Table 1. Summary of Building 50 Source Area Contaminant Mass Evaluation

Depth Interval, ft bgs	TCE		DCE		Vinyl Chloride		TOTAL	
	Mass, lbs	Mass, %	Mass, lbs	Mass, %	Mass, lbs	Mass, %	Mass, lbs	Mass, %
0 to 5 ft	0	0.60%	0	0.46%	0	0.00%	0	0.55%
5 to 10 ft	11	26.71%	3	11.82%	0	0.00%	14	21.27%
10 to 15 ft	6	14.49%	3	13.61%	0	1.81%	9	14.13%
15 to 20 ft	11	25.29%	6	26.75%	0	67.45%	17	25.97%
20 to 25 ft	0	0.01%	0	0.00%	0	0.00%	0	0.00%
25 to 30 ft	10	24.85%	6	26.12%	0	30.75%	17	25.33%
30 to 35 ft	3	8.06%	5	21.23%	0	0.00%	8	12.75%
TOTAL	42	100.00%	24	100.00%	0	100.00%	66	100.00%

Table 2. Summary of D26 and Plating Building Source Area Contaminant Mass Evaluation

Depth Interval, ft bgs	TCE		DCE		Vinyl Chloride		TOTAL	
	Mass, lbs	Mass, %	Mass, lbs	Mass, %	Mass, lbs	Mass, %	Mass, lbs	Mass, %
0 to 5 ft	0	0.00%	0	0.33%	0	0.00%	0	0.00%
5 to 10 ft	2	0.01%	2	2.47%	0	0.09%	4	0.01%
10 to 15 ft	7	0.02%	2	2.98%	0	0.85%	9	0.03%
15 to 20 ft	37	0.12%	5	7.01%	0	0.18%	41	0.14%
20 to 25 ft	18	0.06%	9	13.57%	0	6.88%	28	0.09%
25 to 30 ft	23	0.07%	10	14.79%	0	1.83%	33	0.11%
30 to 35 ft	37	0.12%	12	17.04%	0	2.99%	48	0.16%
40 to 45 ft	30,437	99.60%	29	41.82%	3	87.19%	30,468	99.46%
TOTAL	30,560	100.00%	69	100.00%	3	100.00%	30,632	100.00%

Table 3. Summary of NEA Source Area Contaminant Mass Evaluation

Depth Interval, ft bgs	TCE		DCE		Vinyl Chloride		TOTAL	
	Mass, lbs	Mass, %	Mass, lbs	Mass, %	Mass, lbs	Mass, %	Mass, lbs	Mass, %
0 to 5 ft	0	0.00%	0	0.00%	0	0.00%	0	0.00%
5 to 10 ft	19	1.04%	115	0.56%	0	0.00%	133	0.48%
10 to 15 ft	27	1.49%	130	0.64%	0	0.00%	157	0.57%
15 to 20 ft	421	23.45%	2,029	10.00%	607	11.00%	3,058	11.07%
20 to 25 ft	728	40.50%	6,723	33.13%	1,565	28.35%	9,016	32.66%
25 to 30 ft	377	20.99%	9,618	47.40%	3,219	58.31%	13,214	47.86%
30 to 35 ft	54	3.03%	23	0.11%	0	0.00%	77	0.28%
35 to 40 ft	83	4.61%	40	0.20%	1	0.02%	123	0.45%
40 to 45 ft	30	1.67%	1,602	7.89%	128	2.32%	1,760	6.37%
45 to 50 ft	58	3.22%	11	0.06%	0	0.00%	69	0.25%
TOTAL	1,797	100.00%	20,291	100.00%	5,520	100.00%	27,608	100.00%

Table 4. Calculation inputs for Building 50 source duration based on typical groundwater concentrations and groundwater flow rates.

Item	Input
Groundwater Concentrations	
Typical TCE concentration, ug/L	600
Typical DCE concentration, ug/L	2
Typical VC concentration, ug/L	0
Total typical VOC concentration, ug/L	602
Total typical VOC concentration, lbs/L	**1.33×10^{-6}**
Groundwater Flux	
Flux, ft3/d	137
Flux, L,d	3,879
Flux, L/year	**1,416,954**
Source Mass	
Mass, lbs	**66**

Table 5. Calculation inputs for Department 26 and Former Plating Building source duration based on typical groundwater concentrations and groundwater flow rates.

