

FACT SHEET STATEMENT OF BASIS**SALT LAKE CITY MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)****UPDES PERMIT NUMBER UTS000002****PHASE 1 PERMIT MODIFICATION****BACKGROUND**

The Federal Clean Water Act requires that stormwater discharges from certain types of facilities be authorized under stormwater discharge Permits. (See 40 CFR 122.26.) The goal of the stormwater Permits program is to reduce the amount of pollutants entering streams, lakes and rivers as a result of runoff from residential, commercial and industrial areas. The original 1990 regulation (Phase I) covered municipal (i.e., publicly-owned) storm sewer systems for municipalities over 100,000 population. The regulation was expanded in 1999 to include smaller municipalities. This expansion of the program to include small MS4s is referred to as Phase II. Salt Lake City encompasses approximately 110 square miles within the lower Jordan River Basin and is comprised of a population in excess of 186,440. Salt Lake City is defined as a medium municipality (Utah Administrative Code “UAC” R317-8- 1.6(7)) and is required to maintain a Utah Pollutant Discharge Elimination System (UPDES) stormwater permit (UAC R317-8-11.3(1)(a)).

The State of Utah was granted primacy in the National Pollutant Discharge Elimination System (NPDES) program by USEPA in 1987. In Utah, stormwater discharge Permits are issued by the “Director”. Utah’s program is known as the Utah Pollutant Discharge Elimination System (UPDES) Program. The requirements of this Permit are intended to reduce the discharge of pollutants to the maximum extent practicable and meet water quality standards through the development and implementation of a Storm Water Management Program (SWMP).

This Permit serves as a modification and replacement of the previous Salt Lake City Municipal Separate Storm Sewer (MS4) Permit, UTS000002, issued June, 22, 2021. This Permit is intended to cover new or existing discharges composed entirely of stormwater from the Salt Lake City metropolitan area, which is required by the State to obtain permit coverage.

PERMIT REQUIREMENT SYNOPSIS

The Permittee must develop, implement, and enforce a Storm Water Management Plan (SWMP) designed to reduce the discharge of pollutants to the maximum extent practicable from the MS4, protect the water quality, and satisfy the appropriate water quality requirements of the *Utah Water Quality Act*. The SWMP must include six (6) minimum control measures. Salt Lake City is expected to have fully implemented the six (6) minimum control measures (MCM) included in the previous permit. The six (6) MCM are listed below, with a brief, but not all encompassing, synopsis provided.

Public Education and Outreach on Storm Water Impacts

The public education and outreach MCM requires the Permittee to implement a public education and outreach program to promote behavior change by the public to reduce impacts associated with pollutants in stormwater runoff and illicit discharges. The program must target a variety of audiences, including: residents; institutions, industrial, and commercial facilities; developers and contractors (construction); and MS4 owned or operated facilities. The training should touch on topics including, but not limited to, the

prevention of illicit discharges and improper waste disposal. All provided education is required to be well documented and available to the *Director* upon request.

Public Involvement/Participation

The public involvement/participation MCM requires the Permittee to implement a program that complies with applicable state and local public notice requirements. The Permittee must allow for public input on the SWMP document and make it publicly available for review **180 days** from the effective date of this permit and a current version shall be made available for public review for the life of this permit. The SWMP shall include ongoing opportunities for public involvement and participation.

Illicit Discharge Detection and Elimination (IDDE)

The IDDE MCM requires the Permittee to implement and enforce an IDDE program to systematically find and eliminate sources of non-stormwater discharges from the MS4 and implement procedures to prevent illicit connections and discharges. The Permittee must have a program that consists of a variety of documents, which may include, ordinances (or other regulatory mechanism), SOPs, plans, and/or procedures that target the prohibition, identification, prevention, and remediation of illicit discharges and improper disposal of waste. The Permittee must have adequate legal authority to detect, investigate, eliminate, and enforce against non-stormwater discharges.

Construction Site Storm Water Runoff Control

The construction site stormwater runoff control MCM requires the Permittee to implement and enforce a program to reduce pollutants in stormwater runoff to the MS4 from construction sites with land disturbance greater than, or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale which collectively disturbs land greater than, or equal to one acre. The Permittee must have a regulatory mechanism in place that requires operators to prepare a Storm Water Pollution Prevention Plan (SWPPP) and apply any sediment and erosion control Best Management Practices (BMPs), as necessary to protect water quality. The Permittee must have a written enforcement strategy that includes appropriate escalating enforcement procedures and an appeals process. The MCM also lists specific inspection and project review requirements.

Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)

The post-construction stormwater management MCM requires the Permittee to implement and enforce a program to address post-construction stormwater runoff to the MS4 from private and public new development and redevelopment construction sites. The Permittee must require the retention of an 80th percent rainfall event or the achievement of pre-development hydrologic conditions for new development. The program must include a process which requires the evaluation of a Low Impact Development (LID) approach.

Pollution Prevention and Good Housekeeping for Municipal Operations

The pollution prevention and good housekeeping MCM requires the Permittee to implement a program for Permittee-owned or operated facilities, operations, and structural stormwater controls. All components of the program must be included in the SWMP document and identify the department responsible for performing any activities required by this MCM. The Permittee is required to maintain an inventory of "high priority" facilities that are owned or operated by the Permittee and any associated stormwater controls. The program must include training, inspection procedures and frequencies, and

SOPs designed to protect water quality at each of the facilities owned or operated by the Permittee, among other items.

NOTABLE CHANGES MADE SINCE THE LAST PERMIT RENEWAL

The last permit renewal was issued on June, 22, 2021. In this permit modification (**July 3, 2023**) significant changes were made in regard to the Special Conditions section. This section was updated to include requirements of MS4s under the *Jordan River Watershed Wide Escherichia coli (E. coli) TMDL*.

Since the previous Permit, some spelling edits, changes to grammar, minor language changes, sentencng restructuring, and formatting have been completed. Permit numbering was corrected in several locations (namely Parts 4.2.6. & 7.0). URL links were updated in instances where the links had broken.

These changes were made to improve readability and clarify the requirements of this permit. These changes are not explicitly mentioned below unless it updates/adds requirements, has the potential to impact how a Permittee may implement their program, or were considered a significant restructure or rewording, but did not change the overall permit requirement. The notable changes are identified below and are broken down by Permit Part.

Additionally, the expiration date of June 24th, 2026 was corrected to June 21st, 2026 as the permit became effective June 22nd, 2021, and the standard permit term is 5 years.

1.0 Coverage Under this Permit

Permit part 1.2.2.2. was updated to remove the word “residential” from “Dechlorinated residential swimming pool discharges.” This was done because Salt Lake City’s POTW was not equipped to handle dechlorinated swimming pool discharges from public (non-residential sources).

3.0 Special Conditions

3.1. Discharges to Water Quality Impaired Waters

Permit Part 3.1.1.1. was updated to include language referencing the *Jordan River Watershed Wide Escherichia coli (E. coli) TMDL* included in permit section 3.2.

Permit Part 3.1.1.2. was updated to include language referencing the *Jordan River Watershed Wide Escherichia coli (E. coli) TMDL* included in permit section 3.2.

3.2 Jordan River Watershed Wide Escherichia coli (E. coli) TMDL

Permit section 3.2. under section 3.0 Special Conditions has been modified to include specific requirements of the *Jordan River Watershed Wide Escherichia coli (E. coli) TMDL*. The Section 3.2. heading was changed from Nitrogen and Phosphorus Reduction to Jordan River Watershed Wide *Escherichia coli (E. coli) TMDL*.

Permit part 3.2.1. identifies that Salt Lake City discharges to waters listed on Utah 303(d) list as impaired for *E. coli* for which stormwater is a contributing source per *the Jordan River Watershed Wide E. coli TMDL*. Salt Lake City must update their SWMP document **within 180 days** of the permit modification. This SWMP update will include a *TMDL Compliance Plan* or similar that addresses the pollutant reduction requirements of the TMDL and this permit modification.

Permit part 3.2.2. requires that the *TMDL Compliance Plan* or similar, designed to reduce the discharge

of *E. coli*, be based on the six (6) minimum control measures found in Section 4.2. of this permit. Source control BMPs must be developed, funded, and implemented to reduce the discharge of *E. coli* within the permittee's jurisdiction.

