

FACT SHEET STATEMENT OF BASIS**GENERAL PERMIT FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE
STORM SEWER SYSTEMS****UPDES PERMIT NUMBER UTR090000****GENERAL PERMIT RENEWAL****1.0. Introduction**

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 serves as a re-issuance or replacement of the previous General Permit for Discharges from Small Municipal Separate Storm Sewers (MS4s), UTR090000, issued August 1, 2010. 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.

2.0. Background

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 Utah Department of Environmental Quality, Division of Water Quality (the "Division"). Utah's program is known as the Utah Pollutant Discharge Elimination System (UPDES) Program. The Phase II small municipal separate storm sewer systems (MS4s) are covered under a general Permit for storm water discharges from MS4s. The narrative requirements of this Permit are intended to reduce the discharge of pollutants to the maximum extent practicable (MEP) and meet water quality standards through the development and implementation of a Storm Water Management Program (SWMP). Implementation of a SWMP involves implementation of a variety of Best Management Practices (BMPs) to reduce the discharge of pollutants from the MS4. MEP is the standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve through implementation of BMPs included in their SWMPs. There are no numeric effluent limitations included in this Permit. Storm Water Management Program requirements are the controls used in place of numeric limits to achieve a reduction of pollutants in the storm water discharge from small MS4s. A SWMP is comprised of six minimum control measures that must be developed and implemented. These measures include:

- 1) Public Education and Outreach
- 2) Public Involvement/Participation
- 3) Illicit Discharge Detection and Elimination
- 4) Construction Site Storm Water Runoff Control
- 5) Long-Term Storm Water Management in New Development and Redevelopment (Post-Construction Storm Water Management)

6) Pollution Prevention and Good Housekeeping for Municipal Operations

The Permittee must develop a SWMP that meets the requirements of the six minimum measures and protects state waters from pollution, contamination, and/or degradation. The Permit allows the MS4 flexibility to determine appropriate BMPs to satisfy each of the six minimum control measures. The BMPs employed to reduce pollutants to the MEP may be different for each small MS4 given the unique local concerns that may exist and the different possible pollutant control strategies. The Division may evaluate the Permittees' proposed storm water BMPs to determine if they meet the requirements of this Permit and if a reduction to the MEP can be achieved. Evaluation of the effectiveness of a SWMP and application of the MEP standard should be an iterative process. The standard of MEP and the necessary modifications to the SWMP should continually adapt to current conditions and BMP effectiveness. The Permittee must continually assess the effectiveness of the current BMPs and expand or better tailor the BMPs to comply with this Permit and protect water quality, and to satisfy the appropriate water quality requirements of the *Utah Water Quality Act*.

3.0. Changes in this General Permit

Significant changes and clarifications are listed below:

Application and Storm Water Management Program

This Permit serves as both a renewal Permit for those covered under the previous Permit as well as provides coverage for New Applicants. **Renewal Permittees** were required to have fully implemented SWMPs by February 1, 2012 as required in the previous Permit. An exception to this is given for Permittees that were designated during the previous Permit term. These Permittees will have 5 years to fully implement their SWMPs. New applicants are given the full Permit term to implement a SWMP except where specific deadlines are indicated.

New Applicants will have **180 days** from Division notification to submit a Notice of Intent (NOI) in accordance with Part 2.2. of this Permit and a Storm Water Management Program (SWMP) whereas Renewal Permittees will have **120 days** from the effective date of this Permit to submit an updated SWMP in accordance with Part 2.3. of this Permit.

Permit Area and Eligibility

Permit Part 1.2.2.2. Non-storm water discharges, has added the clarification that discharges from emergency firefighting activity is an allowable discharge to the MS4; this does not include equipment testing, drills and exercises.

Nitrogen and Phosphorus Reduction

The significant increase in recent years of nitrogen and phosphorus in water bodies across the country has intensified water quality problems. Too much nitrogen and phosphorus can cause serious water quality problems. Nutrient pollution impairs drinking water, endangers aquatic life and threatens the recreational use of Utah's streams, rivers, and lakes.

The Division of Water Quality (DWQ) is currently at work on a nutrient reduction plan tailored to the unique needs of Utah waters. DWQ has already identified numerous watersheds in the state

that are affected by high nutrient levels. In an effort to reverse this disturbing trend, DWQ, in partnership with a comprehensive team of key stakeholders, established a working group to develop acceptable benchmarks for nitrogen and phosphorus and develop nutrient reduction programs to reduce nutrient loads entering the state's waters.

