To:	Nevada Division of Environmental Protection Nevada Environmental Response Trust
Cc:	Nevada Environmental Response Trust Stakeholders
From:	Michael Del Vecchio, Director Engineering and Project Management
Date:	January 20, 2022
Subject:	NERT – GWETS Operation Monthly Report – December 2022

At the request of the Nevada Environmental Response Trust (Trust), Envirogen Technologies, Inc. (ETI) is providing this summary of the groundwater extraction and treatment system (GWETS) operation and performance during December 2022.

Summary of GWETS Operation

Envirogen Technologies, Inc. (ETI) mechanically operated the GWETS and ion exchange (IX) system normally in December 2022. Flow from PC-118, PC-119, PC-120, PC-121, and PC-133 were routed to the IX system, bypassing all flow meters associated with the FBR plant for the month of December. The flow rate to the IX system averaged approximately 235 gallons per minute (gpm). The flow rate to the FBR plant averaged approximately 889 gpm during December. At the end of the month, the filled GW-11 Pond volume was at 41.4 million gallons (MG), which would allow 14.6 days of available additional storage in the event of an emergency FBR plant shutdown with continued well field pumping. The water volume stored in the GW-11 Pond increased since the end of November 2022; Figure 1 in this report depicts the actual GW-11 pond volumes and additional storage available.

The influent perchlorate concentration to the IX system averaged 1.6 mg/L for the month. The influent perchlorate concentration to the FBR plant averaged 51 mg/L for the month, with a maximum concentration of 53 mg/L. In comparison, the influent perchlorate concentration to the FBRs for the month of November 2022 averaged 49 mg/L, with a maximum concentration of 50 mg/L.

Enhanced Operational Metrics

Tables 1 and 2 provide a summary of the current GWETS operational metrics data for flow rates, perchlorate and chromium concentrations, and mass removal. Figure 2 graphically presents historical perchlorate and chromium mass flux information. Attachment A provides a summary of the NPDES permit analytes with numerical discharge limits.

Operational Issues

All routine plant repairs conducted by ETI were performed in accordance with the NERT Perchlorate Treatment System Operations Manual. The following is a list of operational issues and major repairs and/or equipment replaced during this reporting period.

1. GW-11

There were no operational issues with GW-11 in the month of December.

2. Biological Plant

There were influent / effluent diversions during the reporting period generally associated with maintenance activities as well as extraction well short-term shutdown events. Below is a description of the events that occurred:

Diversion Events / Well Shutdowns

- Extraction well shutdown at the Seep Well Field (SWF) on December 8, 2022 from 7:59am to 1:34pm due to electrical upgrade efforts for the individual well panels. The panels and electrical components were replaced/upgraded and the individual wells were brought back online as the upgrades were complete.
- Extraction well field shutdown of the Athens Well Field (AWF) and Seep Well Field (SWF) on December 13, 2022 from 7:15am to 12:53pm due to maintenance efforts on the Influent pipeline. After the maintenance efforts were completed and the well fields were brought back online.
- Effluent diversion occurred on December 13, 2022 from 1:36pm to 3:11pm as a precautionary measure due to perchlorate result in the onsite lab. Adjustments were made to the process and the plant was brought back online. Approximately 80,000 gallons of water were added to GW-11.
- Extraction well shutdown at the Seep Well Field (SWF) and Effluent diversion occurred on December 14, 2022 from 6:23am to December 16, 2022 at 1:54pm due to preventative maintenance and realignment efforts on the Effluent and Influent pipelines between Lift Station 1 and Lift Station 2. Approximately 2,300,000 gallons of water were added to GW-11.
- Extraction well field shutdown of the Interceptor Well Field (IWF) on December 15, 2022 intermittently from 12:53pm to 11:43pm due to a malfunctioning level control indicator. Maintenance was conducted on the instrument and the well flow was reestablished.
- Effluent diversion occurred on December 25, 2022 from 4:31pm to 5:33pm as a precautionary measure due to perchlorate result in the onsite lab. Adjustments were made to the process and the plant was brought back online. Approximately 25,000 gallons of water were added to GW-11.

3. IX Treatment Plant

During the month of February 2022, flooding conditions were observed adjacent to the SWF as a result of the City of Henderson's (CoH's) use of inactive Birding Ponds 10 through 13. The discharge to these ponds resulted in an increase in groundwater elevation adjacent to the SWF by approximately 5 feet. This increase in groundwater elevation caused flooding adjacent to the SWF extraction wells and within four extraction well vaults. ETI temporarily increased the pumping rate of extraction wells PC-120 and

PC-121 to reduce flooding with the well vaults. Additionally, the concentration of perchlorate in shallow groundwater increased resulting in increased loading to the IX treatment plant. The CoH ceased discharging water to Birding Ponds 10 through 13 in February 2022. The groundwater elevation adjacent to the SWF is no longer elevated but perchlorate concentrations are still elevated, although decreasing, in shallow groundwater adjacent to wells PC-118, PC-119, PC-120, and PC-121.

4. Spills

There were no reportable spills in the Month of December.

5. Maintenance

- Major maintenance performed by ETI in the reporting month included:

  I. Repaired spare sludge transfer pump.
  II. Replaced level transducer for Interceptor well I-H.
  III. Repaired west press pump.
  IV. Repaired electrical box and motor saver for Interceptor well I-V
  V. Rebuilt and installed multiple air lifts at the Sand Filter.

- Preventative maintenance performed by ETI in the reporting month included:

  I. Cleaned the air filters for the external A/C units for the lift station MCC's.
  II. Flushed the ORP lines around the plant.
  III. Flushed the sump pits around the plant.
  IV. Greased all motors that are online around the plant.
  V. Repaired and replaced various Air Relief valves on the Influent pipeline.
  VI. Installed new MCC cabinet at Lift Station 1 and moved all electrical assets to new MCC.

Attachment B contains a summary of all maintenance activities completed during the reporting period.

Facility Projects

1. Chromium Treatment Subsystem – Envirogen received a Work Authorization for this scope in February 2022. The 100 percent design for the Chromium Treatment Subsystem was submitted and approved by NDEP on May 26,2022. With a number of supply chain delays, Envirogen is currently targeting early January 2023 to complete the final modifications required to treat groundwater extracted as part of the Unit 4 Source Area In-Situ Bioremediation Treatability Study as well as the flow currently routed to the existing Chromium Treatment Plant (i.e. GWTP) from the IWF and AP Area wells. However, the supply chain delays have not had an impact on implementation of the Unit 4 Source Area In-Situ Bioremediation Treatability Study as groundwater extraction is less than originally anticipated and tank T-201 is only filled to approximately 35 percent of capacity. ETI prefers that tank T-201 be filled to approximately 50 percent capacity before bringing the CTS online.

2. Treatment System Extension (TSE) – Envirogen has delivered all of the contracted equipment for the GWETS extension. TSE construction and system start-up is being facilitated by Arcadis

through terms with the Trust and began in December 2021. ETI will incorporate a summary of the treatment operations once the system becomes operational (anticipated to occur in late 1Q 2023).

