Official Draft Public Notice Version **November 25, 2025**
The findings, determinations, and assertions contained in this document are not final and subject to change following the public comment period.

FACT SHEET
U. S. STEEL CORPORATION
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES)
UPDES DISCHARGE PERMIT RENEWAL
UPDES PERMIT NUMBER: UT0000361
MINOR INDUSTRIAL FACILITY

FACILITY CONTACT INFORMATION

Contact: Position:	Tishie Woodwell, Signatory Vice President – Environmental U. S. Steel Corporation
Contact: Position:	Eric Williams Manager - Water & Waste U. S. Steel Corporation
Phone:	(412) 302-3624
Permittee Name:	U. S. Steel Corporation
Facility Name:	U. S. Steel Corporation – Treatment Unit
Mailing Address:	600 Grant Street, Environmental Room 1774 Pittsburg, PA 15219
Facility Address:	140 West 1400 North Vineyard, UT 84059

DESCRIPTION OF FACILITY & BACKGROUND

U. S. Steel Corporation operates a groundwater treatment unit located onsite of the Anderson Geneva, LLC property, which was previously permitted and co-operated under the name GPM Enviro Project Manager, LLC (GPM), and was a defunct integrated steel mill located in the town of Vineyard, Utah, just east of Utah Lake in Utah County at the above-referenced facility address (facility). As of 2010, the steel making machinery and mill had been dismantled and removed off site, and all of the buildings and other structures at the facility have since been demolished. 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. While Anderson Geneva, LLC and GPM will no longer be co-operating the facility, U. S. Steel Corporation is seeking a renewal of the above-referenced UPDES Permit (Permit) for continued authorization of wastewater discharges from the onsite treatment unit as appropriate.

Regarding wastewater discharges at the facility, the only operation currently remaining onsite is the ongoing Resource Conservation and Recovery Act (RCRA) Corrective Action Management Unit (CAMU) Groundwater Treatment Unit for discharges via Outfall 005-B. Due to historical groundwater impacts on site, monitoring wells were previously installed for long term monitoring and treatment of the impacted groundwater proximal to the RCRA CAMU as primarily and historically regulated by the Utah Division of

Waste Management & Radiation Control. A Granular Activated Carbon (GAC) Treatment Unit has been utilized for many years to treat the groundwater leachate prior to any discharges. The current GAC Treatment Unit was installed in late 2019 along with the relocated Outfall 005-B as part of a previous Permit modification process to replace the original GAC unit and Outfall location. The treated water from the newer GAC unit is batch discharged intermittently via Outfall 005-B to an unclassified drainage ditch on the property, which then flows toward a site stormwater collection system and pond adjacent to Utah Lake.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

There are no changes in the Permit other than the name change from Anderson Geneva, LLC (and formerly GPM) to U. S. Steel Corporation. All Permit limitations and requirements remain unchanged.

DISCHARGE

DESCRIPTION OF DISCHARGE

The facility has been reporting self-monitoring results via Discharge Monitoring Report (DMR) forms on a monthly basis as required. A summary of the past five years of effluent discharge data has been included as an attachment to this Fact Sheet. The lone Permit Outfall remains unchanged as follows:

Outfall	Description of Discharge Point
005-B	Located at latitude 40° 19' 21.9576" N and longitude 111° 45' 23.7528" W. Discharge is from the carbon filtration treatment unit that treats leachate from a RCRA Corrective Action Management Unit.

RECEIVING WATERS AND STREAM CLASSIFICATION

Outfall 005-B discharges are to an onsite drainage ditch, which flows toward a stormwater pond adjacent to Utah Lake. There is no direct discharge from Outfall 005-B to Utah Lake. Therefore, according to Utah Administrative Code (UAC) R317-2-13.13 and UAC R317-2-10, the receiving water is categorized as an Unclassified Ditch with default classifications as follows:

Class 2B -- Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.

Class 3D -- Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.

