

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**

is hereby authorized to discharge from its facility located at Jensen, Utah,  
with the outfalls located at latitude 40°22'31" and longitude 109°20'22", to receiving waters named  
Green River (a tributary to the Colorado River)  
and to discharge storm water,  
in accordance with specific limitations, outfalls, and other conditions set forth herein.

This permit shall become effective on February 1, 2019

This permit expires at midnight on January 31, 2024

Signed this 28<sup>th</sup> day of January, 2019.



Erica Brown Gaddis, PhD  
Director

DWQ-2018-012098

Table of Contents

<u>Outline</u>	<u>Page Number</u>
<b>I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS</b> .....	1
A. Description of Discharge Points .....	1
B. Narrative Standard .....	1
C. Specific Limitations and Self-Monitoring Requirements .....	1
D. Reporting of Monitoring Results .....	2
<b>II. STORM WATER REQUIREMENTS</b> .....	3
A. Coverage of This Section.....	3
B. Prohibition of Non-Storm Water Discharges.....	3
C. Storm Water Pollution Prevention Plan Requirements .....	3
D. Monitoring and Reporting Requirements .....	8
<b>III. MONITORING, RECORDING &amp; GENERAL REPORTING REQUIREMENTS</b> .....	9
A. Representative Sampling .....	9
B. Monitoring Procedures.....	9
C. Penalties for Tampering.....	9
D. Compliance Schedules.....	10
E. Additional Monitoring by the Permittee .....	10
F. Records Contents.....	10
G. Retention of Records .....	10
H. Twenty-four Hour Notice of Noncompliance Reporting.....	10
I. Other Noncompliance Reporting.....	11
J. Inspection and Entry .....	11
<b>IV. COMPLIANCE RESPONSIBILITIES</b> .....	13
A. Duty to Comply .....	13
B. Penalties for Violations of Permit Conditions .....	13
C. Need to Halt or Reduce Activity not a Defense .....	13
D. Duty to Mitigate.....	13
E. Proper Operation and Maintenance.....	13
F. Removed Substances .....	13
G. Bypass of Treatment Facilities .....	13
H. Upset Conditions .....	15
I. Toxic Pollutants .....	15
J. Changes in Discharge of Toxic Substances .....	15
K. Industrial Pretreatment.....	16
<b>V. GENERAL REQUIREMENTS</b> .....	18
A. Planned Changes.....	18
B. Anticipated Noncompliance.....	18
C. Permit Actions .....	18
D. Duty to Reapply .....	18
E. Duty to Provide Information .....	18
F. Other Information.....	18
G. Signatory Requirements.....	18
H. Penalties for Falsification of Reports.....	19
I. Availability of Reports .....	19
J. Oil and Hazardous Substance Liability.....	19
K. Property Rights .....	19
L. Severability .....	19
M. Transfers.....	20
N. State or Federal Laws .....	20
O. Water Quality - Reopener Provision.....	20

R. Storm Water-Reopener Provision ..... 20

**VI. DEFINITIONS..... 21**

A. Wastewater ..... 21

C. Storm Water ..... 22

**PART I**  
**DISCHARGE PERMIT NO. UT0024015**  
**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*.

Outfall Number  
001

Location of Discharge Outfall

Discharge from the main pond near gravel washer to a ditch which flows through pasture land which drains to the Green River. Latitude 40°22'31" and longitude 109°20'22".

002

Discharge of overflow from the main water supply pond to a ditch which flows through pasture land which drains to the Green River. Latitude 40°22'31" and longitude 109°20'22".

- 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 the duration of this permit, the permittee is authorized to discharge from Outfalls 001 and 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
TSS, mg/L	25	35	NA	NA
TDS, 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**

**PART I**  
**DISCHARGE PERMIT NO. UT0024015**  
**WASTEWATER**

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
Selenium /b	Monthly	Grab	mg/L

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.

**D. Reporting of Monitoring Results**

1. Discharge Water. Monitoring results obtained during the previous month shall be summarized for each month and reported on NetDMR or a Discharge Monitoring Report Form (EPA No. 3320-1), post-marked no later than the 28th day of the month following the completed reporting period. The first report is due March 28, of 2019. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies shall be signed and certified in accordance with the requirements of Signatory Requirements (see Part V.G), and submitted to the Director, Division of Water Quality at the following address:

Original to: Department of Environmental Quality  
Division of Water Quality  
288 North 1460 West  
PO Box 144870  
Salt Lake City, Utah 84114-4870

