

NPDES Inspection Report

National Database Information	
Inspection Date: 9/17/2024	Inspection Type: Industrial Discharger
Entry/Exit Time: Opening Interview: 8:00 a.m. – 11:00 a.m. (opening conference) Site Inspection: 3:00 p.m. – 3:55 p.m. (site review)	NPDES ID Number: UT0025259
NAICS Code: 212399	Inspection ID: 202409 UT0025259
Lead inspector and affiliation: Jennifer Ferrando, U.S. Environmental Protection Agency (EPA) Region 8	
Inspector and affiliation: Akash Johnson, EPA Region 8	
Inspector and affiliation: Althea Wilson, EPA Region 8	

Facility Location Information	
Site/Facility Name & Location: American Gilsonite Company, Cottonwood Mine Uintah County, Utah	Mail Report to: Jonathan Lombardo, Senior Engineer American Gilsonite Company see cover letter for email address

Inspection/Site Contacts	
	Name, Title, Affiliation
Facility Contacts:	Jonathan Lombardo, Senior Engineer, American Gilsonite Company (present)
	Gregg Galecki, Surface Operations Manager, American Gilsonite Company (present)
Tribal Government Contacts	Alrita Murray, Environmental GAP Coordinator, Ute Tribe (not present)
	CeeJay Rebsom, Solid and Hazardous Waste Labor, Ute Tribe Environmental GAP Program (present for opening conference)
	Darrel Ningealook, Solid and Hazardous Waste Labor, Ute Tribe Environmental GAP Program (present for opening conference)
	Devonte Smith, Solid and Hazardous Waste Labor, Ute Tribe Environmental GAP Program (present for opening conference)
	Bart Powaukee, Water Quality Coordinator, Ute Tribe (not present)

Permit Information	
Is the permit on site and available? Did not evaluate	Date Permit Application Submitted: 2/25/2021
Effective Date: 4/1/2022	Expiration Date: 3/31/2027
Latitude: 39.89780° N	Longitude: 109.51373° W
Receiving Water(s): unnamed tributary of Sand Wash (Outfall 002), and an unnamed tributary of Cottonwood Wash (Outfall 003), both of which are tributaries of the White River	
Regulatory Inspector's source of information: EPA records and databases, NPDES permit, inspection observations, and the facility's representatives.	

Areas Evaluated During Inspection		
Permit	<u>Self-Monitoring Program</u>	Pretreatment
<u>Records/Reports</u>	Compliance Schedule	<u>Pollution Prevention</u>
<u>Facility Site Review</u>	Laboratory	<u>Storm Water</u>
<u>Effluent/Receiving Waters</u>	<u>Operations and Maintenance</u>	Combined Sewer Overflow
<u>Flow Measurement</u>	Sludge Handling/Disposal	Sanitary Sewer Overflow

Report Review and Signature		
Lead Inspector and Report Writer Name/Signature/Final Date		Contact Information
JENNIFER FERRANDO  Digitally signed by JENNIFER FERRANDO Date: 2025.04.03 15:22:26 -06'00'		U.S. EPA Region 8 Denver, Colorado ferrando.jennifer@epa.gov (303) 312-6601
Reviewer Name	Review Date	Contact Information
Althea Wilson	November 25, 2024 (original)	U.S. EPA Region 8 Denver, Colorado wilson.althea@epa.gov (303) 312-6026
Reviewer Name	Review Date	Contact Information
Akash Johnson	December 5, 2024 (original) March 20, 2025 (amended)	U.S. EPA Region 8 Denver, Colorado ferrando.jennifer@epa.gov (303) 312-6067
Management Reviewer Name/Signature/Date		Contact Information
EMILIO LLAMOZAS  Digitally signed by EMILIO LLAMOZAS Date: 2025.04.02 10:51:28 -06'00'		U.S. EPA Region 8 Denver, Colorado llamozas.emilio@epa.gov (303) 312-6407
Emilio Llamozas, NPDES and Wetlands Enforcement Section Supervisor		

Inspection Narrative and Site Description

On Tuesday September 17, 2024, U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) inspectors Akash Johnson, Jennifer Ferrando, and Althea Wilson (inspectors) conducted a compliance evaluation inspection of the American Gilsonite Company (AGC) Cottonwood Mine (Facility), located in Uintah County, Utah, within the exterior boundaries of the Uintah and Ouray (Reservation). The Facility was operated by AGC. Ownership of the Facility and underlying lands was not evaluated during the inspection.

The purpose of the inspection was to evaluate compliance with the Facility's NPDES permit for the discharge of mine dewatering wastewater and stormwater and other applicable Clean Water Act requirements. The EPA is the NPDES permitting authority for Indian country within EPA Region 8. A letter notifying the Ute Tribe of the EPA's inspection presence on the Reservation was sent on August 19, 2024. Approximately one week prior to the inspection, the EPA contacted AGC to announce the EPA's intent to inspect the Facility and to coordinate logistics. Throughout the inspection, we took notes on our discussions and observations in field logbooks. Photographs taken during the inspection are included in the enclosed photo log.

On September 17, 2024, at approximately 8:00 a.m., the inspectors met with Jonathan Lombardo, Senior Engineer for AGC, and Gregg Galecki, Surface Operations Manager for AGC, at AGC's office located in Bonanza, Utah, to commence inspections of multiple AGC-operated facilities in the area, including the AGC Bonanza Mine and processing plant (NPDES ID UT0000167), the AGC Bonanza wastewater treatment facility (WWTF) (NPDES ID UTG589407), and the subject facility, the AGC Cottonwood Mine. This inspection report focuses on the Cottonwood Mine inspection.

