

Table 4 - Treatment Plant Operational Metrics

Nevada Environmental Response Trust Groundwater Extraction and Treatment System Enhanced Operational Metrics																						
Date	LS #2	Chromium Treatment Subsystem Effluent ¹			GW-11 Influent ¹				Unit 4 Influent ¹					FBR Plant Influent ¹								
	Flow (gpm)	Flow ² (gpm)	TA - Cr (TR) (mg/L)	PA - Cr (VI) (mg/L)	TA - ClO ₂ (mg/L)	Flow (gpm)	TA - Cr (TR) (mg/L)	PA - Cr (VI) (mg/L)	TA - ClO ₂ (mg/L)	Flow ⁴ (gpm)	PA - Cr (VI) (mg/L)	TA - ClO ₂ (mg/L)	TA - ClO ₂ (mg/L)	TA - NO ₂ - N (mg/L)	Flow (gpm)	TA - ClO ₂ (mg/L)	ETI - ClO ₂ (mg/L)	TA - ClO ₂ (mg/L)	TA - NO ₂ - N (mg/L)	TA - Cr (TR) (mg/L)	PA - Cr (VI) (mg/L)	
03/01/24	787	8.4				0.0				0.0					795		34					
03/02/24	795	5.6				0.059				0.0					800	41	35					
03/03/24	795	10				0.084				0.0					805		38					
03/04/24	795	10				0.085				0.0					805		37					
03/05/24	795	10				0.057				0.0					805		35					
03/06/24	834	10	0.0091 J	0.00016 J	360	0.063				0.0					844		38	46				
03/07/24	821	4.3				0.062				0.0					825		30		7.1	0.10		0.083
03/08/24	809	0.0				0.075				0.0					846		30					
03/09/24	789	0.0				0.089				0.0					865	33	31					
03/10/24	764	0.0				0.077				0.0					861		33					
03/11/24	804	0.0				0.043				0.0					824		32					
03/12/24	724	0.0				0.054				0.0					819		34					
03/13/24	797	0.0				1.2	0.11	0.097	30	0.0					951		32		3.9	0.12		0.105
03/14/24	788	0.0				0.12				0.0					900		32					
03/15/24	784	0.0				0.16				0.0					893		30					
03/16/24	611	0.0				0.13				0.0					1150	30	32					
03/17/24	771	0.0				0.083				0.0					1136		33					
03/18/24	789	28				0.059				0.0					1026		50					
03/19/24	698	50				0.051				0.0					1040		46					
03/20/24	783	56				0.038				0.0					983		51		7.1	0.45		0.10
03/21/24	795	60				0.026				0.0					996		55					
03/22/24	791	57	1.90	0.00042 J	370	0.020				0.0					944		55					
03/23/24	782	58				0.019				0.0					1079	43	57					
03/24/24	793	56				0.084				0.0					1058		54					
03/25/24	795	52				0.068				0.0					958		57					
03/26/24	770	54				0.052				0.0					977		55					
03/27/24	775	57				0.050				0.0					1027		54					
03/28/24	764	60	0.30	0.00023 J	400	0.020				0.0					1018		55		7.6	0.47		0.13
03/29/24	781	48				0.034				0.0					1023		49					
03/30/24	811	56				0.10				0.0					1061	51	54					
03/31/24	788	53				0.14				0.0					1034		52					
Monthly Average ²	780	26	1.1	0.00032	382	0.10	0.11	0.097	30	0.0	0.0	0.0	0.0	0.0	940	39	43	46	6.5	0.29		0.10

Notes:
 Flow reported as gpm is a daily average calculated from the totalizer reading. The only exceptions are the instantaneous flow readings recorded for the 1st and 2nd Stage FBR flows.
 J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
 1: ETI = Envirogen internal process control data, TA = Eurofins TestAmerica data, PA = Pace Analytical data.
 2: All average concentrations reported are monthly flow weighted averages.
 3: From 03/08 to 03/17, Chromium Treatment Subsystem Effluent offline due to maintenance.
 4: From 03/01 to 03/31, Unit 4 Influent offline.