Class 3E -- Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

According to Utah's 2024 303(d) Water Quality Assessment Report, the receiving water for the discharge, "Unclassified Waters: All waters not specifically classified are presumptively classified," is not listed as impaired for any parameters.

Protection of Downstream Uses

Per UAC R317-2-8, all actions to control waste discharges under these rules shall be modified as necessary to protect downstream designated uses. Utah Lake is the immediately downstream receiving water body for this discharge.

Utah Lake (Utah Lake other than Provo Bay, UT-L-16020201-004_01) is listed for harmful algal blooms, total dissolved solids (TDS), total phosphorus, E. coli, Eutrophication, and PCBs in fish tissue on the 2024 303(d) list of impaired waterbodies. The receiving water currently does not have approved TMDLs for any of these constituents. Although there are no approved TMDLs for any of these impairments, there is an ongoing Utah Lake Water Quality Study effort with the objective to develop numeric nutrient criteria in the future for discharges into Utah Lake and Provo Bay. Therefore, considering these ongoing efforts, as well as previous Permit requirements, monitoring for both TDS and total phosphorus will remain in the Permit as appropriate. While TDS limitations have previously been included and remain in the Permit, total phosphorus will continue to be monitored without an associated limit as the facility is not considered a significant source of the phosphorus. E. coli was more recently added to the list of Utah Lake impairments and is not considered a past or present parameter of concern from the facility discharge and current groundwater treatment operations and therefore, has not been included in the Permit.

BASIS FOR EFFLUENT LIMITATIONS

In accordance with regulations promulgated in 40 Code of Federal Regulations (40 CFR) Part 122.44 and UAC R317-8-4.2, effluent limitations are derived from technology-based effluent limitations guidelines, Utah Secondary Treatment Standards (UAC R317-1-3.2) or Utah Water Quality Standards (UAC R317-2) as applicable. In cases where multiple limits have been developed, those that are more stringent apply. In cases where no limits or multiple limits have been developed, Best Professional Judgment (BPJ) of the permitting authority may be used where applicable. Best Professional Judgment, or BPJ, refers to a discretionary, best professional decision made by the Permit writer based upon precedent, prevailing regulatory standards, or other relevant information.

Permit limits can also be derived from the WLA, which incorporates Secondary Treatment Standards, Water Quality Standards, including any applicable TMDL impairments as appropriate, Antidegradation Reviews (ADR), and designated uses into a water quality model that projects the effects of discharge concentrations on receiving water quality. Effluent limitations are those that the model demonstrates are sufficient to meet State water quality standards in the receiving waters. During this Permit renewal development, a WLA and ADR were completed as appropriate and determined that this discharge will not cause a violation of Water Quality Standards. An ADR Level I review was performed and concluded that an ADR Level II review was not required at this time since water quality will not be further lowered by the proposed activity, as per UAC R317-2-3.5.b.1.(b). The WLA indicates that the effluent limitations will be sufficiently protective of water quality, in order to meet Utah Water Quality Standards in the receiving waters. The WLA with ADR information is attached to this Fact Sheet.

The following list is the basis for the Permit Outfall effluent limitations:

1) The daily minimum and daily maximum limitations for pH, as well as the Turbidity increase requirements, are derived from the Utah Water Quality Standards found in UAC R317-2-14.

2) Oil & Grease limitations, requirements and effluent concentrations are based upon BPJ of the permitting authority to be consistent with other similar type permits in Utah.

3) TDS are initially limited in concentrations by the Utah Water Quality Standard of 1200 mg/L found in UAC R317-2-14 to further support the aforementioned Utah Lake TMDL efforts. However, if TDS concentrations in the effluent exceeds 1200 mg/L, then the facility is instead limited in TDS

loading to 231 lbs/day, which was previously calculated using the Total Effluent Flow Limitation as appropriate. The conditional TDS limitations remain unchanged from the previous Permit and are based upon the high variability of TDS concentrations naturally occurring in groundwater at the facility. Since no assimilative capacity exists for the immediate receiving water at the facility, either the TDS concentration value, or the calculated loading equivalent, will need to be consistently met at the discharging Outfall.