As part of Utah's adaptive management approach, site-specific strategies that account for the differences in water bodies and their sources of nutrient pollution must be addressed. Therefore, all MS4 Permittees must incorporate specific measurable goals regarding the need to reduce nutrients in storm water. Compliance with this requirement can be achieved by determining sources that are contributing to, or have the potential to contribute, nutrients to the waters receiving the MS4 discharge authorized under this Permit. Permittees must then prioritize these targeted sources and distribute educational materials or equivalent outreach accordingly. More information on the rulemaking efforts for nutrients in Utah's waters can be found at: <http://www.nutrients.utah.gov/index.htm>.

Public Education and Outreach on Storm Water Impacts

Permit Part 4.2.1. lists 4 audiences that documented education and outreach efforts must address. The second audience has been changed from businesses, institutions, and commercial facilities to institutions, industrial and commercial facilities. The fourth audience has been changed from MS4 industrial facilities to MS4-owned or operated facilities.

A frequency of action has been added to Permit Part 4.2.1.3. Upon the effective date of this permit, Permittees must provide and document information given to institutions, industrial, and commercial facilities on an annual basis of the Permittee's prohibition against and the water quality impacts associated with illicit discharges and improper disposal of waste.

Although there is little change in this minimum control measure since the last Permit term, the Division wishes to clarify that "Outreach" is active and requires contact by the Permittee and an exchange of education and information. Making information only available on a website without further action or outreach is passive education and does not adequately meet the intent of the Permit requirements. The Division expects that the Permittee will actively "reach out" to targeted audiences and targeted sources and provide information and education. The Division encourages and recommends that Permittees collaborate on the nutrient-related requirements in this renewal Permit as well as other targeted audiences and pollutants.

Permittees must include written documentation or rationale as to why particular BMPs were chosen for its public education and outreach program as well as thorough documentation of all activities, frequency of activity, and content of public education and outreach deliverables.

Public Involvement/Participation

If a Permittee maintains a website, a current version of the SWMP document must be posted on the website within 120 days from the effective date of this Permit (Permit Part 4.2.2.3.). The online SWMP document must be updated as needed (according to Permit Part 4.4.) and shall remain on the website for the entire Permit term. In order for the public to review and provide input for the life of the Permit, the online SWMP document must indicate a contact person and phone number or email address in which to provide input or pose questions (Permit Part 4.2.2.3.).

Illicit Discharge Detection and Elimination

Upon the effective date of this permit, the separate requirements regarding dry weather screening and priority areas inspections have been separated into two distinct Permit citations (Permit Parts 4.2.3.3.2 and 4.2.3.3.3) to provide clarification and address confusion as stated below.

The inspection frequency for priority areas has changed to annually at a minimum (Permit Part 4.2.3.3.2).

A frequency of dry weather screening has been added. All outfalls must be inspected at least once every 5 years (Permit Part 4.2.3.3.3).

The Division has added the requirement that the Permittee notify the Division of dischargers to the MS4 that need a separate UPDES Permit such as an Industrial Storm Water Permit or Construction Dewatering Permit (Permit Part 4.2.3.3.4).

The Division includes the wording “Permittees shall ensure that all staff, contracted staff, or other responsible entities receive training about the IDDE program...” in Permit Part 4.2.3.11. The wording has changed to clarify that providing one training opportunity for all staff to attend does not necessarily meet the training requirements of the Permit. Permittees must ensure through tracking of attendance that all 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 required by this Permit, this is one option to ensure that all staff receives the necessary training that is required throughout this Permit. A requirement to ensure that new hires are trained immediately has also been added to Permit Part 4.2.3.11.

Construction Site Storm Water Runoff Control

Permit Part 4.2.4.1.2 has clarified the requirement that it is part of the Permittee’s role to ensure that construction operators obtain and maintain coverage under the current UPDES Storm Water General Permits for Construction Activities for the duration of the project.

Permit Part 4.2.4.4.5 has added the requirement that Permittees publicly provide and publicize a hotline or other local telephone number for public reporting of storm water violations on construction sites.

Permit Part 4.2.4.5. has added language that requires the Permittee to ensure annual training of staff as well as the immediate training of new hires prior to commencing storm water related duties.

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

Permit Part 4.2.5.3.2 requires that the Permittee have a process to require the evaluation of a Low Impact Development (LID) approach which encourages the implementation of BMPs that infiltrate, evapotranspire, or harvest and use storm water from the site to protect water quality. If an LID approach cannot be utilized, the Permittee is required to document an explanation of the

reasons preventing this approach and rationale for the chosen alternative controls on a case by case basis for each project.