Table 4 - Treatment Plant Operational Metrics

Nevada Environmental Response Trust Groundwater Extraction and Treatment System Enhanced Operational Metrics														
Date	1st Stage FBR ⁵			2nd Stage FBR ⁵			FBR Plant Effluent ¹							
	Flow (gpm)	pH (s.u.)	ORP (mV)	Flow (gpm)	pH (s.u.)	ORP (mV)	Flow ⁶ (gpm)	TA - ClO ₄ (mg/L)	ETI - ClO ₄ (mg/L)	TA - ClO ₃ (mg/L)	TA - Cr (TR) (mg/L)	PA - Cr (VI) (mg/L)	TA - NO ₃ - N (mg/L)	ETI - Turbidity (NTU)
03/01/24	451	7.1	-376	835	7.0	-428	403		ND					10
03/02/24	538	6.7	-291	538	6.7	-418	524	0.016	ND					10
03/03/24	565	6.9	-298	565	6.8	-433	577		ND					10
03/04/24	573	6.5	-264	573	7.0	-441	607		ND					17
03/05/24	571	6.6	-368	571	7.0	-449	607		ND					14
03/06/24	261	6.8	-400	261	7.0	-446	592		ND	ND				17
03/07/24	499	6.7	-399	499	7.0	-427	536		ND		0.024	ND	ND	15
03/08/24	795	6.6	-334	795	7.0	-424	542		ND					12
03/09/24	794	6.6	-328	794	6.9	-442	834	ND D	ND					10
03/10/24	784	6.6	-320	784	7.0	-443	826		ND					15
03/11/24	790	6.5	-359	790	7.0	-436	708		ND					12
03/12/24	821	6.5	-347	821	7.0	-443	778		ND					13
03/13/24	836	6.4	-346	836	7.0	-446	867		ND		0.024	ND	0.053	11
03/14/24	844	6.7	-302	844	7.0	-444	726		ND					18
03/15/24	816	6.7	-307	816	7.0	-453	855		ND					18
03/16/24	853	6.8	-277	853	6.9	-440	891	ND	ND					18
03/17/24	857	6.8	-280	857	6.9	-438	899		ND					25
03/18/24	866	6.8	-311	866	6.8	-417	918		ND					17
03/19/24	905	6.8	-335	905	6.7	-424	931		ND					20
03/20/24	975	6.8	-345	975	6.8	-436	921		ND		0.11	ND	ND	20
03/21/24	1080	6.7	-327	1080	6.8	-441	958		ND					19
03/22/24	1034	6.7	-272	1034	6.8	-433	880		ND					11
03/23/24	1036	6.7	-262	1036	6.7	-431	896	ND D	ND					13
03/24/24	1073	6.6	-266	1073	6.7	-420	888		ND					18
03/25/24	1154	6.7	-307	1154	6.8	-440	871		ND					12
03/26/24	1153	6.7	-291	1153	6.8	-421	928		ND					12
03/27/24	1155	6.8	-276	1155	6.8	-380	937		ND		0.069	0.00022 J	ND	15
03/28/24	1164	6.8	-306	1164	6.8	-376	727		ND					15
03/29/24	1251	6.8	-296	1251	6.8	-381	939		ND					17
03/30/24	1125	6.7	-299	1125	6.7	-373	890	ND D	ND					18
03/31/24	1113	6.7	-281	1113	6.7	-328	871		ND					18
Monthly Average ²	862	6.7	-309	875	6.8	-420	785	0.0018	ND	ND	0.020	0.011	0.011	15

Notes:

Flow reported as gpm is a daily average calculated from the totalizer reading. The only exceptions are the instantaneous flow readings recorded for the 1st and 2nd Stage FBR flows.

D = Result was obtained from the analysis of a dilution.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

ND = Not detected above laboratory method detection limit (ClO₄ = 0.5 µg/L; ClO₃ = 10 µg/L; NO₃-N = 0.055 mg/L; Cr(VI) = 0.25 µg/L).

