1761 22ND AVENUE S	SEATTLE	98144	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	4068-01	A45571	L40047-1	29-Aug-06	Discharge Rate	0.000606	MGD			
Emerald Recycling	1500 AIRPORT WAY S	SEATTLE	98134		CENTRALIZED WASTE TREATMENT	7690-03	A42241	L39977-1	3-Oct-06	Benzyl Alcohol	136	UG/L		10	4.14E-02
Emerald Recycling	1500 AIRPORT WAY S	SEATTLE	98134		CENTRALIZED WASTE TREATMENT	7690-03	A42241	L39977-1	3-Oct-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Emerald Recycling	1500 AIRPORT WAY S	SEATTLE	98134		CENTRALIZED WASTE TREATMENT	7690-03	A42241	L39977-1	3-Oct-06	Bis(2-Ethylhexyl)Phthalate	19.7	UG/L		2	6.00E-03
Emerald Recycling	1500 AIRPORT WAY S	SEATTLE	98134		CENTRALIZED WASTE TREATMENT	7690-03	A42241	L39979-1	3-Oct-06	Discharge Rate	0.036517	MGD			
Time Oil Company	2737 WEST COMMODO	SEATTLE	98199		FUEL - BULK STORAGE	7689-03	A4257	L41172-1	21-Nov-06	Benzyl Alcohol		UG/L	<MDL	1	0.00E+00
Time Oil Company	2737 WEST COMMODO	SEATTLE	98199		FUEL - BULK STORAGE	7689-03	A4257	L41172-1	21-Nov-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.6	0.00E+00
Time Oil Company	2737 WEST COMMODO	SEATTLE	98199		FUEL - BULK STORAGE	7689-03	A4257	L41172-1	21-Nov-06	Bis(2-Ethylhexyl)Phthalate	0.88	UG/L	<MDL B	0.2	1.22E-03
Time Oil Company	2737 WEST COMMODO	SEATTLE	98199		FUEL - BULK STORAGE	7689-03	A4257	L41169-1	21-Nov-06	Discharge Rate	0.1656	MGD			
Marine Vacuum Service	1518 SOUTH GRAHAM	SEATTLE	98108		CENTRALIZED WASTE TREATMENT	7676-04	A4297	L40601-1	3-Oct-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Marine Vacuum Service	1518 SOUTH GRAHAM	SEATTLE	98108		CENTRALIZED WASTE TREATMENT	7676-04	A4297	L40601-1	3-Oct-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Marine Vacuum Service	1518 SOUTH GRAHAM	SEATTLE	98108		CENTRALIZED WASTE TREATMENT	7676-04	A4297	L40601-1	3-Oct-06	Bis(2-Ethylhexyl)Phthalate	7.5	UG/L	<RDL	2	2.07E-04
Marine Vacuum Service	1518 SOUTH GRAHAM	SEATTLE	98108		CENTRALIZED WASTE TREATMENT	7676-04	A4297	L40603-1	3-Oct-06	Discharge Rate	0.003304	MGD			
Waste Management of Washington- Eastmont Transfer Station	7201 W. MARGINAL W	SEATTLE	98106		SOLID WASTE - TRANSFER FAC	322-02	A4434	L39505-3	15-Jun-06	Benzyl Alcohol		UG/L	<MDL	100	0.00E+00
Waste Management of Washington- Eastmont Transfer Station	7201 W. MARGINAL W	SEATTLE	98106		SOLID WASTE - TRANSFER FAC	322-02	A4434	L39505-3	15-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	60	0.00E+00
Waste Management of Washington- Eastmont Transfer Station	7201 W. MARGINAL W	SEATTLE	98106		SOLID WASTE - TRANSFER FAC	322-02	A4434	L39505-3	15-Jun-06	Bis(2-Ethylhexyl)Phthalate		UG/L	<MDL	20	0.00E+00
Waste Management of Washington- Eastmont Transfer Station	7201 W. MARGINAL W	SEATTLE	98106		SOLID WASTE - TRANSFER FAC	322-02	A4434	L39505-2	15-Jun-06	Discharge Rate	0.0005	MGD			
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND	SEATTLE			DECANT STATION	415-02	A4437	L40187-2	29-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND	SEATTLE			DECANT STATION	415-02	A4437	L40187-2	29-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND	SEATTLE			DECANT STATION	415-02	A4437	L40187-2	29-Aug-06	Bis(2-Ethylhexyl)Phthalate	33.2	UG/L		2	2.22E-04
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND	SEATTLE			DECANT STATION	415-02	A4437	L40187-1	29-Aug-06	Discharge Rate	0.0008	MGD			
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL	SEATTLE	98134		TRUCKED WASTE	7783-01	A46561	L37884-1	18-Jan-06	Benzyl Alcohol		UG/L	<MDL	1	0.00E+00
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL	SEATTLE	98134		TRUCKED WASTE	7783-01	A46561	L37884-1	18-Jan-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.63	0.00E+00
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL	SEATTLE	98134		TRUCKED WASTE	7783-01	A46561	L37884-1	18-Jan-06	Bis(2-Ethylhexyl)Phthalate	3.51	UG/L		0.21	3.79E-03
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL	SEATTLE	98134		TRUCKED WASTE	7783-01	A46561	L37887-1	18-Jan-06	Discharge Rate	0.126	MGD			

Notes:

(*) CSO AREA
E / KC CSO
E / SPU CSO
W
blank

Description
Company is located East of Duwamish Waterway & is tributary to KC's CSO from Hanford Trunk into Duwamish Diagonal storm/CSO outfall
Company is located East of Duwamish Waterway & is tributary to SPU's CSO's into Duwamish Diagonal storm/CSO outfall
Company is located West of Duwamish Waterway & is tributary to KC CSO's into Duwamish Siphon
Company is located outside of subject CSO area

BEHP = bis(2-Ethylhexyl)phthalate
BzBP = Benzyl butyl phthalate
BA = Benzyl alcohol

(in **BOLD**) = BEHP >20 µg/L, BzBP > 10 µg/L, or BA >100 µg/L
= BEHP >100 µg/L, BzBP > 50 µg/L, or BA >250 µg/L

Industrial Users Sampled - West Side of Lower Duwamish Waterway (W)

Totals	VALUE	UNITS			LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			2.51E-03	1.70
Benzyl Butyl Phthalate	-	-			2.51E-03	1.71
Bis(2-Ethylhexyl)Phthalate	-	-			1.60E-02	10.96
Discharge Rate	0.181	MGD				

Industrial Users Sampled - East Side of Lower Duwamish Waterway - Tributary to SPU CSO (E/SPU CSO)

Totals	VALUE	UNITS			LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			0.00E+00	0.00
Benzyl Butyl Phthalate	-	-			1.02E-03	6.34
Bis(2-Ethylhexyl)Phthalate	-	-			2.44E-02	96.42
Discharge Rate	0.031	MGD				

Industrial Users Sampled - East Side of Lower Duwamish Waterway - Tributary to KC CSO (E/KC CSO)

Totals	VALUE	UNITS			LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			2.17E-01	53.18
Benzyl Butyl Phthalate	-	-			2.89E-03	0.69
Bis(2-Ethylhexyl)Phthalate	-	-			5.04E-02	12.35
Discharge Rate	0.468	MGD				

Industrial Users Sampled - Outside Lower Duwamish Waterway

Totals	VALUE	UNITS			LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			4.14E-02	14.92
Benzyl Butyl Phthalate	-	-			0.00E+00	0.00
Bis(2-Ethylhexyl)Phthalate	-	-			1.14E-02	4.12
Discharge Rate	0.333	MGD				

Summation of Industrial Users Sampled

Totals	VALUE	UNITS			LOADING, LBS/DAY	Average Ind. WW, µg/L
Benzyl Alcohol	-	-			2.61E-01	30.27
Benzyl Butyl Phthalate	-	-			7.01E-03	0.81
Bis(2-Ethylhexyl)Phthalate	-	-			1.02E-01	11.87
Discharge Rate	1.034	MGD				

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Table C-3
Industrial Waste Program - 2006 Sampling of Industrial Users
Results Sorted According to Industry Type

