
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: Nov 20, 2021

Subject: NERT – GWETS Operation Monthly Report – October 2021

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 October 2021.

Summary of GWETS Operation

Envirogen Technologies, Inc. (ETI) mechanically operated the GWETS and ion exchange (IX) system normally in October 2021. Flow from PC-118, PC-119, PC-120, PC-121, and PC-133 was routed to the IX system, bypassing all flow meters associated with the FBR plant. The flow rate to the IX system averaged approximately 259 gallons per minute (gpm). The flow rate to the FBR plant averaged approximately 924 gpm during October 2021. At the end of the month, the available GW-11 Pond volume was at 34.4 million gallons (MG), which would allow 19.5 days of available additional storage in the event of an emergency FBR plant shutdown with continued well field pumping. The available water volume stored in the GW-11 Pond did not change since the end of September 2021; 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 0.50 mg/L for the month. The influent perchlorate concentration to the FBR plant averaged 66 mg/L for the month, with a maximum concentration of 76 mg/L. In comparison, the influent perchlorate concentration to the FBRs for the month of September 2021 averaged 62 mg/L, with a maximum concentration of 87 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 October.

2. Biological Plant

There were influent / effluent diversions during the reporting period generally associated with GW-11 pond level maintenance as well as extraction well short-term shutdown events. Below is a description of the events that occurred:

Diversion Events / Well Shutdowns

- Effluent diversion to GW-11 occurred on October 7, 2021 from 11:32pm to October 8, 2021 at 4:17am due to low GW-11 pond level. Approximately 275,000 gallons of water were diverted to GW-11.
- Effluent diversion to GW-11 occurred on October 11, 2021 from 11:35pm to October 12, 2021 at 4:26am due to low GW-11 pond level. Approximately 280,000 gallons of water were diverted to GW-11.
- Effluent diversion to GW-11 occurred on October 13, 2021 from 11:35pm to October 14, 2021 at 4:05am due to low GW-11 pond level. Approximately 291,000 gallons of water were diverted to GW-11.
- Effluent diversion to GW-11 occurred on October 19, 2021 from 1:02am to October 19, 2021 at 8:10am due to low GW-11 pond level. Approximately 230,000 gallons of water were diverted to GW-11.
- IWF extraction well field shutdown occurred on October 20, 2021 from 9:38am to 9:50am due to a malfunctioning influent pump at the GWTP. The pump was reset, troubleshooting was conducted, and the wells were brought back online.
- SWF extraction well field and AWF extraction well field shutdown due to utility power interruption from NV Energy occurred on October 22, 2021 from 6:17pm to October 23, 2021 at 4:38am. Power was restored and the well fields were brought back online.
- IWF West extraction well field shutdown occurred on October 25, 2021 from 6:10am to 9:32am due to maintenance efforts on the extraction well I-S well pump discharge piping. The damaged pipe fitting was replaced and the West well field was brought back online.

3. Spills

There were no reportable spills in the month of October.

4. Maintenance

- Major maintenance performed by ETI in the reporting month included:
 - I. Installed a new mechanical seal on the Lift Station 2 turbine pump.
 - II. Replaced the media return pump on Separator 1.
 - III. Replaced the 0.5 hp motor and pump on IWF extraction well I-S.
 - IV. Repaired the discharge piping on IWF extraction well I-S.
 - V. Replaced the flow meter on AWF extraction well ART-9.
 - VI. Replaced the radio for the communication from Lift Station 1 to the plant due to the power loss from NV Energy.
 - VII. Replaced the air filters on the air system for the feed valves on FBR 3, 7, and 8.
 - VIII. Installed a longer shaft on the GWTP polymer mixer.
 - IX. Assembled and installed the pressure pump for the South DAF.

- Preventative maintenance performed by ETI in the reporting month included:
 - I. Filled potholes around the plant area.
 - II. Replaced belts on the DAF sludge pumps.
 - III. Cleaned the air filters on the lift station Air Conditioners.
 - IV. Cleared area around Lift Station 2 to gain access with the forklift.
 - V. Removed solids from the sand filter reject tank.
 - VI. Drained water from the air system around the plant.
 - VII. Changed the filter bags on the IX feed system.
 - VIII. Completed general housekeeping in the chemical storage area.
 - IX. Greased the pumps and motors around the plant.

