

Official Draft Public Notice Version **April 2, 2024**.

The findings, determinations, and assertions contained in this document are not final and subject to change following the public comment period.

STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH

UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM (UPDES) PERMITS

Minor Industrial Permit No. **UT0024015**

In compliance with provisions of the Utah *Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended* (the "Act"),

INTERMOUNTAIN CONCRETE COMPANY

is hereby authorized to discharge from

INTERMOUNTAIN CONCRETE

a facility located in Jensen, Utah,

to receiving waters named **GREEN RIVER (a tributary to the Colorado River)**,

in accordance with specific limitations, outfalls, and other conditions set forth herein.

This permit shall become effective on **Month XX, 2024**

This permit expires at midnight on **Month XX, 20XX**.

Signed this **XXth** day of **Month**, 2024.

John K. Mackey, P.E.
Director

DWQ-2023-001109

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PART I
DISCHARGE PERMIT NO. UT0023015
WASTEWATER

I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS

A. Description of Discharge Points. The authorization to discharge wastewater provided under this part is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit are violations of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

<u>Outfall Number</u>	<u>Location of Discharge Outfall</u>
001	Located at latitude 40°22' 31" and longitude 109° 20' 22". Discharges from the main pond near gravel washer to a ditch, which flows through pasture land that drains to the Green River.
002	Located at latitude 40°22' 31" and longitude 109° 20' 22". Discharges overflow from the main water supply pond to a ditch, which flows through pasture land that drains to the Green River.

B. Narrative Standard. It shall be unlawful, and a violation of this permit, for the Permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum, or other nuisances such as color, odor or taste, or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by a bioassay or other tests performed in accordance with standard procedures.

C. Specific Limitations and Self-Monitoring Requirements.

1. Effective immediately, and lasting through the life of this permit, there shall be no acute or chronic toxicity in Outfalls 001 and 002 as defined in *Part VIII*, and determined by test procedures described in Part VIII of this permit.
2.
 - a. Effective immediately and lasting the duration of this permit, the Permittee is authorized to discharge from Outfall 001 and Outfall 002. Such discharges shall be limited and monitored by the Permittee as specified below:

Parameter	Effluent Limitations (Outfall 001 and 002)			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
Total Flow, MGD	0.917	NA	NA	NA
Total Dissolved Solids, mg/L	NA	NA	NA	1200
Total Dissolved Solids, lbs/Day /d	NA	NA	NA	2000 lbs/day Net
Oil & Grease, mg/L	NA	NA	NA	10.0
pH (Standard Units)	NA	NA	6.5	9.0

NA – Not Applicable

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Self-Monitoring and Reporting Requirements a/			
Parameter	Frequency	Sample Type	Units
Total Flow /b /c	Monthly	Measured	MGD
TSS, Effluent	Monthly	Grab	mg/L
TDS, Effluent /b /d	Monthly	Grab	mg/L
Oil & Grease /e	Monthly	Grab	mg/L
pH	Monthly	Grab	SU

There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

There shall be no discharge of sanitary wastes.

- a/ See Definitions, *Part IV* for definition of terms.
- b/ In addition to monitoring the final discharge, influent samples shall be collected and analyzed for this constituent at the same frequency as required for this constituent in the discharge. Influent samples should be taken at the Culvert(s) at the inlet of Pond 2.
- c/ If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
- d/ The total TDS discharged shall be limited to 2000 lbs/day (one ton per day) or 366 tons per year as a sum total from all discharge points.
- e/ An oil and grease sample shall be taken if a visual sheen is observed on the effluent discharge. If no sheen is present or visible, report NA. If an effluent sample is taken, as a result of a visual sheen, a grab sample shall be taken and oil and grease shall not exceed 10 mg/L in concentration.

3. Compliance Schedule

- a. There is no Compliance Schedule included in this renewal permit

D. Reporting of Monitoring Results.

- 1. Reporting of Wastewater Monitoring Results Monitoring results obtained during the previous month shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1)* or by NetDMR, post-marked or entered into NetDMR no later than the 28th day of the month following the completed reporting period. The first report is due on **Month 28, 20--**. If no discharge occurs during the reporting period, “no discharge” shall be reported. Legible copies of these, and all other reports including whole effluent toxicity (WET) test reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part VII.G)*, and submitted by NetDMR, or to the Division of Water Quality at the following address:

Department of Environmental Quality
Division of Water Quality
PO Box 144870
Salt Lake City, Utah 84114-4870

* Starting January 1, 2017 monitoring results must be submitted using NetDMR unless the permittee has successfully petitioned for an exception.

PART II
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PRETREATMENT

II. PRETREATMENT REQUIREMENTS

A. Definitions. For this section, the following definitions shall apply:

1. *Indirect Discharge* means the introduction of pollutants into a Publicly Owned Treatment Works (POTW) from any non-domestic source regulated under section 307 (b), (c) or (d) of the CWA.
2. *Interference* means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:
 - a. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
 - b. Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.
3. *Pass Through* means a Discharge which exits the POTW into waters of the State or waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
4. *Publicly Owned Treatment Works* or *POTW* means a treatment works, as defined by section 212 of the CWA, which is owned by a State or municipality (as defined by section 502(4) of the CWA). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality, as defined in section 502(4) of the CWA, which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works.
5. *Significant Industrial User (SIU)* is defined as an Industrial User discharging to a POTW that satisfies any of the following:
 - a. Has a process wastewater flow of 25,000 gallons or more per average work day;
 - b. Has a flow greater than five percent of the flow carried by the municipal system receiving the waste;
 - c. Is subject to Categorical Pretreatment Standards, or
 - d. Has a reasonable potential for adversely affecting the operation of the POTW or violating any pretreatment standard or requirement.

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6. *User or Industrial User (IU)* means a source of Indirect Discharge.
- B. Discharge to POTW. Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of The Water Quality Act of 1987, the Permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at 40 CFR 403, the State Pretreatment Requirements at UAC R317-8-8, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters. At a minimum, the discharge into a POTW must meet the requirements of Part II. D. and E. of the permit.
- C. Hazardous Waste Notification. The Permittee must notify the POTW, the EPA Regional Waste Management Director, the Director and the State hazardous waste authorities in writing if they discharge any substance into a POTW that, if otherwise disposed of, would be considered a hazardous waste under 40 CFR 261. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).
- D. General and Specific Prohibitions.
1. General Prohibitions. The Permittee may not introduce into a POTW any pollutant(s) which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in paragraph 2. of this section apply to the introducing pollutants into a POTW whether or not the Permittee is subject to other National Pretreatment Standards or any national, State, or local Pretreatment Requirements.
 2. Specific Prohibitions. The following pollutants shall not be introduced into a POTW:
 - a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140°F (60°C);
 - b. Pollutants, which will cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0;
 - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in Interference;
 - d. Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at such volume or strength as to cause Interference in the POTW;
 - e. Heat in amounts, which will inhibit biological activity in the POTW, resulting in Interference, but in no case, heat in such quantities that the influent to the sewage treatment works exceeds 104°F (40°C));
 - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
 - g. Pollutants, which result in the presence of toxic gases, vapor, or fumes within the POTW in a quantity that may cause worker health or safety problems;
 - h. Any trucked or hauled pollutants, except at discharge points designated by the POTW;
or

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- i. Any pollutant that causes Pass Through or Interference at the POTW.
 - j. Any specific pollutant which exceeds any Local Limitation established by the POTW.
- E. Categorical Standards. In addition to the general and specific limitations expressed in *Part II. D.* of this section, applicable National Categorical Pretreatment Standards must be met by all Industrial Users discharging into a POTW. These standards are published in the federal regulations at *40 CFR 405 through 471*.

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III. BIOSOLIDS REQUIREMENTS

- A. The State of Utah has adopted the 40 CFR Part 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, since this facility is an industrial facility, there is not any regular sludge production. Therefore 40 CFR Part 503 does not apply.

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**PART IV
STORM WATER PERMIT**

IV. STORM WATER REQUIREMENTS.

- A. Industrial Storm Water Permit. Based on the type of industrial activities occurring at the facility, the permittee is required to maintain separate coverage or an appropriate exclusion under the Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities (UTR000000). If the facility is not already covered, the permittee has 30 days from when this permit is issued to submit the appropriate Notice of Intent (NOI) for the MSGP or exclusion documentation.

- B. Construction Storm Water Permit. Any construction at the facility that disturbs an acre or more of land, including less than an acre if it is part of a common plan of development or sale, is required to obtain coverage under the UPDES Construction General Storm Water Permit (UTRC00000). Permit coverage must be obtained prior to land disturbance. If the site qualifies, a Low Erosivity Waiver (LEW) Certification may be submitted instead of permit coverage.

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V. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS

- A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Samples of biosolids shall be collected at a location representative of the quality of biosolids immediately prior to the use-disposal practice.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under Utah Administrative Code ("UAC") *R317-2-10*, *UAC R317-8-4.1(10)(d)*, and/or *40 CFR 503* utilizing sufficiently sensitive test methods unless other test procedures have been specified in this permit. Monitoring must be conducted according to the test procedures listed above unless another method is required under 40 CFR subchapters N or O. Sufficiently sensitive test method means: (1) The method minimum level (ML) is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or (2) The method has the lowest ML of the analytical methods approved under *40 CFR part 136* or required under *40 CFR chapter I, subchapter N or O* for the measured pollutant or pollutant parameter as per *40 CFR 122.44(i)(1)(iv)(A)*.
- C. Penalties for Tampering. The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- E. Additional Monitoring by the Permittee. If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under Permit Part V.B., the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or the Biosolids Report Form.
- F. Records Contents. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) and time(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and,
 6. The results of such analyses.
- G. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart 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 five years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location
- H. Twenty-four Hour Notice of Noncompliance Reporting.
1. The permittee shall (orally) report any noncompliance including transportation accidents, spills, and uncontrolled runoff from biosolids transfer or land application sites which may seriously endanger health or environment, as soon as possible, but no later than twenty-

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four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality (DWQ) via the 24-hour answering service (801) 536-4123.

