

## **FACT SHEET STATEMENT OF BASIS**

### **GENERAL PERMIT FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

#### **UPDES PERMIT NUMBER UTR090000**

#### **GENERAL PERMIT RENEWAL**

### **BACKGROUND**

The Federal Clean Water Act requires that storm water discharges from certain types of facilities be authorized under storm water discharge permits. (See 40 CFR 122.26.) The goal of the storm water 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. This Permit covers new or existing discharges composed entirely of storm water from Phase II, or Small Municipal Separate Storm Sewer Systems (MS4) Permittees statewide.

The State of Utah was granted primacy in the National Pollutant Discharge Elimination System (NPDES) program by USEPA in 1987. In Utah, storm water 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 re-issuance or replacement of the previous General Permit for Discharges from Small Municipal Separate Storm Sewers (MS4s), UTR090000, issued December 1, 2016, and last MODIFIED on February 26, 2020. This Permit is intended to cover new or existing discharges composed entirely of storm water from MS4s required by the State to obtain a Permit, of which there are 77 at the time of this Permit Renewal.

### **PERMIT REQUIREMENT SYNOPSIS**

All Permittees 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. Permittees covered under the previous General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer System are expected to have fully implemented the six (6) minimum control measures (MCM) included in the previous permit. Permittees that were newly designated during the previous permit term or will be newly designated during this permit term, have five (5) years from the date of their submitted Notice of Intent (NOI) to fully implement and enforce their SWMP. 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 Permittees to implement a public education and outreach program to promote behavior change by the public to reduce impacts associated with pollutants in storm water 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 must be well documented and available to the *Director* upon request.

### Public Involvement/Participation

The public involvement/participation for MCM requires Permittees to implement a program that complies with applicable state and local public notice requirements. **Renewal Permittees** must allow for public input on the SWMP document and make it publically 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. **New Applicants** shall make the SWMP document available to the public for review and input within **180 days** of receiving notification from the *Director* of the requirement for permit coverage. The SWMP shall include ongoing opportunities for public involvement and participation.

### Illicit Discharge Detection and elimination (IDDE)

The IDDE MCM requires Permittees to implement and enforce an IDDE program to systematically find and eliminate sources of non-storm water 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. Permittees must have adequate legal authority to detect, investigate, eliminate, and enforce against non-storm water discharges.

### Construction Site Storm Water Runoff Control

The construction site storm water runoff control MCM requires Permittees to implement and enforce a program to reduce pollutants in storm water 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 storm water management MCM requires the Permittee to implement and enforce a program to address post-construction storm water runoff to the MS4 from private and public new development and redevelopment construction sites. The Permittee must require the retention of an 80<sup>th</sup> 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 all Permittees to implement a program for Permittee-owned or operated facilities, operations, and structural storm water 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. Permittees are required to maintain an inventory of “high priority” facilities that are owned or operated by the Permittee and any associated storm water 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 DURING THE LAST PERMIT MODIFICATION**

The last Permit Modification occurred almost 1 year prior to the previous permit’s expiration date. During the most recent Permit Modification (February 26, 2020) significant changes were made in regard to Post-Construction Storm Water Management. Since significant changes were made so close to permit expiration, these changes are included in this Fact Sheet below, for the Permittee’s reference.

#### **4.0 Storm Water Management Program**

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

##### **Modified Post-Construction Retention Standard**

Permit Part 4.2.5.2.1 *requires* by **July 1, 2020** all new development projects meeting the applicable threshold, to manage rainfall on-site, and prevent the off-site discharge of runoff associated with precipitation less than or equal to the 80<sup>th</sup> percentile rainfall event. The 80<sup>th</sup> percentile rainfall event is the event whose precipitation total is greater than or equal to 80 percent of all storm events over a given period of record. If not feasible, a rationale must be provided for the use of alternative design criteria. This water quality volume-based methodology will reduce the runoff from a site from the small frequently occurring storms which have a strong negative cumulative impact on receiving water quality.

By **July 1, 2020**, redevelopment projects meeting the applicable threshold that increase the impervious surface by greater than 10%, shall manage rainfall on-site, and prevent the off-site discharge of the net increase in the volume associated with the precipitation from all rainfall events less than or equal to the 80<sup>th</sup> percentile rainfall event.