The inspectors presented their inspector credentials and proceeded to have an opening conference to explain the purpose of the inspections, discuss the schedule for the inspections, and discuss questions pertaining to the operation of the mines and Town of Bonanza WWTF. The inspectors also explained that inspection reports would be generated and provided to Jonathan Lombardo with any findings identified during the inspections. As part of the opening conference, the inspectors participated in a safety briefing and signed a hazard training acknowledgement form. While at the AGC office, the inspectors reviewed onsite records associated with NPDES permit requirements, including self-inspection records, operation and maintenance records, the facility's Stormwater Pollution Prevention Plan (SWPPP), and employee training records. The facility's SWPPP was available on site at AGC's office. The inspectors reviewed the SWPPP facility map and training records but did not conduct a comprehensive review of the SWPPP. Representatives of the Ute Tribe Environmental General Assistance Program (GAP), Devonte Smith, Darrel Ningealook, and CeeJay Rebsom, arrived at approximately 10:15 a.m. and accompanied the inspectors and AGC representatives for the remainder of the opening conference. The opening conference concluded around 11:00 a.m. after which the inspectors took a break for lunch in the AGC office, then reconvened with the representatives from AGC and the Ute Tribe GAP to conduct site reviews of the AGC Bonanza Mine and processing plant and Town of Bonanza WWTF. Ute Tribe GAP representatives left the group after these site reviews and did not participate in the subsequent site review of the Cottonwood Mine.

On September 17, 2024, at approximately 3:00 p.m., the inspectors and Facility representatives, commenced their inspection tour of the Cottonwood Mine, including Outfall 002 and the location of the previously-permitted Outfall 001. The inspectors did not review the location of Outfall 003 because the Facility representatives stated that the outfall had not been constructed yet and there were no discharges associated with mining activity in that location.

Gilsonite® is AGC's registered trademark name for uintaite, a naturally-occurring solid hydrocarbon material. Active uintaite mining sites consist of a vertical shaft sunk into the vein, with uintaite removed from the vein by mining horizontally in opposite directions from the shaft. Uintaite is chipped from the vein on a sloping face using a pneumatic hammer. Ore falls to the bottom of the slope and is vacuumed to a head frame at the surface where it is discharged to a bin. A baghouse at the surface filters the air that is used to transport the ore; filtered air is released to the atmosphere.

Outfall 002 was actively discharging at the time of the inspection. The waste stream consists of dewatering wastewater from two mine shafts (CW-3 and CW-6) and pumped drainage from a uintaite drying bed near shaft CW-3. Wet uintaite removed from the mine is spread on the ground near the shaft. Water drains from the uintaite ore into an adjacent pond (photo 33). Uintaite that floats to the surface of the pond is periodically skimmed off and placed back onto the drying bed. Wastewater from the pond is periodically pumped to the outfall.

Wastewater treatment and monitoring equipment associated with Outfall 002 consists of pH monitoring and pH adjustment equipment, a flow meter, and filtration at the outfall structure. Wastewater from the mine shafts and drying bed flows through an inline mixer unit equipped with a pH sensor in one of two Conex shipping containers (photo 30). According to Facility representatives, if the pH measurement reaches 8.75 or higher, acid is automatically injected into the discharge stream to reduce the pH. The acid is stored in the second Conex box. A digital flow meter is located outside the Conex boxes, after pH adjustment, immediately upstream of the discharge structure. After the flow meter, a manifold distributes wastewater to four filter units, each of which discharges treated wastewater to Sand Wash (photos 31 and 32).

The filter socks used to remove total dissolved solids (TDS) from the effluent are air filters that the facility stocks for use in the baghouses. Jonathan Lombardo stated that the frequency of filter inspections varies from once every other week up to two times per week depending on the volume of effluent being discharged. According to Jonathan Lombardo, a filter is determined to be full when water begins to spurt out of the seams of the filter sock. Discharge monitoring samples are collected by holding the sample container below one of the four filters.

The inspectors and Facility representatives proceeded from Outfall 002 to the location of Outfall 001, which had been decommissioned and is no longer permitted. The inspectors confirmed there were no discharges associated with mining activity in the location of previously permitted Outfall 001.

The inspectors concluded the inspection with a closing conference with the Facility representatives at the location of Outfall 001. The inspectors discussed preliminary inspection findings, including permit compliance relative to the use of air filters to treat the wastewater discharge and the need to repair a leak in the in-line mixer and prevent potential discharges of untreated wastewater to Sand Wash. The inspectors discussed the next steps, including estimated timing for delivery of the inspection reports.

On November 8, 2024, EPA sent an email to the Permittee requesting the following records and information:

- Model numbers for pH, flow, and dissolved oxygen (DO) meters.
- Expiration dates for pH buffer/calibration solutions.
- SWPPP map(s) for the Cottonwood mine.
- Copies of the most recent completed SWPPP inspection form(s) for Bonanza and Cottonwood.
- Laboratory analytical reporting packages (including chain-of-custody forms [COCs]) and records of field measurements (pH, DO, flow) supporting data reported on discharge monitoring reports (DMRs) for the specified months for the Bonanza and Cottonwood mines.