COMPANY NAME	LOCATION_STREET	CITY	LOCATION_ZIP	CSO AREA (*)	COMPANY TYPE	PERMIT#	LOCATOR #	LIMS #	SAMPLE DATE	PARAMETER	VALUE	UNITS	QUAL	MDL	LOADING_LBS/DAY
Industrial Container Services (ICS)(pka PalEx and IFCO Systems)	7152 1ST AVENUE SOUTH	SEATTLE	98108	W	BARREL CLEANING	7130-03	A4073	L41377-1	12-Dec-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Industrial Container Services (ICS)(pka PalEx and IFCO Systems)	7152 1ST AVENUE SOUTH	SEATTLE	98108	W	BARREL CLEANING	7130-03	A4073	L41377-1	12-Dec-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Industrial Container Services (ICS)(pka PalEx and IFCO Systems)	7152 1ST AVENUE SOUTH	SEATTLE	98108	W	BARREL CLEANING	7130-03	A4073	L41377-1	12-Dec-06	Bis(2-Ethylhexyl)Phthalate	70	UG/L		2	8.54E-03
Industrial Container Services (ICS)(pka PalEx and IFCO Systems)	7152 1ST AVENUE SOUTH	SEATTLE	98108	W	BARREL CLEANING	7130-03	A4073	L41377-1	12-Dec-06	Discharge Rate	0.006056				
Seattle Barrel Company	4716 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	BARREL CLEANING	7713-02	A4089	L40641-1	5-Oct-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Seattle Barrel Company	4716 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	BARREL CLEANING	7713-02	A4089	L40641-1	5-Oct-06	Benzyl Butyl Phthalate	6.2	UG/L	<RDL	5	2.98E-04
Seattle Barrel Company	4716 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	BARREL CLEANING	7713-02	A4089	L40641-1	5-Oct-06	Bis(2-Ethylhexyl)Phthalate	126	UG/L		2	6.01E-03
Seattle Barrel Company	4716 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	BARREL CLEANING	7713-02	A4089	L40643-1	5-Oct-06	Discharge Rate	0.005715	MGD			
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7782-03	A41027	L39058-2	6-May-06	Benzyl Alcohol		UG/L	<MDL	0.94	0.00E+00
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7782-03	A41027	L39058-2	6-May-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.57	0.00E+00
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7782-03	A41027	L39058-2	6-May-06	Bis(2-Ethylhexyl)Phthalate	3.03	UG/L		0.19	1.44E-03
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7782-03	A41027	L39054-2	6-May-06	Discharge Rate	0.05689	MGD			
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7782-03	A41028	L39045-2	24-May-06	Benzyl Alcohol	1.9	UG/L	<RDL	1	7.58E-04
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7782-03	A41028	L39045-2	24-May-06	Benzyl Butyl Phthalate	4.23	UG/L		0.63	1.09E-03
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7782-03	A41028	L39045-2	24-May-06	Bis(2-Ethylhexyl)Phthalate	2.74	UG/L		0.21	1.09E-03
Todd Pacific Shipyards Corporation	1801 16TH AVE. S.W.	SEATTLE	98134	W	BOAT/SHIPYARD	7782-03	A41028	L39045-1	24-May-06	Discharge Rate	0.04785	MGD			
Duwamish Shipyard	5658 W. MARGINAL WAY SW	SEATTLE	98106	W	BOAT/SHIPYARD	7704-02	A43971	L41079-2	9-Nov-06	Benzyl Alcohol		UG/L	<MDL	1.1	0.00E+00
Duwamish Shipyard	5658 W. MARGINAL WAY SW	SEATTLE	98106	W	BOAT/SHIPYARD	7704-02	A43971	L41079-2	9-Nov-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.65	0.00E+00
Duwamish Shipyard	5658 W. MARGINAL WAY SW	SEATTLE	98106	W	BOAT/SHIPYARD	7704-02	A43971	L41079-2	9-Nov-06	Bis(2-Ethylhexyl)Phthalate	0.81	UG/L	<RDL	0.22	5.37E-06
Duwamish Shipyard	5658 W. MARGINAL WAY SW	SEATTLE	98106	W	BOAT/SHIPYARD	7704-02	A43971	L41082-2	9-Nov-06	Discharge Rate	0.00075	MGD			
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WAY	SEATTLE	98108	W	CEMENT/READYMIX	232-03	A4431	L40980-3	3-Nov-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WAY	SEATTLE	98108	W	CEMENT/READYMIX	232-03	A4431	L40980-3	3-Nov-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WAY	SEATTLE	98108	W	CEMENT/READYMIX	232-03	A4431	L40980-3	3-Nov-06	Bis(2-Ethylhexyl)Phthalate	6.3	UG/L	<RDL,B	2	1.58E-04
