

APPENDIX G

DIOXINS AND FURANS

Dioxin/Furan concentrations (in pg/L) detected in stormwater at West Valley View Road (WVV) from 2021 through 2023.

REDUCED SET	West Valley View Road (WVV)						
Dioxin/Furans in pg/l	3/5/2021	11/9/2021	1/3/2022	3/15/2022	10/22/2022	3/13/2023	5/2/2023
1,2,3,4,6,7,8-HpCDD	49	ND	85	ND	140	ND	160
1,2,3,4,6,7,8-HpCDF	ND	ND	43	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	5.3	ND	ND	ND	ND	ND	4.8
1,2,3,6,7,8-HxCDD	4.1	ND	ND	ND	2.2	ND	8.3
1,2,3,6,7,8-HxCDF	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDD	ND	ND	ND	ND	ND	ND	7.6
1,2,3,7,8-PeCDF	2.8	ND	ND	ND	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND	ND	ND	42	ND
2,3,4,7,8-PeCDF	1.9	ND	ND	ND	ND	4.3	ND
OCDD	270	170	630	100	820	320	1000
OCDF	46	24	120	11	ND	ND	130
TEQ (no units)	1.9	0.058	1.5	0.033	1.9	5.6	4

Bold = Above RL

Orange = Above MDL, below RL (J-flagged data)

ND = Not detected above MDL

Toxic Equivalency Factors for concentrations of dioxin/furans and Toxicity Equivalent Quantity (TEQ) to reference congener TCDD for the mixture present per date sampled. Note that the laboratory-reported TEQ is used for this table and may not equal the total of TEF values in all cases.

REDUCED SET	West Valley View Road (WVV)						
TEF Values (no units)	3/5/2021	11/9/2021	1/3/2022	3/15/2022	10/22/2022	3/13/2023	5/2/2023
1,2,3,4,6,7,8-HpCDD	0.49	ND	0.85	ND	1.4	ND	1.6
1,2,3,4,6,7,8-HpCDF	ND	ND	0.43	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	0.53	ND	ND	ND	ND	ND	0.48
1,2,3,6,7,8-HxCDD	0.41	ND	ND	ND	0.22	ND	0.83
1,2,3,6,7,8-HxCDF	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDD	ND	ND	ND	ND	ND	ND	0.76
1,2,3,7,8-PeCDF	0.084	ND	ND	ND	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND	ND	ND	4.2	ND
2,3,4,7,8-PeCDF	0.57	ND	ND	ND	ND	1.29	ND
OCDD	0.081	0.051	0.189	0.03	0.246	0.096	0.3
OCDF	0.0138	0.0072	0.036	0.0033	ND	ND	0.039
TEQ (no units)	1.9	0.058	1.5	0.033	1.9	5.6	4

Dioxin/Furan concentrations (in pg/L) detected in stormwater at North Ridge Terrace (NRT) from 2021 through 2023.

REDUCED SET	North Ridge Terrace (NRT)						
Dioxin/Furans in pg/l	3/5/2021	11/9/2021	1/3/2022	3/15/2022	10/22/2022	3/13/2023	5/2/2023
1,2,3,4,6,7,8-HpCDD	19	26	ND	ND	ND	43	120
1,2,3,4,6,7,8-HpCDF	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	ND	ND	ND	ND	ND	ND	4.9
1,2,3,6,7,8-HxCDD	ND	ND	ND	ND	ND	ND	11
1,2,3,6,7,8-HxCDF	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDD	ND	1.7	ND	ND	ND	ND	ND
1,2,3,7,8-PeCDF	ND	ND	ND	ND	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND	ND	ND	16	ND
2,3,4,7,8-PeCDF	ND	ND	ND	ND	ND	ND	ND
OCDD	110	210	75	41	ND	270	770
OCDF	8.5	ND	ND	ND	ND	ND	71
TEQ (no units)	0.23	0.49	0.023	0.012	ND	2.1	3

Bold = Above RL

Orange = Above MDL, below RL (J-flagged data)

ND = Not detected above MDL

Toxic Equivalency Factors for concentrations of dioxin/furans and Toxicity Equivalent Quantity (TEQ) to reference congener TCDD for the mixture present per date sampled. Note that the laboratory-reported TEQ is used for this table and may not equal the total of TEF values in all cases.