2. The following occurrences of noncompliance shall initially be reported by telephone to the DWQ via the 24-hour answering service as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment;
 - b. Any unanticipated bypass, which exceeds any effluent limitation in the permit (See *Part VI.G, Bypass of Treatment Facilities.*);
 - c. Any upset which exceeds any effluent limitation in the permit (See *Part VI.H, Upset Conditions.*);
 - d. Violation of a daily discharge limitation for any of the pollutants listed in the permit. For other permit violations which will not endanger health or the environment, DWQ may otherwise be notified during business hours (801) 536-4300; or,
 - e. Violation of any of the Table 3 metals limits, the pathogen limits, the vector attraction reduction limits or the management practices for biosolids that have been sold or given away.
3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected;
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and,
 - e. Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.
4. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 536-4300.
5. Reports shall be submitted to the addresses in *Part I.D, Reporting of Monitoring Results.*
- I. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part I.D* are submitted. The reports shall contain the information listed in *Part V.H.3*
- J. Inspection and Entry The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

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2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, including but not limited to, biosolids treatment, collection, storage facilities or area, transport vehicles and containers, and land application sites;
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location, including, but not limited to, digested biosolids before dewatering, dewatered biosolids, biosolids transfer or staging areas, any ground or surface waters at the land application sites or biosolids, soils, or vegetation on the land application sites; and,
5. The permittee shall make the necessary arrangements with the landowner or leaseholder to obtain permission or clearance, the Director, or authorized representative, upon the presentation of credentials and other documents as may be required by law, will be permitted to enter without delay for the purposes of performing their responsibilities.

VI. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply. The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of *the Act* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The *Act* provides that any person who violates a permit condition implementing provisions of the *Act* is subject to a civil penalty not to exceed \$10,000 per day of such violation. Except as provided at *Part VI.G, Bypass of Treatment Facilities* and *Part VI.H, Upset Conditions*, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or prevent any land application in violation of this permit.
- E. 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 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.
- F. Removed Substances. Collected screening, grit, solids, sludge, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.
- G. Bypass of Treatment Facilities.
1. Bypass Not Exceeding Limitations. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to paragraph 2 and 3 of this section.
 2. Prohibition of Bypass.
 - a. Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of human life, personal injury, or severe property damage;

**PART VI
DISCHARGE PERMIT NO. UT0023015**

- (2) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance, and
 - (3) The Permittee submitted notices as required under *Part VI.G.3*.
- b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in *Parts VI.G.2.a (1), (2) and (3)*.
3. Notice.
- a. *Anticipated bypass.* Except as provided above in *Part VI.G.2* and below in *Part VI.G.3.b*, if the permittee knows in advance of the need for a bypass, it shall submit prior notice, at least ninety days before the date of bypass. The prior notice shall include the following unless otherwise waived by the Director:
 - (1) Evaluation of alternative to bypass, including cost-benefit analysis containing an assessment of anticipated resource damages;
 - (2) A specific bypass plan describing the work to be performed including scheduled dates and times. The permittee must notify the Director in advance of any changes to the bypass schedule;
 - (3) Description of specific measures to be taken to minimize environmental and public health impacts;
 - (4) A notification plan sufficient to alert all downstream users, the public and others reasonably expected to be impacted by the bypass;
 - (5) A water quality assessment plan to include sufficient monitoring of the receiving water before, during and following the bypass to enable evaluation of public health risks and environmental impacts; and,
 - (6) Any additional information requested by the Director.
 - b. *Emergency Bypass.* Where ninety days advance notice is not possible, the permittee must notify the Director, and the Director of the Department of Natural Resources, as soon as it becomes aware of the need to bypass and provide to the Director the information in *Part VI.G.3.a.(1) through (6)* to the extent practicable.
 - c. *Unanticipated bypass.* The permittee shall submit notice of an unanticipated bypass to the Director as required under *Part IV.H, Twenty-Four Hour Reporting*. The permittee shall also immediately notify the Director of the Department of Natural Resources, the public and downstream users and shall implement measures to minimize impacts to public health and environment to the extent practicable.

H. Upset Conditions.

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1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of paragraph 2 of this section are met. Director's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
 2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under *Part V.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,
 - d. The permittee complied with any remedial measures required under *Part VI.D, Duty to Mitigate*.
 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- I. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of *The Water Quality Act of 1987* for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- J. Changes in Discharge of Toxic Substances. Notification shall be provided to the Executive Secretary as soon as the permittee knows of, or has reason to believe:
1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/L);
 - b. Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(7)* or (10); or,
 - d. The level established by the Executive Secretary in accordance with *UAC R317-8-4.2(6)*.
 2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":\

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- a. Five hundred micrograms per liter (500 ug/L);
- b. One milligram per liter (1 mg/L) for antimony;
- c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(9)*; or,
- d. The level established by the Executive Secretary in accordance with *UAC R317-8-4.2(6)*.

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**PART VII
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VII. GENERAL REQUIREMENTS

- A. Planned Changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 122.29(b); or
 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit nor to notification requirements under Subsection R317-8-4.1(15).
 3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. The permittee shall give notice to the Director of any planned changes at least 30 days prior to their implementation.
- B. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit.
- E. Duty to Provide Information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts or information.
- G. Signatory Requirements. All applications, reports or information submitted to the Director shall be signed and certified.
1. All permit applications shall be signed by either a principal executive officer or ranking elected official. A person is a duly authorized representative only if:

**PART VII
DISCHARGE PERMIT NO. UT0023015**

- a. The authorization is made in writing by a person described above and submitted to the Director, and,
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
 - (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - (b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (a) The chief executive officer of the agency, or
 - (b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person.
 3. Changes to authorization. If an authorization under *paragraph VII.G.2* is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of *paragraph VII.G.2* must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
 4. 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

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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."

- H. Penalties for Falsification of Reports. The *Act* provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under *UAC R317-8-3.2*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Director. As required by the *Act*, permit applications, permits and effluent data shall not be considered confidential.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the *Act*.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. Transfers. This permit may be automatically transferred to a new permittee if:
1. The current permittee notifies the Director at least 20 days in advance of the proposed transfer date;
 2. The notice includes a written agreement between the existing and new permittee's containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
 3. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State or Federal Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Sections 19-5-117 and 510 of the Clean Water Act or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.

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- O. Water Quality - Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
 2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.
 3. Revisions to the current CWA § 208 areawide treatment management plans or promulgations/revisions to TMDLs (40 CFR 130.7) approved by the EPA and adopted by DWQ which calls for different effluent limitations than contained in this permit.
- P. Biosolids – Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate biosolids limitations (and compliance schedule, if necessary), management practices, other appropriate requirements to protect public health and the environment, or if there have been substantial changes (or such changes are planned) in biosolids use or disposal practices; applicable management practices or numerical limitations for pollutants in biosolids have been promulgated which are more stringent than the requirements in this permit; and/or it has been determined that the permittees biosolids use or land application practices do not comply with existing applicable state or federal regulations.
- Q. Toxicity Limitation - Reopener Provision. Use the following paragraph if WET testing is required at the facility:

This permit may be reopened and modified (following proper administrative procedures) to include, whole effluent toxicity (WET) limitations, a compliance date, a compliance schedule, a change in the whole effluent toxicity (biomonitoring) protocol, additional or modified numerical limitations, or any other conditions related to the control of toxicants if one or more of the following events occur;

1. Toxicity is detected during the duration of this permit.
2. The TRE results indicate that the toxicant(s) represent pollutant(s) or pollutant parameter(s) that may be controlled with specific numerical limits, and the Director concludes that numerical controls are appropriate.
3. Following the implementation of numerical control(s) of toxicant(s), the Director agrees that a modified biomonitoring protocol is necessary to compensate for those toxicants that are controlled numerically.
4. The TRE reveals other unique conditions or characteristics, which in the opinion of the permit issuing authority justify the incorporation of unanticipated special conditions in the permit.

Use the following paragraph if there is no WET testing is required at the facility:

This permit may be reopened and modified (following proper administrative procedures) to include WET testing, a WET limitation, a compliance schedule, a compliance date,

PART VII
DISCHARGE PERMIT NO. UT0023015

additional or modified numerical limitations, or any other conditions related to the control of toxicants if toxicity is detected during the life of this permit.

PND DRAFT

VIII. DEFINITIONS

A. Wastewater.

1. The "7-day (and weekly) average", other than for *E. coli* bacteria, fecal coliform bacteria, and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for *E. coli* bacteria, fecal coliform bacteria, and total coliform bacteria. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains Saturday.
2. The "30-day (and monthly) average," other than for *E. coli* bacteria, fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for *E. coli* bacteria, fecal coliform bacteria and total coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
3. "Average annual discharge limit" means maximum allowable average of monthly discharges over a calendar year, calculated as the sum of all monthly discharges measured during a calendar year divided by the number of monthly discharges measured during the year. The timeframe is defined as from January 1st to December 31st.
4. "Act," means the *Utah Water Quality Act*.
5. "Acute toxicity" occurs when 50 percent or more mortality is observed for either test species at any effluent concentration (lethal concentration or "LC₅₀").
6. "Annual Loading Cap" is the highest allowable phosphorus loading discharged over a calendar year, calculated as the sum of all the monthly loading discharges measured during a calendar year divided by the number of monthly discharges measured during that year.
7. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
8. "Chronic toxicity" occurs when the IC₂₅ < XX% effluent. The XX% effluent is the concentration of the effluent in the receiving water, at the end of the mixing zone expressed as per cent effluent.
9. "IC₂₅" is the concentration of toxicant (given in % effluent) that would cause a 25% reduction in mean young per female, or a 25% reduction in overall growth for the test population.
10. "Composite Samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample

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shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

