

**FACT SHEET AND STATEMENT OF BASIS
GPM ENVIRO PROJECT MANAGER, LLC
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES)
UPDES DISCHARGE PERMIT MODIFICATION
UPDES PERMIT NUMBER: UT0000361
MAJOR INDUSTRIAL FACILITY**

FACILITY CONTACT INFORMATION

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DESCRIPTION OF FACILITY

GPM Enviro Project Manager, LLC (GPM) manages the former Anderson Geneva Development, Inc. UPDES Permit and property, which was previously a defunct integrated steel mill located in the town of Vineyard, Utah, just east of Utah Lake in Utah County with the above-mentioned UPDES permit and facility address (facility). As of June 2010, the steel making machinery had been dismantled and removed off site, and all of the buildings and other structures at the facility have since been demolished. GPM's operations during the ongoing redevelopment of the facility property have fallen under two Standard Industrial Classification (SIC) Codes: 4953 – *Refuse Systems and*; 5093 – *Scrap and Waste Materials*.

Storm water discharges at the facility are currently regulated under the Utah Multi-Sector General Permit for Industrial facilities with UPDES Permit Number UTRI00088. As the facility area within the permit boundaries becomes remediated and redeveloped for other uses, such areas that are redeveloped will continue to use the existing collection system for storm water discharges in conjunction with the Utah Municipal Separate Storm Sewer System (MS4) permit for Vineyard City regulated under the UPDES MS4 Permit Number UTR090073.

Storm water and wastewater discharges from the facility, as well as storm water from parts of the adjacent redevelopment areas in Vineyard City is conveyed through a concrete culvert inlet structure into the northeast side of a large onsite retention pond, which ultimately discharges to Utah Lake (via Outfall 001) through a 1500-foot-long, 24-inch diameter diffuser with 20, 6" portals extending west from the retention pond out into Utah Lake. The retention pond has a design capacity of 20 million gallons per day (MGD) and Outfall 001 has a mean monthly design flow of 5.0 MGD.

Regarding wastewater discharges at the facility, the only operation currently remaining on the site is the ongoing Resource Conservation and Recovery Act (RCRA) Corrective Action Management Unit (CAMU) Leachate Treatment Unit that treats leachate collected from the CAMU with the occasional addition of recovered groundwater which discharges via Outfall 005-B. Due to historical ground water impacts on site, monitoring wells were previously installed for long term monitoring and treatment of the impacted ground water. A Granular Activated Carbon (GAC) Treatment Unit has been utilized for many years to treat the ground water prior to any discharges. The current GAC Treatment Unit was installed in late 2019 along with the relocated outfall (005-B) as part of the previous permit modification process to replace the

original GAC unit and outfall (005-A). The treated water from the newer GAC unit is batch discharged intermittently through Outfall 005-B to an internal drainage ditch on the property, which then flows into the site storm water collection system and eventually may ultimately flow into Utah Lake via the existing Outfall 001 structure.

Since storm water discharges are being managed and regulated at the facility via the aforementioned UPDES storm water permits, and since the only wastewater discharges occurring at the facility are from Outfall 005-B, GPM has requested the removal of Outfalls 001 & 005-A from the UPDES Permit, as well as the removal of Total Lead from future sampling requirements. Additionally, GPM has requested other permit modifications, such as the removal of the Oil & Grease sampling, as well as a request for the Total Dissolved Solids (TDS) effluent limitation to be a loading-based requirement. Not all of GPM's requests have been implemented as proposed, but each of these permit modification requests have been addressed in the next section of this Fact Sheet and an outfall location map is being provided herewith for reference (Attachment I).