REDUCED SET	North Ridge Terrace (NRT)						
TEF Values (no units)	3/5/2021	11/9/2021	1/3/2022	3/15/2022	10/22/2022	3/13/2023	5/2/2023
1,2,3,4,6,7,8-HpCDD	0.19	0.26	ND	ND	ND	4.3	1.2
1,2,3,4,6,7,8-HpCDF	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	ND	ND	ND	ND	ND	ND	0.49
1,2,3,6,7,8-HxCDD	ND	ND	ND	ND	ND	ND	1.1
1,2,3,6,7,8-HxCDF	ND	ND	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDD	ND	0.17	ND	ND	ND	ND	ND
1,2,3,7,8-PeCDF	ND	ND	ND	ND	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND	ND	ND	1.6	ND
2,3,4,7,8-PeCDF	ND	ND	ND	ND	ND	ND	ND
OCDD	0.033	0.063	0.0225	0.0123	ND	0.081	0.231
OCDF	0.00255	ND	ND	ND	ND	ND	0.0213
TEQ (no units)	0.23	0.49	0.023	0.012	ND	2.1	3

Dioxin/Furan concentrations (in pg/L) detected in stormwater at Colver Road (CR) from 2021 through 2023.

REDUCED SET	Colver Road (CR)					
Dioxin/Furans in pg/l	11/9/2021	1/3/2022	3/15/2022	10/22/2022	3/13/2023	5/2/2023
1,2,3,4,6,7,8-HpCDD	ND	28	ND	ND	110	310
1,2,3,4,6,7,8-HpCDF	ND	ND	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	ND	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDD	ND	ND	ND	ND	ND	15
1,2,3,6,7,8-HxCDF	ND	ND	ND	ND	3.1	22
1,2,3,7,8,9-HxCDD	ND	ND	ND	ND	5.2	8.4
1,2,3,7,8-PeCDF	ND	ND	ND	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND	ND	46	ND
2,3,4,7,8-PeCDF	ND	ND	ND	ND	ND	2.4
OCDD	92	200	56	92	590	1800
OCDF	ND	55	7.7	ND	110	490
TEQ (no units)	0.028	0.36	0.019	0.2	6.7	9

Bold = Above RL

Orange = Above MDL, below RL (J-flagged data)

ND = Not detected above MDL

Toxic Equivalency Factors for concentrations of dioxin/furans and Toxicity Equivalent Quantity (TEQ) to reference congener TCDD for the mixture present per date sampled. Note that the laboratory-reported TEQ is used for this table and may not equal the total of TEF values in all cases.

REDUCED SET	Colver Road (CR)					
TEF Values (no units)	11/9/2021	1/3/2022	3/15/2022	10/22/2022	3/13/2023	5/2/2023
1,2,3,4,6,7,8-HpCDD	ND	0.28	ND	ND	1.1	3.1
1,2,3,4,6,7,8-HpCDF	ND	ND	ND	ND	ND	ND
1,2,3,4,7,8-HxCDD	ND	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDD	ND	ND	ND	ND	ND	1.5
1,2,3,6,7,8-HxCDF	ND	ND	ND	ND	0.31	2.2
1,2,3,7,8,9-HxCDD	ND	ND	ND	ND	0.52	0.84
1,2,3,7,8-PeCDF	ND	ND	ND	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND	ND	4.6	ND
2,3,4,7,8-PeCDF	ND	ND	ND	ND	ND	0.24
OCDD	0.0276	0.06	0.0168	0.0276	0.177	0.54
OCDF	ND	0.0165	0.00231	ND	0.033	0.147
TEQ (no units)	0.028	0.36	0.019	0.2	6.7	9

Dioxin/Furan concentrations (in pg/L) detected in Bear Creek at Oak Street (BCOS) from 2021 through 2023.