## **II. STORM WATER REQUIREMENTS.**

- A. Coverage of This Section. The requirements listed under this section shall apply to storm water discharges. Storm water discharges from the following portions of the facility may be eligible for coverage under this permit: washing or processing areas, screening locations, unloading and storage areas, salt or sand storage areas, or vehicle or equipment storage and maintenance areas that are located within the confines of the facility that may have a reasonable expectation to contribute to pollutants in a storm water discharge.
- B. Prohibition of Non-Storm Water Discharges. Except for discharges identified in *Part I.* and discharges described below in this paragraph, non-storm water discharges are prohibited. The following non-storm water discharges may be authorized under this permit provided the non-storm water component of the discharge is in compliance with this section; discharges from firefighting activities; fire hydrant flushing; potable water sources including waterline flushing; drinking fountain water; irrigation drainage and lawn watering; routine external building wash down water where detergents or other compounds have not been used in the process; pavement wash waters where spills or leaks of toxic or hazardous materials (including oils and fuels) have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated compressor condensate; uncontaminated springs; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.
- C. Storm Water Pollution Prevention Plan Requirements. The permittee must have (on site) and implement a storm water pollution prevention plan as a condition of this permit.
1. Contents of the Plan. The plan shall include, at a minimum, the following items:
- a. *Pollution Prevention Team.* Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team who are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.
  - b. *Description of Potential Pollutant Sources.* Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials, which may be reasonably expected to have the potential as a significant pollutant source. Each plan shall include, at a minimum:
    - (1) *Drainage.* A site map indicating drainage areas and storm water outfalls. For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow and an identification of the types of pollutants that are likely to be present in storm water discharges associated with the activity. Factors to consider include the toxicity of the pollutant; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or

**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

hazardous pollutants. Flows with a significant potential for causing erosion shall be identified. The site map shall include but not be limited to:

- (a) Drainage direction and discharge points from all industrial associated activities including but not limited to vehicle and equipment maintenance and /or cleaning, loading and unloading, material storage (including tanks or other vessels used for liquid or waste storage), material processing, and waste disposal, haul roads, access roads, and rail spurs.
  - (b) Location of any erosion and sediment control structure or other control measures utilized for reducing pollutants in storm water runoff.
  - (c) Location of any handling, loading, unloading or storage of chemicals or potential pollutants such as caustics, hydraulic fluids, lubricants, solvents or other petroleum products, or hazardous wastes and where these may be exposed to precipitation.
  - (d) Locations where any major spills or leaks of toxic or hazardous materials have occurred.
  - (e) Location of any sand or salt piles.
  - (f) Location of fueling stations or vehicle and equipment maintenance and cleaning areas that are exposed to precipitation.
  - (g) Location of receiving streams or other surface water bodies.
  - (h) Locations of outfalls and the types of discharges contained in the drainage areas of the outfalls.
- (2) *Inventory of Exposed Materials.* An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the effective date of this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the effective date of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.
- (3) *Spills and Leaks.* A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.
- (4) *Sampling Data.* A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

- (5) *Summary of Potential Pollutant Sources and Risk Assessment.* A narrative description of the potential pollutant sources from the following activities associated with the site: loading and unloading operations; outdoor storage activities; outdoor processing activities; and significant dust or particulate generating processes. Specific potential pollutants shall be identified where known.
- c. *Measures and Controls.* The permittee shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:
- (1) *Good Housekeeping.* All areas that may contribute pollutants to storm waters discharges shall be maintained in a clean, orderly manner. These are practices that would minimize the generation of pollutants at the source or before it would be necessary to employ sediment ponds or other control measures at the discharge outlets. Where applicable, such measures or other equivalent measures would include the following: sweepers and covered storage to minimize dust generation and storm runoff; conservation of vegetation where possible to minimize erosion; sweeping of haul roads and exits to reduce or eliminate off site tracking; sweeping of sand or salt storage areas to minimize entrainment in storm water runoff; collection, removal, and proper disposal of waste oils and other fluids resulting from vehicle and equipment maintenance; other equivalent measures to address identified potential sources of pollution.
- (2) *Preventive Maintenance.* A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
- (3) *Spill Prevention and Response Procedures.* Areas where potential spills that can contribute pollutants to storm water discharges can occur, and their accompanying drainage points, shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures and equipment for cleaning up spills shall be identified in the plan and made available to the appropriate personnel.
- (4) *Inspections.* In addition to the comprehensive site evaluation required under paragraph (*Part II.C.1.c.(10)*) of this section, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility on a quarterly basis. The following areas shall be included in all inspections: storm water discharge diversions; conveyance systems; sediment control and collection systems; containment structures; vegetative BMPs; serrated or benched slopes; loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; and vents and stacks from industrial activities.



