

FACT SHEET STATEMENT OF BASIS

GENERAL PERMIT FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

UPDES PERMIT NUMBER UTR090000

PERMIT MODIFICATION

1.0. Introduction and 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 as well. 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, of which there are 77 at the time of this Permit modification.

This Permit serves as a *modification* of the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), UTR090000, which was renewed and issued by the Division of Water Quality (Division) on December 1, 2016. The December 1, 2016 renewed permit included more specific requirements than the previous permit for on-site retention of storm water and the use of a Low Impact Development (LID) approach which implements Best Management Practices (BMPs) that infiltrate, evapotranspire and harvest and reuse storm water. The Permit was modified (effective date April 25, 2019) moving the retention and LID implementation date from September 1, 2019 to March 1, 2020.

The Division issued a Public Notice Draft of the renewal of another MS4 permit, the Jordan Valley Municipalities (JVM) Permit UTS000001, on July 25, 2018. DWQ received significant comments on the July 25, 2018 Jordan Valley Municipalities MS4 Draft Permit. In early 2019, the Division entered into stakeholder collaboration with a subcommittee of the Land Use Task Force facilitated by the Utah League of Cities and Towns (ULCT). The committee included members of the Division, ULCT, the Utah Home Builders Association and MS4 representatives among others who worked together to refine the Permit language. The Jordan Valley Municipalities Permit renewal was public noticed on December 21, 2019. This modification of the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), UTR090000 includes similar changes in an effort to promote consistency among the MS4 permits statewide.

2.0. Modifications to the General Permit for Discharges from Small MS4s

Significant changes and clarifications to the Permit are listed below:

The Term “Division” referring the Division of Water Quality has been replaced with “Director” referring to the Director of the Division of Water quality throughout the permit.

Application and Storm Water Management Program

The date for submittal of a revised SWMP document for renewal permittees has been changed from 120 days to **180 days** from the effective date of the Permit (Permit Part 2.3).

This Permit serves as both a modified Permit for those covered under the existing Permit as well as provides coverage for New Applicants. Renewal Permittees should have fully implemented SWMPs that reflect the permit requirements of the previous permit cycle. A Renewal Permittee shall continue to implement its SWMP as described in the application and submittals provided in accordance with the previous Small MS4 General Permit, while updating its SWMP document pursuant to this renewal Permit to achieve pollutant reductions to the Maximum Extent Practicable from the MS4, as specified in Part 4.1. An exception to this is given for Permittees that were designated during the previous Permit term who have 5 years from the date of their submitted NOI to develop, fully implement and enforce their SWMP. New applicants are given the full Permit term to implement a SWMP except where specific deadlines are indicated.

Public Involvement/Participation

If a Permittee maintains a website, a current version of the SWMP document must be posted on the website within 180 days (increased from 120 days) from the effective date of this Permit (Permit Part 4.2.2.2.).

Illicit Discharge Detection and Elimination

Based on a comment received regarding Permittee responsibility for third-party discharges, Permit Part 4.2.3.6.2 was added: “Although Permittees are required to prohibit illicit discharges within their boundaries and to take appropriate action to detect and address any violations, this Permit does not impose strict liability on the Permittee.”

Permit Part 4.2.3.11 includes the wording “Permittees shall...require that all staff, contracted staff, or other responsible entities, that as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge or illicit connection to the MS4 including office personnel who might receive initial reports of illicit discharges, receives annual training in the IDDE program...”. The wording has changed to clarify which MS4 staff should be trained. Permittees must ensure through tracking of attendance that appropriate staff has received annual training. If some staff were unable to attend the yearly training that was offered, it is the Permittee’s responsibility to offer another form of training to meet this Permit requirement. Although online training and certification is not specifically mentioned in this Permit, this is one option to ensure that all appropriate staff receives the necessary training that is required throughout this Permit. A requirement to ensure that new hires are trained within 60 days of hire date has also been added to Permit Part 4.2.3.11.

Construction Site Storm Water Runoff Control

The threshold for construction site storm water runoff control has been clarified to “construction sites with a land disturbance of 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...*”

The requirement that MS4s ensure operators “maintain coverage under the Construction General Permits has been removed from Permit Part 4.2.4.1.2.

Permit Part 4.2.4.2.1 has added an appeals process as part of the procedures to ensure compliance to be posted in a publicly available location. An appeals process will allow a construction operator to appeal an enforcement option.

Permit Part 4.2.4.3.1 has changed the pre-construction SWPPP *review* requirement to a pre-construction *meeting* requirement.

Permit Part 4.2.4.3.2 has clarified the factors for determining a priority construction site.

Permit Part 4.2.4.4. prohibits an individual or entity who prepares a SWPPP for a construction project from performing construction site inspections on behalf of a Permittee on that site.

Permit Part 4.2.4.4.1 has added the requirements for qualified Permittee storm water inspectors.

Permit Part 4.2.4.4.4 allows for the use of an electronic inspection tool by the Permittees in place of in person, on-site inspections for up to one-half of inspections at a construction site.