Stoneway Concrete - South Seattle Ready Mix Batch Plant	3803 E. MARGINAL WAY	SEATTLE	98108	W	CEMENT/READYMIX	232-03	A4431	L40980-1	3-Nov-06	Discharge Rate	0.0033	MGD			
Emerald Recycling	1500 AIRPORT WAY S.	SEATTLE	98134		CENTRALIZED WASTE TREATMENT	7690-03	A42241	L39977-1	3-Oct-06	Benzyl Alcohol	136	UG/L		10	4.14E-02
Emerald Recycling	1500 AIRPORT WAY S.	SEATTLE	98134		CENTRALIZED WASTE TREATMENT	7690-03	A42241	L39977-1	3-Oct-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Emerald Recycling	1500 AIRPORT WAY S.	SEATTLE	98134		CENTRALIZED WASTE TREATMENT	7690-03	A42241	L39977-1	3-Oct-06	Bis(2-Ethylhexyl)Phthalate	19.7	UG/L		2	6.00E-03
Emerald Recycling	1500 AIRPORT WAY S.	SEATTLE	98134		CENTRALIZED WASTE TREATMENT	7690-03	A42241	L39979-1	3-Oct-06	Discharge Rate	0.036517	MGD			
Marine Vacuum Service	1516 SOUTH GRAHAM ST.	SEATTLE	98108		CENTRALIZED WASTE TREATMENT	7676-04	A4297	L40601-1	3-Oct-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Marine Vacuum Service	1516 SOUTH GRAHAM ST.	SEATTLE	98108		CENTRALIZED WASTE TREATMENT	7676-04	A4297	L40601-1	3-Oct-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Marine Vacuum Service	1516 SOUTH GRAHAM ST.	SEATTLE	98108		CENTRALIZED WASTE TREATMENT	7676-04	A4297	L40601-1	3-Oct-06	Bis(2-Ethylhexyl)Phthalate	7.5	UG/L	<RDL	2	2.27E-04
Marine Vacuum Service	1516 SOUTH GRAHAM ST.	SEATTLE	98108		CENTRALIZED WASTE TREATMENT	7676-04	A4297	L40603-1	3-Oct-06	Discharge Rate	0.003304	MGD			
Northwest Container Services, Inc.	6110 WEST MARGINAL WAY SW	SEATTLE	98106	W	CONTAINER WASHING	651-02	A4522	L40198-3	31-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Northwest Container Services, Inc.	6110 WEST MARGINAL WAY SW	SEATTLE	98106	W	CONTAINER WASHING	651-02	A4522	L40198-3	31-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Northwest Container Services, Inc.	6110 WEST MARGINAL WAY SW	SEATTLE	98106	W	CONTAINER WASHING	651-02	A4522	L40198-3	31-Aug-06	Bis(2-Ethylhexyl)Phthalate	106	UG/L		2	4.41E-04
Northwest Container Services, Inc.	6110 WEST MARGINAL WAY SW	SEATTLE	98106	W	CONTAINER WASHING	651-02	A4522	L40198-1	31-Aug-06	Discharge Rate	0.00049	MGD			
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND W. HALLIDAY ST.	SEATTLE			DECANT STATION	415-02	A4437	L40187-2	29-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND W. HALLIDAY ST.	SEATTLE			DECANT STATION	415-02	A4437	L40187-2	29-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND W. HALLIDAY ST.	SEATTLE			DECANT STATION	415-02	A4437	L40187-2	29-Aug-06	Bis(2-Ethylhexyl)Phthalate	33.2	UG/L		2	2.22E-04
Seattle, City of-SPU - (DA 415) 20th Ave W. and W. Halliday St.	20TH AVE. WEST AND W. HALLIDAY ST.	SEATTLE			DECANT STATION	415-02	A4437	L40187-1	29-Aug-06	Discharge Rate	0.0008	MGD			
Schwartz Brothers Bakery	617 S. NEVADA STREET	SEATTLE	98108	E / SPU CSO	FOOD PROCESSING-BAKERY	743-01	A45511	L38625-1	27-Mar-06	Benzyl Alcohol		UG/L	<MDL	19	0.00E+00
Schwartz Brothers Bakery	617 S. NEVADA STREET	SEATTLE	98108	E / SPU CSO	FOOD PROCESSING-BAKERY	743-01	A45511	L38625-1	27-Mar-06	Benzyl Butyl Phthalate	17	UG/L	<RDL	11	1.08E-03
Schwartz Brothers Bakery	617 S. NEVADA STREET	SEATTLE	98108	E / SPU CSO	FOOD PROCESSING-BAKERY	743-01	A45511	L38625-1	27-Mar-06	Bis(2-Ethylhexyl)Phthalate	227	UG/L		3.7	1.44E-02
Schwartz Brothers Bakery	617 S. NEVADA STREET	SEATTLE	98108	E / SPU CSO	FOOD PROCESSING-BAKERY	743-01	A45511	L38622-1	27-Mar-06	Discharge Rate	0.00762	MGD			