REDUCED SET	Bear Creek at Oak St. (BCOS)		
Dioxin/Furans in pg/l	11/4/2020	1/3/2022	10/22/2022
1,2,3,4,6,7,8-HpCDD	ND	26	ND
1,2,3,4,6,7,8-HpCDF	ND	9.3	ND
1,2,3,4,7,8-HxCDD	ND	ND	0.97
1,2,3,6,7,8-HxCDD	ND	ND	ND
1,2,3,6,7,8-HxCDF	ND	ND	ND
1,2,3,7,8,9-HxCDD	ND	ND	ND
1,2,3,7,8-PeCDF	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND
2,3,4,7,8-PeCDF	ND	ND	ND
OCDD	ND	200	ND
OCDF	ND	ND	ND
TEQ (no units)	ND	0.41	0.097

Bold = Above RL

Orange = Above MDL, below RL (J-flagged data)

ND = Not detected above MDL

Toxic Equivalency Factors for concentrations of dioxin/furans and Toxicity Equivalent Quantity (TEQ) to reference congener TCDD for the mixture present per date sampled. Note that the laboratory-reported TEQ is used for this table and may not equal the total of TEF values in all cases.

REDUCED SET	Bear Creek at Oak St. (BCOS)		
TEF Values (no units)	11/4/2020	1/3/2022	10/22/2022
1,2,3,4,6,7,8-HpCDD	ND	0.26	ND
1,2,3,4,6,7,8-HpCDF	ND	0.093	ND
1,2,3,4,7,8-HxCDD	ND	ND	0.097
1,2,3,6,7,8-HxCDD	ND	ND	ND
1,2,3,6,7,8-HxCDF	ND	ND	ND
1,2,3,7,8,9-HxCDD	ND	ND	ND
1,2,3,7,8-PeCDF	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND
2,3,4,7,8-PeCDF	ND	ND	ND
OCDD	ND	0.06	ND
OCDF	ND	ND	ND
TEQ (no units)	ND	0.41	0.097

Dioxin/Furan concentrations (in pg/L) detected in Bear Creek at US Cellular (BCUC) from 2021 through 2023.

REDUCED SET	Bear Creek at US Cellular Park (BCUC)				
Dioxin/Furans in pg/l	11/4/2020	11/15/2020	12/17/2020	1/3/2022	10/22/2022
1,2,3,4,6,7,8-HpCDD	ND	ND	ND	31	11
1,2,3,4,6,7,8-HpCDF	ND	ND	ND	7.8	ND
1,2,3,4,7,8-HxCDD	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDD	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDF	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDD	ND	ND	ND	ND	ND
1,2,3,7,8-PeCDF	ND	ND	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND	ND	ND
2,3,4,7,8-PeCDF	ND	ND	ND	ND	ND
OCDD	ND	56	0.15	230	ND
OCDF	ND	ND	0.016	ND	ND
TEQ (no units)	ND	0.017	ND	0.46	0.11

Bold = Above RL

Orange = Above MDL, below RL (J-flagged data)

ND = Not detected above MDL

Toxic Equivalency Factors for concentrations of dioxin/furans and Toxicity Equivalent Quantity (TEQ) to reference congener TCDD for the mixture present per date sampled. Note that the laboratory-reported TEQ is used for this table and may not equal the total of TEF values in all cases.

REDUCED SET	Bear Creek at US Cellular Park (BCUC)				
TEF Values (no units)	11/4/2020	11/15/2020	12/17/2020	1/3/2022	10/22/2022
1,2,3,4,6,7,8-HpCDD	ND	ND	ND	0.31	0.11
1,2,3,4,6,7,8-HpCDF	ND	ND	ND	0.078	ND
1,2,3,4,7,8-HxCDD	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDD	ND	ND	ND	ND	ND
1,2,3,6,7,8-HxCDF	ND	ND	ND	ND	ND
1,2,3,7,8,9-HxCDD	ND	ND	ND	ND	ND
1,2,3,7,8-PeCDF	ND	ND	ND	ND	ND
2,3,4,6,7,8-HxCDF	ND	ND	ND	ND	ND
2,3,4,7,8-PeCDF	ND	ND	ND	ND	ND
OCDD	ND	0.0168	0.000045	0.069	ND
OCDF	ND	ND	0.0000048	ND	ND
TEQ (no units)	ND	0.017	ND	0.46	0.11