4) The effluent discharge loading limitations for Ammonia, Phenols, Benzene, Naphthalene, and Benzo(a)pyrene have remained unchanged in the Permit since early treatment unit operations at the RCRA CAMU facility with loading calculations following 40 CFR Part 420 for Iron and Steel Manufacturing, and more specifically the Cokemaking Subcategory Subpart A Tier One requirements, as previously applied in the year 2000.

5) The effluent flow limitation remains unchanged as provided previously by the facility in 2019 and is based upon the maximum average design flow of the current treatment unit.

Reasonable Potential Analysis
Since January 1, 2016, Utah Division of Water Quality (DWQ) has conducted a reasonable potential (RP) analysis on all new and renewal applications received after that date. RP analysis 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 provide a frame work for what routine monitoring or effluent limitations are required.

Typically, an RP analysis is performed on common metals parameters (metals) to determine if there is reasonable potential for the discharge to exceed the applicable water quality standards. Historically, metals have not been considered parameters of concern from the facility discharge and have not been included in past monitoring efforts. However, during the development of this Permit, the facility agreed to monitor the effluent for metals and provide the results to DWQ. Although limited to a single metals sampling event, a simple evaluation was conducted as an RP analysis, which has been included at the end of this Fact Sheet.

The Permit limitations remain unchanged as follows:

Parameter, Units	Effluent Limitations *a			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
Total Effluent Flow, million gallons per day (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 *f	--	--	--	Report

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are the same as in the previous Permit. The Permit requires reports to be submitted monthly on DMR forms due 28 days after the end of the monitoring period. Effective January 1, 2017, monitoring results shall be submitted using NetDMR unless the permittee has successfully petitioned for an exception. Lab sheets for biomonitoring, metals and toxic organics shall be attached to the DMRs when applicable.

Self-Monitoring and Reporting Requirements *a			
Parameter	Frequency	Sample Type	Units
Total Flow, *b	Continuous	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 *f	Monthly	Grab	mg/L
Oil & Grease *d	Monthly	Visual/Grab	Yes/No, mg/L

*a See Definitions, Part VIII, 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.

*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 during discharge events. 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 from the discharging Outfall and from the receiving water whenever possible to demonstrate that there is not an increase of more than 10 nephelometric turbidity units (NTU) over the receiving waters, when applicable.

*f Additional pollutants are being sampled in support of ongoing work for the TMDL currently underway for Utah Lake. The Pollutants of Concern (POC) will be monitored and reported on a monthly basis by facility, but will not have an associated limit for the POC.

BIOSOLIDS

The State of Utah has adopted the 40 C.F.R. § 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, this facility does not receive, generate, treat or dispose of biosolids. Therefore 40 C.F.R. § 503 shall not apply.

STORM WATER

Separate storm water permits may be required based on the types of activities occurring on site. Permit coverage under the Multi Sector General Permit (MSGP) for Storm Water Discharges from Industrial Activities is required based on the Standard Industrial Classification (SIC) code for the facility and the types of industrial activities occurring for which the facility has previously obtained separate MSGP coverage as appropriate.

Permit coverage under the Construction General Storm Water Permit (CGP) is required for any construction at the facility which disturb an acre or more, or is part of a common plan of development or sale that is an acre or greater, and which is not part of active mining activities. A Notice of Intent (NOI) is required to obtain a construction storm water permit prior to the period of construction. Information on storm water permit requirements can be found at http://stormwater.utah.gov.

PRETREATMENT REQUIREMENTS

The facility does not discharge process wastewater to a Publicly Owned Treatment Works (POTW). However, any wastewater discharged to a sanitary sewer or POTW is subject to Federal, State and local regulations. Pursuant to section 307 of the Clean Water Act, the Permittee shall comply with all applicable Federal General Pretreatment Regulations promulgated, found in 40 C.F.R. § 403 and the State Pretreatment Requirements found in UAC R317-8-8.