- a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
 - c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
 - d. Continuous sample volume, with sample collection rate proportional to flow rate.
11. "CWA" means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
 12. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
 13. "EPA," means the United States Environmental Protection Agency.
 14. "Director," means Director of the Division of Water Quality.
 15. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
 16. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
 17. "Severe Property Damage," means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 18. "Upset," means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

**FACT SHEET AND STATEMENT OF BASIS
INTERMOUNTAIN CONCRETE
RENEWAL PERMIT: DISCHARGE
UPDES PERMIT NO: UT0024015
MINOR INDUSTRIAL**

FACILITY CONTACTS:

Person Name: Mr. Bart Murray
Position: Operator
Phone Number: (435) 789-0774

Permittee Name: Intermountain Concrete Company
Facility Name: Intermountain Concrete
Mailing and Facility Address: 625 East Main Street
Vernal, Utah 84078
Telephone: (435) 789-0774
Actual Address: Highway 40, Jensen, UT

DESCRIPTION OF FACILITY

Intermountain Concrete (IC) stores, washes, and sizes gravel for use in the construction industry. Wash water is obtained from irrigation ditches and is used to clean the gravel. The makeup for the wash water is withdrawn by water right from irrigation ditches. The makeup water travels through three ponds known as West Pond, Middle Pond, and Main Pond. Water is pumped from the Main Pond to the wash plant. After its use in the wash plant, it is discharged to the first of two settling basins. Then the water is transferred to the second settling basin. The water is recycled from the second settling basin back to the Main Pond. Outfall 001 drains the Main Pond from a pipe located deep in the pond. A second discharge, Outfall 002, is located on the Main Pond to handle any excess water in the system. These two outfalls drain from the same location, but from different depths.

IC has the Standard Industrial Classification (SIC) Code of 1442.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

Due to a rule change exempting industrial facilities from Utah Secondary Standards, total suspended solids (TSS) effluent limitations were removed from the permit. Reasonable potential for Total Suspended Solids was run based upon the value of 90 mg/L found in the Wasteload Analysis (WLA). Based on the previous 5 year of the facilities discharge data, there was no reasonable potential for the facility to violate water quality standards downstream of the discharge. The facility will continue to monitor TSS as it was listed as a pollutant of concern in the WLA.

Selenium monitoring was required in the previous permit, but in the new permit, their potential limit would be 216 mg/L based on the WLA. Based upon that limit, there is no reasonable potential for the facility to discharge selenium, and it's being removed from the monitoring requirements.

DESCRIPTION OF DISCHARGE

IC has two discharge points. These two outfalls drain from the same location but from different depths.

<u>Outfall</u>	<u>Description of Discharge Point</u>
001	Located at latitude 40°22' 31" and longitude 109° 20' 22". Discharges from the main pond near gravel washer to a ditch, which flows through pasture land that drains to the Green River.
002	Located at latitude 40°22' 31" and longitude 109° 20' 22". Discharges overflow from the main water supply pond to a ditch, which flows through pasture land that drains to the Green River.

RECEIVING WATERS AND STREAM CLASSIFICATION

If a discharge were to occur, it would be pumped into an irrigation ditch, and then to the Green River. The classification of the Green River is 1C, 2A, 3B, 4 according to Utah Administrative Code (UAC) R317-2-13:

- Class 1C -- Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water
- Class 2A -- Protected for the frequent primary contact recreation where there is a high likelihood of ingestion of water or a high degree of bodily contact with the water. Examples include, but are not limited to, swimming, rafting, kayaking, diving, and water skiing.
- Class 3B -- Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.
- Class 4 -- Protected for agricultural uses including irrigation of crops and stock watering.

TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

According to the Utah's Final 2022 Integrated Report on Water Quality dated December 9, 2022, the receiving water for the discharge, "Green River- 2, Green River from Duchesne River confluence to Utah-Wyoming border (Assessment Unit UT14060010-011_00)" was listed as "Not Supporting" for E. coli. A TMDL is needed, however, the priority is low. The 2022 Integrated Report, also listed the receiving water as not supporting for selenium and pH.

BASIS FOR EFFLUENT LIMITATIONS

IC is covered by Subpart C - Construction Sand and Gravel Subcategory as contained in 40 CFR 436.30. pH limits are based upon this federal regulation and Utah's secondary standards found in UAC R317-1-3.2. Due to the high ratio of receiving water to design flow discharge, roughly 1,000:1 from Outfall 001, and ambient conditions in the receiving water being below water quality standards, Water Quality-Based Effluent Limits are not required for this discharge. Therefore, permit limits were according to rules found in UAC R-317-1 and categorical UPDES discharge requirements for a design flow of 1.41 cubic feet per second. The oil and grease is based on best professional judgment (BPJ). Attached is a WLA for this discharge into the Green River. It has been determined that this discharge will not cause a violation of water quality standards. An Antidegradation Level II review is not required since the Level I review shows that water quality impacts are minimal. The permittee is expected to be able to comply with these limitations.

Discharges from IC may eventually reach the Colorado River, which places it under the guidance of the Colorado River Basin Salinity Control Forum (CRBSCF) for total dissolved solids (TDS) mass loading limitations, which is authorized in UAC R317-2-4 to further control salinity in the Utah portion of the Colorado River Basin. On February 28, 1977, the CRBSCF produced the “Policy For Implementation of Colorado River Salinity Standards Through the NPDES Permit Program” (Policy), with the most current subsequent triennial revision dated October 2017, which states that if a no-salt (i.e., no-TDS) discharge cannot be achieved, then the facility is limited to discharging one-ton per day or a total of 366 tons per year of TDS from all of their outfalls. Since the discharge from both Outfalls 001 and 002 goes to a ditch which flows through a pastureland area for at least 100 yards before reaching the Green River, the amount of TDS discharged water reaching the Green River is substantially diluted and thus is not expected to have an appreciable effect on the water quality of the Green River. However, a one ton per day limit (366 tons per year) will be included in the permit. This limitation is based on the Colorado River Salinity Control Forum Policy. The facility is expected to be able to meet this requirement.

REASONABLE POTENTIAL ANALYSIS

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 provide a frame work for what routine monitoring or effluent limitations are required.

A qualitative RP check was performed on metals to determine if there was enough data to perform a reasonable potential analysis on the outfalls. Due to the facility type and processes, IC was not required to sample metals during the previous permit cycle, and as a result there is no metals data to analyze for RP.

The permit limitations for all Outfalls are:

Parameter	Effluent Limitations (Outfall 001 and 002)			
	Maximum Monthly Average	Maximum Weekly Average	Daily Minimum	Daily Maximum
Total Flow, MGD	0.917	NA	NA	NA
Total Dissolved Solids, mg/L	NA	NA	NA	1200
Total Dissolved Solids, lbs/Day /d	NA	NA	NA	2000 lbs/day Net
Oil & Grease, mg/L	NA	NA	NA	10.0
pH (Standard Units)	NA	NA	6.5	9.0

NA – Not Applicable

SELF-MONITORING AND REPORTING REQUIREMENTS

The following self-monitoring requirements are not the same as in the previous permit, as selenium monitoring has been removed. The permit will require reports to be submitted monthly and annually, as applicable, on Discharge Monitoring Report (DMR) forms due 28 days after the end of the monitoring period. Effective January 1, 2017, monitoring results must be submitted using NetDMR unless the permittee has successfully petitioned for an exception. Lab sheets for biomonitoring must be attached to the biomonitoring DMR. Lab sheets for metals and toxic organics must be attached to the DMRs.

Self-Monitoring and Reporting Requirements a/			
Parameter	Frequency	Sample Type	Units
Total Flow /b /c	Monthly	Measured	MGD
TSS, Effluent	Monthly	Grab	mg/L
TDS, Effluent /b /d	Monthly	Grab	mg/L
Oil & Grease /e	Monthly	Grab	mg/L
pH	Monthly	Grab	SU

There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

There shall be no discharge of sanitary wastes.

- a/ See Definitions, *Part IV* for definition of terms.
- b/ In addition to monitoring the final discharge, influent samples shall be collected and analyzed for this constituent at the same frequency as required for this constituent in the discharge. Influent samples should be taken at the Culvert(s) at the inlet of Pond 2.
- c/ If the rate of discharge is controlled, the rate and duration of discharge shall be reported.
- d/ The total TDS discharged shall be limited to 2000 lbs/day (one ton per day) or 366 tons per year as a sum total from all discharge points.
- e/ An oil and grease sample shall be taken if a visual sheen is observed on the effluent discharge. If no sheen is present or visible, report NA. If an effluent sample is taken, as a result of a visual sheen, a grab sample shall be taken and oil and grease shall not exceed 10 mg/L in concentration.

BIOSOLIDS

The State of Utah has adopted the 40 CFR 503 federal regulations for the disposal of sewage sludge (biosolids) by reference. However, since this facility is an industrial facility, there is not any regular sludge production. Therefore 40 CFR 503 does 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 SIC code for the facility and the types of industrial activities occurring. If the facility is not already covered, it has 30 days from when this permit is issued to submit the appropriate Notice of Intent (NOI) for the MSGP or exclusion documentation. Previously storm water discharge requirements and coverage were combined in this individual permit. These have been separated to provide consistency among permittees, electronic reporting for storm water discharge monitoring reports, and increase flexibility to changing site conditions.

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. 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

Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at *40 CFR 403*, the State Pretreatment Requirements at *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters.

In accordance with *40 CFR 403.12(p)(1)*, if discharge occurs to a POTW, the permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under *40 CFR 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 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 irrigation ditch 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
Lonnie Shull, Discharge Permit Writer, Biomonitoring
Jennifer Robinson, Pretreatment
Jordan Bryant, Storm Water
Chris Shope, Wasteload Analysis
Utah Division of Water Quality, (801) 536-4300

PUBLIC NOTICE

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 Noticed of the draft permit was published on the DWQ webpage.

During the public comment period provided under 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 R317-8-6.12.