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

### Basis for Permit Modification

This permit modification changes the required retention volume from the 90<sup>th</sup> percentile storm to the 80<sup>th</sup> percentile storm. The permit modification falls under 40 CFR.62(a)(2), which allows states to modify a permit when the Director receives new information. The first post-construction retention standard, 90<sup>th</sup> percentile storm, was selected following the EPA's October 2015 NPDES Permit Quality Review (PQR) Utah. The PQR included a critical finding that Utah's post-construction storm water management requirements were insufficient to meet maximum extent practicable (MEP) and could include a specific numeric design standard in order to be sufficient. As a result, the Division promptly included a numeric standard, which it originally set at 90<sup>th</sup> percentile, in the April 2016 version of the permit.

Later, the 2016 NPDES MS4 General Permit Remand Rule (December 2016 regulations) at 81 Fed. Reg. 89320 clarified the requirement that states incorporate clear, specific, and measurable permit requirements to meet each of the 6 minimum control measures in 40 CFR 122, 34, one of which is post-construction storm water management in new development and redevelopment sites. The guidance issued concurrently with the December 2016 regulations still did not define specific numeric post-construction standards, relying on states to determine how to best meet the control measure to the maximum extent practicable, and prompting the Division to revisit its numeric standard with the newly acquired knowledge that the EPA had declined to adopt a national standard. Thus, the circumstances and information on which the 90<sup>th</sup> percentile retention standard was based changed materially and substantially since the permit was originally issued.

### Rationale for Post-Construction Retention Standard

The Division has determined that the retention standards outlined in Section 4.2.5, meet the intent of the maximum extent practicable (MEP) standard to prevent or minimize water quality impacts from new and redevelopment post-construction storm water management through clear, specific, and measurable requirements.

In reviewing literature, evaluation of the diversity of site conditions and climates around the state, and consulting with practicing design engineers, the Division determined that the 80<sup>th</sup> percentile event represents the MEP for retention across the state. While a higher level of retention may be practicable in some areas of the state, it is not practicable for many communities found in Utah's valleys with collapsible soils, high ground water, and poor infiltration rates. In addition, the Division has made this standard identical to the standard used in the renewal of Permit UTS000001 which is applicable to municipal separate storm sewer systems (MS4s) in the Jordan Valley.

In developing this standard, the Division reviewed literature and design guidelines for storm water quality management throughout the intermountain west. The purpose of the post-construction retention standard is to maintain or restore stable hydrology in receiving waters and protect water quality by reducing the effect of first-flush events on receiving waters. The Division recognizes the cascading water quality effects of development to include increases in pollutant sources, storm water runoff, and the erosional impacts of storm events. These effects are associated with increased impervious cover and activities associated with developed lands.

The Division reviewed the following studies related to storm water runoff and water quality volume: Guo and Urbonas, 1996 and Urbonas, Roesner, and Guo, 1996. These studies formed the basis of a recommendation by the Water Environment Federation and American Society of Civil Engineers (1998) that stormwater quality treatment facilities (i.e., post-construction BMPs) be based on the capture and treatment of runoff from storms ranging in size from "mean" to "maximized" storms (70<sup>th</sup> to 90<sup>th</sup> percentile storm). The Division selected the 80<sup>th</sup> percentile as a mid-range target, based in part on this recommendation. The Division determined that retention of the "maximized" storm was impractical for Utah.

Further, the Division determined that the Urban Storm Drainage Criteria Manual developed for the State of Colorado is applicable to Utah's climate and topography. The USDCM states that "capturing and properly treating this volume [80<sup>th</sup> percentile storm] should remove between 80 and 90% of the annual total suspended solids (TSS) load, while doubling the capture volume was estimated to increase the removal rate by only 1 to 2%." Based on this analysis, the 90<sup>th</sup> percentile storm, as included in the previous Permit, would result in a negligible improvement in water quality. Upon further study, the Division could not demonstrate a technical rationale to require Utah's communities to retain storm water to achieve water quality goals that is greater than other similarly situated states in the intermountain west, such as Montana (0.5") and Colorado (80<sup>th</sup> percentile storm).

Although the previously modified Permit included a retention requirement equivalent to the water quality volume associated with the 90<sup>th</sup> percentile storm event for new and redevelopment, this permit requirement was never put into effect due to concerns raised from Utah's engineering, planning, and building communities. This resulted in an additional stakeholder process that took place in 2019 in partnership with the Utah League of Cities and Towns Land Use Task Force. This stakeholder process and review of other states' retention standards revealed greatly increased cost associated with achieving 90<sup>th</sup> percentile retention standard versus the 80<sup>th</sup> percentile, but not greatly increased water quality benefits such that the Division determined that the 90<sup>th</sup> percentile was no longer practicable and the 80<sup>th</sup> percentile represents MEP.