WestFarm Foods/Dairgold - Rainier	4058 RAINIER AVENUE S.	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-DAIRY	7116-04	A50311	L39446-2	12-Jun-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
WestFarm Foods/Dairgold - Rainier	4058 RAINIER AVENUE S.	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-DAIRY	7116-04	A50311	L39446-2	12-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
WestFarm Foods/Dairgold - Rainier	4058 RAINIER AVENUE S.	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-DAIRY	7116-04	A50311	L39446-2	12-Jun-06	Bis(2-Ethylhexyl)Phthalate		UG/L	<MDL	2	0.00E+00
WestFarm Foods/Dairgold - Rainier	4058 RAINIER AVENUE S.	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-DAIRY	7116-04	A50311	L39449-1	12-Jun-06	Discharge Rate	0.144	MGD			
Mondo and Sons	4225 RAINIER AVENUE SOUTH	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-MEATS	635-02	A5074	L40197-3	31-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Mondo and Sons	4225 RAINIER AVENUE SOUTH	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-MEATS	635-02	A5074	L40197-3	31-Aug-06	Benzyl Butyl Phthalate	6.3	UG/L	<RDL	5	5.98E-05
Mondo and Sons	4225 RAINIER AVENUE SOUTH	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-MEATS	635-02	A5074	L40197-3	31-Aug-06	Bis(2-Ethylhexyl)Phthalate	44.8	UG/L		2	3.18E-04
Mondo and Sons	4225 RAINIER AVENUE SOUTH	SEATTLE	98118	E / KC CSO	FOOD PROCESSING-MEATS	635-02	A5074	L40197-3	31-Aug-06	Discharge Rate	0.00085	MGD			
DaVinci/Kerry Food & Beverage	7224 FIRST AVENUE S.	SEATTLE	98108	W	FOOD PROCESSING-OTHER	7759-01	A45311	L39985-2	8-Aug-06	Benzyl Alcohol	24.5	UG/L		10	1.42E-03
DaVinci/Kerry Food & Beverage	7224 FIRST AVENUE S.	SEATTLE	98108	W	FOOD PROCESSING-OTHER	7759-01	A45311	L39985-2	8-Aug-06	Benzyl Butyl Phthalate	16	UG/L		6	9.28E-04
DaVinci/Kerry Food & Beverage	7224 FIRST AVENUE S.	SEATTLE	98108	W	FOOD PROCESSING-OTHER	7759-01	A45311	L39985-2	8-Aug-06	Bis(2-Ethylhexyl)Phthalate	16.8	UG/L		2	9.72E-04
DaVinci/Kerry Food & Beverage	7224 FIRST AVENUE S.	SEATTLE	98108	W	FOOD PROCESSING-OTHER	7759-01	A45311	L39985-1	8-Aug-06	Discharge Rate	0.006939	MGD			
Pepsi-Cola Company	2300 26TH AVE. SOUTH	SEATTLE	98144	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	7023-02	A50063	L38905-1	25-Apr-06	Benzyl Alcohol	82.1	UG/L		0.94	5.18E-02
Pepsi-Cola Company	2300 26TH AVE. SOUTH	SEATTLE	98144	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	7023-02	A50063	L38905-1	25-Apr-06	Benzyl Butyl Phthalate	1.08	UG/L		0.57	6.81E-04
Pepsi-Cola Company	2300 26TH AVE. SOUTH	SEATTLE	98144	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	7023-02	A50063	L38905-1	25-Apr-06	Bis(2-Ethylhexyl)Phthalate	1.72	UG/L	B	0.19	1.09E-03
Pepsi-Cola Company	2300 26TH AVE. SOUTH	SEATTLE	98144	E / KC CSO	FOOD PROCESSING-SOFT DRINKS	7023-02	A50063	L38900-1	25-Apr-06	Discharge Rate	0.07566	MGD			
Time Oil Company	2737 WEST COMMODORE WAY	SEATTLE	98199		FUEL - BULK STORAGE	7689-03	A4257	L41172-1	21-Nov-06	Benzyl Alcohol		UG/L	<MDL	1	0.00E+00
Time Oil Company	2737 WEST COMMODORE WAY	SEATTLE	98199		FUEL - BULK STORAGE	7689-03	A4257	L41172-1	21-Nov-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.6	0.00E+00
Time Oil Company	2737 WEST COMMODORE WAY	SEATTLE	98199		FUEL - BULK STORAGE	7689-03	A4257	L41172-1	21-Nov-06	Bis(2-Ethylhexyl)Phthalate	0.88	UG/L	<RDL,B	0.2	1.22E-03
Time Oil Company	2737 WEST COMMODORE WAY	SEATTLE	98199		FUEL - BULK STORAGE	7689-03	A4257	L41169-1	21-Nov-06	Discharge Rate	0.1656	MGD			