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

Facility Projects

1. Chromium Treatment Subsystem – Envirogen has established a scope of work for this activity and is currently working on preliminary design. It is anticipated Envirogen will submit a Work Authorization for this scope in December 2021. Envirogen is targeting May of 2022 to complete the modifications required to treat groundwater extracted as part of the Unit 4 Source Area In-Situ Bioremediation Treatability Study as well flow currently routed to the existing Chromium Treatment Plant (i.e. GWTP) from the IWF and AP Area wells.
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. Currently it is anticipated the construction will commence in December 2021.
3. Facility Repair/Replacement Items – ETI 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 of all agreed upon items prepared by the Trust. Specific details on in-progress items is provided below:

- I. NERT provided ETI authorization on October 21, 2021 to replace the East Air Compressor (Work Authorization 21-02). ETI has installed the East Air Compressor and the unit is online at this time.

Tables

Operational Metrics

Nevada Environmental Response Trust Groundwater Extraction and Treatment System Monthly Stakeholder Metrics				
Location ID	Average Flow Rate (gpm)	Perchlorate (mg/L) ^{4 5}	Chromium (TR) (mg/L) ^{4 5}	Chromium(VI) (mg/L) ^{4 5}
SWF Total Extraction ¹	730 ³	7.2	0.0003	0.0019
AWF Total Extraction ¹	448 ³	67	0.12	0.14
IWF Total Extraction ¹	58 ³	423	5.7	7.9
AP Area Total Extraction ¹	9.5 ³	737	0.16	0.16
GWTP Effluent ²	72	345	0.13	ND
GW-11 Influent ¹	0.1	75	0.10	0.037
FBR Influent ²	924	66	0.024	0.027

Notes:

TR = Total Recoverable; NA = Not Analyzed; ND = Not detectable above laboratory method detection limit (Chromium (VI) = 0.25 ug/L).

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.

5: ND analytical values are treated as zero values in the flow weighted average calculations.

Nevada Environmental Response Trust Groundwater Extraction and Treatment System Monthly Stakeholder Metrics			
Location ID	Perchlorate (lbs/month) ¹	Chromium (TR) (lbs/month) ¹	Chromium (VI) (lbs/month) ¹
SWF Total Extraction	1,963	0.08	0.53
AWF Total Extraction	11,191	21	24
IWF Total Extraction	9,158	122	170
AP Area Total Extraction	2,599	0.56	0.58
GWTP Effluent	9,320	3.6	ND
GW-11 Influent	2.0	0.00	0.001
FBR Influent ¹	22,631	8.3	9.2

Notes:

TR = Total Recoverable; NA = Not Analyzed.