1: ETI = Envirogen internal process control data, TA = Eurofins TestAmerica data, PA = Pace Analytical data.

2: All average concentrations reported are monthly flow weighted averages.

5: For 1st and 2nd stage FBRs, flow measurements are collected from the influent lines and pH and ORP samples are collected from the recycle lines.

6: FBR Plant Effluent represents effluent discharged to Las Vegas Wash. While this may represent the entirety of the FBR Plant effluent, any diversions to GW-11 are subtracted from the original effluent flow.

GW-11 Level Monitoring ¹		
Date	Field Measurement (ft)	Volume (MG)
03/15/24	18.2	52.6
03/31/24	19.4	50.8

GW-11 Leak Detection Monitoring				
Date	Amount Pumped ² (gallons)			
	NW Corner	NE Corner	SW Corner	SE Corner
03/12/24	0.0	930	3,072	7,468
03/26/24	0.0	881	4,225	0

GW-11 Composite Sample ³		
Analytes	Concentration	Units
Perchlorate	12	mg/L
Chlorate	14	mg/L
Ammonia as N	0.043 J	mg/L
Total Phosphorus	0.750	mg/L
Total Dissolved Solids (TDS)	8,700 D	mg/L
Total Suspended Solids (TSS)	50	mg/L
pH	9.0 H	s.u.
Calcium	420	mg/L
Iron	0.51	mg/L
Chromium (total)	0.052	mg/L
Chromium VI	0.090 J6	mg/L
Chloride	3,500	mg/L
Nitrate as N	0.21	mg/L
Sulfate	2,800	mg/L

Notes:

D = Result was obtained from the analysis of a dilution.

H = Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

J6 = Sample matrix interfered with the ability to make an accurate determination; spike value is low.

1: A transducer installed along the eastern berm provides water pressure measurements that are correlated to elevations for calculation of water depths.

2: Pumping occurs over three consecutive days. The total amount pumped over the three day period is listed with the last day pumping occurred.

3: GW-11 Corner Composite Sample is collected quarterly, most recent sampling results are presented. Sampled on: February 26, 2024

Nevada Environmental Response Trust Groundwater Extraction and Treatment System Enhanced Operational Metrics						
Date	Flow ¹ (gpm)	FBR Influent Concentration			Influent Function Load ² (lbs/day)	6 Month Rolling Average (lbs/day)
		ClO ₄ (mg/L)	NO ₃ as N (mg/L)	ClO ₃ (mg/L)		
Apr 2023	917	51	8.9	130	432	410
May 2023	911	57	4.8	110	364	405
June 2023	946	57	8.9	100	400	403
July 2023	946	53	6.6	150	466	420
Aug 2023	938	48	9.5	97	378	419
Sep 2023	980	51	9.7	80	370	402
Oct 2023	1,004	44	8.7	99	393	395
Nov 2023	939	50	9.4	65	321	388
Dec 2023	994	50	7.2	100	387	386
Jan 2024	1,002	45	6.7	77	328	363
Feb 2024	934	48	7.9	73	316	352
Mar 2024	940	39	6.5	46	234	330

Notes:

Concentrations and flow are presented as monthly average.

1: Flow used in loading calculation is average monthly FBR influent flow.

2: FBR loading calculated as $[(0.9 \cdot \text{NO}_3 \text{ as N} + 0.17 \cdot \text{ClO}_3 + 0.18 \cdot \text{ClO}_4) \cdot \text{Flow} \cdot 1440 / 1000000 \cdot 8.34]$.