**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

- (5) *Employee Training.* Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.
- (6) *Record keeping and Internal Reporting Procedures.* A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. The permittee must describe procedures for developing and retaining records on the status and effectiveness of plan implementation. The plan must address spills, monitoring, and BMP inspection and maintenance activities. Ineffective BMPs must be recorded and the date of their corrective action noted.
- (7) *Non-storm Water Discharges.*
  - (a) *Certification.* The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with *Part V.G* of this permit.
  - (b) *Exceptions.* Except for flows from firefighting activities, sources of non-storm water listed in *Part II.B. (Prohibition of Non-storm Water Discharges)* of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
  - (c) *Failure to Certify.* Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the *Director* within 180 days after the effective date of this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations; potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the State which are not authorized by a *UPDES* permit are unlawful and must be terminated.
- (8) *Sediment and Erosion Control.* The plan shall identify areas, which, due to topography, activities, or other factors, have a high potential for significant soil

**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

- (9) *Management of Runoff.* The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity *Part II.C.1.b* (Description of Potential Pollutant Sources) of this permit] shall be considered when determining reasonable and appropriate measures. Appropriate measures or other equivalent measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet detention/retention devices, or equivalent measures. In addition, the permittee must describe the storm water pollutant sources area or activity (i.e., loading and unloading operations, raw material storage piles, etc.) to be controlled by each storm water management practice.
- (10) *Comprehensive Site Compliance Evaluation.* Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:
- (a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
  - (b) Based on the results of the evaluation, the description of potential pollutant sources identified in the plan in accordance with *Part II.C.1.b* (Description of Potential Pollutant Sources) of this section and pollution prevention measures and controls identified in the plan in accordance with *Part II.C.1.c* (Measures and Controls) of this section shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.
  - (c) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph *b.* (above) shall be made and retained as part of the storm water pollution prevention plan for at least 3 years

**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

after the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with (*Part V.G. (Signatory Requirements)*) of this permit.

- (d) The storm water pollution prevention plan must describe the scope and content of comprehensive site evaluation that qualified personnel will conduct to: 1) confirm the accuracy of the description of potential pollution sources contained in the plan, 2) determine the effectiveness of the plan, and 3) assess compliance with the terms and conditions of the permit. Where compliance evaluation schedules overlap with inspections required under Part II.C.1.c.(4), the compliance evaluation may be conducted in place of one such inspection.
- (11) *Deadlines for Plan Preparation and Compliance.* The permittee shall prepare and implement a plan in compliance with the provisions of this section within 270 days of the effective date of this permit. If the permittee already has a plan, it shall be revised according to *Part II.C.1.c.(10)*, Comprehensive Site Evaluation.
- (12) *Keeping Plans Current.* The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the state or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified by the plan, or in otherwise achieving the general objective of controlling pollutants in storm water discharges associated with the activities at the facility.

**D. Monitoring and Reporting Requirements.**

- 1. Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination must be made at least once in each of the following designated periods during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event: January through March; April through June; July through September; and October through December.
  - a. *Sample and Data Collection.* Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for entire permit term.

**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

- b. *Visual Storm Water Discharge Examination Reports.* Visual examination reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.
- c. *Representative Discharge.* When the permittee has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the observation data also applies to the substantially identical outfall(s) provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explains in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.
- d. *Adverse Conditions.* When a discharger is unable to collect samples over the course of the visual examination period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination and retain this documentation onsite with the results of the visual examination. Adverse weather conditions, which may prohibit the collection of samples, include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).
- e. *Inactive and Unstaffed Site.* When a discharger is unable to conduct visual storm water examinations at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. The facility must maintain a certification with the pollution prevention plan stating that the site is inactive and unstaffed so that performing visual examinations during a qualifying event is not feasible.

### **III. 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 and 40CFR Part 503*, unless other test procedures have been specified in this permit.
- 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

**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

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 *UAC R317-2-10* and *40 CFR 503* or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or the Biosolids Report Form. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.
- 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-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 536-4300, or 24-hour answering service (801) 536-4123.
  2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4300 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 IV.G, Bypass of Treatment Facilities.*);
    - c. Any upset which exceeds any effluent limitation in the permit (See *Part IV.H, Upset Conditions.*);

**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

- d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit; 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 III.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;
  - 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,

**PART II**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

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.

#### **IV. 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. Any person who willfully or negligently violates permit conditions or the Act is subject to a fine not exceeding \$25,000 per day of violation. Any person convicted under *UCA 19-5-115(2)* a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at *Part IV.G, Bypass of Treatment Facilities* and *Part IV.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;
    - (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 IV.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 IV.G.2* and below in *Part IV.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 IV.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 II.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.

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 III.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,
  - d. The permittee complied with any remedial measures required under *Part IV.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 Director 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 Director 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":
  - 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 Director in accordance with *UAC R317-8-4.2(6)*.

K. Pretreatment Requirements.

1. 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.
2. 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).

**PART IV**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

**PART V**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

**V. 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 the alteration or addition could significantly change the nature or increase the quantity of parameters discharged or pollutant sold or given away. This notification applies to pollutants, which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, 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.
  - 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. A person is a duly authorized representative only if:
    - a. The authorization is made in writing by a person described above and submitted to the Director, and,

**PART V**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

- 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.
3. Changes to authorization. If an authorization under *paragraph V.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 V.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 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.