In addition, in accordance with 40 C.F.R. § 403.12(p)(1), the Permittee must notify the POTW, the EPA Regional Waste Management Director, the DWQ Director and the State hazardous waste authorities in writing if the facility discharges any substance into a POTW that if otherwise disposed of would be considered a hazardous waste under 40 C.F.R. § 261. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).

BIOMONITORING REQUIREMENTS

A nationwide effort to control toxic discharges where effluent toxicity is an existing or potential concern is regulated in accordance with the Utah Pollutant Discharge Elimination System Permit and Enforcement Guidance Document for Whole Effluent Toxicity Control (biomonitoring), dated February 2018. Authority to require effluent biomonitoring is provided in Permit Conditions, UAC R317-8-4.2, Permit Provisions, UAC R317-8-5.3 and Water Quality Standards, UAC R317-2-5 and R317 -2-7.2.

The permittee is categorized as a minor industrial facility that will be discharging an infrequent amount of effluent, in which toxicity is neither an existing concern, nor likely to be present. Also, the receiving water is a drainage ditch which is regularly dry; therefore, there is not any available data to conclude that the irrigation ditch is impaired. Based on these considerations, and the absence of receiving stream water quality monitoring data, there is no reasonable potential for toxicity in the permittee's discharge (per State of Utah Permitting and Enforcement Guidance Document for WET Control). As such, there will be no numerical WET limitations or WET monitoring requirements in this Permit. However, the Permit will contain a toxicity limitation re-opener provision that allows for modification of the Permit should additional information indicate the presence of toxicity in the discharge.

PERMIT DURATION

It is recommended that this Permit be effective for a duration of five (5) years.

Drafted and Reviewed by
Jeff Studenka, Discharge Permit Writer
Daniel Griffin, Biosolids
Jennifer Robinson, Pretreatment
Lonnie Shull, Biomonitoring
Jordan Bryant, Storm Water
Scott Daly, TMDL/Watershed Protection
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Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE INFORMATION (to be updated after)

Began: Month Day, Year
Ended: Month Day, Year

Comments will be received at: 195 North 1950 West
PO Box 144870
Salt Lake City, UT 84114-4870

The Public Notice of the draft Permit was published on State of Utah and/or DWQ's website for at least 30 days as required.

During the public notice and 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 FACT SHEET

During finalization of the Permit certain dates, spelling edits and minor language corrections were completed. Due to the nature of these changes, they are considered minor changes and the Permit is not required to be re Public Noticed as provided in UAC R317-8-5.6(3)

Responsiveness Summary

(If applicable, explain any comments received and response sent. Actual letters can be referenced, but not required to be included).

DWQ-2025-006610

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ATTACHMENT 1

Effluent Monitoring Data

Permit Effluent Monitoring Data Summary 2020-2025

Parameter	Flow		pH		O & G	Ammonia	Phenolics	Benzene	Benzo-a	Naphtha	TDS	
Units	MGD	MGD	SU	SU	mg/L	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	mg/L	lbs/day
Limitations	Avg	Max	Min	Max	Max	Max	Max	Max	Max	Max	Avg	Max
Outfall 005-B	0.004	0.022	6.5	9	5.0	4.12	0.05	0.088	0.004	0.012	5450	41.22

Note: No effluent permit violations during the past five-year reporting period.