3. Facility Repair/Replacement Items – Envirogen and the Trust have finalized a list of facility items to be addressed in connection with Amendment 8 to the O&M Agreement. Attachment C contains a status summary prepared by the Trust of all agreed upon items. Specific details on in-progress items are provided below:

    I. (WA 21-02) East Air Compressor - Complete

    II. (WA 21-03) Wiring at Lift Station 3

        1. The A/C units were installed and project is complete.

    III. (WA 21-04) Motor Control Center at Lift Station 1

        1. Project is complete.

    IV. (WA 21-05) Replacement of Safety Shower System

        1. Installation is complete.

    V. (WA 21-06) Influent Pipeline Combination Valves

        1. Project is complete.

    VI. (WA 21-07) Replacement of all pH and ORP probes.

        1. Installation is complete.

    VII. (WA 21-08) Wiring IWF wells

        1. New wire has been installed at the wells, awaiting new starters to be delivered. Due to supply chain issues, some of the required electrical items are delayed. Installation to occur in January 2023.

    VIII. (WA 21-09) Siemens controls upgrade

        1. Spare parts still being received. Estimated completion by the end of January 2023.

    IX. (WA 22-01) DAF Pilot

        1. Pilot is complete and the report is under Trust review.

    X. (WA 22-02) Sludge Pump and Bins

        1. Work is complete.

    XI. (WA 22-03) Influent and Effluent Pump Motors

        1. Project is complete.

    XII. (WA 22-04) FBR Skid Upgrades

        1. Upgrades are complete.

    XIII. (WA 22-05) Large Valve Upgrades

        1. Upgrades are complete.

    XIV. (WA 22-07) LS2 Pump Replacement

        1. Work is complete.

4. Improved Biological Treatment Plant Efficiency – Consistent with Attachment D to the December 2021 GWETS Operation Monthly Report, Envirogen plans to take five FBRs out of service and maintain them in working condition should they be needed in the future. This action will reduce the use of electricity and water and still maintain sufficient treatment capacity to address current groundwater extracted from the IWF, AWF, and the SWF as well as groundwater to be extracted as part of the Unit 4 Source Area In-Situ Bioremediation Treatability Study. FBR A was placed into Offline mode on April 13, 2022. The electrical and mechanical components of the pump skid were inspected and removed when applicable. The removal of the sand media is complete. Final inspection of all internal components is also complete. The remaining FBRs scheduled to be taken out of service will be addressed flowing startup of the CTS.

5. GWETS Pipeline Realignments – ETI was made aware of at least three locations approximately 1.75 miles from the site which will require the modification of the influent and effluent pipelines due to conflicts with ongoing development in the area. The Trust has authorized Tetra Tech to engage with the required property owners to design and build the new sections of pipeline. ETI continues to work with both Tetra Tech and the Trust to verify plans are acceptable and plant downtime is kept to a minimum during the construction efforts. In December, the first pipeline realignment project immediately north of Galleria Drive was completed. The second pipeline realignment located further north of Galleria Drive was determined to be unnecessary as the vertical separation between the GWETS pipelines and the stormwater culvert under construction did not place an unacceptable load on the pipelines at this location. The third pipeline realignment is located in the vicinity to Pabco Road and Galleria Road. ETI is currently supporting the Trust as required on this project while the Trust finalizes project design with the property owners.

6. Water Reuse – Consistent with the Trust's efforts to reduce its water consumption and acknowledgment of best management practices, accelerated by the Basic Water Company (BWC) bankruptcy filing, the Trust is actively pursuing multiple options to become independent of the BWC water distribution system. To that end, it is the objective of the Trust to replace the water currently distributed by BWC through implementation of a water filtration system to allow for reuse of the GWETS effluent. ETI continues to support the Trust in this effort. In December 2022, ETI:

    I. Advanced procurement and installation efforts for filtered water distribution infrastructure.
    II. Worked with vendors to finalize documentation for Trust review related to the procurement of filtration technology.

Tables

Operational Metrics

Nevada Environmental Response Trust I Groundwater Extraction and Treatment System I Monthly Stakeholder Metrics				
Location ID	**Average Flow Rate (gpm)**	**Perchlorate (mg/L)[4]**	**Chromium (TR) (mg/L)[4]**	**Chromium(VI) (mg/L)[4]**
SWF Total Extraction[1]	620[3]	8.2	0.0010	0.0019
AWF Total Extraction[1]	447[3]	49	0.11	0.10
IWF Total Extraction[1]	49[3]	347	5.5	5.5
AP Area Total Extraction[1]	8.7[3]	529	0.18	0.18
GWTP Effluent[2]	62	394	1.8	1.3
GW-11 Influent[1]	2.9	43	0.085	0.045
FBR Influent[2]	889	51	0.17	0.13

Notes:

ND = Not detected above laboratory method detection limit (Cr(VI) = 0.25 ug/L).

TR = Total Recoverable.

1: Perchlorate and chromium TR sampled monthly, values reported from Eurofins TestAmerica.

2: Perchlorate, chromium TR, and chromium (VI) sampled weekly, values reported from Eurofins TestAmerica.

3: Sum of daily average flow for individual wells.

4: All concentrations reported are monthly flow weighted averages.

Nevada Environmental Response Trust I Groundwater Extraction and Treatment System I Monthly Stakeholder Metrics			
Location ID	**Perchlorate (lbs/month)[1]**	**Chromium (TR) (lbs/month)[1]**	**Chromium (VI) (lbs/month)[1]**
SWF Total Extraction	1,897	0.23	0.43
AWF Total Extraction	8,241	18	17
IWF Total Extraction	6,299	99	100
AP Area Total Extraction	1,725	0.59	0.60
GWTP Effluent	9,062	42	31
GW-11 Influent	47	0.092	0.049
FBR Influent[1]	16,743	58	44

Notes:

ND = Not detected above laboratory method detection limit.

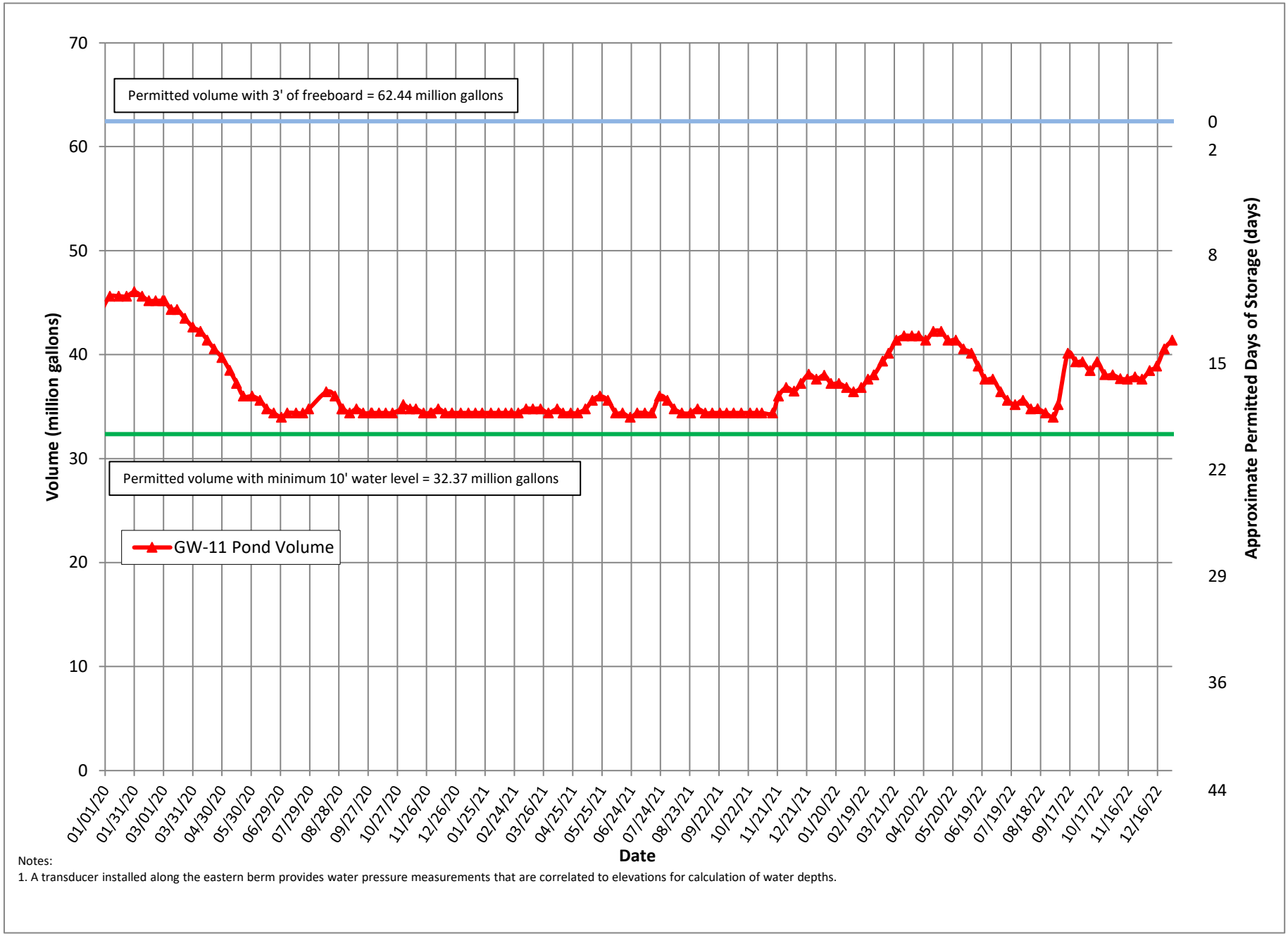
TR = Total Recoverable.