- Photographs of several Bonanza outfalls that were not observed during the inspection.

On November 22, 2024, EPA received the following records from Gregg Galecki for the Cottonwood Mine:

- Model numbers for pH, flow, and DO meters.
- Expiration dates for pH buffer/calibration solutions.
- SWPPP map(s) for the Cottonwood mine.
- Laboratory analytical reporting packages and records of field measurements supporting data reported on DMRs for Outfall 002 for June and July 2023 (requested results for August 2023 were not provided).

On November 24, 2024, EPA inspectors Akash Johnson and Jennifer Ferrando met with Gregg Galecki and BJ Jensen, an engineer with AGC, to discuss the records provided. On November 27, 2024, Gregg Galecki provided the following additional records for the Cottonwood Mine:

- Documentation of SWPPP quarterly inspection conducted on September 26, 2024.
- Field pH and flow data for sampling conducted in June, July, and August 2023.

On December 5 and December 13, 2024, EPA emailed Gregg Galecki a request for clarification of the details of a previously reported TDS exceedance (in December 2023) and clarification of details of the facility's monitoring equipment maintenance. On December 20, 2024, Gregg Galecki provided the following records for the Cottonwood Mine:

- Analytical laboratory reports for samples collected at Outfall 002 on December 26 and 29, 2023.
- Copies of previously submitted written reports of a missed quarterly sample in the second quarter of 2022 and two exceedances of the TDS limit in December 2023.

Findings, Corrective Actions, and Recommendations

Finding #1: The Permittee did not report TDS Load, tons/year every quarter.

The facility did not report the rolling annual average TDS load for the first quarter of 2023 (monitoring period end date 3/31/2023). The DMR included a “no data indicator” (NODI) code C (indicating no discharge) for all parameters for the first quarter of 2023, but the rolling annual average value should be reported quarterly regardless of whether the facility discharged during the quarter.

Permit Requirement

Section 4 of the permit states, “Self-monitoring shall be conducted effective immediately and lasting through the effective term of this Permit. Sampling and test procedures for pollutants listed in this section shall be in accordance with guidelines promulgated by the Administrator in 40 CFR Part 136, as required in 40 CFR Part 122.41(j). At a minimum, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report (DMR) that no discharge occurred. See Reporting of Monitoring Results, section 6.4, for more details.

Table 3 – Monitoring and Reporting Requirements for Outfalls 002 and 003

Effluent Characteristic	Monitoring Frequency	Sample Type a/	Data Type a/

TDS Load, tons/year	Quarterly j/	Calculation	Rolling Annual Average

a/ See section 1 for definitions of terms.

j/ The reported value for this parameter is the total mass of dissolved solids discharged by this facility per year. This value is reported once per quarter and is based on a rolling annual average (i.e., the last 12 months of data). The calculation for this parameter is the sum of the products of the TDS (mg/L) and average monthly discharge rate (ADR) in mgd *for each outfall and each month* converted to tons/year using the equations below. If more than one TDS sample is collected from an outfall during a month, the TDS results shall be averaged for that month. See section 7.1 of the statement of basis for an example calculation using these equations.

- (1) Rolling Annual TDS Load (tons/year) = sum of the past 12 months of Monthly TDS Load
- (2) Monthly TDS Load (tons/month) = $0.125 \times [\text{TDS}_{\text{outfall002}} \times \text{ADR}_{\text{outfall002}} + \text{TDS}_{\text{outfall003}} \times \text{ADR}_{\text{outfall003}}]$

Corrective Action

Ensure that the rolling annual average TDS load is calculated and reported once per quarter in accordance with the permit requirements. Update the first quarter of 2023 DMR to reflect the appropriate rolling annual average TDS load. In a response, provide a copy of the updated DMR.

Finding #2: The facility's discharge exceeded Permit effluent limitations.

The inspectors reviewed the DMRs for April 2022 through September 2024. AGC has reported through its electronic DMR submittals that it has exceeded its Permit effluent limitations for TDS and total suspended solids (TSS) at Outfall 002 as listed below:

Effluent limitation exceedances reported for outfall 002 from April 2022 through August 2024.

Monitoring Period End Date	Parameter	Permit Limit	Limit Data Type	DMR Value	Percent Over the Limit
08/31/2022	TDS	3500 mg/L	Daily Maximum	4250 mg/L	21%
10/31/2022	TSS	25 mg/L	30-Day Average	250 mg/L	900%
10/31/2022	TSS	35 mg/L	7-Day Average	250 mg/L	614%
05/31/2023	TDS	3500 mg/L	Daily Maximum	3990 mg/L	14%
06/30/2023	TDS	3500 mg/L	Daily Maximum	4040 mg/L	15%
12/31/2023	TDS	3500 mg/L	Daily Maximum	3920 mg/L	12%

Permit Requirement

Part 3 of the Permit states, "All Outfalls: Effective immediately and lasting through the life of this Permit, the quality of effluent discharged by the facility shall, at a minimum, meet the limitations as set forth below:

Table 2 – Effluent Limitations for Outfalls 002 and 003

Effluent Characteristic	30-Day Average Effluent Limitations a/	7-Day Average Effluent Limitations a/	Daily Maximum Effluent Limitations a/
Flow, million gallons per day (mgd)	report only	N/A	report only
Total Suspended Solids (TSS), mg/L	25	35	N/A
Oil and Grease (O&G), mg/L	N/A	N/A	10
Total Dissolved Solids (TDS), mg/L	N/A	N/A	3,500
Calcium, mg/L	N/A	N/A	report only
Iron, mg/L	N/A	N/A	report only
Magnesium, mg/L	N/A	N/A	report only
Potassium, mg/L	N/A	N/A	report only
Sodium, mg/L	N/A	N/A	report only
Bicarbonate, mg/L	N/A	N/A	report only
Carbonate, mg/L	N/A	N/A	report only
Chloride, mg/L	N/A	N/A	report only
Fluoride, mg/L	N/A	N/A	report only
Sulfate, mg/L	N/A	N/A	report only
Sodium Adsorption Ratio (SAR)	N/A	N/A	report only
Hardness, mg/L	N/A	N/A	report only
Temperature, °C	N/A	N/A	report only
pH, standard units	Shall not be less than 6.5 nor greater than 9.0 at any time.		
TDS Load, tons/year	The TDS load from the sum of all outfalls shall not be greater than 366 tons/year		
Sanitary wastewater, process wastewater, and contact cooling water	There shall be no discharge of sanitary wastewater, process wastewater, or contact cooling water.		
Visible sheen	There shall not be any visible sheen in the receiving water or adjoining shoreline.		

a/ See section 1 for definition of terms."

Corrective Action

Ensure that the Permit effluent limitations are met at all outfalls. In a response, provide a narrative explanation of the presumed or confirmed causes of these exceedances and explain how AGC plans to maintain compliance with numeric effluent limitations in the future.

Finding #3: The Permittee did not submit twenty-four hour notifications and five-day follow-up reports for all Permit effluent limitation exceedances.

For the daily maximum TDS effluent limitation exceedances reported in the facility's DMRs (see Finding #2), the Permittee did not always provide the required 24-hour notifications and 5-day follow-up reports. AGC collected a sample on December 26, 2023, and received preliminary results on December 29, 2023, indicating a TDS exceedance. AGC did not report this result verbally to EPA within 24 hours and did not send a written follow-up report within 5 days of first becoming aware of the exceedance.

AGC collected a second sample on December 29, 2023, and was notified by the lab on January 8, 2024, that the second sample also exceeded the TDS limit. AGC verbally notified EPA of both exceedances on January 8, 2024, and sent a written follow-up report for both exceedances on January 11, 2024. These reports met the 24-hour notification requirement and 5-day follow-up reporting for the exceedance that occurred on December 29, 2023, but not for the exceedance that occurred on December 26, 2023.

In addition, EPA has no record of 24-hour or 5-day reporting for the TDS exceedance that occurred in May 2023.

Permit Requirements

Section 6.9 of the Permit states, "Twenty-Four Hour Notice of Noncompliance Reporting:

- 6.9.1 The Permittee shall report any noncompliance which may endanger health or the environment as soon as possible, but no later than twenty-four (24) hours from the time the Permittee first became aware of the circumstances. The report shall be made to EPA, Region 8, Superfund & Emergency Management Division at (303) 293-1788 and the Ute Indian Tribe at (435) 722-3941.
- 6.9.2 The following occurrences of noncompliance and WET test failures shall be reported by telephone to EPA Region 8's Enforcement and Compliance Assurance Division Water Enforcement Branch at (800) 227-8917 (8:00 a.m. - 4:30 p.m. Mountain Time) and the Ute Indian Tribe at (435) 722-3941 (8:00 a.m. - 4:30 p.m. Mountain Time) by the first workday following the day the Permittee became aware of the circumstances:
 - 6.9.2.1 Any unanticipated bypass which exceeds any effluent limitation in the Permit (See section 7.8, Bypass of Treatment Facilities.);
 - 6.9.2.2 Any upset which exceeds any effluent limitation in the Permit (See section 7.9, Upset Conditions); or,
 - 6.9.2.3 Violation of a maximum daily discharge limitation for any of the pollutants listed by EPA in the Permit to be reported within 24 hours.
- 6.9.3 For any noncompliance notification required under sections 6.9.1, 6.9.2, a written submission shall also be provided to EPA Region 8's Enforcement and Compliance Assurance Division Water Enforcement Branch, and to the Ute Indian Tribe within five days of the time that the Permittee becomes aware of the circumstances. The written submission shall contain:
 - 6.9.3.1 A description of the noncompliance and its cause;
 - 6.9.3.2 The period of noncompliance, including exact dates and times;
 - 6.9.3.3 The estimated time noncompliance is expected to continue if it has not been corrected;

- 6.9.3.4 Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and,
- 6.9.3.5 The signed certification statement required by the Signatory Requirements (see section 8.7).”

Section 6.10 of the Permit states, “Other Noncompliance Reporting: Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for section 6.5 are submitted. The reports shall contain the information listed in section 6.9.3.”

Corrective Action

Report effluent limitation exceedances in accordance with the permit. In a response, describe the procedures AGC will use to ensure future effluent limitation exceedances are detected in a timely manner and reported to EPA and the Tribe as required.

Finding #4: The Permittee did not include the results of all monitoring in DMRs.