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ATTACHMENT 2

Wasteload Analysis Information
(DWQ-2025-006401 & DWQ-2025-006402)

Utah Division of Water Quality
Statement of Basis
ADDENDUM
Wasteload Analysis and Antidegradation Level I Review

Date:	**August 12, 2025**
Prepared by:	**Suzan Tahir** **Standards and Technical Services Section**
Facility:	**U. S. Steel Corporation (formerly Anderson-Geneva/GPM Enviro)** **UPDES Permit No. UT0000361**
Receiving Water:	**Discharge is from a gray PVC pipe into a dry ditch that flows into a Stormwater Pond adjacent to Utah Lake (2B, 3D, 3E)**

This addendum summarizes the wasteload analysis that was performed to determine water quality based effluent limits (WQBEL) for this discharge. Wasteload analyses are performed to determine point source effluent limitations necessary to maintain designated beneficial uses by evaluating projected effects of discharge concentrations on in-stream water quality. The wasteload analysis also takes into account downstream designated uses (UAC R317-2-8). Projected concentrations are compared to numeric water quality standards to determine acceptability. The numeric criteria in this wasteload analysis may be modified by narrative criteria and other conditions determined by staff of the Division of Water Quality.

Discharge

Outfall 005-B: Upon Treatment of groundwater and leachate collected from a Corrective Action Management Unit (CAMU) as part of the Resource Conservation and Recovery Act (RCRA) permitted facility through the Utah Division of Waste Management & Radiation Control.

The maximum design flow rate for the facility is 0.036 million gallons per day (MGD) and the daily average flow rate is 0.021 MGD.

Receiving Water

The receiving water for Outfall 005-B is a dry ditch that flows into a stormwater pond adjacent to Utah Lake. There is no direct discharge from Outfall 005-B to Utah Lake.

Per UAC R317-2-13.13, the designated beneficial uses fall under the category, *Unclassified Waters: All waters not specifically classified are presumptively classified as 2B, 3D.*

- Class 2B - Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to,

wading, hunting, and fishing.

- Class 3D - Protected for waterfowl, shore birds and other water-oriented wildlife not included in Classes 3A, 3B, or 3C, including the necessary aquatic organisms in their food chain.

Per UAC R317-2-10, the designated beneficial uses fall under the category, *All drainage canals and ditches statewide, except as otherwise designated: are 2B, 3E.*

- Class 3E - Severely habitat-limited waters. Narrative standards will be applied to protect these waters for aquatic wildlife.

Total Maximum Daily Load (TMDL)

According to the Utah's Final 2024 Integrated Report on Water Quality dated April 30, 2024 (UDWQ, 2024), the receiving water for Outfall 005-B discharge, "*Unclassified Waters: All waters not specifically classified are presumptively classified* (AU name: *NA*, AU ID: *NA*)," was not listed as impaired for any parameters.

Protection of Downstream Uses

Per UAC R317-2-8, *all actions to control waste discharges under these rules shall be modified as necessary to protect downstream designated uses*. Utah Lake is the immediately downstream receiving water body for this discharge.

Utah Lake (Utah Lake other than Provo Bay, UT-L-16020201-004_01) is listed for harmful algal blooms, total dissolved solids (TDS), total phosphorus, E. coli, Eutrophication and PCBs in fish tissue on the 2024 303(d) list of impaired waterbodies. The receiving water currently does not have approved TMDLs for any of these constituents. Although there are no approved TMDLs for any of these impairments, there is an ongoing Utah Lake Water Quality Study effort with the objective to develop numeric nutrient criteria in the future for discharges into Utah Lake and Provo Bay. Therefore, considering these ongoing efforts, as well as both previous and current permit requirements, monitoring 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 parameter of concern from the facility discharge and current groundwater treatment operations and therefore, has not been included in the permit.

Regarding TDS, the Utah water quality standard is 1200 mg/l. Since no assimilative capacity exists for the facility receiving water, either the TDS standard of 1200 mg/l, or the calculated loading equivalent will need to be continually met at end-of-pipe.

Mixing zone

Per UAC R317-2-5, the maximum allowable mixing zone is 15 minutes of travel time for acute conditions, not to exceed 50% of stream width, and 2,500 feet for chronic conditions. Water

quality standards must be met at the end of the regulatory mixing zone. For this permit renewal, the critical background flow is assumed to be zero and end-of-pipe conditions must be met. Therefore, no mixing was considered.