1: Total mass extracted is calculated from flow weighted average concentration and average flow (see Table 1).

Figures

Operational Metrics

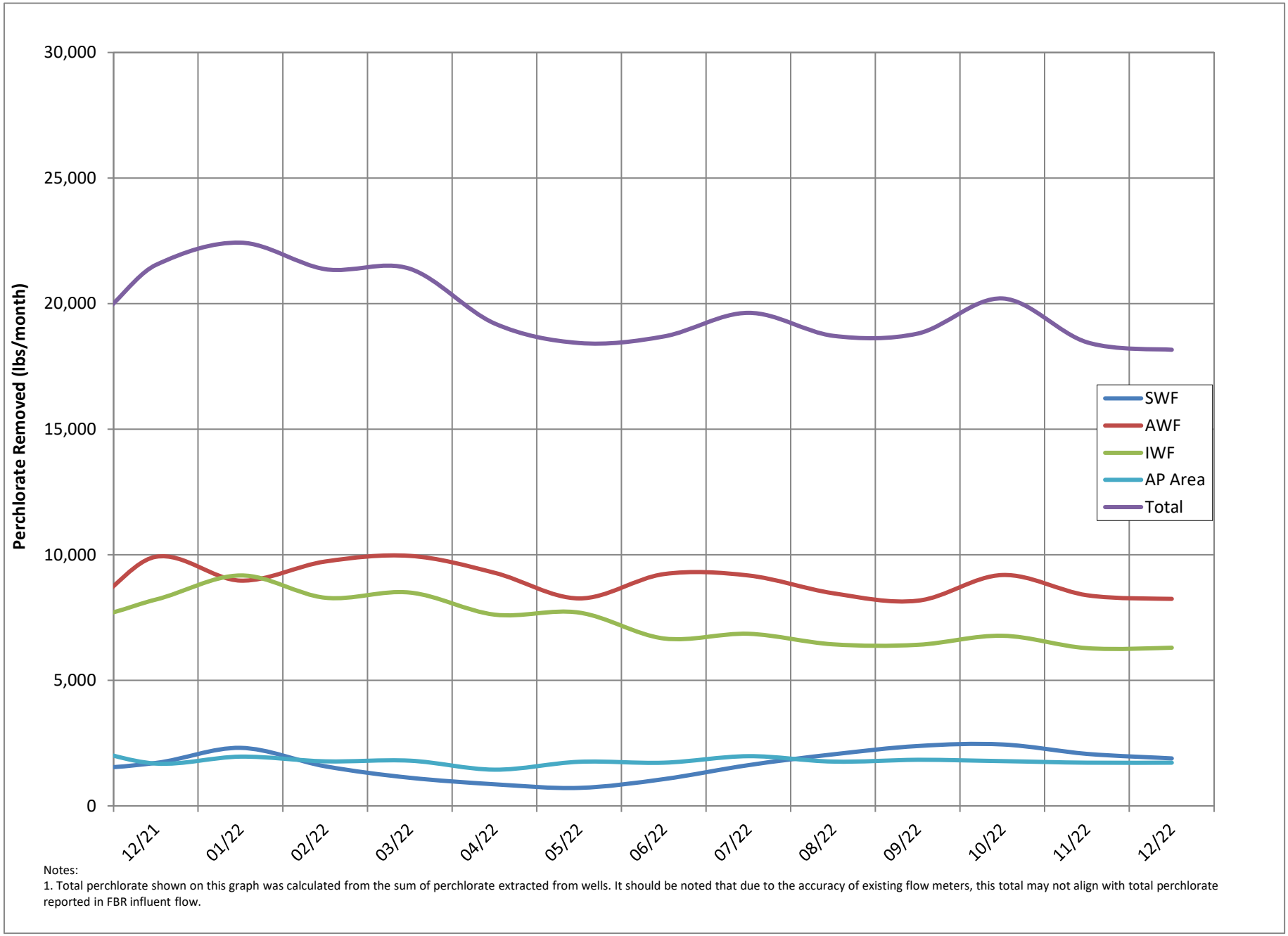
Figure 1 - GW-11 Pond Volume Through 12/31/2022



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

Figure Updated: 1/3/2023

Figure 2 - Historical Perchlorate Mass Removed From Environment



Notes:
1. Total perchlorate shown on this graph was calculated from the sum of perchlorate extracted from wells. It should be noted that due to the accuracy of existing flow meters, this total may not align with total perchlorate reported in FBR influent flow.

Figure Updated: 1/18/2023

Attachment A

NPDES Tracking Sheet (Prepared by Ramboll)