ADDENDUM TO FSSOB

During finalization of the Permit certain dates, spelling edits and minor language corrections were completed. Due to the nature of these changes they were not considered Major and the permit is not required to be re Public Noticed.

Responsiveness Summary

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

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ATTACHMENT 1

Wasteload Analysis

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

Date: January 22, 2024

Prepared by: Christopher L. Shope
Standards and Technical Services

Facility: Intermountain Concrete Company
UPDES Permit No. UT-0024015

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

Intermountain Concrete has two permitted outfalls:

Outfall 001: Discharge from the main pond near gravel washer to pasture land which drains to the Green River. No discharge for Outfall 001 as provided by the permittee (pp 8 of application). Previous maximum discharge was 34 GPM (0.05 MGD).

Outfall 002: Discharge of overflow from the main water supply pond to pasture land which drains to the Green River. Maximum discharge of 8 GPM (0.01 MGD), as provided by the permittee (pp 2 of application). Previous maximum discharge was 603 GPM (0.87 MGD).

Receiving Water

Per UAC R317-2-13.1.b, the designated beneficial uses *Green River from Duchesne River confluence to Utah-Wyoming border* are: 1C,2A,3B,4.

- *Class 1C – Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water.*
- *Class 2A - Protected for frequent primary contact recreation where there is a high likelihood of ingestion of water or a high degree of bodily contact with the water. Examples include, but are not limited to, swimming, rafting, kayaking, diving, and water skiing.*

Utah Division of Water Quality

Wasteload Analysis

Intermountain Concrete Company, UPDES Permit No. UT-0024015

- *Class 3B - Protected for warm water species of game fish and other warm water aquatic life, including the necessary aquatic organisms in their food chain.*
- *Class 4 - Protected for agricultural uses including irrigation of crops and stock watering.*

Flow

Typically, the critical flow for the receiving water in a wasteload analysis is considered the lowest stream flow for seven consecutive days with a ten-year return frequency (7Q10). Daily in-stream flow records were analyzed from USGS 09261000: GREEN RIVER NEAR JENSEN, UT monitoring location. The annual 7Q10 critical flow value for the Green River at this location is 1162.9 ft³/s. Receiving water quality was characterized using data from DWQ Monitoring Station DWQ 4937900: GREEN R AT DINOSAUR NATL MONUMENT U149 XING for the period 2000-2024.

Total Maximum Daily Load (TMDL)

According to the Utah's [Final 2022 Integrated Report on Water Quality](#) dated December 9, 2022, the receiving water for the discharge, "Green River-2, Green River from Duchesne River confluence to Utah-Wyoming border (Assessment Unit UT14060010-011_00)" was listed as "Not Supporting" for E. coli. A TMDL is needed, however, the priority is low. The 2016 Integrated Report, listed the receiving water as impaired for selenium.

Mixing Zone

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, per UAC R317-2-5. Water quality standards must be met at the end of the mixing zone.

Individual mixing zones may be disallowed in consideration of site-specific factors. For the site location, biologically important areas such as fish spawning/nursery areas or segments with occurrences of federally listed threatened or endangered species may be present (R317-2-5.1.b.). According to US Fish and Wildlife Service (US FWS), endangered species downstream and possibly within this area include, Bonytail (*Gila elegans*), Colorado Pikeminnow (*Ptychocheilus Lucius*), Humpback Chub (*Gila cypha*) and Razorback Sucker (*Xyrauchen texanus*). Because the critical habitat of these species is potentially affected, authorized additional study may be required from agencies including but not limited to US EPA, US FWS, Utah Division of Wildlife Resources. In addition, early life species (ELS) are present at least January through August in this reach of Green River. Therefore, no mixing zone is granted for this effluent discharge point source. Water quality standards must be met at the end of pipe (EOP).

Further special studies commissioned by the permittee would be required to support inclusion of a dilution credit through the addition of a mixing zone.

Parameters of Concern

The potential parameters of concern identified for the discharge/receiving water were determined in consultation with the UPDES Permit Writer, the Watershed Coordinator, the Utah Water Quality Assessment Reports, and the industry SIC codes from <https://www.osha.gov/data/sic-search>. The

Utah Division of Water Quality

Wasteload Analysis

Intermountain Concrete Company, UPDES Permit No. UT-0024015

potential parameters of concern for this facility include: total dissolved solids (TDS), total suspended solids (TSS), and pH.

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. The LC₅₀ (lethal concentration, 50%) percent effluent for acute toxicity and the IC₂₅ (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 LC₅₀ is typically 100% effluent and does not need to be determined by the WLA.

WET limits for Outfall 001 and Outfall 002 for IC₂₅ should be based on 0.002% effluent.

Wasteload Allocation Methods

Effluent limits were determined for conservative constituents using a simple mass balance mixing analysis (UDWQ 2021). The mass balance analysis is summarized in the Wasteload Addendum.

The Utah Rivers Model was used to evaluate the DO sag and implications on nutrients and BOD. The analysis is summarized in the Wasteload Addendum.

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. To evaluate effluent discharge water quality, the Intermountain Concrete Company discharge monitoring report (DMR) was used. Background temperature and pH values from the Green River were used in the analysis.

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.

A Level II Antidegradation Review (ADR) is not required for this facility. The proposed permit is a renewal with no additional flow or concentration of pollutants over those authorized for the Green River.

Documents:

WLA Document: *240115-Intermountain_Concrete_WLA_2024.docx*

Wasteload Analysis and Addendums: *240115-Intermountain_Concrete_WLA_2024.xlsm*

References:

Utah Division of Water Quality. 2022. Final 2022 Integrated Report on Water Quality.

<https://documents.deq.utah.gov/water-quality/monitoring-reporting/integrated-report/DWQ-2022-002386.pdf>

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

<https://documents.deq.utah.gov/water-quality/standards-technical-services/DWQ-2021-000684.pdf>

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WASTELOAD ANALYSIS [WLA] [REDACTED] = not included in the WLA
Addendum: Statement of Basis

22-Jan-24
4:00 PM

Facilities: Intermountain Concrete
Discharging to: Green River

UPDES No: UT-UT0024015

THIS IS A DRAFT DOCUMENT

I. Introduction

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 [R317-2-8, UAC]. Projected concentrations are compared to numeric water quality standards to determine acceptability. The anti-degradation policy and procedures are also considered. The primary in-stream parameters of concern may include metals (as a function of hardness), total dissolved solids (TDS), total residual chlorine (TRC), un-ionized ammonia (as a function of pH and temperature, measured and evaluated in terms of total ammonia), and dissolved oxygen.

Mathematical water quality modeling is employed to determine stream quality response to point source discharges. Models aid in the effort of anticipating stream quality at future effluent flows at critical environmental conditions (e.g., low stream flow, high temperature, high pH, etc).

The numeric criteria in this wasteload analysis may always be modified by narrative criteria and other conditions determined by staff of the Division of Water Quality.

II. Receiving Water and Stream Classification

Green River: 1C,2A,3B,4
 Antidegradation Review: Level I review completed. Level II review is not required.

III. Numeric Stream Standards for Protection of Aquatic Wildlife

Total Ammonia (TNH3)	Varies as a function of Temperature and pH Rebound. See Water Quality Standards
Chronic Total Residual Chlorine (TRC)	0.011 mg/l (4 Day Average) 0.019 mg/l (1 Hour Average)
Chronic Dissolved Oxygen (DO)	5.5 mg/l (30 Day Average) 6.0 mg/l (7Day Average) 3.0 mg/l (1 Day Average)
Maximum Total Dissolved Solids	1200.0 mg/l

Acute and Chronic Heavy Metals (Dissolved)

Parameter	4 Day Average (Chronic) Standard		1 Hour Average (Acute) Standard		
	Concentration	Load*	Concentration		Load*
Aluminum	87.00 ug/l**	0.008 lbs/day	750.00	ug/l	0.072 lbs/day
Arsenic	150.00 ug/l	0.014 lbs/day	340.00	ug/l	0.033 lbs/day
Cadmium	1.48 ug/l	0.000 lbs/day	4.11	ug/l	0.000 lbs/day
Chromium III	164.26 ug/l	0.016 lbs/day	3436.57	ug/l	0.330 lbs/day
ChromiumVI	11.00 ug/l	0.001 lbs/day	16.00	ug/l	0.002 lbs/day
Copper	18.28 ug/l	0.002 lbs/day	29.40	ug/l	0.003 lbs/day
Iron			1000.00	ug/l	0.096 lbs/day
Lead	8.67 ug/l	0.001 lbs/day	222.50	ug/l	0.021 lbs/day
Mercury	0.0120 ug/l	0.000 lbs/day	2.40	ug/l	0.000 lbs/day
Nickel	101.56 ug/l	0.010 lbs/day	913.45	ug/l	0.088 lbs/day
Selenium	4.60 ug/l	0.000 lbs/day	20.00	ug/l	0.002 lbs/day
Silver	N/A ug/l	N/A lbs/day	14.67	ug/l	0.001 lbs/day
Zinc	233.51 ug/l	0.022 lbs/day	233.51	ug/l	0.022 lbs/day

* Allowed below discharge

**Chronic Aluminum standard applies only to waters with a pH < 7.0 and a Hardness < 50 mg/l as CaCO₃

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Metals Standards Based upon a Hardness of 219.8 mg/l as CaCO₃

IV. Numeric Stream Standards for Protection of Agriculture

	4 Day Average (Chronic) Standard		1 Hour Average (Acute) Standard	
	Concentration	Load*	Concentration	Load*
Arsenic			100.0 ug/l	lbs/day
Boron			750.0 ug/l	0.04 lbs/day
Cadmium			10.0 ug/l	0.00 lbs/day
Chromium			100.0 ug/l	lbs/day
Copper			200.0 ug/l	lbs/day
Lead			100.0 ug/l	lbs/day
Selenium			50.0 ug/l	lbs/day
TDS, Summer			1200.0 mg/l	0.06 tons/day