SUMMARY OF PERMIT MODIFICATION CHANGES

The following is a list of the permit changes as evaluated and determined by the permitting authority:

1. As mentioned above, Outfalls 001 & 005-A will now be obviated from this permit. Outfall 005-A is no longer in service and has been previously replaced by Outfall 005-B. Outfall 001 no longer discharges wastewater from the facility that will not already be regulated through Outfall 005-B as modified. Therefore, the removal of these two outfalls from the permit is appropriate at this time.
2. GPM has requested the removal of Total Lead monitoring from future permit requirements since there have been no detectable concentrations reported in many years. This has been addressed and granted as discussed in the subsequent **Reasonable Potential Analysis** section of this Fact Sheet.
3. With the removal of Outfall 001, all the monitoring requirements from that outfall have now been added to Outfall 005-B as appropriate, with the exception of Total Lead. This includes the additional monitoring and limitations for: pH, TDS, Total Phosphorus, Turbidity, Oil & Grease, and Acute Whole Effluent Toxicity testing. Note that the previously existing effluent limitations for Outfall 005-B remain unchanged and, in the permit, as appropriate.
4. GPM requested that the TDS limitation be changed to a loading-based limitation in lieu of a concentration-based limitation. The permitting authority determined that although it was not appropriate for the TDS concentration-based limitation to be eliminated at this time, a conditional loading-based limitation for TDS was added to the permit effluent limitations. The new TDS conditional loading limitation is based upon the fact that current TDS groundwater concentrations proximal to Outfall 005-B are unknown and expected to be highly variable. Thereby, if the existing TDS concentration limit cannot be met, then the effluent shall be limited to a TDS loading limit of 231 lbs/day as a maximum monthly average. The 231 lbs/day was calculated using the current TDS concentration limit and proposed new effluent flow limitation as discussed below and calculated as follows: **[1200 mg/L TDS x 0.02304 MGD x 8.34 lbs/gal = 230.6 lbs]**.
5. As mentioned above, an effluent flow limitation has now been added to further support TDS and other existing effluent loading limitations. The maximum monthly average flow limitation is based upon the GAC Treatment Unit average design flow of 23,040 gallons per day as provided by GPM, which equates to 0.02304 MGD.

6. Oil & Grease monitoring has not been removed from the permit as requested by GPM, but rather has been changed to a visual monthly monitoring requirement first, and then if a sheen is observed, or if there is any other reason to believe oil & grease may be present in the discharge, then a sample must be immediately collected and subject to the same previous and existing effluent limitation. This is consistent with other UPDES permitted facilities statewide that consistently do not have detectable concentrations of Oil & Grease in the discharging effluent. Additionally, the GAC Treatment Unit would remove any traces of Oil & Grease constituents prior to discharges via Outfall 005-B.

The changes listed above are the only changes being proposed with this permit modification that are subject to public comment during the public notice period. All other permit effluent limitations remain unopened and unchanged as appropriate.

DISCHARGE INFORMATION

Outfall Location

With the removal of Outfalls 001 & 005-A, the remaining permitted discharging outfall is as follows:

<u>Outfall Number</u>	<u>Location of Discharge Point(s)</u>
005-B	Located at latitude 40°19'21.9576" N and longitude 111° 45'23.7528" W. Discharge from the new carbon filtration treatment unit that treats leachate from a RCRA Corrective Action Management Unit.

Total Maximum Daily Load (TMDL) Information

Regarding ongoing TMDL study and implementation efforts, Utah Lake is listed as impaired for harmful algal blooms, eutrophication, E. coli, TDS, total phosphorus and PCBs in fish tissue according to the 2022 303(d) list of impaired waterbodies. Although there are no approved TMDLs for any of these impairments, there is an ongoing Utah Lake Water Quality Study with the objective to develop numeric nutrient criteria in the future for discharges into Utah Lake and Provo Bay. Therefore, considering the previous and current permit parameters of concern (POCs), monitoring requirements for both TDS and Total Phosphorus will remain in the permit as appropriate. E. coli was more recently added to the list of Utah Lake impairments and is not considered a past or present POC from the facility and current groundwater treatment operations and therefore, has not previously been included in the permit.