NPDES Permit NV0023060 - Analytes with Numerical Discharge Limits

Treated Effluent at Outfall 001

	Continuous		Daily Samples, composited weekly		Weekly Grab Samples											Weekly, collected separately			Quarterly
	Flow Rate		Perchlorate		pH		Hexavalent Chromium	Total Chromium	Manganese	Total Iron	Total Inorganic Nitrogen (TIN)	Total Suspended Solids (TSS)		Total Ammonia as N	Total Phosphorus as P	BOD_5 (inhibited)			Total Dissolved Solids (TDS)
	30-Day Avg. (MGD)	Daily Maximum (MGD)	30-Day Avg. (µg/L)	30-Day Avg. (lbs/day)	Daily Min. (S.U.)	Daily Max. (S.U.)	Daily Max. (µg/L)	Daily Max. (µg/L)	Daily Max. (µg/L)	Daily Max. (µg/L)	Daily Max. (mg/L)	Daily Average (mg/L)	30-Day Avg. (lbs/day)	30-Day Avg. (lbs/day)	30-Day Avg. (lbs/day)	30-Day Avg. (mg/L)	Daily Max. (mg/L)	30-Day Avg. (lbs/day)	Daily Max. (mg/L)
	2.52	**2.88**	**18**	**0.38**	**6.5**	**9.0**	**10**	**100**	**5,000**	**10,000**	**20**	**135**	**2,839**	**20***	**10***	**25**	**40**	**525**	**8,000**
January 2022	1.85	1.92	0.7	0.011	7.0	7.4	ND (<0.50)	12	61	1,100	0.88	10	150	2.0	7	ND (<5.0)	ND (<5.0)	39	
February 2022	1.77	1.95	2.2	0.033	6.8	7.5	ND (<0.50)	7.4	78	1,200	1.6	17	240	2.6	6.1	ND (<5.0)	ND (<5.0)	38	3,800
March 2022	1.70	1.84	2.7	0.038	6.5	7.2	ND (<0.50)	2.1	170	1,200	2.9	12	170	1.5	8	ND (<5.0)	ND (<5.0)	35	
April 2022	1.72	1.82	1.3	0.020	7.1	7.2	ND (<0.50)	14	200	590	2.5	8	120	1.7	3.5	ND (<5.0)	ND (<5.0)	36	
May 2022	1.74	1.82	ND (<0.31)	0.0022	6.5	7.5	ND (<0.50)	11	320	1,100	2.5	6	87	1.8	5.1	ND (<5.0)	ND (<5.0)	36	3,900
June 2022	1.75	1.77	1.7	0.025	6.5	7.4	ND (<0.50)	14	270	890	2.2	10	140	1.7	3.9	ND (<5.0)	ND (<5.0)	37	
July 2022	1.69	1.80	1.8	0.025	6.5	6.9	ND (<0.50)	19	280	930	1.8	11	150	1.5	4.3	ND (<5.0)	ND (<5.0)	36	
August 2022	1.66	1.73	0.5	0.0065	6.5	7.4	ND (<0.50)	8.9	360	1,100	1.6	12	170	1.4	5.2	ND (<5.0)	ND (<5.0)	35	4,100
September 2022	1.52	1.85	0.6	0.0090	6.5	7.7	0.57	50	630	1,200	1.4	13	180	2.1	4.4	ND (<5.0)	ND (<5.0)	29	
October 2022	1.74	1.84	0.3	0.0046	6.5	6.9	ND (<0.50)	26	440	1,100	0.9	21	300	1.8	3.8	ND (<5.0)	ND (<5.0)	36	
November 2022	1.68	1.74	1.8	0.024	6.6	7.2	ND (<0.150)	13	470	710	0.9	9	120	1.3	4.5	ND (<5.0)	ND (<5.0)	35	4,400
December 2022	1.51	1.71	ND (<1.6)	0.010	6.6	7.5	1.83	13	430	920	1.1	8	110	2.4	5.2	ND (<5.0)	ND (<5.0)	33	