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 10/31/2021

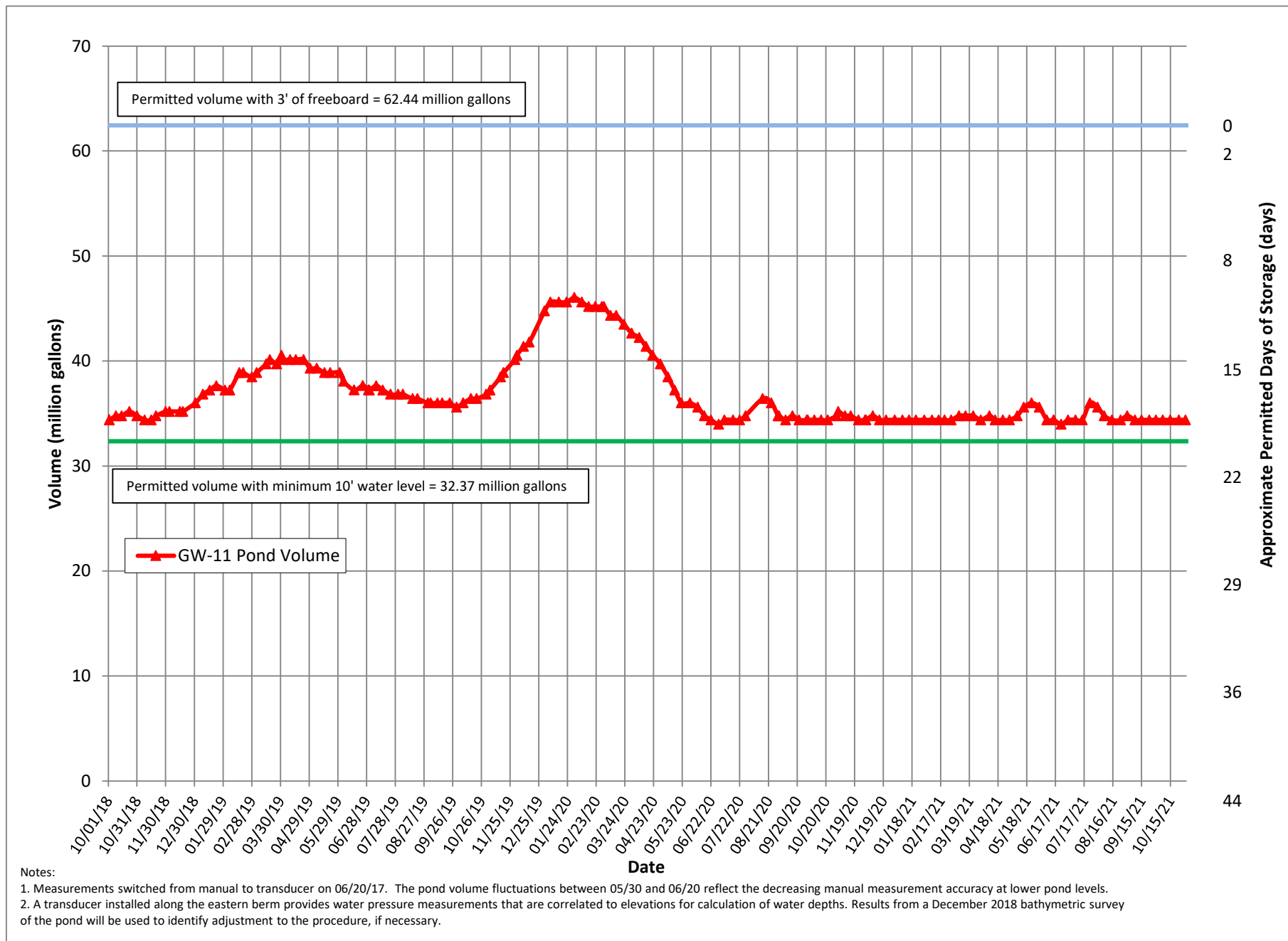
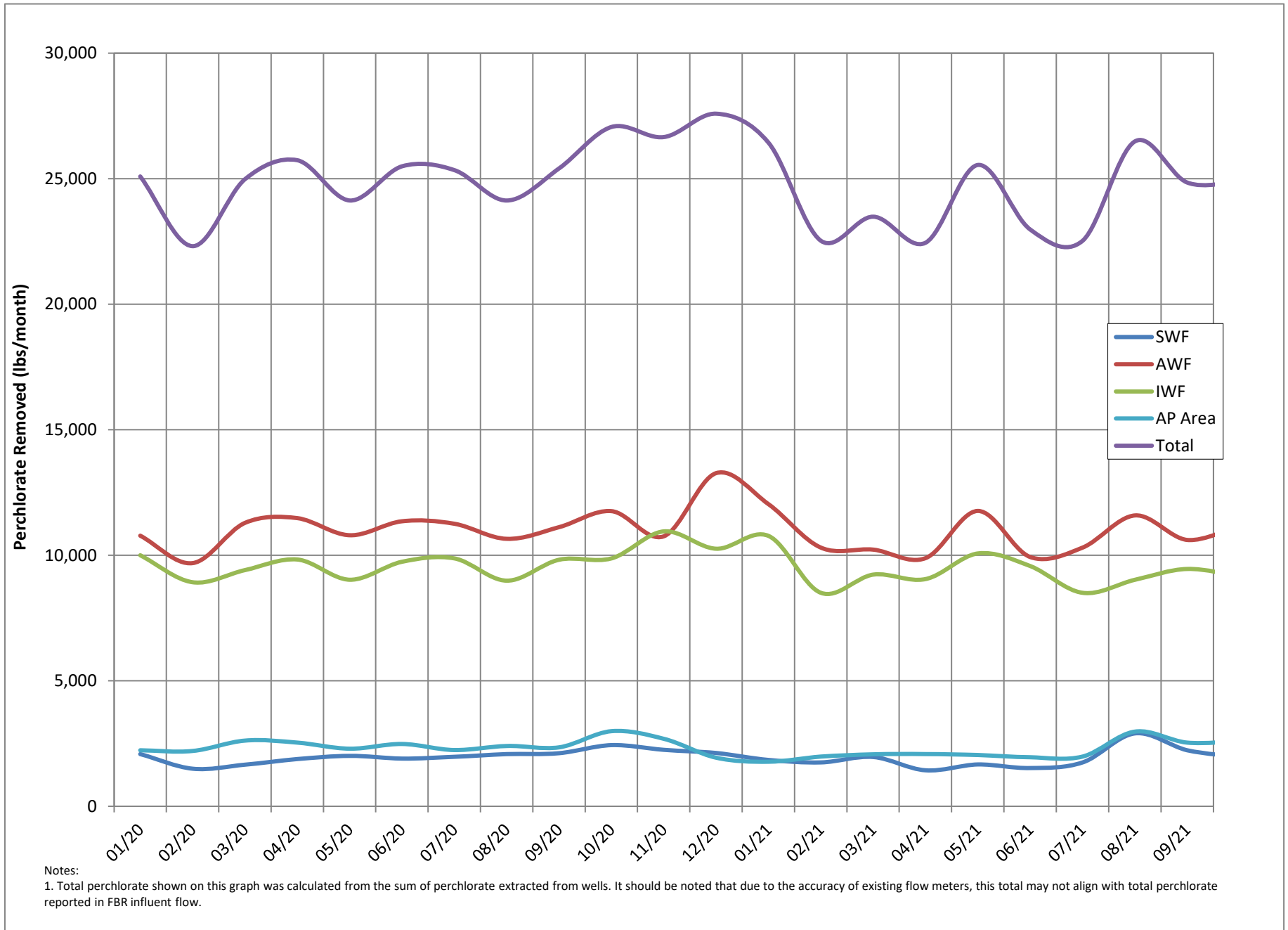