Parameters of Concern

The potential parameters of concern identified for the discharge/receiving water remain unchanged from the current UPDES Permit and include TDS, total phosphorus and ammonia as determined in consultation with the UPDES Permit Writer.

WET Limits

The percent of effluent in the receiving water in a fully mixed condition, and acute and chronic dilution in a not fully mixed condition are calculated in the WLA in order to generate WET limits where applicable. The LC_{50} (lethal concentration, 50%) percent effluent for acute toxicity and the IC_{25} (inhibition concentration, 25%) percent effluent for chronic toxicity, as determined by the WET test, needs to be below the WET limits, as determined by the WLA. The WET limit for LC_{50} is typically 100% effluent and does not need to be determined by the WLA. If chronic WET testing is implemented in the permit, the IC_{25} WET limits should also be based on 100% effluent.

Wasteload Allocation Methods

Effluent limits were determined for conservative constituents using a simple mass balance mixing analysis. The water quality standard for chronic ammonia toxicity is dependent on temperature and pH, and the water quality standard for acute ammonia toxicity is dependent on pH. The Utah Lake Model uses mixing and ammonia decay to determine ammonia effluent limits. The mass balance analysis and resulting effluent limits are summarized in Appendix A.

Models and supporting documentation are available for review upon request.

Antidegradation Level I Review

The objective of the Level I ADR is to ensure the protection of existing uses, defined as the beneficial uses attained in the receiving water on or after November 28, 1975. No evidence is known that the existing uses deviate from the designated beneficial uses for the receiving water. Therefore, the beneficial uses will be protected if the discharge remains below the WQBELs presented in this wasteload.

Antidegradation Level II Review

A Level II Antidegradation Review (ADR) is not required for this facility, as there is no increase in concentration or load over that authorized in the current permit.

Site Map

Outfall 005-B

Documents:

WLA Document : US Steel old Anderson Geneva_WLA_2025.docx
Wasteload Analysis:

US Steel old Anderson Geneva _WLA_2025.xls
US Steel_City_old Anderson Geneva_WLA_2025_TRC.pdf
US Steel_City_old Anderson Geneva_WLA_2025_AppA.pdf

REFERENCES

Utah Division of Water Quality. 2024. Final 2024 Integrated Report on Water Quality.

Utah Division of Water Quality. 2021. Utah Wasteload Analysis Procedures Version 2.0.

WASTELOAD ANALYSIS [WLA] Date: 8/7/2025

Appendix A: Simple Mixing Analysis for Conservative Constituents

Discharging Facility:	U. S. Steel Corporation (formerly Anderson-Geneva/GPM Enviro)		
UPDES No:	UT-0000361		
Permit Flow [MGD]:	0.04	Annual	Max. Daily
	0.02	Annual	Max. Monthly
Receiving Water:	Small pipe that goes into a dry ditch that flows into the stormwater pond. There is no direct discharge to Utah Lake anymore		
Stream Classification:	2B, 3D, 3E		
Stream Flows [cfs]:	0.0	All Seasons	Critical Low Flow
Fully Mixed:	YES	YES	
Acute River Width:	100%		
Chronic River Width:	100%		

Modeling Information

A simple mixing analysis was used to determine the effluent limits.

All model numerical inputs, intermediate calculations, outputs and graphs are available for discussion, inspection and copy at the Division of Water Quality.

Effluent Limitations

Current State water quality standards are required to be met under a variety of conditions including in-stream flows targeted to the 7-day, 10-year low flow (R317-2-9).

Other conditions used in the modeling effort reflect the environmental conditions expected at low stream flows.

Effluent Limitations for Protection of Recreation (Class 2B Waters)

No dilution in unnamed irrigation ditch.