Permit Part 4.2.5.3.4 requires that all new development or redevelopment projects disturbing 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 must manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 90th percentile rainfall event. If not feasible, a rationale must be provided on a case by case basis 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. The rationale for using the 90th percentile event is that it represents the majority of runoff volume on an annual basis, and that larger events would be very difficult and costly to control for the same level of water quality protection. Additionally, this storm size represents the volume which is infiltrated in a pre-development condition and therefore achieves the goal of the minimum control measure, which is for the hydrology of new development to mirror the pre-development hydrology of the previously undeveloped site or to improve the hydrology of the redeveloped site. This objective must be accomplished by the use of a combination of practices; site design, structural and non-structural controls that are designed, constructed, and maintained to infiltrate, evapotranspire and/or harvest and reuse rainwater.

The 90th percentile rainfall event is the event whose precipitation total is greater than or equal to 90 percent of all storm events over a given period of record. The 90th percentile rainfall event for the Salt Lake City Airport is approximately 0.6 inches. Guidance for calculating the 90th percentile storm can be found in the Center for Watershed Protection's *Urban Stormwater Retrofit Practices Manual No. 3* (August 2007) and is summarized below.

1. Obtain a long-term rainfall record from a nearby weather station (daily precipitation is fine, but try to obtain at least 30 years of daily record). See NOAA at <http://www.ncdc.noaa.gov/?datasetabbv=SOD&countryabbv=&georegionabbv=>.
2. Edit out small rainfall events than are 0.1 inch or less and snowfall events that do not immediately melt. Events less than 0.1 inch are excluded because they do not generally result in any measurable runoff due to absorption, interception and evaporation.
3. Using a spreadsheet or simple statistical package, analyze the rainfall time series and develop a frequency analysis to determine the percentage of rainfall events greater than or equal to a given numerical value (e.g., 0.2, 0.5, 1.0, 1.5 inches, etc).
4. Construct a table and curve showing rainfall depth versus percentile.
5. Use the data to define the 90th percentile rainfall depth.

Permit Part 4.2.5.4. requires procedures for site plan review that evaluate water quality impacts and that are applied though the life of the project from conceptual design to project closeout.

Permit Part 4.2.5.4.1 requires Permittees to review post construction plans to ensure long-term controls are implemented which meet the permit requirements.

Permit Part 4.2.5.5.2 requires that permanent structural BMPs be inspected at least once during installation by qualified personnel and that construction be verified upon completion to ensure the BMPs were constructed as designed.

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 immediately upon hire prior to commencing storm water related duties.

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.

Permit Part 4.2.6.4. requires Permittees to develop and implement a Storm Water Pollution Prevention Plan (SWPPP) or similar type document 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.

Further clarification has been provided in Permit Part 4.2.6.6.6 concerning the proper management and disposal of waste and wastewater removed from the MS4. This material includes but is not limited to, street sweepings and catch basin cleanout materials. The Division has added the word “impervious” to the requirement “materials removed from the MS4 shall be dewatered in a contained, impervious area...” to clarify that dewatering onto the ground is not in compliance with this Permit. Further clarification is made in this provision with the sentence “The solid material shall be stored and disposed of properly to avoid discharge to Waters of the State during a storm event.” Waters of the State was added to emphasize that discharges cannot be made onto the ground as underground waters are also Waters of the State (see Permit Definition 7.46.).

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 immediately upon hire and annually thereafter.

Reporting

UDOT must submit an annual report to the Division by October 1 following each year of the Permit term. UDOT may continue to submit the annual report using the same format as the previous Permit term.

Record Keeping

UDOT shall retain all required plans, records of all programs, records of all monitoring information, copies of all reports required by this Permit, and records of all other data required by or used to demonstrate compliance with this Permit, for at least five years as stated in Part 5.4.4.

Some records, as in the case of common plans of development, may need to be retained longer than five years.

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 Permit will be set to expire on February 28, 2021, five years after the effective date of reissuance.

Comments Received and DWQ Responses

The 30-day public notice began on December 16, 2015, and ended on January 17, 2016. 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 Rhonda Thiele, MS4 Program Coordinator, Utah Division of Water Quality and Jeanne Riley, Storm Water Specialist, Utah Division of Water Quality, and updated on February 17, 2016.