Table 7 - AP Area Operational Metrics

Nevada Environmental Response Trust Groundwater Extraction and Treatment System Enhanced Operational Metrics																
Date	E1-1		E1-2		E1-3		E2-1		E2-2		E2-3		E2-4		E2-5	
	Flow (gpm)	Water Elevation (ft amsl)	Flow ² (gpm)	Water Elevation (ft amsl)	Flow (gpm)	Water Elevation (ft amsl)	Flow (gpm)	Water Elevation (ft amsl)	Flow (gpm)	Water Elevation (ft amsl)	Flow (gpm)	Water Elevation (ft amsl)	Flow (gpm)	Water Elevation (ft amsl)	Flow (gpm)	Water Elevation (ft amsl)
03/01/24	2.1	1710.41	0.53	1709.95	0.82	1710.57	0.63	1716.48	0.89	1715.20	1.3	1715.93	1.1	1715.93	0.43	1710.71
03/02/24	2.2	1710.38	0.49	1709.77	0.85	1710.49	0.55	1717.34	0.88	1715.86	1.3	1716.08	1.1	1716.69	0.43	1710.13
03/03/24	2.1	1710.14	0.55	1710.03	0.84	1710.68	0.74	1713.46	0.85	1715.82	1.3	1715.84	1.0	1716.65	0.38	1710.87
03/04/24	2.2	1710.35	0.56	1709.89	0.86	1710.57	0.76	1713.41	0.88	1716.17	1.3	1716.63	1.1	1716.16	0.40	1710.32
03/05/24	2.2	1710.09	0.55	1709.52	0.84	1710.91	0.80	1713.07	0.86	1715.69	1.3	1717.25	1.2	1714.53	0.46	1710.69
03/06/24	2.2	1710.33	0.48	1709.65	0.84	1711.03	0.82	1712.92	0.89	1715.78	0.9	1717.71	1.2	1714.65	0.46	1710.52
03/07/24	2.2	1710.31	0.48	1709.38	0.83	1710.95	0.77	1712.93	0.88	1715.52	1.0	1717.90	1.2	1714.17	0.48	1710.43
03/08/24	2.0	1710.43	0.51	1709.54	0.82	1711.14	0.78	1714.22	0.93	1715.17	1.0	1717.83	1.2	1716.03	0.50	1710.67
03/09/24	2.4	1710.95	0.56	1709.66	0.83	1711.07	0.77	1714.84	0.93	1715.44	1.0	1718.02	1.2	1715.67	0.46	1710.17
03/10/24	2.1	1711.07	0.53	1709.82	0.82	1710.88	0.72	1715.12	0.89	1715.58	1.0	1718.16	1.1	1715.92	0.44	1710.14
03/11/24	2.2	1709.66	0.53	1709.55	0.86	1710.41	0.73	1715.97	0.94	1715.41	0.9	1718.00	1.2	1715.65	0.48	1710.49
03/12/24	2.2	1709.79	0.56	1709.73	0.84	1710.67	0.73	1715.30	0.95	1715.26	0.8	1717.97	1.2	1715.86	0.43	1710.41
03/13/24	2.2	1710.29	0.48	1709.84	0.86	1710.88	0.71	1715.68	0.94	1716.26	0.8	1717.94	1.2	1716.54	0.51	1711.12
03/14/24	2.2	1711.09	0.52	1710.59	0.85	1710.05	0.69	1717.29	0.92	1715.87	0.8	1718.07	1.2	1717.01	0.46	1711.44
03/15/24	2.2	1710.84	0.53	1711.20	0.83	1710.05	0.68	1717.22	0.91	1715.63	0.8	1719.35	1.2	1716.56	0.46	1711.62
03/16/24	2.2	1710.60	0.57	1711.34	0.84	1710.00	0.67	1717.16	0.88	1715.38	0.7	1721.19	1.2	1716.28	0.43	1711.72