Physical Parameter	**Standard**	
pH Minimum	6.5	
pH Maximum	9.0	
Turbidity Increase (NTU)	10.0	
Dissolved Oxygen_3D ELS absent		
Daily Minimum (mg/L)	3.0	
7-day Average (mg/L)	NA	
30-day Average (mg/L)	5.0	
Bacteriological		
E. coli (30 Day Geometric Mean)	206	(#/100 mL)
E. coli (Maximum)	668	(#/100 mL)

Effluent Limitations for Protection of Aquatic Wildlife (Class 3D Waters)

Inorganics	Chronic Standard (4 Day Average)	Acute Standard (1 Hour Average)
Parameter	Standard	Standard
Phenol (mg/L)		0.010
Hydrogen Sulfide (Undissociated) [mg/L]		0.002

Ammonia-Total (mg/L)

	Chronic (30-day ave)			Acute (1-hour ave)		
Season	Standard	Background	Limit	Standard	Background	Limit
Summer	1.4	0.5	1.4	5.7	0.5	5.7
Fall	2.3	0.5	2.3	5.7	0.5	5.7
Winter	3.0	0.5	3.0	5.7	0.5	5.7
Spring	2.3	0.5	2.3	5.7	0.5	5.7

Metals-Total Recoverable

	Chronic (4-day ave)			Acute (1-hour ave)		
Parameter	Standard[1]	Background	Limit	Standard[1]	Background	Limit
Aluminum (µg/L)	87.0	15.2	87.0	750.0	15.2	750.0
Arsenic (µg/L)	150.0	3.0	150.0	340.0	3.0	340.0
Cadmium (µg/L)	1.9	0.10	1.9	6.2	0.10	6.2
Chromium VI (µg/L)	11.0	2.0	11.0	16.0	2.0	16.0
Chromium III (µg/L)	218.8	2.0	218.8	1682.0	2.0	1682.0
Copper (µg/L)	27.7	2.0	27.7	46.7	2.0	46.7
Cyanide (µg/L)[2]	5.2	3.5	5.2	22.0	3.5	22.0
Iron (µg/L)				1000.0	139.0	1000.0
Lead (µg/L)	10.2	0.1	10.2	262.8	0.1	262.8
Mercury (µg/L)[2]	0.012	0.008	0.012	2.4	0.008	2.4
Nickel (µg/L)	159.1	5.0	159.1	1432.5	5.0	1432.5
Selenium (µg/L)	4.6	1.0	4.6	18.4	1.0	18.4
Silver (µg/L)				31.2	0.5	31.2
Tributylin (µg/L)[2]	0.072	0.048	0.072	0.46	0.048	0.46
Zinc (µg/L)	362.1	13.2	362.1	359.1	13.2	359.1

1: Based upon a Hardness of 375 mg/l as CaCO3

2: Background concentration assumed 67% of chronic standard

Organics [Pesticides]

	Chronic (4-day ave)		Acute (1-hour ave)	
Parameter	**Standard**	**Limit**	**Standard**	**Limit**
Aldrin (µg/L)			1.5	1.5
Chlordane (µg/L)	0.0043	0.0043	1.2	1.2
DDT, DDE (µg/L)	0.001	0.001	0.55	0.55
Diazinon (µg/L)	0.17	0.17	0.17	0.17
Dieldrin (µg/L)	0.0056	0.0056	0.24	0.24
Endosulfan, a & b (µg/L)	0.056	0.056	0.11	0.11
Endrin (µg/L)	0.036	0.036	0.086	0.086
Heptachlor & H. epoxide (µg/L)	0.0038	0.0038	0.26	0.26
Lindane (µg/L)	0.08	0.08	1.0	1.0
Methoxychlor (µg/L)			0.03	0.03
Mirex (µg/L)			0.001	0.001
Nonylphenol (µg/L)	6.6	6.6	28.0	28.0
Parathion (µg/L)	0.0130	0.0130	0.066	0.066
PCB's (µg/L)	0.014	0.014		
Pentachlorophenol (µg/L)	15.0	15.0	19.0	19.0
Toxephene (µg/L)	0.0002	0.0002	0.73	0.73