Daily Grab Sample Dates	Composite Sample Date		µg/L	lbs/day	Sample Date	S.U.	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L		lbs/day			lbs/day		mg/L	lbs/day	Sample Date	mg/L		lbs/day	Sample Date	mg/L
1/2 - 1/8	1/8/2022	ND (<0.31)	0.16	0.002	1/3/2022	7.0	ND (<0.50)	4.8	11	910	0.35	14	14	220	--	0.13	2.0	--	0.47	7.4	1/5/2022	ND (<5.0)	2.5	39		
1/9 - 1/15	1/15/2022	0.61 J	0.61	0.009	1/10/2022	7.4	ND (<0.50)	2.2	38	600	0.41	ND(<10)	5	78	--	0.18	2.8	--	0.25	3.9	1/12/2022	ND (<5.0)	2.5	38		
1/16 - 1/22	1/22/2022	0.52 J	0.52	0.008	1/17/2022	7.2	ND (<0.50)	12	55	1,100	0.64	19	19	301	--	0.16	2.5	--	0.73	12	1/19/2022	ND (<5.0)	2.5	39		
1/23 - 1/29	1/29/2022	1.5	1.5	0.023	1/24/2022	7.0	ND (<0.50)	1.4	61	530	0.63	ND(<10)	5	78	--	0.10	1.6	--	0.34	5.3	1/26/2022	ND (<5.0)	2.5	39		
1/30 - 2/5	2/5/2022	3.8	3.8	0.059	1/31/2022	7.2	ND (<0.50)	3.1	56	720	0.88	ND(<10)	5	78	--	0.084	1.3	--	0.41	6.4	2/2/2022	ND (<5.0)	2.5	40		
2/6 - 2/12	2/12/2022	ND (<0.31)	0.16	0.002	2/7/2022	7.5	ND (<0.50)	4.2 3.0	69	730	1.6	16	16	249	--	0.17	2.7	--	0.38	5.9	2/9/2022	ND (<5.0)	2.5	41	2/9/2022	3,800
2/13 - 2/19	2/19/2022	3.9	3.9	0.056	2/14/2022	6.8	ND (<0.50)	2.1	69	840	0.94	13	13	191	--	0.25	3.7	--	0.40	5.9	2/16/2022	ND (<5.0)	2.5	36		
2/20 -2/26	2/26/2022	0.91 J	0.91	0.013	2/22/2022	7.3	ND (<0.50)	2.5	65	1,000	1.4	21	21	302	--	0.18	2.6	--	0.42	6.0	2/23/2022	ND (<5.0)	2.5	36		
2/27 - 3/5	3/5/2022	ND (<0.31)	0.16	0.002	2/28/2022	7.2	ND (<0.50)	7.4	78	1,200	1.6	16	16	222	--	0.10	1.4	--	0.46	6.4	3/2/2022	ND (<5.0)	2.5	34		
3/6 - 3/12	3/12/2022	7.4	7.4	0.099	3/7/2022	7.2	ND (<0.50)	1.1	85	1,200	1.9	14	14	191	--	0.23	3.1	--	1.2	16	3/9/2022	ND (<5.0)	2.5	32		
3/13 - 3/19	3/19/2022	ND (<0.31)	0.16	0.002	3/14/2022	6.5	ND (<0.50)	1.1	50	860	1.1	13	13	173	--	0.076	1.0	--	0.43+	5.7	3/16/2022	ND (<5.0)	2.5	37		
3/20 - 3/26	3/26/2022	1.6	1.6	0.024	3/21/2022	7.1	ND (<0.50)	1.8	170	660	2.9	ND(<10)	5	74	--	0.053	0.8	--	0.40	5.9	3/23/2022	ND (<5.0)	2.5	37		
3/27 - 4/2	4/2/2022	4.3	4.3	0.064	3/28/2022	6.7	ND (<0.50)	2.1	160	820	2.5	15	15	230	--	0.074	1.1	--	0.45	6.9	3/30/2022	ND (<5.0)	2.5	36		
4/3 - 4/9	4/9/2022	4.3	4.3	0.064	4/4/2022	7.1	ND (<0.50)	1.2	190	590	2.4	ND(<10)	5	76	--	0.099	1.5	--	0.29	4.4	4/6/2022	ND (<5.0)	2.5	38		
4/10 - 4/16	4/16/2022	ND (<0.31)	0.16	0.002	4/11/2022	7.2	ND (<0.50)	1.5	180	540	2.5	10	10	147	--	0.078	1.1	--	0.25	3.7	4/13/2022	ND (<5.0)	2.5	36		
4/17 - 4/23	4/23/2022	ND (<0.31)	0.16	0.002	4/18/2022	7.2	ND (<0.50)	14	200	520	0.52	ND(<10)	5	73	--	0.12	1.7	--	0.16	2.3	4/20/2022	ND (<5.0)	2.5	35		
4/24 - 4/30	4/30/2022	0.71	0.71	0.010	4/25/2022	7.1	ND (<0.50)	3.0	140	370	1.9	12	12	167	--	0.17	2.4	--	0.27	3.8	4/27/2022	ND (<5.0)	2.5	34		
5/1 - 5/7	5/7/2022	ND (<0.31)	0.16	0.002	5/2/2022	7.3	ND (<0.50)	3.7	150	660	1.8	ND(<10)	5	69	--	0.11	1.5	--	0.31	4.3	5/4/2022	ND (<5.0)	2.5	32	5/4/2022	3,900
5/8 - 5/14	5/14/2022	ND (<0.31)	0.16	0.002	5/9/2022	7.5	ND (<0.50)	3.4	170	770	2.5	ND(<10)	5	72	--	0.15	2.2	--	0.45	6.5	5/11/2022	ND (<5.0)	2.5	38		
5/15 - 5/21	5/21/2022	ND (<0.31)	0.16	0.002	5/16/2022	6.5	ND (<0.50)	6.6	260	580	1.8	ND(<10)	5	75	--	0.10	1.5	--	0.33	4.9	5/18/2022	ND (<5.0)	2.5	36		
5/22 - 5/28	5/28/2022	ND (<0.31)	0.16	0.002	5/23/2022	6.7	ND (<0.50)	6.1	280	560	2.2	ND(<10)	5	73	--	0.13	1.9	--	0.25	3.7	5/25/2022	ND (<5.0)	2.5	36		
5/29 - 6/4	6/4/2022	2.9	2.9	0.043	5/31/2022	7.3	ND (<0.50)	11	320	1,100	1.8	10	10	147	--	0.13	1.9	--	0.41	6.0	6/2/2022	ND (<5.0)	2.5	37		
6/5 - 6/11	6/11/2022	2.8	2.8	0.041	6/6/2022	7.4	ND (<0.50)	5.0	270	580	2.2	ND(<10)	5	74	--	0.13	1.9	--	0.26	3.8	6/8/2022	ND (<5.0)	2.5	37		
6/12 - 6/18	6/18/2022	2.6	2.6	0.038	6/13/2022	7.2	ND (<0.50)	14	250	890	2.0	16	16	233	--	0.095	1.4	--	0.31	4.5	6/15/2022	ND (<5.0)	2.5	37		
6/19 - 6/25	6/25/2022	ND (<0.31)	0.16	0.002	6/20/2022	6.5	ND (<0.50)	4.5	260	680	2.1	ND(<10)	5	73	--	0.16	2.3	--	0.28	4.1	6/22/2022	ND (<5.0)	2.5	36		
6/26 - 7/2	7/2/2022	ND (<0.31)	0.16	0.002	6/27/2022	6.5	ND (<0.50)	12	210	860	1.8	13	13	190	--	0.088	1.3	--	0.23	3.4	6/29/2022	ND (<5.0)	2.5	37		
7/3 - 7/9	7/9/2022	3.2	3.2	0.046	7/5/2022	6.9	ND (<0.50)	11	260	930	1.6	14	14	204	--	0.10	1.5	--	0.38	5.5	7/6/2022	ND (<5.0)	2.5	37		
7/10 - 7/16	7/16/2022	3.5	3.5	0.050	7/11/2022	6.5	ND (<0.50)	19	280	840	1.8	ND(<10)	5	72	--	0.085	1.2	--	0.20	2.9	7/13/2022	ND (<5.0)	2.5	36		
7/17 - 7/23	7/23/2022	ND (<0.31)	0.16	0.002	7/18/2022	6.6	ND (<0.50)	2.9	240	630	1.4	ND(<10)	5	71	--	0.12	1.7	--	0.32	4.6	7/20/2022	ND (<5.0)	2.5	35		
7/24 - 7/30	7/30/2022	ND (<0.31)	0.16	0.002	7/25/2022	6.8	ND (<0.50)	11	220	770	1.7	20	20	271	--	0.12	1.6	--	0.31	4.2	7/27/2022	ND (<5.0)	2.5	34		
7/31 - 8/6	8/6/2022	1.7	1.7	0.024	8/1/2022	7.4	ND (<0.50)	8.1	320	1,100	1.6	20	20	285	--	0.15	2.1	--	0.39	5.6	8/3/2022	ND (<5.0)	2.5	36		
8/7 - 8/13	8/13/2022	ND (<0.31)	0.16	0.002	8/8/2022	6.7	ND (<0.50)	5.8	360	570	0.40	ND(<10)	5	65	--	0.10	1.3	--	0.26	3.4	8/10/2022	ND (<5.0)	2.5	36	8/8/2022	4,100
8/14 - 8/20	8/20/2022	ND (<0.31)	0.16	0.002	8/16/2022	6.5	ND (<0.50)	3.7	350	770	1.4	14	14	200	--	0.095	1.4	--	0.36	5.1	8/17/2022	ND (<5.0)	2.5	35		
8/21 - 8/27	8/27/2022	ND (<0.31)	0.16	0.002	8/22/2022	7.0	ND (<0.50)	8.9	280	890	0.34	16	16	220	--	0.079	1.1	--	0.48	6.6	8/24/2022	ND (<5.0)	2.5	36		
8/28 - 9/3	9/3/2022	ND (<0.31)	0.16	0.002	8/29/2022	7.1	ND (<0.50)	4.2	330	670	1.1	ND(<10)	5	58	--	0.10	1.2	--	0.45	5.2	8/31/2022	ND (<5.0)	2.5	34		
9/4 - 9/10	9/10/2022	ND (<0.31)	0.16	0.001	9/9/2022	7.7	0.57	ND (<0.85)	630	ND<10	0.23	ND(<10)	5	18	--	0.12	0.4	--	0.096	0.3	9/9/2022	ND (<5.0)	2.5	9		
9/11 - 9/17	9/17/2022	2.1	2.1	0.030	9/13/2022	7.0	ND (<0.50)	38	390	1,200	0.94	20	20	291	--	0.041	0.6	--	0.34	5.0	9/14/2022	ND (<5.0)	2.5	37		
9/18 - 9/24	9/24/2022	ND (<0.31)	0.16	0.002	9/19/2022	7.3	NS	6.6	360	860	1.4	23	23	355	--	0.31	4.8	--	0.54	8.3	9/21/2022	ND (<5.0)	2.5	36		
9/25 - 10/1	10/1/2022	ND (<0.31)	0.16	0.002	9/21/2022	6.5	ND (<0.50)	50	350	810	1.1	13	13	188	--	0.15	2.2	--	0.27	3.9	9/29/2022	ND (<5.0)	2.5	36		
10/2 - 10/8	10/8/2022	ND (<0.31)	0.16	0.002	9/26/2022	6.5	ND (<0.50)	7.9	400	630	1.2	ND(<10)	5	73	--	0.17	2.5	--	0.31	4.5	10/5/2022	ND (<5.0)	2.5	36		
10/9 - 10/15	10/15/2022	ND (<0.31)	0.16	0.002	10/5/2022	6.9	ND (<0.50)	26	350	1,100	0.85	35	35	511	--	0.099	1.4	--	0.36	5.3	10/12/2022	ND (<5.0)	2.5	36		
10/16 - 10/22	10/22/2022	ND (<0.31)	0.16	0.002	10/12/2022	6.9	ND (<0.50)	10	440	580	0.66	16	16	229	--	0.11	1.6	--	0.26	3.7	10/19/2022	ND (<5.0)	2.5	36		
10/23 - 10/29	10/29/2022	ND (<1.6)	0.80	0.012	10/19/2022	6.8	ND (<0.50)	6.0	390	690	0.62	20	20	288	--	0.16	2.3	--	0.21	3.0	10/26/2022	ND (<5.0)	2.5	37		
10/30 - 11/5	11/5/2022	ND (<1.6)	0.80	0.011	10/26/2022	6.5	ND (<0.150)***	ND (<0.85)	380	330	0.90	11	11	161	--	0.12	1.8	--	0.22	3.2	11/2/2022	ND (<5.0)	2.5	36		
11/6 - 11/12	11/12/2022	2.0	2.0	0.029	11/2/2022	7.2	ND (<0.150)	7.7	370	710	0.41	11	11	158	ND(<0.039)	0.020	0.3	--	0.33	4.8	11/9/2022	ND (<5.0)	2.5	36		
11/13 - 11/19	11/19/2022	4.4	4.4	0.059	11/9/2022	6.8	ND (<0.150)	11	310	480	0.77	12	12	174	ND(<0.039)	0.020	0.3	--	0.33	4.8	11/17/2022	ND (<5.0)	2.5	32	11/17/2022	4,400
11/20 - 11/26	11/26/2022	ND (<1.6)	0.8	0.011	11/17/2022	6.6	ND (<0.150)	3.8	470	680	0.18	ND(<10)	5	63	--	0.097	1.2	--	0.38	4.8	11/21/2022	ND (<5.0)	2.5	36		
11/27 - 12/3	12/3/2022	ND (<1.6)	0.8	0.011	11/21/2022	7.0	ND (<0.150)	13	350	670	0.89	ND(<10)	5	72	--	0.16	2.3	--	0.38	5.5	11/30/2022	ND (<5.0)	2.5	36		
12/4 - 12/10	12/10/2022	ND (<1.6)	0.8	0.011	11/30/2022	6.8	ND (<0.150)	7.6	320	570	0.94	10	10	142	--	0.16	2.3	--	0.20	2.8	12/7/2022	ND (<5.0)	2.5	35		
12/11 - 12/17	12/17/2022	ND (<1.6)	0.8	0.007	12/7/2022	7.5	1.83	8.5	320	750	1.1	13	13	184	--	0.27	3.8	--	0.43	6.1	12/12/2022	ND (<5.0)	2.5	28		
12/18 - 12/24	12/24/2022	ND (<1.6)	0.8	0.011	12/12/2022	6.6	ND (<0.150)	13	290	920	0.96	ND(<10)	5	56	--	0.20	2.2	--	0.38	4.2	12/21/2022	ND (<5.0)	2.5	35		
12/25 - 12/31	12/31/2022	ND (<1.6)	0.8	0.011	12/21/2022	7.1	ND (<0.150)	3.2	430	460	0.96	ND(<10)	5	71	--	0.12	1.7	--	0.34	4.8	12/28/2022	ND (<5.0)	2.5	35		
					12/28/2022	6.9	ND (<0.150)	11	340	490	0.94	10	10	139	--	0.14	1.9	--	0.40	5.5						