Reasonable Potential Analysis for the Removal of Total Lead

Since January 1, 2016, DWQ has conducted reasonable potential analysis (RP) on all new and renewal applications received after that date. RP for this permit renewal was conducted following DWQ's September 10, 2015 Reasonable Potential Analysis Guidance (RP Guidance). There are four outcomes defined in the RP Guidance: Outcome A, B, C, or D. These outcomes, as detailed further in the attached RP Analysis, provide a frame work for what routine monitoring and/or effluent limitations will be required. An initial screening RP analysis was performed on the Total Lead monitoring effluent data to determine if there was reasonable potential for facility discharges to exceed the applicable water quality standards. Based upon the RP analysis, the removal of Total Lead from future permit monitoring requirements is appropriate at this time. This is because all the data points reviewed for the past several years did not exceed, or come close to exceeding the applicable Water Quality Standards and/or the laboratory method detection limit. Therefore, RP for Total Lead does not exist at the facility and its removal from future monitoring requirements is warranted as granted herein. Additionally, Total Lead is not a current POC for either the UPDES permitted facility, or the receiving water of Utah Lake. A copy of the more detailed RP analysis is included as an attachment at the end of this Fact Sheet (Attachment II).

The permittee is expected to be able to comply with the permit limitations and self-monitoring and reporting requirements as follows:

Parameter, Units	Effluent Limitations *a			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
Total Effluent Flow, MGD, *b	0.02304	--	--	Report
Ammonia, lbs/day	62	--	--	210
Phenols (4AAP), lbs/day	0.12	--	--	0.25
Benzene, lbs/day	--	--	--	0.12
Naphthalene, lbs/day	--	--	--	0.12
Benzo(a)pyrene, lbs/day	--	--	--	0.12
Total Dissolved Solids (TDS), mg/L *c	--	--	--	1200/Report
TDS, lbs/day *c	231	--	--	Report
Oil & Grease, mg/L *d	--	--	--	10
pH, Standard Units (SU)	--	--	6.5	9.0
Turbidity, NTU *e	--	--	--	Report
Total Phosphorus, mg/L	--	--	--	Report
WET, Acute Biomonitoring *f	--	--	--	LC ₅₀ > 100% effluent

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow, *b	Continuous/Batch	Recorder	MGD
Ammonia	Monthly	Grab	lbs/day
Phenols (4AAP)	Monthly	Grab	lbs/day
Benzene	Monthly	Grab	lbs/day
Naphthalene	Monthly	Grab	lbs/day
Benzo(a)pyrene	Monthly	Grab	lbs/day
TDS *c	Monthly	Grab	mg/L, lbs/day
pH	Monthly	Grab	SU
Turbidity, *e	Monthly	Grab	NTU
Total Phosphorus	Monthly	Grab	mg/L
Oil & Grease *d	Monthly	Visual/Grab	Yes/No, mg/L
WET, Acute Biomonitoring *f	Quarterly	Composite	Pass/Fail

There shall be no visible sheen or floating solids or visible foam in other than trace amounts upon any discharges and there shall be no discharge of any sanitary wastes at any time.

- *a See Permit Definitions, *Part VII*, for definition of terms.
- *b Flow measurements of effluent volumes shall be made in such a manner that the permittee can affirmatively demonstrate that representative values are being obtained. If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
- *c TDS discharges shall initially be limited to 1200 mg/L as a daily maximum concentration. If the effluent concentration is greater than 1200 mg/L, then the TDS discharges shall be limited to a loading of 231 lbs/day loading as a maximum monthly average in lieu of the initial concentration limitation. Maximum monthly average loading values include all days of the month as calculated and days that have no discharge are included as zero lbs/day.
- *d A visual inspection for any oil and grease sheen, sanitary wastes, floating solids, and visible foam shall be performed at least once per month at Outfall 005-B. There shall be no visible sheen, floating solids, or visible foam in other than trace amounts upon any discharges and there shall be no discharge of any sanitary wastes at any time. If a sheen is observed anytime at Outfall 005-B, then a sample of the effluent shall be collected immediately thereafter and the oil and grease shall not exceed 10 mg/L in concentration.
- *e Turbidity monitoring shall be conducted monthly whenever possible during discharge events to document that there is not an increase of more than 10 NTU over the receiving waters, if applicable. Monitoring of the final effluent discharge shall be conducted prior to mixing with the receiving water of Utah Lake.
- *f The permittee shall quarterly conduct acute static renewal toxicity tests on a composite sample of the final effluent discharge before mixing with the receiving water of Utah Lake. See Permit *Part I.C.3* for quarterly WET testing requirements.