On July 25, 2022, the Permittee verbally reported to EPA that they had failed to collect a sample for inorganics and metals during the second calendar quarter for outfall 002. The Permittee stated, and reiterated in a written follow-up report, that they would collect a sample for those parameters on July 26, 2022, and would collect a second sample for the third quarter in late September 2022. On August 9, 2022, the permittee emailed a copy of the laboratory results for the sample collected on July 26, 2022. Based on EPA’s review of the lab report for the July 26 monitoring event, the permittee did not report the maximum result for all parameters monitored in the third quarter of 2022, as some of the July 26 results are higher than those reported. The table below compares the values in the lab report for the July 26 sample to those reported in the DMR for the July – September 2022. For sodium, sodium adsorption ratio, potassium, chloride, iron, and sulfate, the July 26 sample result is higher than the result reported in the DMR for the July – September 2022 period.

Comparison of July 2022 Laboratory Report with Third Quarter 2022 DMR Values

Parameter	DMR Value for July - September 2022	Value from Lab Report for July 26, 2022, Sample
Hardness, total [as CaCO ₃]	13.49 mg/L	6.20 mg/L
Calcium, total [as Ca]	2.35 mg/L	1.4 mg/L
Magnesium, total [as Mg]	1.85 mg/L	0.7 mg/L
Sodium, total [as Na]	856.5 mg/L	1260 mg/L
Sodium adsorption ratio	130.27 (ratio)	216
Potassium, total [as K]	2.45 mg/L	3.0 mg/L
Chloride [as Cl]	190.25 mg/L	311 mg/L
Fluoride, total [as F]	8.92 mg/L	8.92 mg/L
Iron, total [as Fe]	1.08 mg/L	1.11 mg/L
Bicarbonate as [CaCO ₃]	277.5 mg/L	196 mg/L
Carbonate ion [as CaCO ₃]	0 mg/L	ND
Sulfate	1300.5 mg/L	1990 mg/L

Similarly, the Permittee did not report the highest value for multiple sampling events for several parameters in the second quarter of 2023. In AGC’s response to EPA’s November 8, 2024, request for information, the Facility provided results of monitoring for inorganic and metals parameters for Outfall 002 conducted in June 2023. The DMR for June 2023 includes NODI code 9 (indicating “conditional monitoring – not required this period”) for these parameters. EPA notes that these parameters are required to be monitored and reported quarterly, and the Permittee reported results for these parameters for during the quarter (for sampling conducted in May 2023). However, the Permittee did not comply with the Permit requirement to include additional monitoring in its reporting. The table below compares the values in the lab report for the June 2023 sample to those reported in the DMR for the second

quarter of 2023. For calcium, sodium, sodium adsorption ratio, potassium, chloride, fluoride, carbonate ion, and sulfate, the June sample result is higher than the result reported in the May 2023 DMR for the second quarter of 2023.

Comparison of June 2023 Laboratory Report with Second Quarter 2023 DMR Values

Parameter	DMR Value for second quarter of 2023 (reported for May 2023)	Value from Lab Report for June 28, 2023, Sample
Hardness, total [as CaCO ₃]	4.05 mg/L	4 mg/L
Calcium, total [as Ca]	1.2 mg/L	1.25 mg/L
Magnesium, total [as Mg]	0.3 mg/L	< 0.4 mg/L
Sodium, total [as Na]	1390 mg/L	1699 mg/L
Sodium adsorption ratio	293 (ratio)	1995.4
Potassium, total [as K]	2.9 mg/L	6.66 mg/L
Chloride [as Cl]	337 mg/L	358 mg/L
Fluoride, total [as F]	6.82 mg/L	9.23 mg/L
Iron, total [as Fe]	0.06 mg/L	0.05 mg/L
Bicarbonate as [CaCO ₃]	1630 mg/L	1598 mg/L
Carbonate ion [as CaCO ₃]	59.6 mg/L	280 mg/L
Sulfate	965 mg/L	970 mg/L

Permit Requirements

Section 4 of the Permit states, “[s]elf-monitoring shall be conducted effective immediately and lasting through the effective term of this Permit. Sampling and test procedures for pollutants listed in this section shall be in accordance with guidelines promulgated by the Administrator in 40 CFR Part 136, as required in 40 CFR Part 122.41(j). At a minimum, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report (DMR) that no discharge occurred. See Reporting of Monitoring Results, section 6.4, for more details.

Table 3 – Monitoring and Reporting Requirements for Outfalls 002 and 003

Effluent Characteristic	Monitoring Frequency	Sample Type a/	Data Type a/

Calcium, mg/L	Quarterly f/	Grab	Daily Maximum
Iron, mg/L	Quarterly f/	Grab	Daily Maximum
Magnesium, mg/L	Quarterly f/	Grab	Daily Maximum
Potassium, mg/L	Quarterly f/	Grab	Daily Maximum
Sodium, mg/L	Quarterly f/	Grab	Daily Maximum
Bicarbonate, mg/L	Quarterly f/	Grab	Daily Maximum
Carbonate, mg/L	Quarterly f/	Grab	Daily Maximum
Chloride, mg/L	Quarterly f/	Grab	Daily Maximum
Fluoride, mg/L	Quarterly f/	Grab	Daily Maximum
Sulfate, mg/L	Quarterly f/	Grab	Daily Maximum
Sodium Adsorption Ratio (SAR), g/	Quarterly f/	Calculation	Daily Maximum
Hardness, mg/L h/	Quarterly f/	Calculation	Daily Maximum

a/ See section 1 for definitions of terms.

f/ After two years (eight quarters) of monitoring, the Permittee may request, in writing, a reduction in monitoring frequency for this parameter. Any such request must be sent to EPA at the address in this footnote. EPA may approve or deny the

request based on the monitoring results and other information available without further public notice or major modification of the Permit. If approved, EPA may reduce the monitoring frequency to either semi-annually or annually.