V. Numeric Stream Standards for Protection of Human Health (Class 1C Waters)

Metals	4 Day Average (Chronic) Standard		1 Hour Average (Acute) Standard	
	Concentration	Load*	Concentration	Load*
Arsenic			50.0 ug/l	297.225 lbs/day
Barium			1000.0 ug/l	5944.496 lbs/day
Cadmium			10.0 ug/l	59.445 lbs/day
Chromium			50.0 ug/l	297.225 lbs/day
Lead			50.0 ug/l	297.225 lbs/day
Mercury			2.0 ug/l	11.889 lbs/day
Selenium			10.0 ug/l	59.445 lbs/day
Silver			50.0 ug/l	297.225 lbs/day
Fluoride (3)			1.4 ug/l	8.322 lbs/day
to			2.4 ug/l	14.267 lbs/day
Nitrates as N			10.0 ug/l	59.445 lbs/day

VI. Numeric Stream Standards the Protection of Human Health from Water & Fish Consumption [Toxics]

Metals	Maximum Conc., ug/l - Acute Standards			
	Class 1C		Class 3A, 3B	
Antimony	14.0 ug/l	83.22 lbs/day		
Arsenic	50.0 ug/l	297.22 lbs/day	4300.00 ug/l	25561.33 lbs/day
Asbestos	7.00E+06 ug/l	4.16E+07 lbs/day		
Beryllium				
Cadmium				
Chromium (III)				
Chromium (VI)				
Copper				
Cyanide	1.30E+03 ug/l	7727.84 lbs/day	2.2E+05 ug/l	1307789.13 lbs/day
Lead	700.0 ug/l	4161.15 lbs/day		
Mercury			0.15 ug/l	0.89 lbs/day
Nickel			4600.00 ug/l	27344.68 lbs/day
Selenium	0.1 ug/l	0.83 lbs/day		
Silver	610.0 ug/l	3626.14 lbs/day		
Thallium			6.30 ug/l	37.45 lbs/day
Zinc				

There are additional standards that apply to this receiving water, but were not considered in this modeling/waste load allocation analysis.

VII. Mathematical Modeling of Stream Quality

Model configuration was accomplished utilizing standard modeling procedures. Data points were plotted and coefficients adjusted as required to match observed data as closely as possible.

The modeling approach used in this analysis included one or a combination of the following models.

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(1) The Utah River Model, Utah Division of Water Quality, 1992. Based upon STREAMDO IV (Region VIII) and Supplemental Ammonia Toxicity Models; EPA Region VIII, Sept. 1990 and QUAL2E (EPA, Athens, GA).

(2) Utah Ammonia/Chlorine Model, Utah Division of Water Quality, 1992.

(3) AMMTOX Model, University of Colorado, Center of Limnology, and EPA Region 8

(4) Principles of Surface Water Quality Modeling and Control. Robert V. Thomann, et.al. Harper Collins Publisher, Inc. 1987, pp. 644.

Coefficients used in the model were based, in part, upon the following references:

(1) Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling. Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Athens Georgia. EPA/600/3-85/040 June 1985.

(2) Principles of Surface Water Quality Modeling and Control. Robert V. Thomann, et.al. Harper Collins Publisher, Inc. 1987, pp. 644.

VIII. Modeling Information

The required information for the model may include the following information for both the upstream conditions at low flow and the effluent conditions:

Flow, Q, (cfs or MGD)	D.O. mg/l
Temperature, Deg. C.	Total Residual Chlorine (TRC), mg/l
pH	Total NH3-N, mg/l
BOD5, mg/l	Total Dissolved Solids (TDS), mg/l
Metals, ug/l	Toxic Organics of Concern, ug/l

Other Conditions

In addition to the upstream and effluent conditions, the models require a variety of physical and biological coefficients and other technical information. In the process of actually establishing the permit limits for an effluent, values are used based upon the available data, model calibration, literature values, site visits and best professional judgement.

Model Inputs

The following is upstream and discharge information that was utilized as inputs for the analysis. Dry washes are considered to have an upstream flow equal to the flow of the discharge.

Current Upstream Information

	Stream							
	Critical Low							
	Flow	Temp.	pH	T-NH3	BOD5	DO	TRC	TDS
	cfs	Deg. C		mg/l as N	mg/l	mg/l	mg/l	mg/l
Summer (Irrig. Season)	1102.9	18.7	8.4	0.08	0.97	7.04	0.00	399.0
Fall	1046.8	6.6	8.3	0.04	0.84	---	0.00	440.7
Winter	1058.6	3.5	8.3	0.08	1.38	---	0.00	440.7
Spring	2932.9	13.1	8.2	0.07	1.77	---	0.00	440.7
Dissolved Metals	Al	As	Cd	CrIII	CrVI	Copper	Fe	Pb
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
All Seasons	64.90	2.50	0.50	2.50	2.50	8.40	72.0	1.50
Dissolved Metals	Hg	Ni	Se	Ag	Zn	Boron		
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l		
All Seasons	0.0000	3.50	1.10	1.00	15.00	10.0		* 1/2 MDL

Projected Discharge Information

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Season	Flow, MGD	Temp.	TDS mg/l	TDS tons/day
Summer	0.01152	24.1	104.40	0.00501
Fall	0.01152	8.5		
Winter	0.01152	3.8		
Spring	0.01152	19.6		

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

IX. 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 coincide with the environmental conditions expected at low stream flows.

Effluent Limitation for Flow based upon Water Quality Standards

In-stream criteria of downstream segments will be met with an effluent flow maximum value as follows:

Season	Daily Average	
Summer	0.012 MGD	0.018 cfs
Fall	0.012 MGD	0.018 cfs
Winter	0.012 MGD	0.018 cfs
Spring	0.012 MGD	0.018 cfs

Flow Requirement or Loading Requirement

The calculations in this wasteload analysis utilize the maximum effluent discharge flow of 0.01152 MGD. If the discharger is allowed to have a flow greater than 0.01152 MGD during 7Q10 conditions, and effluent limit concentrations as indicated, then water quality standards will be violated. In order to prevent this from occurring, the permit writers must include the discharge flow limitation as indicated above; or, include loading effluent limits in the permit.

Effluent Limitation for Whole Effluent Toxicity (WET) based upon WET Policy

Effluent Toxicity will not occur in downstream segments if the values below are met.

WET Requirements	LC50 > IC25 >	0.0% Effluent 0.0% Effluent	[Acute] [Chronic]	Receiving		Chronic IC25 % Effluent	Acute LC50 % Effluent
				Water Flow (cfs)	Effluent Flow (MGD)		
Season		Effluent Flow (cfs)	Combined Flow (cfs)	Totally Mixed			
Summer		0.0	1102.9	NO		0.0%	0.0%
Fall		0.0	1046.8	NO		0.0%	0.0%
Winter		0.0	1058.6	NO		0.0%	0.0%
Spring		0.0	2932.9	NO		0.0%	0.0%

Effluent Limitation for Biological Oxygen Demand (BOD) based upon Water Quality Standards or Regulations

In-stream criteria of downstream segments for Dissolved Oxygen will be met with an effluent BOD limitation as follows:

Season	Concentration	
Summer	35.0 mg/l as BOD5	3.4 lbs/day
Fall	35.0 mg/l as BOD5	3.4 lbs/day

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Winter	35.0 mg/l as BOD5	3.4 lbs/day
Spring	35.0 mg/l as BOD5	3.4 lbs/day

Effluent Limitation for Dissolved Oxygen (DO) based upon Water Quality Standards

In-stream criteria of downstream segments for Dissolved Oxygen will be met with an effluent D.O. limitation as follows:

Season	Concentration
Summer	4.00
Fall	4.00
Winter	4.00
Spring	4.00

Effluent Limitation for Total Ammonia based upon Water Quality Standards

In-stream criteria of downstream segments for Total Ammonia will be met with an effluent limitation (expressed as Total Ammonia as N) as follows:

Season		Concentration	Load
Summer	4 Day Avg. - Chronic	51625.6 mg/l as N	4,959.0 lbs/day
	1 Hour Avg. - Acute	87462.7 mg/l as N	8,401.5 lbs/day
Fall	4 Day Avg. - Chronic	162315.1 mg/l as N	15,591.6 lbs/day
	1 Hour Avg. - Acute	267686.2 mg/l as N	25,713.3 lbs/day
Winter	4 Day Avg. - Chronic	62149.0 mg/l as N	5,969.9 lbs/day
	1 Hour Avg. - Acute	106823.8 mg/l as N	10,261.2 lbs/day
Spring	4 Day Avg. - Chronic	58039.0 mg/l as N	5,575.1 lbs/day
	1 Hour Avg. - Acute	95680.1 mg/l as N	9,190.8 lbs/day

Acute limit calculated with an Acute Zone of Initial Dilution (ZID) to be equal to 50.%.