**PART V**  
**DISCHARGE PERMIT NO. UT0024015**  
**Minor Industrial**

- 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 *UCA 19-5-117* and *Section 510* of the *Act* or any applicable Federal or State transportation regulations, such as but not limited to the Department of Transportation regulations.
- 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 area-wide 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. Whole Effluent Toxicity-Reopener Provision This permit may be reopened and modified (following proper administrative procedures) to include WET testing, a WET limitation, a compliance schedule, a compliance date, 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.
- Q. Storm Water-Reopener Provision. At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *UAC R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

## **VI. 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. "Act," means the *Utah Water Quality Act*.
4. "Acute toxicity" occurs when 50 percent or more mortality is observed for either test species at any effluent concentration (lethal concentration or "LC<sub>50</sub>").
5. "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.
6. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
7. "Chronic toxicity" occurs when the IC<sub>25</sub> < 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.
8. "IC<sub>25</sub>" 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.
9. "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 shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:



**PART VI**  
**DISCHARGE PERMIT NO. UT0024015**

- 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.
10. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
11. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
12. "EPA," means the United States Environmental Protection Agency.
13. "Director," means Director of the Division of Water Quality.
14. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
15. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
16. "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.
17. "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.
- B. Storm Water.
- 1. "Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
  - 2. "Coal pile runoff" means the rainfall runoff from or through any coal storage pile.

**PART VI**  
**DISCHARGE PERMIT NO. UT0024015**

3. “Co-located industrial activity” means when a facility has industrial activities being conducted onsite that are described under more than one of the coverage sections of *Appendix II* in the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity. Facilities with co-located industrial activities shall comply with all applicable monitoring and pollution prevention plan requirements of each section in which a co-located industrial activity is described.
4. “Commercial Treatment and Disposal Facilities” means facilities that receive, on a commercial basis, any produced hazardous waste (not their own) and treat or dispose of those wastes as a service to the generators. Such facilities treating and/or disposing exclusively residential hazardous wastes are not included in this definition.
5. “Landfill” means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile.
6. “Land application unit” means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.
7. “Municipal separate storm sewer system” (large and/or medium) means all municipal separate storm sewers that are either:
  - a. Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (at the issuance date of this permit, Salt Lake City is the only city in Utah that falls in this category); or
  - b. Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (at the issuance date of this permit Salt Lake County is the only county that falls in this category); or
  - c. Owned or operated by a municipality other than those described in paragraph *a.* or *b.* (above) and that are designated by the *Director* as part of the large or medium municipal separate storm sewer system.
8. “NOI” means “notice of intent”, it is an application form that is used to obtain coverage under the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity.
9. “NOT” means “notice of termination”, it is a form used to terminate coverage under the General Multi-Sector Permit for Storm Water Discharges Associated with Industrial Activity.
10. “Point source” means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

**PART VI**  
**DISCHARGE PERMIT NO. UT0024015**

11. "Section 313 water priority chemical" means a chemical or chemical categories that:
- a. Are listed at *40 CFR 372.65* pursuant to *Section 313* of the *Emergency Planning and Community Right-to-Know Act (EPCRA)* (also known as *Title III of the Superfund Amendments and Reauthorization Act (SARA)* of 1986);
  - b. Are present at or above threshold levels at a facility subject to *EPCRA Section 313* reporting requirements; and
  - c. Meet at least one of the following criteria:
    - (1) Are listed in *Appendix D* of *40 CFR Part 122* on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances);
    - (2) Are listed as a hazardous substance pursuant to *Section 311(b)(2)(A)* of the *CWA* at *40 CFR 116.4*; or
    - (3) Are pollutants for which EPA has published acute or chronic water quality criteria. See *Appendix III* of this permit. This appendix was revised based on final rulemaking EPA published in the *Federal Register* November 30, 1994.
12. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under *Section 101(14)* of *CERCLA*; any chemical the facility is required to report pursuant to *EPCRA Section 313*; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.
13. "Significant spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under *Section 311 of the Clean Water Act* (see *40 CFR 110.10* and *CFR 117.21*) or *Section 102* of *CERCLA* (see *40 CFR 302.4*).
14. "Storm water" means storm water runoff, snowmelt runoff, and surface runoff and drainage.
15. "SWDMR" means "storm water discharge monitoring report", a report of the results of storm water monitoring required by the permit. The Division of Water Quality provides the storm water discharge monitoring report form.
16. "Storm water associated with industrial activity" (*UAC R317-8-3.8(6)(c) & (d)*) means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the *UPDES* program. For the categories of industries identified in paragraphs (a) through (j) of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined in *40 CFR Part 401*); sites used for the storage and maintenance of material handling equipment; sites used for

**PART VI**  
**DISCHARGE PERMIT NO. UT0024015**

residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in paragraph (k) of this definition, the term includes only storm water discharges from all areas (except access roads and rail lines) listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs (a) to (k) of this definition) include those facilities designated under *UAC R317-8-3.8(1)(a)5*. The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