Item	Input
Groundwater Concentrations	
Typical TCE concentration, ug/L	200,000
Typical DCE concentration, ug/L	20,000
Typical VC concentration, ug/L	200
Total typical VOC concentration, ug/L	220,200
Total typical VOC concentration, lbs/L	**4.85×10^{-4}**
Easterly Groundwater Flux	
Flux, ft3/d	196
Flux, L,d	5,550
Flux, L/year	**2,027,175**
Westerly Groundwater Flux	
Flux, ft3/d	111
Flux, L,d	3,143
Flux, L/year	**1,148,043**
Source Mass	
Mass, lbs	**30,632**

Table 6. Calculation inputs for Department 26 and Former Plating Building source duration based on plume mass and volume and extraction system pumping rates.

Item	Input
Source Mass	
Mass, lbs	**30,632**
Indian Creek Plume Mass	
Mass, lbs	**1,494**
Time to Capture One Plume Volume	
Time, Years	**28**

Table 7. Calculation inputs for Northeast Area source duration based on typical groundwater concentrations and groundwater flow rates.

Item	Input
Groundwater Concentrations	
Typical TCE concentration, ug/L	0
Typical DCE concentration, ug/L	2000
Typical VC concentration, ug/L	100
Total typical VOC concentration, ug/L	2,100
Total typical VOC concentration, lbs/L	**4.625×10^{-6}**
Easterly Groundwater Flux	
Flux, ft3/d	527
Flux, L,d	14,923
Flux, L/year	**5,450,618**
Source Mass	
Mass, lbs	**27,608**

Table 8. Calculation inputs for the Northeast Area duration based on plume mass and volume and extraction system pumping rates.

Item	Input
Source Mass	
Mass, lbs	**27,608**
Indian Creek Plume Mass	
Mass, lbs	**692**
Time to Capture One Plume Volume	
Time, Years	**11**

Table 9. Years to Reach TCE, DCE and Vinyl Chloride Standard after Source Remediation.

Location	100% Source Concentration Reduction, 100% Source Duration Reduction	50% Source Concentration Reduction, 0% Source Duration Reduction	75% Source Concentration Reduction, 0% Source Duration Reduction	95% Source Concentration Reduction, 0% Source Duration Reduction	0% Source Concentration Reduction, 50% Source Duration Reduction	0% Source Concentration Reduction, 75% Source Duration Reduction	0% Source Concentration Reduction, 95% Source Duration Reduction	50% Source Concentration Reduction, 50% Source Duration Reduction	75% Source Concentration Reduction, 75% Source Duration Reduction	95% Source Concentration Reduction, 95% Source Duration Reduction	0% Source Concentration Reduction, 0% Source Duration Reduction
Current Conditions											
Building 50	3/3/4	253/253/253	253/252/251	252/4/4	128/128/129	66/66/67	16/16/17	128/128/128	66/65/64	15/4/4	254/253/254
Department 26 and Plating Building-West	9/44/47	259/291/292	258/285/288	256/275/275	135/168/171	73/107/110	23/57/60	134/168/167	71/98/101	19/46/49	260/294/297
Department 26 and Plating Building-East	10/34/37	259/283/284	258/281/0	257/273/274	135/159/162	73/97/100	23/47/49	134/155/158	71/89/92	20/36/39	260/284/287
Northeast Area	4/3/4	253/253/253	253/253/253	252/252/251	129/128/129	67/66/67	17/16/17	128/128/128	66/66/66	15/15/14	254/253/254
Future Conditions											
Building 50	4/5/6	254/251/252	254/251/8	253/6/6	129/128/128	67/66/66	17/16/16	129/126/126	67/64/8	16/6/6	254/253/253
Department 26 and Plating Building-East	9/15/16	255/255/256	255/255/255	254/254/255	130/131/132	68/69/70	18/19/20	130/130/131	68/68/68	17/17/18	260/256/257
Northeast Area	4/5/5	254/254/254	254/254/253	253/252/251	129/129/130	67/67/68	17/17/18	129/129/129	67/67/67	16/15/15	254/254/255

3/3/4 – Years to TCE Standard (5 ug/L)/Years to DCE Standard (70 ug/l)/Years to Vinyl Chloride Standard (2 ug/L)