U.S. EPA, Region 8
(8WD-CWW)
Attention: Wastewater Section
1595 Wynkoop Street
Denver, Colorado 80202-1129

g/ SAR can be calculated from the calcium, magnesium, and sodium measurements.

h/ Hardness can be calculated from the calcium and magnesium measurements...”

Section 6.6 of the Permit states, “Additional Monitoring by the Permittee: If the Permittee monitors any pollutant in accordance with section 6.1 more frequently than required by this Permit, using test procedures approved under 40 CFR Part 136, 40 CFR Part 503, or as specified in this Permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.”

Corrective Action

Include in the DMRs the results of any monitoring that has been conducted for any parameters that have been monitored more frequently than required, in accordance with the applicable sections of the Permit. For parameters for which the permit requires monitoring and indicates data type “Daily Maximum,” report the maximum daily value of all sample results collected during the monitoring period. Update the requisite quarterly and/or monthly DMRs to reflect appropriate reporting for any parameters monitored more frequently than required. In a response, provide a copy of the updated DMR(s).

Finding #5: The Permittee reported an incorrect NODI code in its DMR.

According to the facility representatives, at the time of the inspection, Outfall 003 and its associated mine shaft had not been constructed. From April 2022 through November 2024, all DMRs for outfall 003 include NODI code C (No Discharge) with a single exception. The DMR for the monitoring period ending on 6/30/2022 includes NODI code B (Below Detection Limit/No Detection) for total fluoride at Outfall 003.

Permit Requirement

Section 6.4 of the Permit states, “...[t]he Permittee must sign and certify all electronic submissions in accordance with the requirements of section 8.7 of this Permit...”

Section 8.7.4 of the Permit states, “Certification: Any person signing a document under this section shall make the following certification: *‘I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.’*”

Corrective Action

Revise the June 2022 DMR to include the correct NODI code for total fluoride at Outfall 003. In a response, provide a copy of the updated DMR(s).

Finding #6: The Permittee has not determined the maximum flow rate of the bag filters used to control TSS in the discharge and therefore cannot ensure the maximum flow rate is not exceeded.

The sock filters that the Permittee is using to filter effluent for TSS control are manufactured and intended for filtering dust from air emissions; therefore, the maximum flow rate for liquid effluent through the filters is unknown. It is not possible for the Permittee to ensure that the maximum flow rate is not exceeded if the maximum rate is not known. The Facility representatives stated that they are testing different filter mechanisms but, in the meantime, will continue to use the air filter socks to filter the effluent.

Permit Requirement

Section 5.1.1 of the Permit states, “TSS: If necessary, BMPs for the use of bag filters shall include, but are not limited to, the following:

- Ensure that the maximum flow rate of the bag filters are not exceeded. If the discharge flow rate is approaching or exceeding the maximum flow rate of the bag filters, re-structure the outfall as needed;
- Check bag filters weekly while discharging to ensure that they are not fouled and replace as needed. If the bag filter is at a stage where it may be overdue for replacement at the next weekly check, replace bag at that inspection (i.e., before it is overdue for replacement);
- When removing bag filters from piping, use caution to avoid dumping/discharge of collected sediment/slurry back into the receiving water;
- Dispose of used/fouled bag filters appropriately (see section 7.7); and
- Install bag filters at additional outfalls if discharge water quality is approaching TSS limits.”

Corrective Action

Ensure that the use of bag filters to control TSS at the outfalls is in accordance with all requirements of the permit. In a response, describe how AGC will determine the maximum flow rate of the bag filters used for TSS control and ensure that the maximum flow rate of the bag filters is not exceeded.

Finding #7: The Permittee was not cleaning and calibrating pH sensors monthly.

The facility representatives stated that the facility had recently changed the type of pH probes used in their pH adjustment system such that monthly cleaning and recalibration was no longer necessary. The facility representatives also stated, and clarified in a follow-up email dated December 20, 2024, that an Automation Specialist employed by AGC is responsible for programming all meters, sensors, and other equipment throughout the mine site; this employee checks the pH probes against a handheld meter.

AGC’s response to EPA’s November 8, 2024, request for model information for the inline pH probes stated, “PH PROBE S-3-2774-1 PH SIGMET (E-31 ACID SYSTEM).” The operating instructions for the Signet 277X series Threaded DryLoc pH and ORP electrodes (<https://s3.amazonaws.com/zcom-media/sites/a0i0L00000VJ0SJQA1/media/mediamanager/gfps-2744-manual-series-dryloc-ph-orp-electrodes-en.pdf>) indicate that the system requires routine maintenance including calibration.

Permit Requirements

Section 5.1.2 of the Permit states, “pH: If necessary, BMPs for the pH adjustment process shall include, but are not limited to, the following:

- Calibrate handheld pH meters regularly, per the manufacturer;
- Check calibration of pH sensors in automatic injection control against handheld pH meters at least monthly while discharging;

- Clean pH sensors in automatic injection controls regularly. At a minimum, these pH sensors shall be cleaned on a monthly basis while discharging. Always check pH calibration of sensors after cleaning;
- If pH violations continue to occur at a particular outfall, consider adjusting the pH setpoint at that outfall to ensure compliance with Permit limitations; and
- Install pH injection controls at additional outfalls if discharge water quality is approaching pH limits.”