Permit part 3.2.2.1. requires that Salt Lake City identifies potential sources of *E. coli* within the jurisdiction. Once sources of *E. coli* are identified, specific audiences potentially contributing to the *E. coli* sources must be targeted. Target audiences must be educated on the impacts to water quality and the BMPs that can be implemented to reduce/eliminate *E. coli* discharges. Education and outreach efforts must be documented within the *TMDL Compliance Plan* contained within the MS4's SWMP document.

Permit part 3.2.2.1.1. allows for collaborative programs (e.g., stormwater coalition) to assist providing outreach materials that evaluate, identify, and target sources for *E. coli*. Education and outreach efforts must be documented within the *TMDL Compliance Plan* contained within the MS4's SWMP document.

Permit part 3.2.2.2. requires that potential sources of *E. coli* within the MS4 are inventoried (either written or mapped). Areas to consider for this inventory include areas with septic, dense waterfowl areas, dog parks, etc.). Inventoried areas must be documented within the *TMDL Compliance Plan* contained within the MS4's SWMP document.

Permit part 3.2.2.2.1. requires that the inventoried areas identified in permit part 3.2.2.2. have a plan created to prioritize *E. coli* reduction activities for those areas. The plan must include structural and non-structural BMPs to be implemented over the permit term.

Permit part 3.2.2.2.2. requires that the inventoried areas identified in permit part 3.2.2.2. are added to the list of areas considered a priority area likely to have an illicit discharge (see permit part 4.2.3.3.1.). Any additional priority areas identified by the inventory must be inspected using an inspection form, annually at a minimum.

Permit part 3.2.2.2.3. requires that the inventoried areas identified in permit part 3.2.2.2. are considered a priority area for street sweeping and storm sewer system maintenance. Any road, parking lot, sweeping, and storm drain system maintenance SOPs created by the permittee should identify all priority areas (including *E. coli* sources) and the schedule of maintenance.

Permit part 3.2.2.3. requires that the current "high priority" permittee owned and/or operated facilities be evaluated to identify sites that have potential sources of *E. coli*. Permittee owned and/or operated dog parks, parks with open water, sites with septic, or properties that are known potential sources of *E. coli* must be added to the inventory criteria for "high priority" sites (see Permit Part 4.2.6.1.). Any sites identified with potential sources of *E. coli* must implement structural or nonstructural BMPs.

Permit part 3.2.2.4. requires that preexisting SOPs be evaluated and updated to include considerations for the reduction of *E. coli*. The following activities must be evaluated to ensure that the current SOPs target reduction of *E. coli* discharge: Surface cleaning and controlling litter; Lake and lagoon maintenance; Mowing/Trimming/Planting; Inspection and Cleaning of Stormwater Conveyance Structures, Controlling Illicit Connections and Discharges, Controlling Illegal Dumping to stormwater collection and conveyance structures; Solid Waste Collection, Controlling Litter, Controlling Illegal Dumping of solid waste; Water line Maintenance, Sanitary Sewer Maintenance, Spill/Leak/Overflow Control, Response, and Containment. If current SOPs do not encompass these activities, new SOPs should be created to target the reduction of *E. coli* discharge if the activities are applicable to the MS4.

Permit part 3.2.2.5. requires that Low Impact Development (LID) controls, identified within the *Guide to Low Impact Development within Utah, Appendix C*, where *E. coli* (listed as a bacteria) has a medium or high pollutant removal effectiveness be promoted. The Guide to Low Impact Development within Utah, Appendix C is available on the division's website: <https://documents.deq.utah.gov/water-quality/stormwater/updes/DWQ-2019-000161.pdf>.

Permit part 3.2.2.6. requires that when ranking retrofit plans for the MS4, potential *E. coli* reduction be considered as a criterion (see Permit part 4.2.6.9.).

Permit part 3.2.2.7. requires that Salt Lake City monitor and analyze for *E. coli* at all of their Wet-Weather Monitoring sites (identified in Permit Part 5.2.2.4.).

Permit part 3.2.3. requires that TMDL compliance be reported annually by October 1 with the annual report form. The *TMDL Compliance Report* will be a component of the annual report form. The first TMDL Compliance Report will be due to DWQ by October 1, 2024. The TMDL Compliance Report includes identification of problem areas where *E. coli* source control BMPs were developed, the cost, and the anticipated pollutant reduction.

Guidance related to these requirements is available on the Division's website.