PERMIT DURATION

It is recommended that this modified permit be effective for the remainder of the five (5) year permit cycle, which is set to expire at midnight on March 31, 2026.

Permit drafted by and collaborated with:
Jeff Studenka, Discharge Permit Writer, Reasonable Potential Analysis
Lonnie Shull, Biomonitoring WET Testing Coordinator
Carl Adams, Storm Water Coordinator
Scott Daly, Watershed/TMDL Coordinator
Suzan Tahir, Wasteload Analysis Specialist

Utah Division of Water Quality, (801) 536-4300
April 17, 2023

PUBLIC NOTICE INFORMATION (to be updated after)

Began:

Ended:

The Public Notice of the draft renewal permit will be published on DWQ's website for at least 30 days as per Utah Administrative Code (UAC) R317-8-6.5.

During the public comment period provided under UAC R317-8-6.5, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments will be considered in making the final decision and shall be answered as provided in UAC R317-8-6.12.

ADDENDUM TO FSSOB

ATTACHMENTS (2): I. Outfall location map
II. Reasonable Potential Analysis Summary for Total Lead

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ATTACHMENT 1

Outfall Location Map



ATTACHMENT 2

Reasonable Potential Analysis

REASONABLE POTENTIAL ANALYSIS

DWQ has worked to improve our reasonable potential (RP) analysis for the inclusion of limits for parameters in the permit by utilizing an EPA approved method and RP guidance document. As a result, more parameters and/or limits may be included in the renewal permit. There are four resulting outcomes for the RP Analyses¹ as listed below;

- Outcome A: A new effluent limitation will be placed in the permit.
- Outcome B: No new effluent limitation. Routine monitoring requirements will be placed or increased from what they are in the permit,
- Outcome C: No new effluent limitation. Routine monitoring requirements maintained as they are in the permit,
- Outcome D: No limitation or routine monitoring requirements are in the permit.

The Initial RP Screening Table is included below for the permit parameter of concern (POC) in question. Note that the full RP analysis model was not utilized at this time due to the results of the initial screening results below.

**RP Initial Screening Table for UPDES Permit No. UT0000361
2018-2022 Data Summary Results & RP Analysis (Outfall 001)**

Permit Parameter	No. of Samples	MEC* mg/L	Water Quality Standards MAC**		Result
			Acute (WLA) mg/L	Chronic (WLA) mg/L	
Total Lead	>60	<0.0005	0.844	0.151	MEC ≤ MAC

Notes: NA = not applicable.

*MEC = Maximum expected effluent concentration as determined from existing data set.

**MAC = Maximum allowable concentration from Water Quality Standards/Wasteload Analysis (WLA).

MEC less than or equal (≤) to MAC, no RP and no additional Acute or Chronic limits required.

MEC > MAC = RP identified, include appropriate limits.

Result: From the table above, the RP screening analysis of discharges for the listed POC is: MEC ≤ MAC. Therefore, no additional Acute or Chronic limits are required and, in this case, the facility has requested the removal of Total Lead from future permit monitoring requirements. This essentially equates to RP *Outcome D*: *No limitation or routine monitoring requirements are in the permit.*

Summary: Based upon the policy “Reasonable Potential Analysis Guidance” developed by the Utah Division of Water Quality on September 10, 2015 and subsequently implemented beginning January 1, 2016 for all new and renewal permits; it was determined that not only are any additional Total Lead effluent limits unnecessary in this 2023 modified permit, but that the removal of Total Lead from future permit monitoring requirements is appropriate at this time. This is because all the data points reviewed for the past several years did not exceed, or come close to exceeding the applicable Water Quality Standards and/or the laboratory method detection limit (see table above). Therefore, no RP currently exists at the facility for Total Lead and a more quantitative RP analysis was not necessary at this time. Additionally, Total Lead is not a current POC for either the UPDES permitted facility, or the receiving water of Utah Lake.

¹ See Reasonable Potential Analysis Guidance for further definitions of terms.