- a. Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under *40 CFR Subchapter N* (except facilities with toxic pollutant effluent standards that are exempted under category (k) of this definition);
- b. Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;
- c. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under *40 CFR 434.11(l)* because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations that have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; inactive mining operations are mining sites that are not being actively mined, but that have an identifiable owner/operator;
- d. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;
- e. Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under *Subtitle D* of RCRA;

**PART VI**  
**DISCHARGE PERMIT NO. UT0024015**

- f. Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;
  - g. Steam electric power generating facilities, including coal handling sites;
  - h. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45 and 5171 that have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or that are otherwise identified under paragraphs (a) to (g) or (l) to (k) of this subsection are associated with industrial activity;
  - i. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under *40 CFR Part 403*. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and that are not physically located in the confines of the facility, or areas that are in compliance with *40 CFR Part 503*;
  - j. Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than 5 acres of total land area that are not part of a larger common plan of development or sale;
  - k. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and that are not otherwise included within categories (a) to (j))
17. "Waste pile" means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

## **FACT SHEET AND STATEMENT OF BASIS**

### **INTERMOUNTAIN CONCRETE COMPANY MINOR INDUSTRIAL RENEWAL UPDES PERMIT NO. UT0024015**

**FACILITY CONTACT:** Mr. Bart Murray, Operator  
Intermountain Concrete Company

Mailing and Facility Address: 625 East Main Street  
Vernal, Utah 84078  
(435) 789-0774

Actual Address: Jensen, UT

### **DESCRIPTION OF FACILITY**

Intermountain Concrete Company (ICC) 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 taken by water right from irrigation ditches. The makeup water then 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. It is then transferred to a second settling basin. This 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 point (002) is located on the Main Pond to handle any excess water in the system. These two outfalls essentially drain from the same location, but from different depths.

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

### **SUMMARY OF CHANGES FROM PREVIOUS PERMIT**

Due to the impairment of the Green River for selenium, and the lack of an approved TMDL, the selenium monitoring is being added to this permit. Selenium monitoring is being added to assess the reasonable potential for the facility to contribute selenium to the impaired water body. After enough data is collected to determine reasonable potential for the facility, selenium monitoring may be continued, or the permit may be reopened to include selenium effluent limits as determined by the wasteload allocation.

### **DISCHARGE**

#### **DESCRIPTION OF DISCHARGE**

ICC has two discharge points.

#### **Outfall**

#### **Description of Discharge Point**

001	Located at latitude 40°22' 31" and longitude 109° 20' 22". Discharge from the main pond near gravel washer to a ditch
-----	--

which flows through pasture land which drains to the Green River.

002

Located at latitude 40°22' 31" and longitude 109° 20' 22". Discharge of overflow from the main water supply pond to a ditch which flows through pasture land which 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 is the receiving water body. 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.

### **BASIS FOR EFFLUENT LIMITATIONS**

ICC is covered by Subpart C - Construction Sand and Gravel Subcategory as contained in 40 CFR 436.30. Total suspended solids (TSS) and pH limits are based upon this federal regulation and Utah's secondary standards found in Utah Administrative Code (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, WQBELs are not required for this discharge. Therefore, permit limits should be set according to rules found in R-317-1 and categorical UPDES discharge requirements for a design flow of 1.41 cfs.

Discharges from ICC may eventually reach the Colorado River, which place 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 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 actually 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 upon Colorado River Salinity Control Forum Policy. The facility has had no problem meeting this requirement in the past.

### **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 outfall. Because of their process, washing sand and gravel, Intermountain Concrete was not required to sample metals during the previous permit cycle, and as a result there is no metals data to analyze for RP. Selenium monitoring is being added to the renewal permit to obtain enough data so the discharge can be analyzed 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
TSS, mg/L	25	35	NA	NA
TDS, 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 the same as in the previous permit. 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
Selenium /b	Monthly	Grab	mg/L

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.

## **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).

## **STORM WATER**

**STORM WATER REQUIREMENTS:** ICC had completed a “No Exposure Certification for Exclusion from UPDES Storm Water Permitting”. However, Utah DWQ feels that it would be more appropriate to include storm water provisions in this combined UPDES permit.

The storm water requirements are based on the UPDES Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity, General Permit No. UTR000000 (MSGP). All sections of the MSGP that pertain to discharges from Sector J facilities (Mineral Mining and Processing Facilities) have been included and sections which are redundant or do not pertain have been deleted. Since all of the storm water on site drains to the ponds, and ICC samples those ponds monthly as part of its individual permit, no analytical storm water sampling will be required. The facility will be required to do visual inspections and visual storm water monitoring.

