

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. **UT0025789**

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

CAPITOL REEF NATIONAL PARK

is hereby authorized to discharge from its facility located in Torrey, Utah, with the outfall located at latitude 38°16'14" and longitude 111°16'55" to receiving waters named

FREMONT RIVER

in accordance with discharge points (s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on March 1, 2019.

This permit and the authorization to discharge shall expire at midnight on February 29, 2024.

Signed this 4th day of February, 2019.



Erica Brown Gaddis, PhD
Director

Table of Contents

Outline	Page Number
I. DISCHARGE LIMITATIONS AND REPORTING REQUIREMENTS	1
A. Description of Discharge Points	1
B. Narrative Standard	1
C. Specific Limitations and Self-Monitoring Requirements	1
II. MONITORING, RECORDING & GENERAL REPORTING REQUIREMENTS	3
A. Representative Sampling	3
B. Monitoring Procedures	3
C. Penalties for Tampering	3
D. Compliance Schedules	3
E. Additional Monitoring by the Permittee	3
F. Records Contents	3
G. Retention of Records	3
H. Twenty-four Hour Notice of Noncompliance Reporting	3
I. Other Noncompliance Reporting	4
J. Inspection and Entry	4
III. COMPLIANCE RESPONSIBILITIES	6
A. Duty to Comply	6
B. Penalties for Violations of Permit Conditions	6
C. Need to Halt or Reduce Activity not a Defense	6
D. Duty to Mitigate	6
E. Proper Operation and Maintenance	6
F. Removed Substances	6
G. Bypass of Treatment Facilities	6
H. Upset Conditions	8
IV. GENERAL REQUIREMENTS	9
A. Planned Changes	9
B. Anticipated Noncompliance	9
C. Permit Actions	9
D. Duty to Reapply	9
E. Duty to Provide Information	9
F. Other Information	9
G. Signatory Requirements	9
H. Penalties for Falsification of Reports	10
I. Availability of Reports	10
J. Oil and Hazardous Substance Liability	10
K. Property Rights	10
L. Severability	10
M. Transfers	11
N. State or Federal Laws	11
O. Water Quality - Reopener Provision	11
R. Storm Water-Reopener Provision	11
V. DEFINITIONS	12

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 through a 4 inch pipe from the facility to the Fremont River. Latitude: 38°16'14" Longitude: 111°16'55"

- 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 Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Effluent Limitations			
	30 - Day Average	Maximum 7 - Day Average	Daily Minimum	Daily Maximum
Flow, gpd	NA	NA	NA	2,880
Total Suspended Solids, mg/L	25	35	NA	NA
Total Dissolved Solids, mg/L	NA	NA	NA	4,000
Total Dissolved Solids, tons/day	NA	NA	NA	1.0
pH, Standard Units	NA	NA	6.5	9.0

NA – Not Applicable

Table 2. Self-Monitoring and Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Total Flow	Continuous	Recorder	gpd
Total Suspended Solids	Monthly	Composite	mg/L
Total Dissolved Solids	Monthly	Grab	mg/L
pH	Monthly	Grab	SU

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

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

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

II. 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 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 III.G, Bypass of Treatment Facilities.*);
 - c. Any upset which exceeds any effluent limitation in the permit (See *Part III.H, Upset Conditions.*);
 - 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.C.2, 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 II.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,
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.

III. 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 III.G, *Bypass of Treatment Facilities* and Part III.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 III.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 III.G.2.a (1), (2) and (3).*

3. Notice.

- a. *Anticipated bypass.* Except as provided above in *Part III.G.2* and below in *Part III.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 III.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 II.H, Twenty-four Hour Notice of Noncompliance Reporting*; and,
 - d. The permittee complied with any remedial measures required under *Part III.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.

IV. 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,

- 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 IV.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 IV.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.

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. 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".

V. DEFINITIONS

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 "LC₅₀").
5. "Bypass," means the diversion of waste streams from any portion of a treatment facility.
6. "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:
 - 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.

PART V
Minor Industrial
Capitol Reef National Park
Permit No. UT0025798

7. "CWA," means *The Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
8. "Daily Maximum" (Daily Max.) is the maximum value allowable in any single sample or instantaneous measurement.
9. "EPA," means the United States Environmental Protection Agency.
10. "Director," means Director of the Division of Water Quality.
11. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
12. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.
13. "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.
14. "Upset," means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

**FACT SHEET AND STATEMENT OF BASIS
CAPITOL REEF NATIONAL PARK
UPDES PERMIT NUMBER: UT0025798
MINOR INDUSTRIAL**

FACILITY CONTACTS

Person Name: Jeff Williams
Position: Maintenance Supervisor

Facility Name: Capitol Reef National Park
Mailing and Facility Address: HC 70 Box 15
Torrey, UT 84775

Telephone: (435) 425-3791

Actual Address: 52 Scenic Drive
Torrey, UT 84775

DESCRIPTION OF FACILITY

Capitol Reef National Park is using a reverse osmosis system to treat well water within the National Park to manage the hardness of water in their campgrounds, visitor's center, and employee housing. The peak treated water production from the system would be approximately 16,000 gallons per day. The well water will be pumped to the reverse osmosis system where it will be treated. Once treated, the water will be chlorinated and pumped to a drinking water storage tank. The reject water from the reverse osmosis system will be pumped to a sedimentation basin, then gravity flow to the Fremont River through a 4 in pipe at latitude 38°16'14" and longitude 111°16'55". The SIC code is 4941: Water Supply.