Section 6.8 of the Permit states, “Retention of Records: The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least three years from the date of the sample, measurement, report or application...”

Section 7.5.2 of the Permit states, “The Permittee shall maintain a log in either paper or electronic format recording information obtained during inspection activities. At a minimum, the notebook shall include the following:

7.5.2.5 Records of the Operational BMP inspections (see section 5.1). This may include, but is not limited to, recording the outfall and date of: bag filter checks and replacements, pH sensor calibrations, pH sensor cleanings, pH setpoint adjustments, and additions to or removal of bag filter/pH adjustment controls to outfalls...”

Corrective Action

Ensure that the pH probes currently used in the acid adjustment system are being calibrated in accordance with the manufacturer’s instructions. In a response, either provide documentation from the manufacturer of the pH probes indicating that calibration is not required, or confirm that the pH sensors will be calibrated, and records of the calibration maintained, in accordance with the Permit requirements.

Finding #8: The Permittee’s sample collection method may not result in representative samples.

Wastewater flows through a manifold that distributes the flow to four filter units, each of which is equipped with an air baghouse filter sock (photo 31). The facility stated that individual filter socks are changed when they are full, as evidenced by water spraying out through the seams in the filter. Discharge monitoring samples are collected by placing the sample container below one of the socks. This sampling procedure may not result in collection of a sample that is representative of the entire discharge, as the amount of sediment build-up and the flow rate through the filter could vary across the different outflow pipes.

Permit Requirement

Section 6.1 of the Permit states, “Representative Sampling: All samples taken in compliance with the monitoring requirements established under section 4 shall be representative. Effluent samples shall be collected from the effluent stream prior to discharge into the receiving waters. Any influent samples shall be taken of the influent stream at the first influent access point, and if feasible prior to entering any treatment unit. Any receiving water samples shall be collected in a representative location of the receiving stream. Samples and measurements shall be representative of the volume and nature of the monitored discharge, influent, receiving stream, or other monitored location. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to use or disposal practice.”

Corrective Action

Ensure samples collected are representative of the discharge. In a response, describe how the existing sample collection protocols result in collection of a representative sample or how the sampling protocols will be revised to ensure representative sampling in accordance with the Permit.

Finding #9: Untreated wastewater was leaking from the treatment system at Outfall 002.

The inspectors observed a potential flow path for untreated wastewater to enter the receiving stream downstream of the monitoring location. Wastewater was leaking from the mixing unit before the acid injection location. Untreated wastewater was accumulated in the west end of the pH mixing building (photo 30) and out of the building at the northwest corner (photo 29). The inspectors observed wastewater flowing on the ground from the northwest corner of the pH mixing building approximately 10 feet east toward Sand Wash. The wastewater was not actively flowing into the receiving stream, but erosion and soil discoloration indicated an apparent flow path for wastewater flowing from the building into Sand Wash at a point north (downstream) of the outfall structure.

Permit Requirements

Section 6.1 of the Permit states, “Representative Sampling: All samples taken in compliance with the monitoring requirements established under section 4 shall be representative. Effluent samples shall be collected from the effluent stream prior to discharge into the receiving waters. Any influent samples shall be taken of the influent stream at the first influent access point, and if feasible prior to entering any treatment unit. Any receiving water samples shall be collected in a representative location of the receiving stream. Samples and measurements shall be representative of the volume and nature of the monitored discharge, influent, receiving stream, or other monitored location. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to use or disposal practice.”

Section 7.6 of the Permit states, “7.6 Proper Operation and Maintenance: The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the Permit. Proper operation and maintenance also includes application of appropriate Operational BMPs (see section 5.1).”

Corrective Action

Repair the leak in the wastewater conveyance system and take immediate steps to ensure untreated wastewater is not discharged to Sand Wash. In a response, provide photographs and a description of the repair, including the repair date, and describe how AGC will ensure that the system is checked for leaks during weekly inspections, including a protocol for ensuring that leaks will be reported immediately upon discovery, untreated wastewater will be prevented from entering Sand Wash, and leaks will be repaired as soon as possible.

Finding #10: The Permittee’s SWPPP inspection documentation does not include all required information.

In a response to the EPA’s request for information after the inspection, the Permittee provided a copy of the Quarterly SWPPP Inspection Report for the Cottonwood Mine for the 3rd quarter of 2023. The SWPPP inspection report is dated September 26, 2024. The inspection report did not document the following items required to be inspected and included in inspection documentation:

- The time of the inspection

- The signature of the inspector
- Observations relating to the implementation of control measures at the facility, including evidence of, or the potential for, pollutants entering the drainage system. For example, untreated wastewater was observed leaking from the treatment system into the facility's stormwater drainage area one week prior to the SWPPP inspection (see Finding #9).
- A statement, signed and certified in accordance with section 5.2.6.