The permit requires the preparation and implementation of a storm water pollution prevention plan for all areas within the confines of the plant. Elements of this plan are required to include:

1. The development of a pollution prevention team,
2. Development of drainage maps and materials stockpiles,
3. An inventory of exposed materials,
4. Spill reporting and response procedures,
5. A preventative maintenance program,
6. Employee training,
7. Certification that storm water discharges are not mixed with non-storm water discharges,

8. Compliance site evaluations and potential pollutant source identification, and
9. Visual examinations of storm water discharges.

### **BIOMONITORING REQUIREMENTS**

A nationwide effort to control toxic discharges where effluent toxicity is an existing or potential concern is regulated in accordance with the State of Utah Permitting and Enforcement Guidance Document for Whole Effluent Toxicity Control (biomonitoring). 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 municipal 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.

DWQ-2018-012097

## **PERMIT DURATION**

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

Drafted by  
Lonnie Shull, Discharge  
Jennifer Robinson/ Pretreatment  
Lisa Stevens, Storm Water  
Nick von Stackelberg, Wasteload Analysis  
Utah Division of Water Quality, (801) 536-4300

## **PUBLIC NOTICE**

Began: December 11, 2018  
Ended: January 10, 2019

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

The Public Notice of the draft permit was published in the Vernal Express. No comments were received during the public comment period.

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**

**ATTACHMENT 1**

*Effluent Monitoring Data*

### Effluent Monitoring Data.

Outfall 001	Flow Rate	pH	TSS	Solids, Total Dissolved	Solids, Total Dissolved	Oil and Grease
	Gal/Min	S.U.	mg/L	mg/L	lbs/Day	Visual
Oct-14	No Discharge					
Nov-14	No Discharge					
Dec-14	No Discharge					
Jan-15	No Discharge					
Feb-15	No Discharge					
Mar-15	No Discharge					
Apr-15	No Discharge					
May-15	No Discharge					
Jun-15	No Discharge					
Jul-15	No Discharge					
Aug-15	No Discharge					
Sep-15	No Discharge					
Oct-15	No Discharge					
Nov-15	No Discharge					
Dec-15	No Discharge					
Jan-16	No Discharge					
Feb-16	No Discharge					
Mar-16	No Discharge					
Apr-16	No Discharge					
May-16	No Discharge					
Jun-16	No Discharge					
Jul-16	No Discharge					
Aug-16	No Discharge					
Sep-16	0.25	7		216	1	0
Oct-16	No Discharge					
Nov-16	No Discharge					
Dec-16	No Discharge					
Jan-17	No Discharge					
Feb-17	No Discharge					
Mar-17	No Discharge					
Apr-17	No Discharge					
May-17	No Discharge					
Jun-17	No Discharge					
Jul-17	No Discharge					
Aug-17	No Discharge					
Sep-17	No Discharge					

Oct-17	No Discharge					
Nov-17	No Discharge					
Dec-17	No Discharge					
Jan-18	No Discharge					
Feb-18	No Discharge					
Mar-18	4	7	6	154	7	0
Apr-18	10	7	6	253	30	0
May-18	8	7	0	161	15	0
Jun-18	0.5	7	4	144	1	0
Jul-18	No Discharge					
Aug-18	No Discharge					
Sep-18	No Discharge					

Outfall 002	Flow Rate	pH	TSS	Solids, Total Dissolved	Solids, Total Dissolved	Oil and Grease
	Gal/Min	S.U.	mg/L	mg/L	lbs/Day	Visual
Oct-14	No Discharge					
Nov-14	20	7		425	102	
Dec-14	20	7		441.35	106	
Jan-15	15	7		369.29	67	
Feb-15	12	7		276.47	40	
Mar-15	8	7	14	171	16	
Apr-15	No Discharge					
May-15	No Discharge					
Jun-15	No Discharge					
Jul-15	No Discharge					
Aug-15	No Discharge					
Sep-15	No Discharge					
Oct-15	No Discharge					
Nov-15	10	7		205	25	

Dec-15	10	7		196	24	
Jan-16	10	7	4	175	21	
Feb-16	10	7		89	11	
Mar-16	No Discharge					
Apr-16	No Discharge					
May-16	No Discharge					
Jun-16	No Discharge					
Jul-16	No Discharge					
Aug-16	No Discharge					
Sep-16	10	7		216	26	
Oct-16	5	7		110	7	
Nov-16	10	7	7	208	25	
Dec-16	7	7		152	13	
Jan-17	15	7		308	55	
Feb-17	15	7	4	241	43	
Mar-17	10	7	5	311	37	
Apr-17	10	7	12	198	24	
May-17	No Discharge					
Jun-17	No Discharge					
Jul-17	No Discharge					
Aug-17	15	7	37	290	52	
Sep-17	15	7	4	288	52	
Oct-17	No Discharge					
Nov-17	15	7	4	288.23	52	
Dec-17	15	7	0	282	51	

Jan-18	15	7	0	259	47	
Feb-18	10	7	0	163	20	
Mar-18	6	7	9	153	11	
Apr-18	5	7	7	253	15	
May-18	2	7	6	161	4	
Jun-18	8	7	4	144	14	
Jul-18	8	7	8	132	13	
Aug-18	No Discharge					
Sep-18	No Discharge					



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**ATTACHMENT 2**

*Wasteload Analysis*

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**Utah Division of Water Quality  
ADDENDUM  
Statement of Basis  
Wasteload Analysis**

**Date: September 17, 2018**

**Facility: Intermountain Concrete  
Jensen, UT  
UPDES No. UT0024015**

**Receiving water: Green River (1C, 2A, 3B, 4)**

This addendum summarizes the wasteload analysis that was performed to determine water quality based effluent limits (WQBEL) for this discharge.