This permit modification also clarifies that implementation of the post-construction retention standard applies only if impervious surface area increases by greater than 10%. The Division never intended to require any redevelopment project, no matter the size, to remove existing impervious surfaces that would not otherwise need to be redeveloped in order to meet the retention standard. It would be impractical to require that an entire redevelopment site meet the new retention standard because redevelopment projects that do not increase surface area by greater than 10% would often not be able to meet the standard without removing existing impervious surfaces. Further, the change allows cities to work within the context of existing storm water master plans and proceed with retrofits of existing facilities through requirements identified in section 4.2.5.3.3 of the permit.

#### Modified Low Impact Development Requirements

The Permit requires that the post-construction retention standard be accomplished through the use of a combination of practices: site design (including reduction in impervious cover), structural and non-structural controls Low Impact Development practices that are designed, constructed, and maintained to infiltrate, evapotranspire, and/or harvest and reuse rainwater. This requirement is described in Permit Part 4.2.5.1.3.

Permittees must allow for use of a minimum of five LID practices from the list in Appendix C of “A Guide to Low Impact Development within Utah” (the Guide). If a Permittee has not adopted specific LID guidelines, any LID approach that is described in the Guide and feasible may be used to meet this requirement.

If an LID approach cannot be utilized, the Permittee must document an explanation of the reasons preventing this approach and the rationale for alternative criteria per Permit Part 4.2.5.1.5.

The definition of LID infeasibility has been expanded to include high groundwater, drinking water source protection areas, soil conditions, slopes, accessibility, excessive costs, or others.

## CHANGES SINCE LAST MODIFICATION

Since the most recent Permit Modification (February 26, 2020), some spelling edits, changes to grammar, minor language changes, sentencng restructuring, and formatting have been completed. 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 re-wording, but did not change the overall permit requirement. The notable changes are identified below and are broken down by Permit Part.

### **2.0 Notice of Intent and Storm Water management Program Requirements**

Permit Part 2.1.6. clarifies that the Measureable Goals for each of the minimum control measure must, at a minimum, include the year by which the Permittee will undertake required actions, including: interim milestones and the frequency of the action (if applicable).

### **3.0 Special Conditions**

#### *Discharges to Water Quality Impaired Waters*

Permit Part 3.1.1.1. clarifies that a water quality impaired waters means any segment of surface waters that has been identified by the *Director* as failing to support one or more of its designated uses. The previous permit identified them as classified use, but the language was changes to be consistent with Utah Administrative Code (UAC) R317-2-6.

Permit Part 3.1.1.2. clarifies that if in the future, a TMDL is developed and approved for a 303 (d) listed waterbody for which the Permittee discharges, the Permittee will be required to meet the requirements of that TMDL, as well as, any requirements outlined in Part 3.1.2.

#### *Nitrogen and Phosphorus Reduction*

Permit Part 3.2.1.2. clarifies that the Permittee is required to identify and target sources that contribute nitrogen and phosphorus to waters of the state, where the Permittee is authorized to discharge under this Permit.

Permit Part 3.2.1.3. clarifies that the Permittee must prioritize targeted sources that are likely to result in a reduction of nitrogen and phosphorus in discharges through education and outreach.

#### *Co-Permittees*

Permit Part 3.3.2. clarifies that in order to be Permitted as a Co-Permittee, the MS4s must each submit an NOI which meets permit requirements outlined in Permit Part 2.0, not just measurable goals and milestones.

### **4.0 Storm Water Management Program**

#### *Requirements*

Permit Part 4.1.3.1. clarifies that the Measureable Goals for each of the BMPs shall, at a minimum, include the year by which the Permittee will undertake required actions, including: interim milestones and the frequency of the actions (if applicable).

#### *Public Education and Outreach on Storm Water Impacts*

Permit Part 4.2.1.2. was significantly restructured to clarify that the Permittee must provide and document education and outreach given to the general public on the Permittee's prohibitions against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges.

Permit Part 4.2.1.3. was significantly restructured to clarify that the Permittee must provide and document education and outreach given to institutions, industrial, and commercial facilities on an annual basis on the Permittee's prohibitions against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges.