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Table 3-4
Industrial Waste Program - 2006 Sampling of Industrial Users
Results Sorted According to Industry Type

COMPANY NAME	LOCATION_STREET	CITY	LOCATION_ZIP	CSO AREA (*)	COMPANY TYPE	PERMIT#	LOCATOR #	LIMS #	SAMPLE DATE	PARAMETER	VALUE	UNITS	QUAL	MDL	LOADING, LBS/DAY
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	W	FUELING FACILITY	7592-03	A4326	L41013-1	7-Nov-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	W	FUELING FACILITY	7592-03	A4326	L41013-1	7-Nov-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	W	FUELING FACILITY	7592-03	A4326	L41013-1	7-Nov-06	Bis(2-Ethylhexyl)Phthalate	2.9	UG/L	<RDL	2	2.18E-04
Arco/BP Petroleum Products Co.	1652 SW LANDER ST.	SEATTLE	98134	W	FUELING FACILITY	7592-03	A4326	L41013-1	7-Nov-06	Discharge Rate	0.009	MGD			
Alaska Marine Lines Inc.	5600 W. MARGINAL WAY S.	SEATTLE	98106	W	GENERAL TYPE	459-02	A4409	L40195-3	31-Aug-06	Benzyl Alcohol	67	UG/L		10	3.37E-04
Alaska Marine Lines Inc.	5600 W. MARGINAL WAY S.	SEATTLE	98106	W	GENERAL TYPE	459-02	A4409	L40195-3	31-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Alaska Marine Lines Inc.	5600 W. MARGINAL WAY S.	SEATTLE	98106	W	GENERAL TYPE	459-02	A4409	L40195-3	31-Aug-06	Bis(2-Ethylhexyl)Phthalate	220	UG/L		2	1.01E-03
Alaska Marine Lines Inc.	5600 W. MARGINAL WAY S.	SEATTLE	98106	W	GENERAL TYPE	459-02	A4409	L40195-1	31-Aug-06	Discharge Rate	0.00055	MGD			
Northwest Dyeworks Inc.	4505 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	GENERAL TYPE	4011-01	A44851	L39939-2	3-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Northwest Dyeworks Inc.	4505 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	GENERAL TYPE	4011-01	A44851	L39939-2	3-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Northwest Dyeworks Inc.	4505 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	GENERAL TYPE	4011-01	A44851	L39939-2	3-Aug-06	Bis(2-Ethylhexyl)Phthalate	17.8	UG/L		2	1.26E-03
Northwest Dyeworks Inc.	4505 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	GENERAL TYPE	4011-01	A44851	L39939-1	3-Aug-06	Discharge Rate	0.008512	MGD			
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER STREET	SEATTLE	98134	W	GROUNDWATER REMEDIATION - PETROLEUM	210-03	A43261	L40056-2	16-Aug-06	Benzyl Alcohol		UG/L	<MDL	1.1	0.00E+00
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER STREET	SEATTLE	98134	W	GROUNDWATER REMEDIATION - PETROLEUM	210-03	A43261	L40056-2	16-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.65	0.00E+00
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER STREET	SEATTLE	98134	W	GROUNDWATER REMEDIATION - PETROLEUM	210-03	A43261	L40056-2	16-Aug-06	Bis(2-Ethylhexyl)Phthalate	3.35	UG/L	B	0.22	4.81E-05
Arco Lander GWR (TechSolv Consulting)	1652 S.W. LANDER STREET	SEATTLE	98134	W	GROUNDWATER REMEDIATION - PETROLEUM	210-03	A43261	L40056-2	16-Aug-06	Discharge Rate	0.00172	MGD			
Union Pacific Railroad - Argo Yard	4300 COLORADO AVENUE S.	SEATTLE	98108	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	668-03	A4505	L39487-3	2-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Union Pacific Railroad - Argo Yard	4300 COLORADO AVENUE S.	SEATTLE	98108	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	668-03	A4505	L39487-3	2-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Union Pacific Railroad - Argo Yard	4300 COLORADO AVENUE S.	SEATTLE	98108	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	668-03	A4505	L39487-3	2-Aug-06	Bis(2-Ethylhexyl)Phthalate	13.6	UG/L		2	3.97E-04
Union Pacific Railroad - Argo Yard	4300 COLORADO AVENUE S.	SEATTLE	98108	E / SPU CSO	GROUNDWATER REMEDIATION - PETROLEUM	668-03	A4505	L39487-2	2-Aug-06	Discharge Rate	0.0035	MGD			
Enodis Corporation	1761 22ND AVENUE S.	SEATTLE	98144	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	4068-01	A45571	L40047-3	28-Aug-06	Benzyl Alcohol		UG/L	<MDL	1.1	0.00E+00
Enodis Corporation	1761 22ND AVENUE S.	SEATTLE	98144	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	4068-01	A45571	L40047-3	28-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.64	0.00E+00
Enodis Corporation	1761 22ND AVENUE S.	SEATTLE	98144	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	4068-01	A45571	L40047-3	28-Aug-06	Bis(2-Ethylhexyl)Phthalate	0.94	UG/L	<RDL,B	0.21	6.32E-06
Enodis Corporation	1761 22ND AVENUE S.	SEATTLE	98144	E / KC CSO	GROUNDWATER REMEDIATION - PETROLEUM	4068-01	A45571	L40047-1	28-Aug-06	Discharge Rate	0.000808	MGD			
Swedish Medical Center/Firsthill	747 BROADWAY AVENUE	SEATTLE	98122	E / KC CSO	HOSPITAL	706-01	A51151	L39688-2	29-Jun-06	Benzyl Alcohol		UG/L	<MDL	1.1	0.00E+00
Swedish Medical Center/Firsthill	747 BROADWAY AVENUE	SEATTLE	98122	E / KC CSO	HOSPITAL	706-01	A51151	L39688-2	29-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.67	0.00E+00
Swedish Medical Center/Firsthill	747 BROADWAY AVENUE	SEATTLE	98122	E / KC CSO	HOSPITAL	706-01	A51151	L39688-2	29-Jun-06	Bis(2-Ethylhexyl)Phthalate	4.31	UG/L	B	0.22	5.39E-03
Swedish Medical Center/Firsthill	747 BROADWAY AVENUE	SEATTLE	98122	E / KC CSO	HOSPITAL	706-01	A51151	L39688-1	29-Jun-06	Discharge Rate	0.15	MGD			
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA STREET	SEATTLE	98122	E / KC CSO	LAUNDRY - LINEN	721-01	A5101	L39951-1	3-Aug-06	Benzyl Alcohol	263	UG/L		10	8.28E-02