03/17/24	2.2	1710.31	0.57	1709.86	0.84	1710.10	0.68	1716.40	0.90	1715.28	1.0	1721.15	1.2	1716.28	0.45	1710.64
03/18/24	2.2	1710.10	0.55	1709.85	0.82	1710.04	0.70	1716.28	0.91	1714.71	1.0	1718.84	1.2	1715.68	0.43	1709.75
03/19/24	2.2	1710.13	0.54	1709.48	0.81	1710.11	0.69	1715.99	0.92	1714.57	1.0	1718.65	1.2	1715.26	0.45	1709.58
03/20/24	2.2	1710.28	0.53	1709.56	0.83	1709.99	0.70	1716.18	0.93	1714.51	1.0	1718.46	1.2	1715.37	0.48	1709.71
03/21/24	2.2	1710.25	0.54	1709.52	0.86	1709.91	0.70	1716.09	0.92	1714.44	0.9	1718.27	1.2	1715.42	0.44	1709.80
03/22/24	2.2	1710.33	0.52	1709.89	0.78	1709.96	0.72	1715.97	0.94	1714.34	0.9	1718.08	1.1	1715.27	0.48	1709.38
03/23/24	2.2	1710.41	0.56	1709.91	0.85	1709.94	0.71	1715.90	0.92	1714.26	0.9	1717.89	1.4	1715.20	0.43	1709.20
03/24/24	2.2	1710.50	0.55	1709.93	0.84	1709.92	0.66	1715.83	0.86	1714.17	0.9	1717.70	1.2	1715.13	0.41	1709.03
03/25/24	2.2	1710.58	0.55	1709.72	0.84	1709.95	0.74	1715.90	0.97	1714.85	1.0	1718.09	1.3	1715.07	0.47	1710.14
03/26/24	2.2	1710.62	0.57	1709.65	0.79	1710.21	0.66	1716.02	0.87	1714.91	1.0	1718.05	1.2	1715.00	0.41	1710.35
03/27/24	2.2	1710.54	0.54	1709.61	0.82	1710.06	0.76	1715.98	0.96	1715.04	1.0	1718.24	1.3	1714.70	0.46	1710.42
03/28/24	2.2	1711.43	0.53	1709.75	0.83	1710.30	0.74	1716.21	0.97	1715.62	1.1	1718.05	1.3	1714.66	0.49	1708.30
03/29/24	2.2	1711.97	0.55	1709.80	0.82	1710.60	0.73	1716.60	0.96	1715.36	1.1	1717.99	1.3	1714.12	0.51	1710.16
03/30/24	2.2	1711.87	0.54	1710.46	0.81	1710.72	0.72	1716.32	0.88	1715.29	1.1	1717.94	1.3	1714.11	0.46	1710.12
03/31/24	2.1	1711.26	0.52	1711.05	0.81	1710.80	0.72	1716.22	0.86	1715.20	1.0	1717.91	1.2	1714.05	0.47	1709.55
Monthly Average	2.2	1710.56	0.54	1709.92	0.83	1710.42	0.72	1715.62	0.91	1715.25	1.0	1718.04	1.2	1715.47	0.45	1710.24
Analytical ¹	Conc (mg/L)	Date	Conc (mg/L)	Date	Conc (mg/L)	Date	Conc (mg/L)	Date	Conc ³ (mg/L)	Date	Conc (mg/L)	Date	Conc (mg/L)	Date	Conc (mg/L)	Date
Perchlorate	420	3/7/2024	740	3/7/2024	320	3/7/2024	74	3/7/2024	355	3/7/2024	810	3/7/2024	860	3/7/2024	1100	3/7/2024
Hexavalent Chromium	0.096	3/7/2024	0.63	3/7/2024	0.68	3/7/2024	0.024	3/7/2024	0.026	3/7/2024	0.099	3/7/2024	0.092	3/7/2024	0.23	3/7/2024
Total Chromium	0.10	3/7/2024	0.63	3/7/2024	0.68	3/7/2024	0.024	3/7/2024	0.026	3/7/2024	0.10	3/7/2024	0.10	3/7/2024	0.24	3/7/2024