Note: All analytical responsibilities are performed by TestAmerica Laboratories, Inc. (TestAmerica) in Irvine, California, unless otherwise indicated.

+ Additional samples were collected this week.

NA = Not Available To Date

ND = Not Detected above laboratory reporting limit; concentration in adjacent cell to right is one-half the reporting limit (per Permit condition)

NS = Not Sampled or Not Analyzed

-- = Analyte detected; see column adjacent to right

* Total phosphorus discharge limitation of 10 lbs/day applies between March 1 and October 31; Ammonia discharge limitation of 20 lbs/day applies between April 1 and September 30; no limits apply the rest of the year.

** Samples collected on September 9, 2022 occurred when only the IX was discharging.

*** Effective 10/24/2022, hexavalent chromium samples are being analyzed at Pace Analytical.

Last Updated: January 13, 2023

Attachment B

Equipment Tracking Form

Sub-System	P&ID	Description	Status[1]	Checked	Criticality[2]	Notes
		Main Plant Equipment				
1		**Seep Wells and Lift Station 1**				
1.01		*Seep Well Field, 9 wells*	Running			
1.02		*Lift Station 1 Lift Pump A*	Running			
1.03		*Lift Station 1 Lift Pump B*	Standby			
1.04		*Area in and around Lift Station 1*	Running			
2		**Athens Road Wells and Lift Station** 3				
2.01		*Athens Road Well Field, 9 wells*	Running			
2.02		*Lift Station 3 Lift Pump A*	Standby			
2.03		*Lift Station 3 Lift Pump B*	Running			
2.04		*Area in and around Lift Station 3*	Running			
3		**Lift Station *2* and Transmission Pipelines**				
3.01		*Influent Pipeline*	In operation			
3.02		*Effluent Pipeline*	Running			
3.03		*Lift Station 2 Lift Pump A*	Running			
3.04		*Lift Station 2 Lift Pump B*	Standby			
3.05		*Area in and around Lift Station 2*	Running			
4		**Interceptor Wells and Cr Treatment Plant**				
4.01		*IWF Well Field, 30 wells*	Running			Electrical wiring upgrade ongoing.
4.02		*Ferrous Sulfate Feed System*	Running			
4.03		*Polymer Feed System*	Running			
4.04		*Clarifier*	In operation			
4.05		*Filter Press*	Running			
4.06		*GWTP Effluent Tank*	In operation			
4.07		*Interceptor Booster Pump A*	Running			
4.08		*Interceptor Booster Pump B*	Standby			
4.09		*Area In And Around GWTP*	Running			
5		**Equalization Area and GW-11 Pond**				
5.01	PID10A	*Pond GW-11*	In operation			
5.02	PID10A	*Pond Water Pump - P101A*	Running			
5.03	PID10A	*Pond Water Pump - P101B*	Standby			
5.04	PID10A	*Equalization Tanks*	In operation			
5.05	PID10A	*Area in and Around EQ*	In operation			
5.06	PID10A	*Raw Water Feed Pump - P102A*				
5.07	PID10A	*Raw Water Feed Pump - P102B*				
5.08	PID10A	*F-101 Filters*	Running			
5.09	PID10B	*Carbon Absorber - LGAC 201A*				