SUMMARY OF CHANGES FROM PREVIOUS PERMIT

All limitations will remain the same as those in the previous permit.

DISCHARGE

DESCRIPTION OF DISCHARGE

<u>Outfall</u>	<u>Description of Discharge Point</u>
001	Located at latitude 38° 16' 14" and longitude 111° 16' 55". The discharge is through a 4-inch diameter pipe leading from the water treatment plant to the Fremont River.

RECEIVING WATERS AND STREAM CLASSIFICATION

The final discharge is to the Fremont River, which is classified as 1C, 2B, 3A, and 4.

Class 1C	-Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water.
Class 2B	-Protected for secondary contact recreation such as boating, wading, or similar uses.
Class 3A	-Protected for cold water species of game fish and other cold 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

Limitations on total suspended solids (TSS), pH and based on current Utah Secondary Treatment Standards, *UAC R317-1-3.2*. Limitations for Total Dissolved Solids are based on the discharge from the best available treatment technology that is used, and verified by the Wasteload Analysis as not causing an exceedance of water quality standards in the Fremont River.

The receiving water segment (Fremont River-3, Fremont River and tributaries from east boundary of Capitol Reef National Park to Bicknell) was listed in Utah's 2016 integrated report as being impaired for Total Dissolved Solids. Additionally, there is a lack of an approved TMDL, the Fremont River-3 for Total Dissolved Solids. However, the source of this impairment can be traced to a tributary of the Fremont, Sulphur Creek. Waters in the main stem of the Fremont where this discharge occurs are not impaired for TDS. Therefore, based on best professional judgment, the TDS limit for the facility is being maintained at the previous permit limit of 4,000 mg/L in this permit.

Discharges from the Capitol Reef facility could potentially reach the Colorado River, which places it under the requirements of the Colorado River Basin Salinity Control Forum (CRBSCF). In accordance with the CRBSCF the effluent will be limited to a maximum discharge of 1.0 ton per day or 366 tons per year. Total dissolved solids (TDS) limitations are based upon Utah Water Quality Standards for concentration values and the Colorado River Basin Salinity Control Forum (CRBSCF) for mass loading values when applicable as authorized in *UAC R317-2-4*.

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. The facility has not discharged in almost 3 years and is currently not in operation. Because of their process (reject water from reverse osmosis of well water) Capitol Reef National Park was not required to sample metals during the previous permit cycle, and as a result there is no metals data to analyze.

The permit limitations are:

Parameter	Effluent Limitations			
	30 - Day Average	Maximum 7 - Day Average	Daily Minimum	Daily Maximum
Flow, gpd	NA	NA	NA	2,880
Total Suspended Solids, mg/L	25	35	NA	NA
Total Dissolved Solids, mg/L	NA	NA	NA	4,000

Total Dissolved Solids, tons/day	NA	NA	NA	1.0
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.

Table 2. Self-Monitoring and Reporting Requirements			
Parameter	Frequency	Sample Type	Units
Total Flow	Continuous	Recorder	gpd
Total Suspended Solids	Monthly	Composite	mg/L
Total Dissolved Solids	Monthly	Grab	mg/L
pH	Monthly	Grab	SU

STORM WATER

Storm water provisions are not included in this UPDES permit. The facility's SIC code is 4941: Water Supply, there is no bulk storage of any contaminants at the facility. Therefore, a storm water industrial UPDES permit is not required. A storm water re-opener provision is included in the permit should storm water requirements become necessary in the future.

PRETREATMENT REQUIREMENTS

The facility is a minor industrial facility and as such is not subject to pretreatment regulations. As a result there are no pretreatment requirements in the permit.

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 classified as a minor industrial facility that will discharge a relatively small volume of effluent when compared to flows of the receiving stream. The receiving stream water quality monitoring data indicate no impairment of the stream. Based on these considerations, there is no reasonable potential for toxicity in the proposed discharge (per State of Utah Permitting and Enforcement Guidance Document for WET Control). As such, there will be no numerical WET limitations or WET monitoring requirements in this permit. However, the permit will contain a toxicity limitation re-opener provision

that allows for modification of the permit should additional information indicate the presence of toxicity in the discharge.

PERMIT DURATION

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

Drafted by
Lonnie Shull
Utah Division of Water Quality,
October 26, 2018

PUBLIC NOTICE

Began: December 27, 2019

Ended: January 28, 2019

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

The Public Noticed of the draft permit was published in the Richfield Reaper. No comments were received during the public comment period.