Permit Part 4.2.4.5. has added language that requires the Permittee to ensure annual training of staff as well as the training of new hires within 60 days of hire.

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 80th percentile rainfall event. The 80th 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 80th 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 90th percentile storm to the 80th 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, 90th

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 90th 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 90th 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 80th 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 (70th to 90th percentile storm). The Division selected the 80th 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 [80th 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 90th 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 (80th percentile storm).

Although the previously modified Permit included a retention requirement equivalent to the water quality volume associated with the 90th 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 90th percentile retention standard versus the 80th percentile, but not greatly increased water quality benefits such that the Division determined that the 90th percentile was no longer practicable and the 80th 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.

Other Changes to Section 4.2.5

The threshold for long-term storm water management has been clarified to “construction sites with a land disturbance of 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...*”

Permit Part 4.2.5.3.1 requires procedures for site plan review that evaluate water quality impacts and that are applied through the life of the project from conceptual design to project closeout.

Permit Part 4.2.5.3.2 requires Permittees to review post construction plans to ensure long-term controls are implemented which meet the permit requirements.

Permit Part 4.2.5.2.4 requires that permanent structural BMPs be inspected to ensure the BMPs were constructed as designed prior to closing out a construction project.

Permanent structural BMP inspection requirements have been reduced from a minimum or annually to at least every other year or as necessary to maintain functionality of the control (Permit Part 4.2.5.2.5).

Previous Permit Part 4.2.5.3.3 requiring a retrofit plan has been moved to Permit Part 4.2.6 Pollution Prevention and Good Housekeeping for Municipal Operations.

Permit 4.2.5.6. requires that all staff involved in post-construction storm water management, planning and review, and inspections and enforcement be trained on an annual basis. New hires must be trained within 60 days of hire.

Previous Permit Part 4.2.5.4.2 has been removed.

Pollution Prevention and Good Housekeeping for Municipal Operations

This minimum control measure has been reorganized to more clearly outline the requirements for “high priority” municipal facilities and overall SOP development and implementation for all facilities and municipal operations. Guidance for evaluating “high priority” municipal facilities and preparing SOPs will be developed as separate Fact Sheets by the Division.

Permit Part 4.2.6.4. requires Permittees to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) for each “high-priority” Permittee-owned or operated facility within 180 days from the effective date of this Permit. The SWPPP must identify potential sources of pollution, describe and ensure implementation of practices that are to be used to reduce pollutants in storm water discharges associated with activity at the facility and must include a site map showing the information required in Permit Part 4.2.6.4. The previous Permit required SOPs to address many of these requirements and these SOPs, provided that they meet the Permit requirements, may be used as part of this SWPPP document. SOPs must be tailored to the specific Permittee, facility, or operational procedure and must not contain generic descriptions of municipal activities.

In Permit Part 4.2.6.5.1, visual inspection frequency has been reduced from weekly to monthly.

In Permit Part 4.2.6.5.2, comprehensive inspection frequency has been reduced from quarterly to semi-annually.

In Permit Part 4.2.6.5.3, visual observation frequency has been reduced from quarterly to annually.

Previous Long-Term Storm Water Management in New Development and Redevelopment Permit Part 4.2.5.3.3 requiring a retrofit plan has been moved to Permit Part 4.2.6.9.

Permit Part 4.2.6.10. requires that all employees, contracted staff, and other responsible entities involved in construction, operation, or maintenance job functions that are likely to impact storm water quality be trained on an annual basis. New hires must be trained within 60 days of hire.

Reporting

All Permittees must submit an annual report to the Division by October 1 following each year of the Permit term. As stated in Permit Part 5.5, signed copies of the annual report and all other reports required by this permit must be submitted directly to the DWQ electronic document system at: <https://deq.utah.gov/water-quality/water-quality-electronic-submissions>.

Standard Permit Conditions

Permit Part 6.12 Oil and Hazardous Substance Liability has been removed as this section is redundant.

Definitions

A definition of “Developed site” was added. The definition of “Indian Country” was removed.

4.0. Permit Duration

The original effective date of reissuance of the permit was March 1, 2016, with an expiration date of February 28, 2021. It was modified on December 1, 2016 and again on April 25, 2019, both with expiration dates of February 28, 2021. 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 at midnight on February 28, 2021, five years after the effective date of reissuance.

5.0. Public Notice

The public notice was published in the Salt Lake Tribune and Desert News newspapers on December 24, 2019. The Permit was also announced on the Utah Division of Water Quality’s Public Notice website at <https://deq.utah.gov/public-notices-archive/water-quality-public-notices>. The 30-day public notice began on December 24, 2019 and ends on January 23, 2020.

Please refer to the Utah Division of Water Quality’s website at <http://www.deq.utah.gov/Permits/water/updes/stormwatermun.htm> for the response to comments received.

This Permit and Fact Sheet were drafted by Jeanne Riley Storm Water Section Manager, Utah Division of Water Quality on December 23, 2019. For questions or comments contact Ms. Riley at jriley@utah.gov or 801-536-4369.

DWQ-2020-005277