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Sub-System	P&ID	Description	Status[1]	Checked	Criticality[2]	Notes
5.10	PID10B	*Carbon Absorber - LGAC 201B*				
5.11	PID10B	*Carbon Absorber - LGAC 201C*				
6		**First Stage FBRs A, 1** *& 2*				
6.01	PID14	*FBR A*				EQUIPMENT OFFLINE
6.02	PID14	*Separator Tank - 1401*				EQUIPMENT OFFLINE
6.03	PID14	*Media Return Pump - P 1401*				EQUIPMENT OFFLINE
6.04	PID14	*P1401A*				EQUIPMENT OFFLINE
6.05	PID01A	*P1401B*				EQUIPMENT OFFLINE
6.06	PID01A	*FBR 1*	Running			
6.07	PID02A	*FBR 2*	Running			
6.08	PID01A	*First Stage Separator Tank - T2011*	Running			
6.09	PID01A	*Media Return Pump - P2011*	Running			
6.10	PID01A	*First Stage FBR Pump - P1011*	Standby			
6.11	PID01A	*First Stage FBR Pump - P1012*				
6.12	PID01A	*First Stage FRB Pump - P101A*	Running			
6.13	PID07A	*FBR A pH Feed Pump - P71A*	Off			
6.14	PID07A	*FBR 1 pH Feed Pump - P711*	Off			
6.15	PID07A	*FBR 2 pH Feed Pump - P712*	Off			
6.16	PID07A	*FBR A Nutrient (Urea) Feed Pump - P72A*	Off			
6.17	PID07A	*FBR 1 Nutrient (Urea) Feed Pump - P721*	Off			
6.18	PID07A	*FBR 2 Nutrient (Urea) Feed Pump - P722*	Off			
6.19	PID15	*FBR A Nutrient (Phos Acid) Feed Pump - P1520A*	Running			Equipment offline
6.20	PID15	*FBR 1 Nutrient (Phos Acid) Feed Pump - P1521*	Running			
6.21	PID15	*FBR 2 Nutrient (Phos Acid) Feed Pump - P1522*	Running			
6.22	PID07B	*FBR A Electron Donor Assembly Pump - P73A*	Running			
6.23	PID07B	*FBR 1 Electron Donor Assembly Pump - P731*	Running			
6.24	PID07B	*FBR 2 Electron Donor Assembly Pump - P732*	Running			
7		**First Stage FBRs 3** *& 4*				
7.01	PID01B	*FBR 3*	Running			
7.02	PID01B	*FBR 4*	Running			
7.03	PID02B	*First Stage Separator Tank - T2012*	Running			
7.04	PID01B	*Media Return Pump - P2012*	Running			
7.05	PID01B	*First Stage FBR Pump - P1013*	Running			
7.06	PID01B	*First Stage FRB Pump - P1014*	Running			
7.07	PID01B	*First Stage FBR Pump - P102A*	Running			
7.08	PID07A	*FBR 3 pH Feed Pump - P713*	Running			
7.09	PID07A	*FBR 4 pH Feed Pump - P714*	Running			
7.10	PID07A	*FBR 3 Nutrient (Urea) Feed Pump - P723*				

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Sub-System	P&ID	Description	Status[1]	Checked	Criticality[2]	Notes
7.11	PID07A	*FBR 4 Nutrient (Urea) Feed Pump - P 724*	Off			
7.12	PID15	*FBR 3 Nutrient (Phos Acid) Feed Pump - P1523*	Running			
7.13	PID15	*FBR 4 Nutrient (Phos Acid) Feed Pump - P1524*	Running			
7.14	PID07B	*FBR 3 Electron Donor Assembly Pump - P733*	Running			
7.15	PID07B	*FBR 4 Electron Donor Assembly Pump - P734*	Running			
8		**Second Stage FBRs 5** & 6				
8.01	PID03A	*FBR 5*	Running			
8.02	PID03A	*FBR 6*	Running			
8.03	PID03C	*Second Stage Separator Tank - T3011*	Running			
8.04	PID03A	*Media Return Pump - P3011*	Running			
8.05	PID03A	*Second Stage FBR Pump - P3015*	Running			
8.06	PID03A	*Second Stage FBR Pump - P3016*	Standby			
8.07	PID03A	*Second Stage FBR Pump - P301A*	Running			
8.08	PID07A	*FBR 5 pH Feed Pump - P715*	Off			
8.09	PID07A	*FBR 6 pH Feed Pump - P716*	Off			
8.1	PID07A	*FBR 5 Nutrient (Urea) Feed Pump - P725*	Off			
8.11	PID07A	*FBR 6 Nutrient (Urea) Feed Pump - P726*	Off			
8.12	PID07B	*FBR 5 Electron Donor Assembly Pump - P735*	Running			
8.13	PID07B	*FBR 6 Electron Donor Assembly Pump - P736*	Running			
9		**Second Stage FBRs 7** & 8				
9.01	PID03B	*FBR 7*	Running			
9.02	PID03B	*FBR 8*	Running			
9.03	PID03D	*Second Stage Separator Tank - T3012*	Running			
9.04	PID03B	*Media Return Pump - P3012*	Running			
9.05	PID03B	*Second Stage FBR Pump - P3017*	Running			
9.06	PID03B	*Second Stage FBR Pump - P3018*	Running			
9.07	PID03B	*Second Stage FBR Pump - P302A*	Running			
9.08	PID07A	*FBR 7 pH Feed Pump - P717*	Off			
9.09	PID07A	*FBR 8 pH Feed Pump - P718*	Off			
9.10	PID07A	*FBR 7 Nutrient (Urea) Feed Pump - P727*	Off			
9.11	PID07A	*FBR 8 Nutrient (Urea) Feed Pump - P728*	Off			
9.12	PID07B	*FBR 7 Electron Donor Assembly Pump - P737*	Running			
9.13	PID07B	*FBR 8 Electron Donor Assembly Pump - P738*	Running			
10		**Aeration and DAF System**				
10.01	PID04	*Aeration Tank*	In operation			
10.02	PID04	*Aeration Blower - B401*	Running			
10.03	PID04	*Bio filter*	In operation			
10.04	PID04	*Nutrient Solution*	Running			

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10.05	PID04	*Bio filter Sump*				
10.06	PID04	*Nutrient Pump - P401*	Running			
10.07	PID04	*Bio filter Sump Pump - P402A*	Standby			
10.09	PID04	*Bio filter Blower*	Running			
10.10	PID05	*DAF Pressure Tanks*	In operation			
10.11	PID05	*DAF Vessel - D501*	Running			
10.12	PID05	*DAF Pressure Pump - P501*	Running			
10.13	PID05	*DAF Float Pump - P502*	Running			
10.14	PID05	*DAF Vessel - D551*	Running			
10.15	PID05	*DAF Pressure Pump - P551*	Running			
10.16	PID05	*DAF Float Pump - P552*	Running			Repaired pump and put back into service.
10.17	PID05	*Screw Conveyer Drive*	Standby			
10.18	PID05	*Skimmer Drive*	Running			
11		**Pumping System (Old Effluent)**				
11.01	PID06	*Effluent Tank 601*	In operation			
11.02	PID06	*Effluent Pump - P601*	Running			
11.03	PID06	*Effluent Pump - P602*				
12		**Sand Filter System**				
12.01	PID17	*Sand Filter*				Constructed and installed new airlifts.
12.02	PID17	*Filter Reject Tank*	In operation			
12.03	PID17	*Filter Reject Pump - P1701A*	Standby			
12.04	PID17	*Filter Reject Pump - P1701B*	Running			
13		**Effluent Tank and Pumping**				
13.01	PID10C	*UV Effluent Tank*	Running			
13.02	PID10C	*Effluent Booster Pump - P1302A*	Running			
13.03	PID10C	*Effluent Booster Pump - P1302B*	Standby			
13.04	PID10C	*Area Around Effluent and North D-1*	Running			
14		**Solids Collection and Pressing System**				
14.01	PID16	*Sludge Storage Tank*	In operation			
14.02	PID16	*Solids Storage Effluent Pump - P1601*	Running			
14.03	PID16	*Solids Cond. Tank*	In operation			
14.04	PID09	*Sludge Mixer*	Running			
14.05	PID09	*Filter Press Pump - P901*	Running			
14.06	PID09	*Filter Press Pump - P902*				Repaired pump and put back into service.
14.07	PID09	*West Press*	Standby			
14.08	PID09	*East Press*	Running			
14.09	PID09	*Filtrate Tank*	In operation			
14.10	PID09	*Filtrate Tank Effluent (recycle) Pump - P903*	Running			