Permit Requirements

Section 5.2.9 of the Permit states, "The SWPPP must document procedures for performing, as appropriate, the types of inspections specified by this Permit. All inspections must be performed by qualified personnel, including at least one member of the stormwater pollution prevention team (see section 5.2.2.1). For each type of inspection performed, the SWPPP must identify:

- Person(s) or positions of person(s) responsible for the inspection
- Schedules for conducting inspections
- Specific items to be covered by the inspection, including schedules for specific discharge points

5.2.9.1 Routine facility inspections must be conducted at a reasonable frequency but no less than quarterly (i.e., once each calendar quarter); however this frequency can and should be increased to monthly or even weekly, if circumstances warrant. Increased frequency may be appropriate for some types of equipment, processes and stormwater control measures, or areas of the facility with significant activities and materials exposed to stormwater. At least once each calendar year, the routine inspection must be conducted during a period of stormwater runoff (e.g., during or just after a storm or snowmelt event).

5.2.9.1.1 Areas that Must Be Inspected: During normal facility operating hours, qualified personnel must conduct inspections of areas of the facility covered by the requirements in this permit, including, but not limited to, the following:

- Areas where industrial materials or activities are exposed to stormwater;
- Areas identified in the SWPPP and those that are potential pollutant sources (see section 5.2.3);
- Areas where spills and leaks have occurred in the past three years;
- Discharge points; and
- Control measures used to comply with the effluent limits contained in this permit.

5.2.9.1.2 What Must Be Looked for During an Inspection: During the inspection, the qualified personnel must examine or look out for the following:

- Good Housekeeping inspections: All inspection requirements listed in section 5.2.4.1 must be performed. Additionally, inspect all outdoor areas associated with industrial activity, stormwater discharges, etc. Clean and dispose of any identified debris, wastes, and spilled/leaked materials.
- Preventative Maintenance/Material Handling inspections: All inspection requirements listed in section 5.2.4.2 must be performed.
- Industrial materials, residue or trash that may have or could come into contact with stormwater.
- Leaks or spills from industrial equipment, drums, tanks and other containers.
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site.
- Tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas.
- Structural and non-structural control measures needing replacement, maintenance or repair.

- During an inspection occurring during a stormwater event or discharge, control measures must be observed to ensure they are functioning correctly. Discharge points must also be observed during this inspection. If such discharge locations are inaccessible, nearby downstream locations must be inspected.
- Sources of run-on into industrial areas of the facility.
- A visual inspection of equipment needed to prevent pollutant discharges, such as spill response equipment, shall be made to confirm that it is readily available and in proper working order.

5.2.9.1.3 Routine Facility Inspection Documentation: Findings of the facility inspections must be documented and maintained with the SWPPP. Any corrective actions required as a result of a routine facility inspection must be promptly taken. Do not submit routine facility inspection reports to EPA unless specifically requested to do so. However, they must be summarized in the annual report per section 5.2.10. Document all findings, including but not limited to, the following information.

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- The areas of the facility that were inspected;
- Weather information;
- All observations relating to the implementation of control measures at the facility, including:
 - A description of any discharges occurring at the time of the inspection;
 - Any previously unidentified discharges from and/or pollutants at the facility;
 - Any evidence of, or the potential for, pollutants entering the drainage system;
 - Observations regarding the physical condition of and around all discharge points, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water; and
 - Any control measures needing maintenance, repairs, or replacement;
- Any additional control measures needed to comply with permit requirements;
- The precipitation event date and depth, duration and flow rate of discharge from the stormwater lagoon outfall, if a discharge occurs;
- Any incidents of noncompliance; and
- A statement, signed and certified in accordance with section 5.2.6.”

Section 5.2.6 of the Permit states, “The SWPPP, including changes to the SWPPP to document any corrective actions or advanced implementation measures taken, and any other compliance documentation required under the SWPPP such as the Annual Report, must be signed in accordance with section 8.7.2. All other changes to the SWPPP must be signed and dated by the person preparing the change or documentation.”

Corrective Action

Ensure that facility personnel conduct and document comprehensive SWPPP inspections in accordance with all requirements identified in the permit. In a response, describe the procedure AGC will follow to ensure that SWPPP inspection records document a complete inspection and provide an example of the revised SWPPP inspection report that addresses all Permit requirements.

Recommendation

Document SWPPP inspections using a checklist that includes questions and evaluation fields that address all requirements for SWPPP inspections in the Permit and the facility's site-specific SWPPP.

Finding #11: The Permittee was discharging process wastewater.

Outfall 002 was actively discharging wastewater that included pumped drainage from a uintaite drying bed near shaft CW-3 (photo 33). The wastestream is generated through drainage of wet uintaite removed from the mine. The wet material is spread on the ground and water drains into an adjacent pond. Floating uintaite is skimmed off the pond surface and the remaining wastewater is periodically pumped through the pH adjustment system to the outfall.

The permit Statement of Basis describes the drying beds at the mine but indicates that the water is evaporated and specifically states in reference to the drying beds, "This process does not result in any discharge." Section 3.3 of the Statement of Basis also states, "All discharges covered by the permit are groundwater dewatering only; no process wastewater is generated by the facility or authorized by the permit."

Permit Requirement

Part 3 of the permit, Table 2 – Effluent Limitations for Outfalls 002 and 003, states, "There shall be **no** discharge of sanitary wastewater, process wastewater, or contact cooling water."

Regulatory Requirements

The federal NPDES regulations at 40 CFR 122.2 and 40 CFR 401.11(q) state, "Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product."

Corrective Action

Immediately discontinue the discharge of process wastewater that results from drying wet uintaite on the ground surface, unless and until AGC requests revision to its NPDES permit and EPA issues a revised permit to cover this discharge. In a response, describe the steps AGC has taken to discontinue the discharge of this process wastewater stream.