Radiological

	Maximum Concentration
Parameter	**Standard**
Gross Alpha (pCi/L)	15

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ATTACHMENT 3

Reasonable Potential Analysis

REASONABLE POTENTIAL ANALYSIS

Water Quality has worked to improve our reasonable potential analysis (RP) for the inclusion of limits for parameters in the permit by using an EPA provided model. As a result of the model, more parameters may be included in the renewal permit. A Copy of the Reasonable Potential Analysis Guidance (RP Guide) is available at water Quality. There are four outcomes for the RP Analysis[1]. They are;

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.

Initial screening for metals values that were submitted through the permit application information showed that a closer look at the metals is not needed. The Metals Initial Screening Table is included below.

RP Screening Results Table for UPDES Permit No. UT0000361 (Outfall 005-B)

Parameter	No. of Samples	MEC *a ug/L	Water Quality Standard MAC *b		Outcome/Result
			Acute ug/L	Chronic ug/L	
Total Aluminum	1	<25	750	87	MEC < MAC *c
Total Arsenic	1	23	340	150	MEC < MAC
Total Cadmium	1	<0.25	6.2	1.9	MEC < MAC
Total Chromium	1	1.6	16.0 (Cr.VI)	11.0 (Cr.VI)	MEC < MAC
Total Copper	1	1.4	46.7	27.7	MEC < MAC
Total Iron	1	2.2	1000	NA	MEC < MAC
Total Lead	1	<0.50	262.8	10.2	MEC < MAC
Total Mercury	1	<0.060 *e	2.4	0.012 *e	MEC < MAC
Total Nickel	1	27	1432.5	159.1	MEC < MAC
Total Selenium	1	5.7	18.4	NA	MEC < MAC
Total Silver	1	<0.25	31.2	NA	MEC < MAC
Total Zinc	1	33	359.1	362.1	MEC < MAC

Notes/Legend
NA – Not Applicable for Chronic Water Quality Standard.

*a – MEC = Maximum expected effluent concentration as determined from existing data set and sufficiently sensitive method detection limits.

*b – MAC = Maximum allowable concentration from current WQS and/or wasteload analysis.

*c – MEC < (less than) MAC = No Acute or Chronic limit required.

*d – **MEC > (greater than) MAC** = Acute and/or Chronic limits may be required.

*e – The effluent analyses for total mercury did not result in a detected concentration above the laboratory method detection limit (MDL) as reported. Although the current MDL for total mercury (0.060 ug/L) is higher

[1] See Reasonable Potential Analysis Guidance for definitions of terms

in concentration than only the applicable Chronic Water Quality Standard listed above, laboratory MDLs continue to improve upon the sufficiently sensitive test methodologies for total mercury. Thereby, this can be re-evaluated in the future if necessary. Based upon all relevant information as evaluated, including a permit limit for total mercury is not necessary at this time.

Summary: Typically, an RP analysis is performed on common metals parameters (metals) to determine if there is reasonable potential for the discharge to exceed the applicable water quality standards. Historically, metals have not been considered parameters of concern from the facility discharge and have not been included in past monitoring efforts. However, during the development of this Permit, the facility agreed to monitor the effluent for metals and provide the results to DWQ. Although limited to a single metals sampling event, a simple evaluation was conducted as an RP analysis during the development of the Permit. Based upon all relevant information as evaluated, including the limited RP analysis, none of the metals parameters were determined to have a reasonable potential to exceed the respective standard, and including additional permit limits for metals is not necessary at this time. This can be re-evaluated during future permit renewals if necessary.

Result: Based upon the RP Guide 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 not to include any new total metal effluent limits in this renewal permit. Therefore, the result was determined to be **Outcome C: No new effluent limitations. Routine monitoring requirements maintained as they are in the permit.**

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