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. Latitude 40°22'31" and longitude 109°20'22". Maximum discharge of 34 gpm, as provided by the permittee.

Outfall 002: Discharge of overflow from the main water supply pond to pasture land which drains to the Green River. Latitude 40°22'31" and longitude 109°20'22". Maximum discharge of 603 gpm, as provided by the permittee.

Receiving Water

The receiving water for the discharge is the Green River. Per UAC R317-2-13.1.b, the Green River from confluence with Colorado River to state line has designated uses of 1C, 2A, 3B, and 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.*
- *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.*

**Utah Division of Water Quality  
Wasteload Analysis  
Intermountain Concrete, Jensen, UT  
UPDES No. UT0024015**

The critical flow for the wasteload analysis was considered the lowest stream flow for seven consecutive days with a ten year return frequency (7Q10). Daily mean discharge records from USGS stream gage #09261000 GREEN RIVER NEAR JENSEN, UT, were obtained. The 7Q10 was calculated for water years 1965 – 2017 using the EPA computer software DFLOW V4.1.

7Q10 Flow (Annual) = 936 cfs

**Mixing Zone**

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

The EPA Region 8 stream mixing zone analysis (STREAMIX1, 1994), was used to determine the plume width and mixed flow rate. A rectangular channel with a width of 700 feet, channel slope of 0.10 foot/foot, and roughness coefficient of 0.030 was assumed for channel geometry. Mannings equation was used to solve for the flow depth and velocity for the 7Q10 flow. The results of the mixing analysis are summarized in Table 1.

**Table 1: Mixing zone dimensions**

<b>Outfall</b>	<b>Condition</b>	<b>Distance (ft)</b>	<b>Plume Width (ft)</b>	<b>Dilution Flow (cfs)</b>	<b>Dilution Ratio</b>
001	Chronic	2,500	59.9	80.1	1,057:1
001	Acute	2,690	62.3	83.2	1,099:1
002	Acute	2,690	62.3	83.2	61:1

**Parameters of Concern**

The parameters of concern for the discharge are total dissolved solids (TDS), total suspended solids (TSS), and pH, as provided by the UPDES Permit Writer.

**TMDL**

The receiving water segment (Green River-2, Green River from Duchesne River confluence to Utah-Wyoming border) does not have an approved TMDL for any parameters. However, the receiving water was on the 303(d) list of impaired waters for selenium in Utah's 2016 Integrated Report.

**Effluent Limits**

Due to the high dilution ratio of receiving water to effluent discharge for Outfall 001 (1,057:1 for chronic conditions and 1,099:1 for acute conditions), WQBELs are not required for pollutants for which the ambient conditions in the receiving water are below water quality criteria. WQBELs for Outfall 002 were calculated using a mass balance mixing analysis and are attached in Appendix A.

**Utah Division of Water Quality**  
**Wasteload Analysis**  
**Intermountain Concrete, Jensen, UT**  
**UPDES No. UT0024015**

Due to the impairment of the Green River for selenium, and the lack of an approved TMDL, the effluent limits are the water quality criteria for that pollutant (Table 2). Remaining permit limits should be set according to rules found in R-317-1 and categorical UPDES discharge requirements for a design flow of 30 gallons per minute.

**Table 2: Water Quality Based Effluent Limits Summary**

Effluent Constituent	Acute			Chronic		
	Standard	Limit	Averaging Period	Standard	Limit	Averaging Period
Flow (gpm) Outfall 001		34	Maximum			
Flow (gpm) Outfall 002		603	Maximum			
Selenium (µg/L)	18.4	18.4	1 hour	4.6	4.6	4 days

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 permit renewal since the pollutant concentration and load are not increasing beyond the current permit and design capacity of the facility.

**Prepared by:**  
**Nicholas von Stackelberg, P.E.**  
**Standards and Technical Services Section**

Documents:

Wasteload Document: *IntermountainConcreteWLA2018-09-13.docx*

Wasteload Model: *IntermountainConcreteWLA2018.xlsx*

References

Utah Division of Water Quality. 2012. *Utah Wasteload Analysis Procedures Version 1.0*. State of Utah, Department of Environmental Quality, Division of Water Quality.