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		Chemical Systems				
15		**Electron Donor System**				
15.01	PID07B	*Electron Donor Tank*	In operation			
15.02	PID07B	*Booster Pump P739A*	Running			
15.03	PID07B	*Booster Pump P739B*	Standby			
17	PID07C	*Micro Nutrient System*	In operation			
18	PID07C	*Hydrogen Peroxide System*	In operation			
19	PID07C	*De-Foam System*	In operation			
20	PID15	*Nutrient (Phosphoric Acid) System (Tank only - pumps included in FBRs)*	In operation			
21	PID07A	*Nutrient (Urea) System (Tank only - pumps included in FBRs)*	In operation			
22	PID07A	*pH System (Tank and effluent pH feed pump only - other pumps included in FBRs)*	In operation			
23	PID07C	*Ferric Chloride*	In operation			
24	PID07B	*Polymer Systems - DAF*	In operation			
25	PID09	*Polymer System - Solids Dewatering (2 tanks, 2 centrifugal pumps, mixer, volumetric feeder)*	In operation			
		Utility Systems				
26		**Compressed Air System**				
26.01	PID08	*West Compressor*	Running			
26.02	PID08	*East Compressor*	Running			
26.03	PID08	*O2 Compressor*	Running			
26.04	PID08	*Compressed Air Receiver Tank*	In operation			
26.05	PID08	*Air Dryer*	Running			
26.06	PID08	*Oil Removal Filter*	In operation			
26.07	PID08	*Particulate Filter*	In operation			
27	PID16	*Oxygen System*	In operation			
28		*GWETS Plant Controls/ Siemens Controls*	In operation			
29		*Well Control System/ Allen Bradley Controls*	In operation			
30		*MCC FBR Pad*	In operation			
31		*MCC in D-1*	In operation			
32		*MCC in EQ area*	In operation			
		Miscellaneous Systems				
33		*Operations Office/Network*	In operation			
34		*Laboratory Analyzers*	In operation			
35		*Security Systems*	In operation			

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4 = Low – Minor repairs that in no way alter the performance of the plant

Sub-System	P&ID	Description	Status[1]	Checked	Criticality[2]	Notes
		Shelf Spares				
		Media Return Pump Rebuild Kit	In stock			
		pH Feed Pump	In stock			
		Nutrient Feed Pump	In stock			
		Electron Donor Feed Pump	In stock			
		Phosphoric Acid Feed Pump	In stock			
		Interceptor Well Pumps (4 each)	In stock			
		Seep Well Pump (1 each, same as Athens so total of 2)	In stock			
		Athens Road Well Pump (1 each, same as Seep so total of 2)	In stock			

Status Codes

Running - Unit is in operation
Standby - Spare or duplicate, not currently in operation
Maintenance - Out of service for maintenance
Off - Not currently needed for use, but can be placed in service

Criticality Codes

1= Critical - Cannot continue with operation until repairs made
2 = Important - Can still operate safely and in compliance with permits, but risks are increased
3 = Moderate - Work needs to be performed, but plant can still operate with redundancy that is in place
4 = Low – Minor repairs that in no way alter the performance of the plant

Attachment C

Facility Repair/Replacement Project Status

GWETS AMENDMENT 8 REPAIR/REPLACEMENT STATUS

PREPARED BY NEVADA ENVIRONMENTAL RESPONSE TRUST

	ITEM	RESOLUTION	WORK AUTHORIZATION	STATUS AS OF 12/31/22
1	Dissolved Air Floatation (DAF) Vessels	ETI to pilot an alternate technology (AquaDisk filters) and make a recommendation	ETI WA 22-01 $58,203 *Executed 1/13/22*	Pilot is complete. Working on proposal for a new DAF.
2	DAF Pump Skid Rebuild	On-hold pending outcome of DAF pilot and evaluation of plant hydraulics	N/A	N/A
3	Main Influent Pipeline Air/Vacuum Release Valves	ETI to replace valves and valve boxes as required	ETI WA 21-06 $40,535 *Executed 12/21*	Project is complete.
4	In-kind Replacement of GWTP	GWTP replacement not required due to design/build of Chromium Treatment Subsystem	N/A	N/A
5	Wiring at Lift Station #3 (controls)	ETI to replace wiring as required	ETI WA 21-03 $60,035 *Executed 11/21*	Project is complete.
6	Wiring at Lift Station #1 (wells)	Project on hold due to potential modification of the SWF with ROD or due to Cadence Sports Park. NERT will authorize interim repairs if necessary.	N/A	N/A
7	Motor Control Center at Lift Station #1	ETI to replace as required	ETI WA 21-04 $186,315 *Executed 12/21*	Project is complete.
8	IWF Wiring	ETI to replace as required	ETI WA 21-08 $436,481 *Executed 12/21*	New wire has been installed at the wells. Delivery of the new starters has been delayed. Installation to be completed in January 2023.
9	FBR Skid Equipment Replacements	ETI to replace what is immediately required in lieu of complete replacements	ETI WA 22-04 $142,061 *Executed 2/4/22*	Project is complete.
10	Influent / Effluent Pump Motors	ETI to procure additional motors for more frequent rotation	ETI WA 22-03 $31,800 *Executed 2/4/22*	Project is complete.
11	Overhaul Lift Station #2 West Wet Well Turbine	ETI to overhaul as required	ETI WA 22-07 $97,304 *Executed 3/7/22*	Project is complete.
12	Replacement of Safety Showers	ETI to replace safety shower system in batches over ~2 years	ETI WA 21-05 $131,899 *Executed 11/21*	Project is complete.

GWETS AMENDMENT 8 REPAIR/REPLACEMENT STATUS

PREPARED BY NEVADA ENVIRONMENTAL RESPONSE TRUST

ITEM		RESOLUTION	WORK AUTHORIZATION	STATUS AS OF 12/31/22
13	East Air Compressor	ETI to replace as required	ETI WA 21-02 $29,784 *Executed 10/21*	Project is complete.
14	pH and ORP Probes	ETI to replace certain probes as required throughout FBR plant	ETI WA 21-07 $108,893 *Executed 11/21*	Project to be completed in January 2023
15	Exterior Shell of Ethanol Storage Tank	ETI to repair as required	-	Submittal of draft Work Authorization for Trust review by 12/31/22. Awaiting contractor quote.
16	FBR Containment Pad Concrete	ETI to monitor status of affected areas. NERT will authorize interim repairs if necessary.	N/A	N/A
17	Siemens Control System Repairs	Spare parts and software updates to be procured in lieu of a complete system replacement.	ETI WA 21-09 $103,061 *Executed 11/21*	Currently anticipating to complete computer tie in January 2023.
18	Sludge Pump and Sludge Bins	ETI to replace as required	ETI WA 22-02 $102,183 *Executed 2/7/22*	Project is complete.
19	Lift Station Repairs	ETI to replace as required	ETI WA 22-05 $20,738 *Executed 2/4/22*	Project is complete.
20	D-1 Asbestos Evaluation	NERT to complete an asbestos survey	TT WA 21-12 $7,400 *Executed 11/21*	Survey complete. Report completed and forwarded to ETI. Project is complete.