Effluent Limitation for Total Residual Chlorine based upon Water Quality Standards

In-stream criteria of downstream segments for Total Residual Chlorine will be met with an effluent limitation as follows:

Season		Concentration	Load
Summer	4 Day Avg. - Chronic	618.768 mg/l	59.44 lbs/day
	1 Hour Avg. - Acute	556.901 mg/l	53.49 lbs/day
Fall	4 Day Avg. - Chronic	587.309 mg/l	56.42 lbs/day
	1 Hour Avg. - Acute	528.588 mg/l	50.77 lbs/day
Winter	4 Day Avg. - Chronic	593.922 mg/l	57.05 lbs/day
	1 Hour Avg. - Acute	534.539 mg/l	51.35 lbs/day
Spring	4 Day Avg. - Chronic	1645.489 mg/l	158.06 lbs/day
	1 Hour Avg. - Acute	1480.949 mg/l	142.26 lbs/day

Effluent Limitations for Total Dissolved Solids based upon Water Quality Standards

Season		Concentration	Load
Summer	Maximum, Acute	49572128.8 mg/l	2,380.89 tons/day
Fall	Maximum, Acute	46989723.2 mg/l	2,256.86 tons/day
Winter	Maximum, Acute	44829772.5 mg/l	2,153.12 tons/day
Spring	4 Day Avg. - Chronic	56491479.7 mg/l	2,713.22 tons/day

Colorado Salinity Forum Limits Determined by Permitting Section

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Salt Lake City, Utah**

**Effluent Limitations for Total Recoverable Metals based upon
Water Quality Standards**

In-stream criteria of downstream segments for Dissolved Metals will be met with an effluent limitation as follows (based upon a hardness of 219.8 mg/l):

	4 Day Average		1 Hour Average		
	Concentration	Load	Concentration		Load
Aluminum	N/A	N/A	21,199,021.0	ug/l	2036.6 lbs/day
Arsenic	##### ug/l	566.8 lbs/day	10,443,219.1	ug/l	1003.3 lbs/day
Cadmium	60,714.23 ug/l	3.8 lbs/day	111,641.5	ug/l	10.7 lbs/day
Chromium III	##### ug/l	621.6 lbs/day	#####	ug/l	10208.4 lbs/day
Chromium VI	526,022.69 ug/l	32.7 lbs/day	417,731.2	ug/l	40.1 lbs/day
Copper	611,731.37 ug/l	38.0 lbs/day	649,827.3	ug/l	62.4 lbs/day
Iron	N/A	N/A	28,716,287.4	ug/l	2758.8 lbs/day
Lead	443,746.10 ug/l	27.6 lbs/day	6,838,357.1	ug/l	657.0 lbs/day
Mercury	742.00 ug/l	0.0 lbs/day	74,262.6	ug/l	7.1 lbs/day
Nickel	##### ug/l	376.8 lbs/day	28,156,604.0	ug/l	2705.0 lbs/day
Selenium	216,597.65 ug/l	13.4 lbs/day	584,821.2	ug/l	56.2 lbs/day
Silver	N/A ug/l	N/A lbs/day	422,838.4	ug/l	40.6 lbs/day
Zinc	##### ug/l	839.7 lbs/day	6,761,486.1	ug/l	649.6 lbs/day
Cyanide (free)	321,800.58 ug/l	20.0 lbs/day	680,743.0	ug/l	65.4 lbs/day

**Effluent Limitations for Heat/Temperature based upon
Water Quality Standards**

Summer	100.0 Deg. C.	212.0 Deg. F
Fall	100.0 Deg. C.	212.0 Deg. F
Winter	100.0 Deg. C.	212.0 Deg. F
Spring	100.0 Deg. C.	212.0 Deg. F

**Effluent Limitations for Organics [Pesticides]
Based upon Water Quality Standards**

In-stream criteria of downstream segments for Organics [Pesticides] will be met with an effluent limit as follows:

	4 Day Average		1 Hour Average		
	Concentration	Load	Concentration		Load
Aldrin			1.5E+00	ug/l	2.23E-04 lbs/day
Chlordane	4.30E-03 ug/l	4.13E-04 lbs/day	1.2E+00	ug/l	1.78E-04 lbs/day
DDT, DDE	1.00E-03 ug/l	9.61E-05 lbs/day	5.5E-01	ug/l	8.17E-05 lbs/day
Dieldrin	1.90E-03 ug/l	1.83E-04 lbs/day	1.3E+00	ug/l	1.86E-04 lbs/day
Endosulfan	5.60E-02 ug/l	5.38E-03 lbs/day	1.1E-01	ug/l	1.63E-05 lbs/day
Endrin	2.30E-03 ug/l	2.21E-04 lbs/day	9.0E-02	ug/l	1.34E-05 lbs/day
Guthion	0.00E+00 ug/l	0.00E+00 lbs/day	1.0E-02	ug/l	1.49E-06 lbs/day
Heptachlor	3.80E-03 ug/l	3.65E-04 lbs/day	2.6E-01	ug/l	3.86E-05 lbs/day
Lindane	8.00E-02 ug/l	7.68E-03 lbs/day	1.0E+00	ug/l	1.49E-04 lbs/day
Methoxychlor	0.00E+00 ug/l	0.00E+00 lbs/day	3.0E-02	ug/l	4.46E-06 lbs/day
Mirex	0.00E+00 ug/l	0.00E+00 lbs/day	1.0E-02	ug/l	1.49E-06 lbs/day
Parathion	0.00E+00 ug/l	0.00E+00 lbs/day	4.0E-02	ug/l	5.94E-06 lbs/day
PCB's	1.40E-02 ug/l	1.34E-03 lbs/day	2.0E+00	ug/l	2.97E-04 lbs/day
Pentachlorophenol	1.30E+01 ug/l	1.25E+00 lbs/day	2.0E+01	ug/l	2.97E-03 lbs/day
Toxephene	2.00E-04 ug/l	1.92E-05 lbs/day	7.3E-01	ug/l	1.08E-04 lbs/day

Effluent Targets for Pollution Indicators

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Salt Lake City, Utah**

Based upon Water Quality Standards

In-stream criteria of downstream segments for Pollution Indicators will be met with an effluent limit as follows:

	Concentration	1 Hour Average
		Loading
Gross Beta (pCi/l)	50.0 pCi/L	
BOD (mg/l)	5.0 mg/l	0.5 lbs/day
Nitrates as N	4.0 mg/l	0.4 lbs/day
Total Phosphorus as P	0.05 mg/l	0.0 lbs/day
Total Suspended Solids	90.0 mg/l	8.6 lbs/day

Note: Pollution indicator targets are for information purposes only.

**Effluent Limitations for Protection of Human Health [Toxics Rule]
Based upon Water Quality Standards (Most stringent of 1C or 3A & 3B as appropriate.)**

In-stream criteria of downstream segments for Protection of Human Health [Toxics] will be met with an effluent limit as follows:

	Maximum Concentration	
	Concentration	Load
Metals		
Antimony	866386.19 ug/l	83.22 lbs/day
Arsenic	2939527.07 ug/l	282.36 lbs/day
Asbestos	4.33E+11 ug/l	4.16E+07 lbs/day
Beryllium		
Cadmium		
Chromium (III)		
Chromium (VI)		
Copper	80450146.21 ug/l	7727.84 lbs/day
Cyanide	43319309.50 ug/l	4161.15 lbs/day
Lead	0.00	0.00
Mercury	8663.24 ug/l	0.83 lbs/day
Nickel	37749683.99 ug/l	3626.14 lbs/day
Selenium	0.00	0.00
Silver	0.00	0.00
Thallium	105204.04 ug/l	10.11 lbs/day
Zinc		

**Metals Effluent Limitations for Protection of All Beneficial Uses
Based upon Water Quality Standards and Toxics Rule**

	Class 4 Acute Agricultural ug/l	Class 3 Acute Aquatic Wildlife ug/l	Acute Toxics Drinking Water Source ug/l	Acute Toxics Wildlife ug/l	1C Acute Health Criteria ug/l	Acute Most Stringent ug/l	Class 3 Chronic Aquatic Wildlife ug/l
Antimony			866386.2	266104329.8		866386.2	
Arsenic	6188472.8	10443219.1	2939527.1		0.0	2939527.1	9127999.9
Asbestos			4.33E+11			4.33E+11	
Barium					61884727.9	61884727.9	
Beryllium						0.0	
Cadmium	587905.4	111641.5			0.0	111641.5	60714.2
Chromium (III)		106259989.5			0.0	106259989.5	10010282.1
Chromium (VI)	6033763.5	417731.2			0.0	417731.16	526022.69
Copper	11857122.3	649827.3	80450146.2			649827.3	611731.4
Cyanide		680743.0	#####			680743.0	321800.6
Iron		28716287.4				28716287.4	
Lead	6095647.2	6838357.1			0.0	6095647.2	443746.1

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Mercury		74262.56	8663.2	9282.71	0.0	8663.24	741.998
Nickel		28156604.0	37749684.0	284669748.1		28156604.0	6068327.9
Selenium	3026164.3	584821.2			0.0	584821.2	216597.6
Silver		422838.4			0.0	422838.4	
Thallium			105204.0	389873.8		105204.0	
Zinc		6761486.1				6761486.1	13522738.7
Boron	37378521.6					37378521.6	

Summary Effluent Limitations for Metals [Wasteload Allocation, TMDL]

[If Acute is more stringent than Chronic, then the Chronic takes on the Acute value.]

	WLA Acute ug/l	WLA Chronic ug/l	
Aluminum	21199021.0	N/A	
Antimony	866386.19		
Arsenic	2939527.1	9127999.9	Acute Controls
Asbestos	4.33E+11		
Barium			
Beryllium			
Cadmium	111641.5	60714.2	
Chromium (III)	106259989.5	10010282	
Chromium (VI)	417731.2	526022.7	Acute Controls
Copper	649827.3	611731.4	
Cyanide	680743.0	321800.6	
Iron	28716287.4		
Lead	6095647.2	443746.1	
Mercury	8663.243	741.998	
Nickel	28156604.0	6068328	
Selenium	584821.2	216597.6	
Silver	422838.4	N/A	
Thallium	105204.0		
Zinc	6761486.1	13522738.7	Acute Controls
Boron	37378521.62		

Other Effluent Limitations are based upon R317-1.

E. coli 126.0 organisms per 100 ml

X. Antidegradation Considerations

The Utah Antidegradation Policy allows for degradation of existing quality where it is determined that such lowering of water quality is necessary to accommodate important economic or social development in the area in which the waters are protected [R317-2-3]. It has been determined that certain chemical parameters introduced by this discharge will cause an increase of the concentration of said parameters in the receiving waters. Under no conditions will the increase in concentration be allowed to interfere with existing instream water uses.

The antidegradation rules and procedures allow for modification of effluent limits less than those based strictly upon mass balance equations utilizing 100% of the assimilative capacity of the receiving water. Additional factors include considerations for "Blue-ribbon" fisheries, special recreational areas, threatened and endangered species, and drinking water sources.