Permit Part 4.2.1.5. clarifies that the Permittee must provide and document education and training given to employees of Permittee-owned or operated facilities concerning the Permittee's prohibition against illicit discharges and improper disposal of waste and the impacts to water quality associated with these types of discharges.

#### *Illicit Discharge Detection and Elimination (IDDE)*

Permit Part 4.2.3.2. clarifies that The Permittee must have a variety of enforcement options in order to apply and escalate enforcement procedures as necessary based on the severity of violation and/or the failure of the violator to address the violation(s).

Permit Part 4.2.3.4. adds a 30-day deadline for a Permittee to report to the *Director* that a discharger may need a separate UPDES Permit.

#### *Construction Site Storm Water Runoff Control*

Permit Part 4.2.4.5. clarifies that training records must be kept and contain, at a minimum, dates, activities or course descriptions, and names and positions of staff in attendance.

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

Permit Part 4.2.5.1.2. the July 1, 2020 deadline for new development and redevelopment projects that disturb greater than or equal to one acre, including projects that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre must manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 80th percentile rainfall event or a predevelopment hydrologic condition, whichever is less, was removed because this date has passed and the Permittee is required to have already implemented this.

Permit Part 4.2.5.1.2. the July 1, 2020 deadline for redevelopment projects that disturb greater than or equal to one acre, including projects less than an acre that are part of a larger common plan of development or sale which collectively disturbs land greater than or equal to one acre must provide a site-specific and project-specific plan aimed at net gain to onsite retention or a reduction to impervious surface to provide similar water quality benefits was removed because this date has passed and the Permittee is required to have already implemented this.

Permit Part 4.2.5.1.3. the July 1, 2020 deadline for the Permittee to implement a program that includes a process which requires the evaluation of Low Impact Development (LID) approach for all projects subject to the requirements in 4.2.5.1.2. was removed because this date has passed and the Permittee is required to have already implemented this.

The requirement that was listed in the previous permit as Permit Part 4.2.5.1.4. was moved to be a footer associated with the harvesting of rainwater, since this was providing information, rather than depicting a requirement.

Permit Part 4.2.5.2.1. clarifies that the Permittee must include enforcement provisions in the ordinance or other regulatory mechanism that must contain procedures for specific processes and sanctions to minimize the occurrences of violations and obtain compliance from chronic and recalcitrant violators.

Permit Part 4.2.5.5. clarifies training records must be kept and include, at a minimum, dates, activities or course descriptions, and names and positions of staff in attendance

*Pollution Prevention and Good Housekeeping for Municipal Operations*

Permit Part 4.2.6.1. added a line that indicates that the *Director* maintains the authority to add additional “high priority” facilities to the list as needed.

Permit Part 4.2.6.1. added the following facilities to the “high priority” facility list: public restrooms; Public marinas and boat launches; de-icing storage facilities; airports; animal control facilities; vehicle salvage yards; chemical storage facilities; and transportation hubs (including bus stations). It also removed Permittee owned and/or maintenance structural storm water controls from the list.

Permit Part 4.2.6.4. adds a requirement for each site specific SWPPP to contain an inspection schedule.



Permit Part 4.2.6.4. added the following requirements to the SWPPP site map: facility address; staff/contact information for the facility; and Facility BMPs (non-structural). It also clarifies that the map must include locations where on-site activities may be exposed to storm water and does not limit the evaluations to areas listed in this part.

Permit Part 4.2.6.5.3. added a deadline for problems observed that can be associated with pollutant sources or controls to be remedied. The problems must be remedied as soon as practicable, but at a minimum, before the next storm event.

Permit Part 4.2.6.6.1. the following practices were added to the SOP list in this part: green waste deposited in the street; the clean-up associated with municipality-sponsored events; and graffiti removal.

#### *Reviewing and Updating Storm Water Management Programs*

Permit Part 4.4.2.1. was updated to clarify that changes that reduce or replace any component, control, or requirement of the SWMP document is not authorized, unless it meets requirements outlined in Part 4.4.2.2.

### **7.0 Definitions**

“Impaired waters” was updated to include language that was consistent with *UAC R317-2*, in regards to designated uses.

### **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 Renewal Permit shall be effective for 5 years after the effective date of its issuance.

### **PUBLIC NOTICE**

Began:

Ended:

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

The Public Noticed of the draft permit was published on the 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*.