Figure 2 - Historical Perchlorate Mass Removed From Environment



Attachment A

NPDES Tracking Sheet (Prepared by Ramboll)

Attachment B

Equipment Tracking Form

Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
		<u>main</u>				
		<u>Plant</u>				
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		1	Power loss from NV Energy. Communication was lost from the radio. A new radio was installed.
2		Athens Road Wells and Lift Station 3				
2.01		Athens Road Well Field, 9 wells	Running		3	Installed a new flow meter on ART-9.
2.02		Lift Station 3 Lift Pump A	Standby		2	The seal began to leak. The old one was taken off and a new one is ready to be installed.
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		2	Installed a new mechanical seal on the turbine.
4		Interceptor Wells and Cr Treatment Plant				
4.01		IWF Well Field, 30 wells	Running		3	Reset the parameters on I-C. A new .5 HP motor and pump were installed on I-S. While repairs were being completed ETI discovered that a short section of pipe had rusted through allowing a small leak to occur. The well was turned off while the repair was made to the piping.
4.02		Ferrous Sulfate Feed System	Running			

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Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
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		3	Repaired fittings on the pressure gauge on the INF for the GAC's.
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	Running			
5.10	PID10B	Carbon Absorber - LGAC 201B	Running			
5.11	PID10B	Carbon Absorber - LGAC 201C	Running			
6		First Stage FBRs A, 1 & 2				
6.01	PID14	FBR A				
6.02	PID14	Separator Tank - 1401				
6.03	PID14	Media Return Pump - P 1401				
6.04	PID14	P1401A				
6.05	PID01A	P1401B				