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA STREET	SEATTLE	98122	E / KC CSO	LAUNDRY - LINEN	721-01	A5101	L39951-1	3-Aug-06	Benzyl Butyl Phthalate	6.7	UG/L	<RDL	6	2.06E-03
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA STREET	SEATTLE	98122	E / KC CSO	LAUNDRY - LINEN	721-01	A5101	L39951-1	3-Aug-06	Bis(2-Ethylhexyl)Phthalate	70.7	UG/L		2	2.18E-02
Hospital Central Services Association, Inc.	1300 EAST COLUMBIA STREET	SEATTLE	98122	E / KC CSO	LAUNDRY - LINEN	721-01	A5101	L39951-1	3-Aug-06	Discharge Rate	0.0369	MGD			
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE SOUTH	SEATTLE	98144	E / KC CSO	LAUNDRY - LINEN	746-01	A51261	L39839-2	19-Jul-06	Benzyl Alcohol	124	UG/L		10	8.20E-02
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE SOUTH	SEATTLE	98144	E / KC CSO	LAUNDRY - LINEN	746-01	A51261	L39839-2	19-Jul-06	Benzyl Butyl Phthalate		UG/L	<MDL	6.1	0.00E+00
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE SOUTH	SEATTLE	98144	E / KC CSO	LAUNDRY - LINEN	746-01	A51261	L39839-2	19-Jul-06	Bis(2-Ethylhexyl)Phthalate	33.1	UG/L		2	2.19E-02
University of Washington - Consolidated Laundry	2901 - 27TH AVENUE SOUTH	SEATTLE	98144	E / KC CSO	LAUNDRY - LINEN	746-01	A51261	L39839-2	19-Jul-06	Discharge Rate	0.079288	MGD			
Pioneer Industries	7000 HIGHLAND PARKWAY SW	SEATTLE	98106	W	METAL FINISHING - CFR 433	7723-03	A4328	L39548-2	20-Jun-06	Benzyl Alcohol		UG/L	<MDL	1	0.00E+00
Pioneer Industries	7000 HIGHLAND PARKWAY SW	SEATTLE	98106	W	METAL FINISHING - CFR 433	7723-03	A4328	L39548-2	20-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.63	0.00E+00
Pioneer Industries	7000 HIGHLAND PARKWAY SW	SEATTLE	98106	W	METAL FINISHING - CFR 433	7723-03	A4328	L39548-2	20-Jun-06	Bis(2-Ethylhexyl)Phthalate	1.06	UG/L	B	0.21	2.82E-05
Pioneer Industries	7000 HIGHLAND PARKWAY SW	SEATTLE	98106	W	METAL FINISHING - CFR 433	7723-03	A4328	L39548-1	20-Jun-06	Discharge Rate	0.00319	MGD			
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106	W	METAL RECYCLING	4012-01	A40191	L39993-3	9-Aug-06	Benzyl Alcohol		UG/L	<MDL	1.2	0.00E+00
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106	W	METAL RECYCLING	4012-01	A40191	L39993-3	9-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.71	0.00E+00
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106	W	METAL RECYCLING	4012-01	A40191	L39993-3	9-Aug-06	Bis(2-Ethylhexyl)Phthalate	1.4	UG/L	B	0.24	2.34E-04
Nucor Steel Corporation	2424 S.W. ANDOVER	SEATTLE	98106	W	METAL RECYCLING	4012-01	A40191	L39993-2	9-Aug-06	Discharge Rate	0.02	MGD			
Aspen Paints	1128 SW SPOKANE STREET	SEATTLE	98134	W	PAINT MANUFACTURING	195-02	A4215	L39881-3	26-Jul-06	Benzyl Alcohol	110	UG/L	<RDL	100	9.17E-05
Aspen Paints	1128 SW SPOKANE STREET	SEATTLE	98134	W	PAINT MANUFACTURING	195-02	A4215	L39881-3	26-Jul-06	Benzyl Butyl Phthalate		UG/L	<MDL	60	0.00E+00
Aspen Paints	1128 SW SPOKANE STREET	SEATTLE	98134	W	PAINT MANUFACTURING	195-02	A4215	L39881-3	26-Jul-06	Bis(2-Ethylhexyl)Phthalate		UG/L	<MDL	20	0.00E+00
Aspen Paints	1128 SW SPOKANE STREET	SEATTLE	98134	W	PAINT MANUFACTURING	195-02	A4215	L39881-1	26-Jul-06	Discharge Rate	0.0001	MGD			
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	E / KC CSO	PHOTO PROCESSING	748-01	A51281	L39838-3	19-Jul-06	Benzyl Alcohol	39.3	UG/L		11	6.01E-04
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	E / KC CSO	PHOTO PROCESSING	748-01	A51281	L39838-3	19-Jul-06	Benzyl Butyl Phthalate		UG/L	<MDL	6.6	0.00E+00
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	E / KC CSO	PHOTO PROCESSING	748-01	A51281	L39838-3	19-Jul-06	Bis(2-Ethylhexyl)Phthalate		UG/L	<MDL	2.3	0.00E+00
Photographic Center Northwest	900 - 12TH AVENUE	SEATTLE	98122	E / KC CSO	PHOTO PROCESSING	748-01	A51281	L39838-1	19-Jul-06	Discharge Rate	0.001833	MGD			
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	W	PRESSURE WASHING	10214-01	A45761	L40366-3	14-Sep-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	W	PRESSURE WASHING	10214-01	A45761	L40366-3	14-Sep-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	W	PRESSURE WASHING	10214-01	A45761	L40366-3	14-Sep-06	Bis(2-Ethylhexyl)Phthalate	42.6	UG/L		2	3.55E-05
Washington Liftruck	700 SOUTH CHICAGO	SEATTLE	98122	W	PRESSURE WASHING	10214-01	A45761	L40366-2	14-Sep-06	Discharge Rate	0.0001	MGD			
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	PRESSURE WASHING	10457-01	A45771	L39945-3	3-Aug-06	Benzyl Alcohol		UG/L	<MDL	100	0.00E+00
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	PRESSURE WASHING	10457-01	A45771	L39945-3	3-Aug-06	Benzyl Butyl Phthalate	72	UG/L	<RDL	60	2.40E-04
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	PRESSURE WASHING	10457-01	A45771	L39945-3	3-Aug-06	Bis(2-Ethylhexyl)Phthalate	702	UG/L		20	2.34E-03
Puget Sound Industries Services, Inc.	4429 AIRPORT WAY SOUTH	SEATTLE	98108	E / SPU CSO	PRESSURE WASHING	10457-01	A45771	L39945-2	3-Aug-06	Discharge Rate	0.0004	MGD			
Pacific Rendering Co., Inc.	4023 WEST MARGINAL WAY SOUTH	SEATTLE	98106	W	RENDERING	7751-01	A4510	L39235-2	22-May-06	Benzyl Alcohol		UG/L	<MDL	100	0.00E+00
Pacific Rendering Co., Inc.	4023 WEST MARGINAL WAY SOUTH	SEATTLE	98106	W	RENDERING	7751-01	A4510	L39235-2	22-May-06	Benzyl Butyl Phthalate		UG/L	<MDL	60	0.00E+00
Pacific Rendering Co., Inc.	4023 WEST MARGINAL WAY SOUTH	SEATTLE	98106	W	RENDERING	7751-01	A4510	L39235-2	22-May-06	Bis(2-Ethylhexyl)Phthalate	75	UG/L	<RDL	20	4.75E-03