An Antidegradation Level I Review was conducted on this discharge and its effect on the receiving water. Based upon that review, it has been determined that an Antidegradation Level II Review is required because it is a new discharge.

XI. Colorado River Salinity Forum Considerations

Discharges in the Colorado River Basin are required to have their discharge at a TDS loading of less than 1.00 tons/day unless certain exemptions apply. Refer to the Forum's Guidelines for additional information allowing for an exceedence of this value.

This doesn't apply to facilities that do not discharge to the Colorado River Basin.

**Utah Division of Water Quality
Salt Lake City, Utah**

XII. Summary Comments

The mathematical modeling and best professional judgement indicate that violations of receiving water beneficial uses with their associated water quality standards, including important downstream segments, will not occur for the evaluated parameters of concern as discussed above if the effluent limitations indicated above are met.

XIII. Notice of UPDES Requirement

This Addendum to the Statement of Basis does not authorize any entity or party to discharge to the waters of the State of Utah. That authority is granted through a UPDES permit issued by the Utah Division of Water Quality. The numbers presented here may be changed as a function of other factors. Dischargers are strongly urged to contact the Permits Section for further information. Permit writers may utilize other information to adjust these limits and/or to determine other limits based upon best available technology and other considerations provided that the values in this wasteload analysis [TMDL] are not compromised. See special provisions in Utah Water Quality Standards for adjustments in the Total Dissolved Solids values based upon background concentration.

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801-538-6052
File Name: 240115-Intermountain_Concrete_WLA_2024.xlsm

APPENDIX - Coefficients and Other Model Information

CBOD Coeff. (Kd)20 1/day 0.210	CBOD Coeff. FORCED (Kd)/day 0.000	CBOD Coeff. (Ka)T 1/day 0.198	REAER. Coeff. (Ka)20 (Ka)/day 1.488	REAER. Coeff. FORCED 1/day 0.000	REAER. Coeff. (Ka)T 1/day 1.443	NBOD Coeff. (Kn)20 1/day 0.400	NBOD Coeff. (Kn)T 1/day 0.362
Open Coeff. (K4)20 1/day 0.000	Open Coeff. (K4)T 1/day 0.000	NH3 LOSS (K5)20 1/day 4.000	NH3 (K5)T 1/day 3.770	NO2+NO3 LOSS (K6)20 1/day 0.000	NO2+NO3 (K6)T 1/day 0.000	TRC Decay K(CI)20 1/day 32.000	TRC K(CI)(T) 1/day 29.679
BENTHIC DEMAND (SOD)20 gm/m2/day 1.000	BENTHIC DEMAND (SOD)T gm/m2/day 0.922						
K1 CBOD {theta} 1.0	K2 Reaer. {theta} 1.0	K3 NH3 {theta} 1.1	K4 Open {theta} 1.0	K5 NH3 Loss {theta} 1.0	K6 NO2+3 {theta} 1.0	K(CI) TRC {theta} 1.1	S Benthic {theta} 1.1

Antidegradation Review

An antidegradation review (ADR) was conducted to determine whether the proposed activity complies with the applicable antidegradation requirements for receiving waters that may be affected. The Level I ADR evaluated the criteria of R317-2-3.5(b) and determined that a Level II antidegradation Review is not required because this is a permit renewal with no change in discharge.

ATTACHMENT 2

Effluent Monitoring Data

PVNDraft

INTERMOUNTAIN CONCRETE (UT0024015) 001 – Flow rate – Effluent Gross – Quantity

Late/Missing Reports Timeline

Non-Numeric Value Timeline



INTERMOUNTAIN CONCRETE (UT0024015) 001 – pH – Effluent Gross – Concentration

Late/Missing Reports Timeline

Non-Numeric Value Timeline



INTERMOUNTAIN CONCRETE (UT0024015) 001 - Oil and grease visual - Effluent Gross - Quantity

Late/Missing Reports Timeline

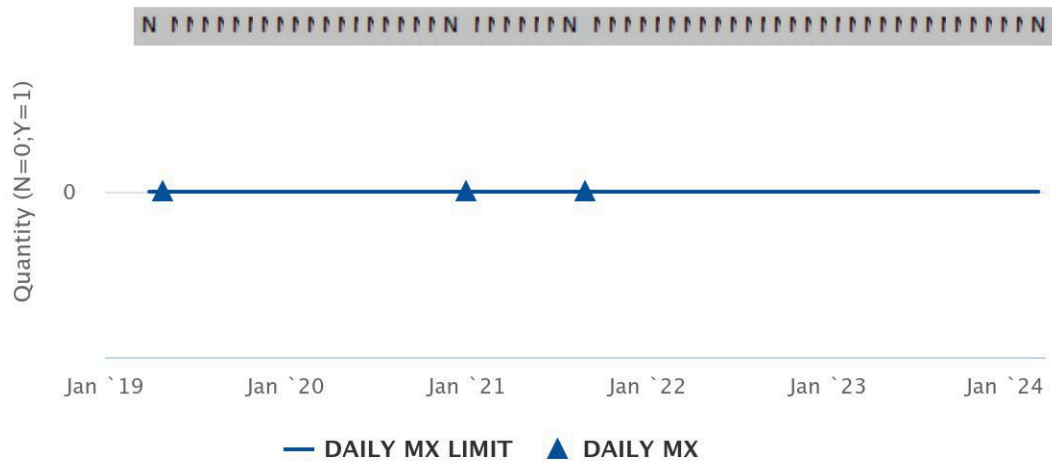
Non-Numeric Value Timeline



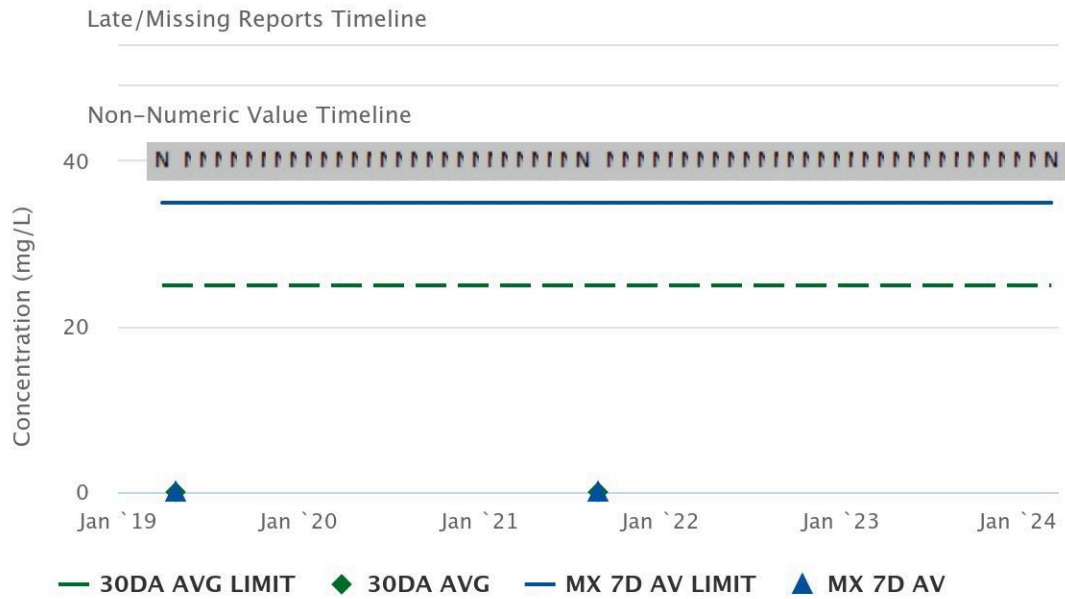
INTERMOUNTAIN CONCRETE (UT0024015) 001 - Oil and grease visual - Effluent Gross - Quantity

Late/Missing Reports Timeline

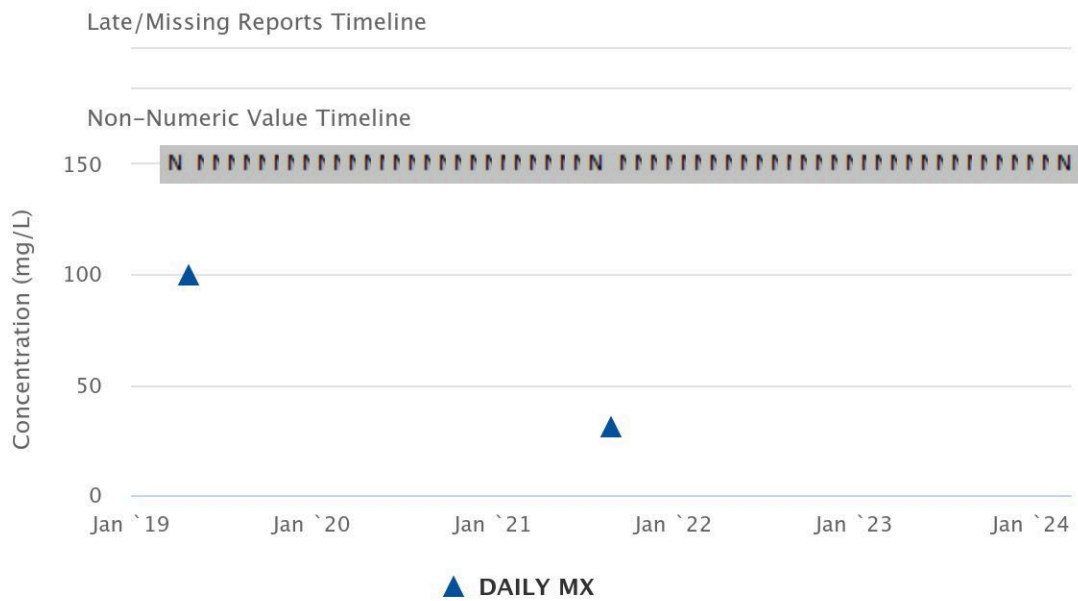
Non-Numeric Value Timeline



INTERMOUNTAIN CONCRETE (UT0024015) 001 – Solids, total suspended – Effluent Gross – Concentration