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Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
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		2	Rebuilt the pump that blown out trunnions.
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			
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			

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Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
7		First Stage FBRs 3 & 4				
7.01	PID01B	FBR 3	Running			
7.02	PID01B	FBR 4	Running		3	Unclogged the airline that feeds the flow feed valve.
7.03	PID02B	First Stage Separator Tank - T2012	Running			
7.04	PID01B	Media Return Pump - P2012	Running		4	Tightened the fittings on the discharge of the pump.
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				
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			

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Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
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		3	Replaced the air filter on the air supply line for the feed valve.
9.02	PID03B	FBR 8	Running		3	Replaced the air filter on the air supply line for the feed valve.
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			
10.05	PID04	Bio filter Sump				

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Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
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		3	Assembled the pump seal and the impeller then installed the pump into service.
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			
10.17	PID05	Screw Conveyer Drive	Standby			
10.18	PID05	Skimmer Drive	Running			

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Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
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			3	Rebuilt 2 airlifts.
12.02	PID17	Filter Reject Tank	In operation		3	Removed solids from the tank.
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				
14.07	PID09	West Press	Standby		4	Installed a new handle on the feed valve.
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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Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
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		1	The compressor is in the process of being replaced.
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			

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Sub-System	P&ID	Description	Status ¹	Checked	Criticality ²	Notes
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			
		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			

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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 10/31/21
1	Dissolved Air Floatation (DAF) Vessels ETI to pilot an alternate technology (AquaDisk filters) and make a recommendation	-	Preparation of Draft Work Authorization by ETI in progress. To Trust by 12/31.
2	DAF Pump Skid Rebuild On-hold pending outcome of DAF pilot	-	-
3	Main Influent Pipeline Air/Vacuum Release Valves ETI to replace valves and valve boxes as required	-	Draft Work Authorization received by NERT. Finalization of Work Authorization terms in progress.
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	-	Draft Work Authorization received by NERT. Finalization of Work Authorization terms in progress.
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	-	Draft Work Authorization received by NERT. Finalization of Work Authorization terms in progress.
8	IWF Wiring ETI to replace as required	-	Preparation of Draft Work Authorization by ETI in progress. To Trust by 11/30.
9	FBR Skid Equipment Replacements ETI to replace what is immediately required in lieu of complete replacements	-	Preparation of Draft Work Authorization by ETI in progress. To Trust by 12/31.
10	Influent / Effluent Pump Motors ETI to procure additional motors for more frequent rotation	-	Preparation of Draft Work Authorization by ETI in progress. To Trust by 11/30.
11	Overhaul Lift Station #2 West Wet Well Turbine ETI to overhaul as required	-	Preparation of Draft Work Authorization by ETI in progress. To Trust by 11/30.
12	Replacement of Safety Showers ETI to replace safety shower system in batches over ~2 years	-	Preparation of Draft Work Authorization by ETI in progress. To Trust by 11/30.

GWETS AMENDMENT 8 REPAIR/REPLACEMENT STATUS

PREPARED BY NEVADA ENVIRONMENTAL RESPONSE TRUST

ITEM		RESOLUTION	WORK AUTHORIZATION	STATUS AS OF 10/31/21
13	East Air Compressor	ETI to replace as required	ETI WA 21-02 \$29,874	Procurement and installation planning underway.
14	pH and ORP Probes	ETI to replace certain probes as required throughout FBR plant	-	Preparation of Draft Work Authorization by ETI in progress. To Trust by 11/30.
15	Exterior Shell of Ethanol Storage Tank	ETI to repair as required	-	Preparation of Draft Work Authorization for Trust review by 3/31/22.
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.	-	Preparation of Draft Work Authorization by ETI in progress. To Trust by 11/30.
18	Sludge Pump and Sluge Bins	ETI to replace as required	-	Preparation of Draft Work Authorization for Trust review by 3/31/22.
19	FBR Fluidization Pumps Check Valves	ETI to replace as required	-	Preparation of Draft Work Authorization for Trust review by 3/31/22.
20	D-1 Asbestos Evaluation	NERT to complete an asbestos survey	TT WA 21-12 \$7,400	Survey to be completed in December