DWQ-2018-012092

ATTACHMENT 1

Wasteload Analysis

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

Date: December 12, 2018

**Facility: Capitol Reef National Park Water Treatment Plant
Torrey, UT
UPDES No. UT0025798**

Receiving water: Fremont River (1C, 2A, 3A, 4)

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

Discharge

001: Discharge through a 4-inch diameter pipe from a sedimentation pond to the Fremont River.

The design flow for the discharge is 2,880 gallons per day (0.004 cfs), as provided by the permittee.

The discharge is reject water from the reverse osmosis water treatment process. Discharge to the Fremont River only occurs when the pond is full and reaches the height of the outlet pipe.

Receiving Water

The receiving water for the discharge is the Fremont River, which is tributary to the Dirty Devil River, which drains to the Colorado River.

Per UAC R317-2-13, the designated beneficial uses for the Fremont River and tributaries, through Capitol Reef National Park to headwaters are 1C, 2A, 3A 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 3A - Protected for cold water species of game fish and other cold 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.*

The critical flow for the wasteload analysis was considered the lowest stream flow for seven consecutive days with a ten year return frequency (7Q10). Flow records from USGS stream gage #09330000 Fremont River Near Bicknell, UT, for the period 1909 – 2013 were obtained.

**Utah Division of Water Quality
Wasteload Analysis
Capitol Reef National Park Water Treatment Plant
UPDES No. UT0025798**

Distribution records for the Torrey Canal, the primary diversion immediately downstream of the USGS stream gage, for the period 1976 – 2012 were obtained from the Utah Division of Water Rights. The Torrey Canal diversion flows were subtracted from the USGS stream gage in order to develop a flow record for the Fremont River downstream of Torrey, UT. The 7Q10 critical flow was calculated using the EPA computer software DFLOW V3.1b (Table 1).

Table 1: Fremont River critical low flow (7Q10)

Season	Flow (cfs)
Summer	28.4
Fall	39.7
Winter	64.8
Spring	28.4

Receiving water quality data was obtained from monitoring site 4954390 Fremont River at U12 Crossing. The average seasonal value was calculated for constituents with available data in the receiving water (Table 2).

Table 2: Ambient conditions for #4954390 Fremont River at U12 Crossing (2000-2012)

Parameter	Count	Average
Hardness, Ca + Mg (mg/L)	5	250
pH	25	8.5
Total Dissolved Solids (mg/L)	10	350
Total Suspended Solids (mg/L)	22	55

Mixing Zone

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

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 15 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 discharge was estimated to be fully mixed within 70 feet of the outfall.

Parameters of Concern

The parameters of concern for the discharge/receiving water are total dissolved solids (TDS), total suspended solids (TSS), BOD₅, and pH, as provided by the UPDES Permit Writer.

**Utah Division of Water Quality
Wasteload Analysis
Capitol Reef National Park Water Treatment Plant
UPDES No. UT0025798**

TMDL

The receiving water segment (Fremont River-3, Fremont River and tributaries from east boundary of Capitol Reef National Park to Bicknell) does not have an approved TMDL for any parameters. However, the receiving water was on the 303(d) list of impaired waters for E. coli, temperature, and total dissolved solids in Utah's 2016 Integrated Report.

The downstream segment of the Fremont River (Fremont River-4, Fremont River and tributaries from confluence with Dirty Devil to east boundary of Capitol Reef National Park) has an approved TMDL (UDWQ, 2002) for total dissolved solids (TDS).

Effluent Limits

Due to the high dilution ratio of receiving water to effluent discharge (minimum of 6,311:1 for chronic conditions and 3,156:1 for acute conditions during the spring season), WQBELs are not required for pollutants for which the ambient conditions in the receiving water are below water quality criteria. However, due to the impairment of the Fremont River for E. coli and TDS, and the lack of an approved TMDL, the effluent limits are the water quality criteria for these pollutants (Table 3). Remaining permit limits should be set according to rules found in R-317-1 and categorical UPDES discharge requirements for a design flow of 2,880 gallons per day.

Table 3: Water Quality Based Effluent Limits Summary

Effluent Constituent	Acute			Chronic		
	Standard	Limit	Averaging Period	Standard	Limit	Averaging Period
Flow (GPD)		2,880	1 day		2,880	30 days
Total Dissolved Solids (mg/L)	Refer to Watershed Protection Section for limits due to impairment and approved TMDL for receiving water.					
E. coli (#/100mL)	409	409	Maximum	126	126	30 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**

**Utah Division of Water Quality
Wasteload Analysis
Capitol Reef National Park Water Treatment Plant
UPDES No. UT0025798**

Documents:

Wasteload Document: *capitol_reef_wla_2018-12-12.docx*

Wasteload Model: *capitol_reef_wla_2013.xlsx*

References

Utah Division of Water Quality. 2002. *Fremont River Watershed Water Quality Management Plan*. State of Utah, Department of Environmental Quality, Division of Water Quality.

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.

DWQ-2018-012094