Basis for Permit Modification

This permit modification updates the permit to reflect the Jordan River watershed *E. coli* Total Maximum Daily Load (TMDL) approved in February of 2023. Permit part 3.1.1.2. requires MS4 permittees to comply with all requirements associated with any approved TMDLs on stormwater discharge locations upstream of an impaired waterbody. The modification adds a permit section (Permit part 3.2.) that identifies the requirements of the Jordan River Watershed Wide *E. coli* TMDL.

A TMDL analysis was completed by the Utah Division of Water Quality (DWQ) to address *E. coli* exceedances throughout the Jordan River watershed. A TMDL analysis determines the amount of an identified pollutant that a waterbody can receive and still support its beneficial uses and meet state water quality standards. Once the location and magnitude of exceedances, as well as all potential sources, are identified, controls are implemented to reduce pollutant loading until the waterbody is brought back into compliance with water quality standards.

Surface waters are monitored as part of Utah's bacteriological monitoring program for pathogens that originate from fecal pollution from human and animal waste. It is not feasible to monitor for all pathogens in water, but by analyzing for certain indicator organisms, it is possible to assess potential health risks. Utah samples for *E. coli* concentrations in surface waters using USEPA guidelines (EPA, 2012). Common sources of *E. coli* include failing septic systems, leaking sewer lines, grazed pastures, confined feedlots, wildlife, and dog parks (Benham, 2006). Bacteria from these sources, some of which may be pathogenic or disease causing, are washed into surface waters during rainfall or snowmelt or are deposited directly in the water. These pathogenic bacteria pose a threat to human health usually through ingestion.

The potential sources of *E. coli* that may be contributing to the water quality impairments in a watershed are characterized as either point or nonpoint sources. Point sources are spatially discrete and regulated under UPDES permits. Nonpoint sources are spatially distributed. Stormwater discharges can be either nonpoint source or point source, and they are regulated under multiple permit programs.

Stormwater is a significant contributor to *E. coli* loading to surface waters in the Jordan River watershed. MS4 individual and general permits will serve as a regulatory mechanism for working toward the goals of the TMDL. Permittees that discharge to the Jordan River and its tributaries are required to implement permit requirements in Section 3.2.

4.0 Storm Water Management Program

4.2. Minimum Control Measures

Permit Part 4.2.3.6.1. was updated to improve clarity and readability. The reference to Permit part 4.2.3.6. was included to direct any potential enforcement actions to the established SOPs developed by the permittee for situations involving illicit discharges.

Permit Part 4.2.4.1. was updated to remove the language, "Existing local requirements to apply stormwater

controls at sites less than 1 acre or not part of a Common Plan of Development may be retained.” Removing this language doesn’t affect the authority of municipalities from implementing local guidelines and requirements. It clarifies that DWQ isn’t placing any restrictions on local requirements. The hyperlink to the construction stormwater website was updated as the current link was broken.

Permit Part 4.2.4.4.1. was updated to reflect new trainings that satisfy the definition of a “qualified person.” Updates included adding Certified Stormwater Inspector Construction (CSI-Construction), Qualified Compliance Inspector of Stormwater (QCIS), and EPA NPDES Construction General Permit Inspector Training. The Utah Department of Transportation Environmental Control Supervisor (ECS) training was removed as it was determined to be insufficient as a stand-alone training. This update is consistent with an upcoming Construction General Permit (CGP) update

5.0 Narrative Standard, Monitoring, Recordkeeping and Reporting

5.2. General Monitoring and Sampling Requirements

Permit part 5.2.2.3. adds *E coli* (No./100mL) to the list of required parameters to be monitored and analyzed for the outfalls identified in permit part 5.2.2.4. that discharge to the Jordan River and its tributaries.

PERMIT DURATION

As stated in UAC R317-8-5.1(1), UPDES permits shall be effective for a fixed term, not to exceed five (5) years. Therefore, this modified Permit will be set to expire on June 21st 2026, five years after the effective date of reissuance.

DRAFTED BY

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PUBLIC NOTICE

Began: May 16, 2023
Ended: June 19, 2023

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

The Public Notice of the draft permit was published on the Department Website.

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 was not required to be re-Public Noticed.

RESPONSIVENESS SUMMARY

No comments were received.