Utah Division of Water Quality. 2016. *Utah's 2016 Integrated Report*. State of Utah, Department of Environmental Quality, Division of Water Quality.

**WASTELOAD ANALYSIS [WLA]**

Date: 9/13/2018

**Appendix A: Mass Balance Mixing Analysis for Conservative Constituents**

Discharging Facility: Intermountain Concrete  
 UPDES No: UT-0024015  
 Outfall: 002  
 Permit Flow [gpm]: 603.00 Max. Daily 1.343 cfs  
  
 Receiving Water: Green River  
 Stream Classification: 1C, 2A, 3B, 4  
 Stream Flow [cfs]: 936.0 All Seasons Critical Low Flow  
  
 Fully Mixed: NO  
 Acute River Width: 8.5% Plume Model Used  
 Chronic River Width: N/A  
  
 Acute Stream Flow [cfs]: 79.56  
 Acute Combined Flow [cfs]: 80.90

**Modeling Information**

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

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

**Effluent Limitations**

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

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

**Effluent Limitations for Protection of Drinking Water (Class 1C Waters)**

Metals, Dissolved (mg/L)	Standard	Background	Limit
Arsenic	0.01	0.007	0.21
Barium	1.0	0.7	20.5
Beryllium	0.004	0.003	0.082
Cadmium	0.01	0.007	0.21
Chromium	0.05	0.03	1.03
Lead	0.015	0.010	0.308
Mercury	0.002	0.001	0.041
Selenium	0.05		0.05
Silver	0.05	0.03	1.03

**Effluent Limitations for Protection of Recreation (Class 2A Waters)**

Physical Parameter	Maximum Concentration
pH Minimum	6.5
pH Maximum	9.0
Turbidity Increase (NTU)	10.0

## Effluent Limitations for Protection of Aquatic Wildlife (Assumed Class 3B Waters)

<b>Temperature (deg C)</b>	<b>Maximum</b>
Instantaneous	27.0
Change	4.0
<b>Dissolved Oxygen (mg/L)</b>	<b>Minimum Concentration</b>
Instantaneous	3.0
30-day Average	5.0
<b>pH</b>	<b>Concentration</b>
Minimum	6.5
Maximum	9.0

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

## Metals-Total Recoverable

<b>Parameter</b>	<b>Chronic (4-day ave)</b>			<b>Acute (1-hour ave)</b>		
	<b>Standard<sup>1</sup></b>	<b>Background<sup>2</sup></b>	<b>Limit</b>	<b>Standard<sup>1</sup></b>	<b>Background<sup>2</sup></b>	<b>Limit</b>
Aluminum (µg/L)	87.0	58.3	N/A	750.0	58.3	809.0
Arsenic (µg/L)	150.0	100.5	N/A	340.0	100.5	360.4
Cadmium (µg/L)	0.4	0.27	N/A	3.9	0.27	4.3
Chromium VI (µg/L)	11.0	7.4	N/A	16.0	7.4	16.7
Chromium III (µg/L)	130.8	87.6	N/A	1005.2	87.6	1083.4
Copper (µg/L)	16.2	10.8	N/A	25.8	10.8	27.1
Cyanide (µg/L) <sup>2</sup>	5.2	3.5	N/A	22.0	3.5	23.6
Iron (µg/L)				1000.0	23.0	1083.3
Lead (µg/L)	5.3	3.6	N/A	136.1	3.6	147.4
Mercury (µg/L) <sup>2</sup>	0.012	0.008	N/A	2.4	0.008	2.6
Nickel (µg/L)	93.5	62.6	N/A	841.7	62.6	908.1
Selenium (µg/L)	4.6	3.1	N/A	18.4		18.4
Silver (µg/L)				10.6	1.1	11.4
Tributyltin (µg/L) <sup>2</sup>	0.072	0.048	N/A	0.46	0.048	0.50
Zinc (µg/L)	212.5	142.4	N/A	210.8	142.4	216.7

1: Based upon a Hardness of 200 mg/l as CaCO<sub>3</sub>

2: Background concentration assumed 67% of chronic standard



**Utah Division of Water Quality**

**Organics [Pesticides]**

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

**Radiological**

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

**Effluent Limitation for Protection of Agriculture (Class 4 Waters)**

Parameter	Maximum Concentration		
	Standard	Background	Limit
Total Dissolved Solids (mg/L)	1200		1200
Boron (mg/L)	0.75	0.5	15.4
Arsenic, Dissolved (µg/L)	100	67.0	2054
Cadmium, Dissolved (µg/L)	10	6.7	205
Chromium, Dissolved (µg/L)	100	67.0	2054
Copper, Dissolved (µg/L)	200	134.0	4108
Lead, Dissolved (µg/L)	100	67.0	2054
Selenium, Dissolved (µg/L)	50	33.5	1027
Gross Alpha (pCi/L)	15	10.1	308