Notes:
 Flow reported as gpm is a daily average calculated from the totalizer reading.
 The flow rate at individual wells is adjusted daily to maintain the water level in the wells above the pump.
 1: Analytical results are reported from Eurofins TestAmerica.
 2: On 03/01, E1-2 offline due to maintenance; Averaged flows are presented for this date.
 3: Duplicates taken on 3/7 of well E2-2; average of both values is presented and used for calculations.

Figure 1 - GW-11 Pond Volume and FBR Influent Perchlorate Concentration

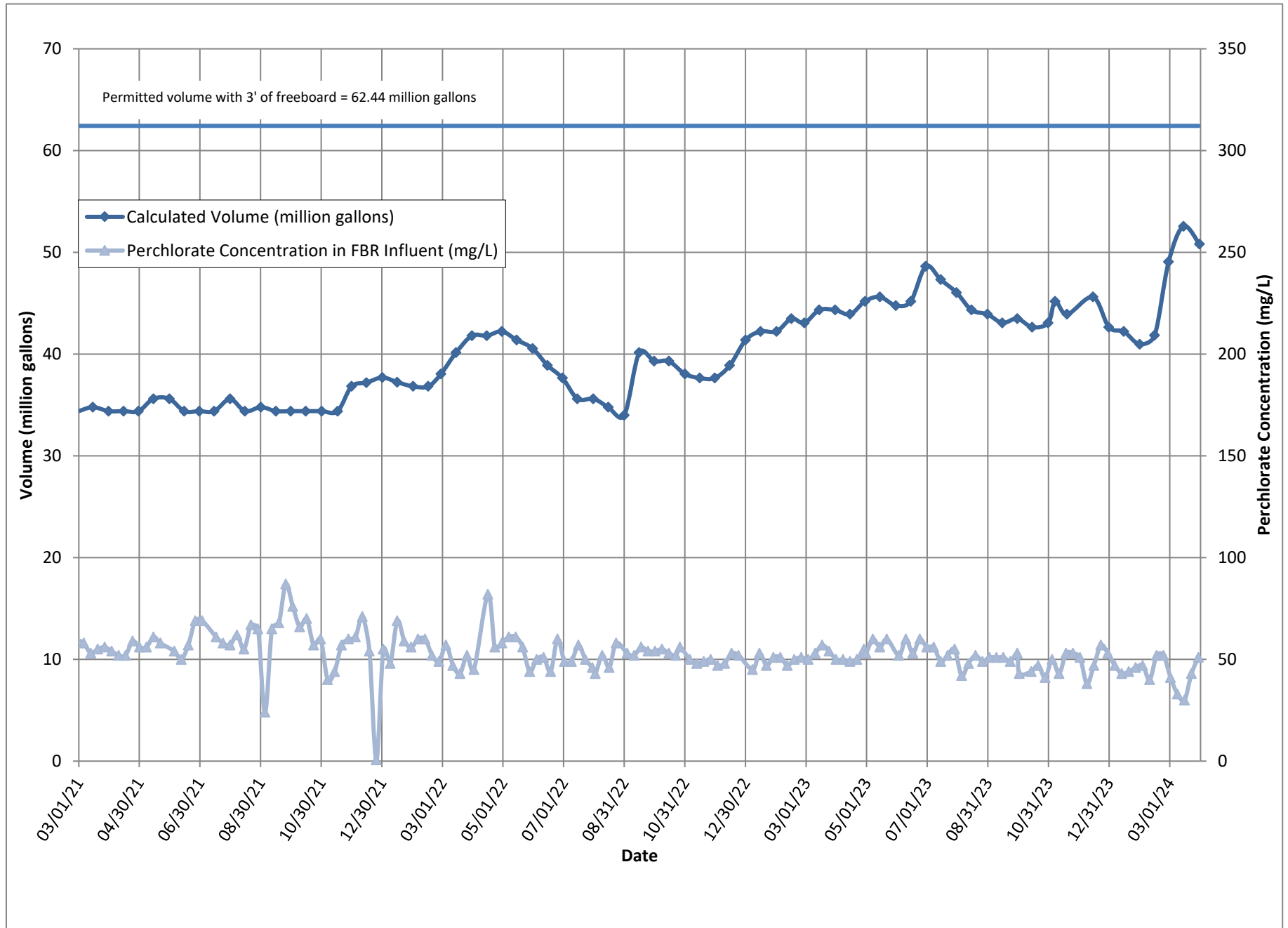


Figure 2 - FBR Equivalent Loading Calculation