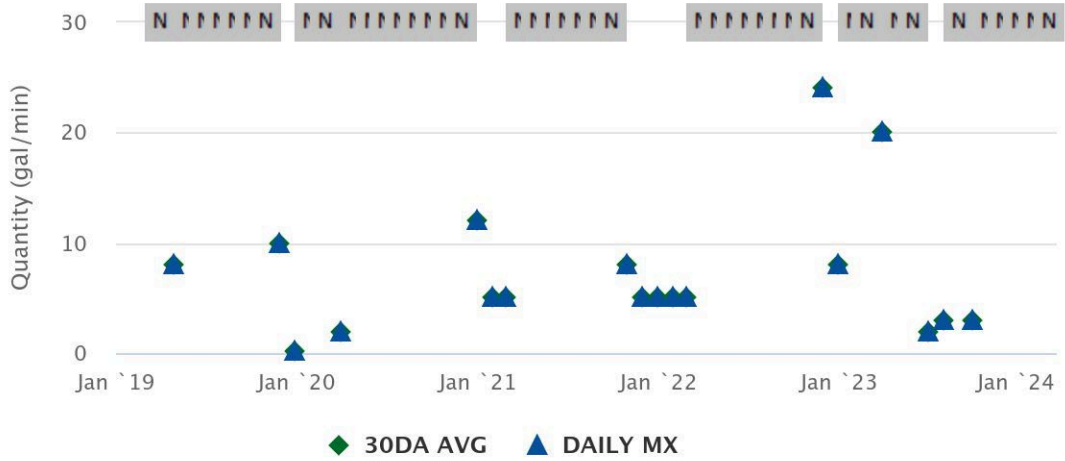
INTERMOUNTAIN CONCRETE (UT0024015) 001 – Solids, total dissolved – Effluent Gross – Concentration



INTERMOUNTAIN CONCRETE (UT0024015) 002 - Flow rate - Effluent Gross - Quantity

Late/Missing Reports Timeline

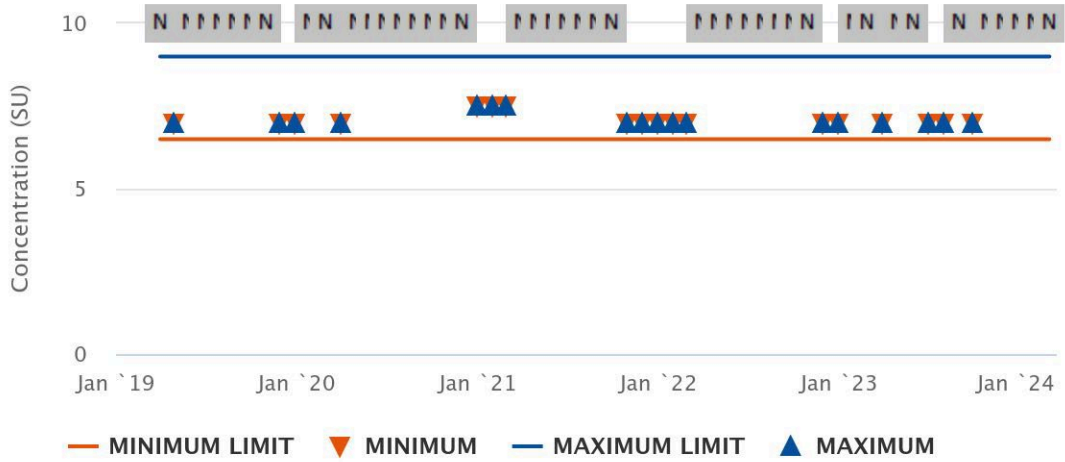
Non-Numeric Value Timeline



INTERMOUNTAIN CONCRETE (UT0024015) 002 - pH - Effluent Gross - Concentration

Late/Missing Reports Timeline

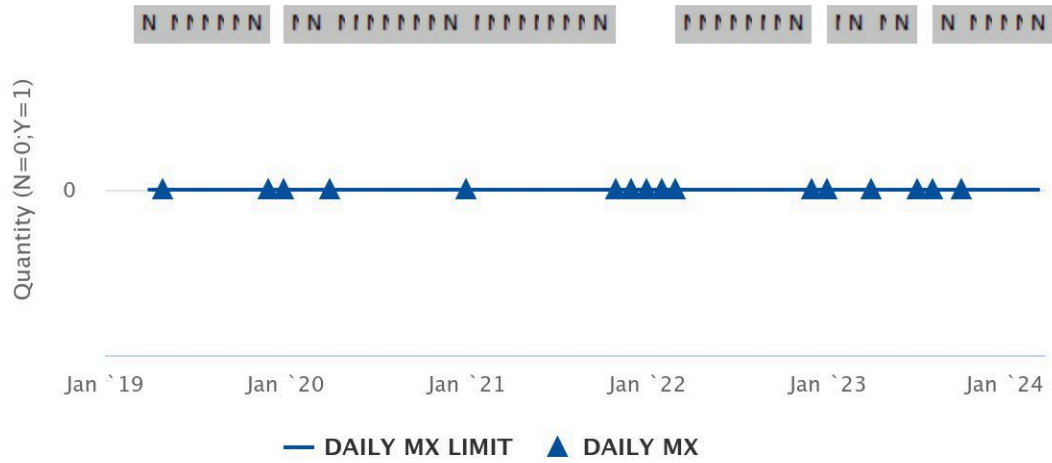
Non-Numeric Value Timeline



INTERMOUNTAIN CONCRETE (UT0024015) 002 – Oil and grease visual – Effluent Gross – Quantity

Late/Missing Reports Timeline

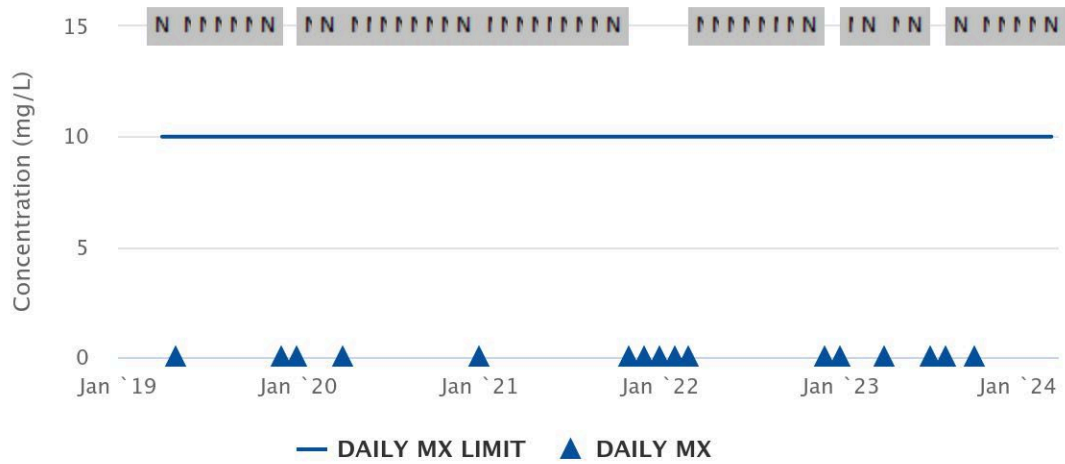
Non-Numeric Value Timeline



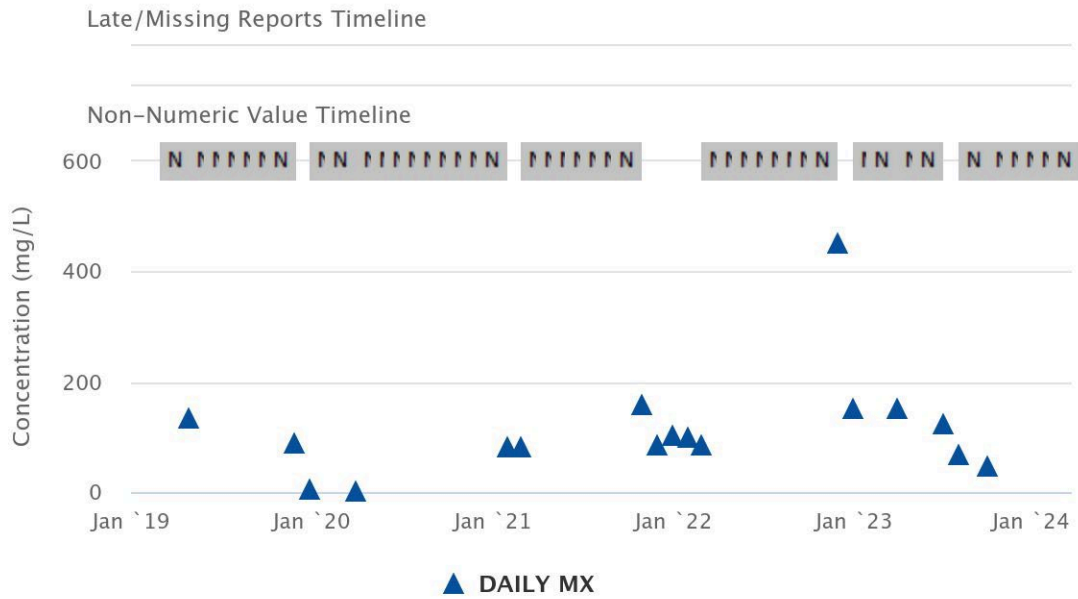
INTERMOUNTAIN CONCRETE (UT0024015) 002 – Oil & Grease – See Comments – Concentration

Late/Missing Reports Timeline

Non-Numeric Value Timeline



INTERMOUNTAIN CONCRETE (UT0024015) 002 – Solids, total dissolved – Effluent Gross – Concentration



INTERMOUNTAIN CONCRETE (UT0024015) 002 – Solids, total suspended – Effluent Gross – Concentration