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MDL

BA
BBP
BEHP

Table C-3
Industrial Waste Program - 2006 Sampling of Industrial Users
Results Sorted According to Industry Type

COMPANY NAME	LOCATION STREET	CITY	LOCATION_ZIP	CSO AREA (*)	COMPANY TYPE	PERMIT#	LOCATOR #	LIMS #	SAMPLE DATE	PARAMETER	VALUE	UNITS	QUAL	MDL	LOADING, LBS/DAY
Pacific Rendering Co., Inc.	4023 WEST MARGINAL WAY SOUTH	SEATTLE	98106	W	RENDERING	7751-01	A4510	L39228-1	22-May-06	Discharge Rate	0.007591	MGD			
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	E / SPU CSO	SOLID WASTE - TRANSFER FAC	691-02	A4532	L39097-3	14-Jun-06	Benzyl Alcohol		UG/L	<MDL	1.1	0.00E+00
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	E / SPU CSO	SOLID WASTE - TRANSFER FAC	691-02	A4532	L39097-3	14-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.85	0.00E+00
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	E / SPU CSO	SOLID WASTE - TRANSFER FAC	691-02	A4532	L39097-3	14-Jun-06	Bis(2-Ethylhexyl)Phthalate	3.62	UG/L	B	0.22	5.43E-05
Waste Management, Inc. - Alaska Street Facility	70 S. ALASKA STREET	SEATTLE	98134	E / SPU CSO	SOLID WASTE - TRANSFER FAC	691-02	A4532	L39097-2	14-Jun-06	Discharge Rate	0.0018	MGD			
Waste Management of Washington- Eastmont Transfer Station	7201 W. MARGINAL WAY SW	SEATTLE	98106		SOLID WASTE - TRANSFER FAC	322-02	A4434	L39505-3	15-Jun-06	Benzyl Alcohol		UG/L	<MDL	100	0.00E+00
Waste Management of Washington- Eastmont Transfer Station	7201 W. MARGINAL WAY SW	SEATTLE	98106		SOLID WASTE - TRANSFER FAC	322-02	A4434	L39505-3	15-Jun-06	Benzyl Butyl Phthalate		UG/L	<MDL	50	0.00E+00
Waste Management of Washington- Eastmont Transfer Station	7201 W. MARGINAL WAY SW	SEATTLE	98106		SOLID WASTE - TRANSFER FAC	322-02	A4434	L39505-3	15-Jun-06	Bis(2-Ethylhexyl)Phthalate		UG/L	<MDL	20	0.00E+00
Waste Management of Washington- Eastmont Transfer Station	7201 W. MARGINAL WAY SW	SEATTLE	98106		SOLID WASTE - TRANSFER FAC	322-02	A4434	L39505-2	15-Jun-06	Discharge Rate	0.0005	MGD			
Eagle Marine Services, Ltd	3200 WEST MARGINAL WAY - TERMINAL 5	SEATTLE	98106	W	TRANSPORTATION FACILITY	685-02	A4530	L40152-3	24-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Eagle Marine Services, Ltd	3200 WEST MARGINAL WAY - TERMINAL 5	SEATTLE	98106	W	TRANSPORTATION FACILITY	685-02	A4530	L40152-3	24-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Eagle Marine Services, Ltd	3200 WEST MARGINAL WAY - TERMINAL 5	SEATTLE	98106	W	TRANSPORTATION FACILITY	685-02	A4530	L40152-3	24-Aug-06	Bis(2-Ethylhexyl)Phthalate	10.5	UG/L		2	4.38E-04
Eagle Marine Services, Ltd	3200 WEST MARGINAL WAY - TERMINAL 5	SEATTLE	98106	W	TRANSPORTATION FACILITY	685-02	A4530	L40384-1	24-Aug-06	Discharge Rate	0.005	MGD			
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL WAY S, TERM 25	SEATTLE	98134		TRUCKED WASTE	7783-01	A45651	L37884-1	18-Jan-06	Benzyl Alcohol		UG/L	<MDL	1	0.00E+00
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL WAY S, TERM 25	SEATTLE	98134		TRUCKED WASTE	7783-01	A45651	L37884-1	18-Jan-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.83	0.00E+00
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL WAY S, TERM 25	SEATTLE	98134		TRUCKED WASTE	7783-01	A45651	L37884-1	18-Jan-06	Bis(2-Ethylhexyl)Phthalate	3.61	UG/L		0.21	3.79E-03
TAU Rabanco Sediment Management Facility	3225 EAST MARGINAL WAY S, TERM 25	SEATTLE	98134		TRUCKED WASTE	7783-01	A45651	L37887-1	18-Jan-06	Discharge Rate	0.126	MGD			
Glacier Northwest (DA #510)	5900 WEST MARGINAL WAY SW	SEATTLE	98106	W	VEHICLE WASHING	510-02	A4472	L40196-3	31-Aug-06	Benzyl Alcohol		UG/L	<MDL	10	0.00E+00
Glacier Northwest (DA #510)	5900 WEST MARGINAL WAY SW	SEATTLE	98106	W	VEHICLE WASHING	510-02	A4472	L40196-3	31-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	6	0.00E+00
Glacier Northwest (DA #510)	5900 WEST MARGINAL WAY SW	SEATTLE	98106	W	VEHICLE WASHING	510-02	A4472	L40196-3	31-Aug-06	Bis(2-Ethylhexyl)Phthalate	15.6	UG/L		2	1.57E-03
Glacier Northwest (DA #510)	5900 WEST MARGINAL WAY SW	SEATTLE	98106	W	VEHICLE WASHING	510-02	A4472	L40196-1	31-Aug-06	Discharge Rate	0.01203	MGD			
United Parcel Service - Seattle	4455 7TH AVENUE SOUTH	SEATTLE	98108	E / SPU CSO	VEHICLE WASHING	4020-01	A45361	L39946-3	3-Aug-06	Benzyl Alcohol		UG/L	<MDL	1	0.00E+00
United Parcel Service - Seattle	4455 7TH AVENUE SOUTH	SEATTLE	98108	E / SPU CSO	VEHICLE WASHING	4020-01	A45361	L39946-3	3-Aug-06	Benzyl Butyl Phthalate		UG/L	<MDL	0.53	0.00E+00
United Parcel Service - Seattle	4455 7TH AVENUE SOUTH	SEATTLE	98108	E / SPU CSO	VEHICLE WASHING	4020-01	A45361	L39946-3	3-Aug-06	Bis(2-Ethylhexyl)Phthalate	3.75	UG/L	B	0.21	9.38E-05
United Parcel Service - Seattle	4455 7TH AVENUE SOUTH	SEATTLE	98108	E / SPU CSO	VEHICLE WASHING	4020-01	A45361	L39946-2	3-Aug-06	Discharge Rate	0.003	MGD			

Notes:

(*) CSO AREA	Description
E / KC CSO	Company is located East of Duwamish Waterway & is tributary to KC's CSO from Hanford Trunk into Duwamish Diagonal storm/CSO outfall
E / SPU CSO	Company is located East of Duwamish Waterway & is tributary to SPU's CSO's into Duwamish Diagonal storm/CSO outfall
W	Company is located West of Duwamish Waterway & is tributary to KC CSO's into Duwamish Siphon
blank	Company is located outside of subject CSO area

BEHP = Bis(2-Ethylhexyl)phthalate
BzBP = Benzyl butyl phthalate
BA = Benzyl alcohol

(in **BOLD**) = BEHP >20 µg/L, BzBP > 10 µg/L, or BA >100 µg/L
= BEHP >100 µg/L, BzBP > 50 µg/L, or BA >250 µg/L

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