FACT SHEET/STATEMENT OF BASIS

STORM WATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY CONNECTED WITH SINGLE LOT HOUSING PROJECTS OR THE "COMMON PLAN PERMIT" UPDES PERMIT No. UTRH00000

BACKGROUND

The storm water program, authorized by the Federal Clean Water Act (CWA), went into effect in October, 1992. It requires anyone doing construction activities which will disturb 5 acres or more, or smaller parcels that are part of a common development plan, to obtain a storm water permit (Utah Administrative Code [UAC] R317-8-3.9(1)(a)). Phase II of the storm water program, later implemented by the Utah Division of Water Quality (DWQ), expanded the permit requirement to include "small construction," defined as soil disturbances from construction activity affecting from one to less than 5 acres (UAC R317-8-3.9(6)(e)).

DWQ administers the Utah Pollution Discharge Elimination System (UPDES) program (CWA Section 402) under a memorandum of agreement with the EPA dated July 7, 1987. UPDES permits issued for construction storm water discharges are required to include conditions for meeting technology-based effluent limitations guidelines and, where applicable, any new source performance standard established under the CWA Section 306.

A technology-based standard is included in the USEPA Effluent Limitations Guidelines and New Source Performance Standards for Construction and Development (C&D) related storm water discharges (40 Code of Federal Regulations [CFR] 450). This standard is referred to as the C&D Rule, and its requirements include a suite of non-numeric effluent limitations that apply to all permitted construction sites. These limits include requirements for erosion and sediment controls, pollution prevention measures, soil stabilization, dewatering, prohibited discharges, and surface outlets.

In order to comply with the standards in 40 CFR 450, DWQ currently administers the Common Plan Permit (UTRH00000) which covers single-lot residential construction activity in a larger common plan of development that disturbs greater than an acre.

PERMIT DEVELOPMENT INFORMATION

The development of the Storm Water Permit for Construction Activity Connected with Single Lot Housing Projects (UTRH00000) was first issued in 2015. Its purpose is to partner with the existing Utah Construction General Permit (CGP) for storm water discharges in providing permit coverage for construction activity. It was created for small home builders who construct approximately 10 or less house projects a year, and/or owner builders who generally do not have the resources and permitting expertise larger entities do. Its clarity and directness will also benefit local building authorities who are often consulted to explain stormwater requirements.

Larger residential construction ventures are not barred from applying for the coverage provided by this

permit; however, taking that path would require maintaining several small area permits which could be more costly and less efficient. Likewise, small home builders are not barred from applying for coverage under the CGP if they are comfortable addressing compliance requirements.

DISCUSSION OF UNIQUE CLIMATE ISSUES IN UTAH

Utah is the second most arid state in the nation. DWQ has wrestled with stabilization requirements for the arid- and drought-stricken areas of the state during inspections of construction sites since the beginning of the storm water program in 1992. The general stabilization requirements given in 40 CFR 450.21(b) are not economically practicable and achievable for arid, semi-arid, and drought-stricken areas in Utah. Some of the differences observed between wetter climates and arid climates are:

1. The lack of climatic moisture causes less dense vegetative cover in arid climates. As a result, nearly all arid areas naturally have more erosion and sediment transport under normal precipitation events. The more arid the area, the more sediment transport from erosion.
2. Many streams in arid areas naturally flow heavy with sediment after storm events that produce runoff due to this less dense vegetative cover.
3. Arid areas have fewer storm events that cause runoff.
4. Moisture is a significant factor in seed germination. Regrowth of vegetation after clearing and excavating takes much longer, even years sometimes, to re-establish in arid and semi-arid areas, even when topsoil is preserved and reused, unless irrigation water is applied.
5. Topsoils in arid areas have smaller fractions of organics and biota than that found in soils in wetter climates. Only hardier plants thrive in arid areas because of the poor soil quality, reduced precipitation, and generally higher temperatures. These harsh conditions mean many indigenous plants in arid areas are not fast-growing, and those plants that are fast-growing grow in spurts during and immediately after precipitation events, then die or go dormant.
6. Stabilization factors for soil surfaces in developed areas include roads, driveways, buildings, and irrigated and designed landscaping, all of which provide a powerful stabilizing effect. In undeveloped areas, the stabilizing force for soil comes, for the most part, from the roots of natural vegetation. There are other factors like soil type, the residue of dead and dying plants on the soil surface, and the protection of branches, leaves, and aboveground vegetation that break the fall of raindrops that dislodge dirt when hitting the ground. The stabilizing force from natural vegetation in undeveloped areas is much stronger in wetter climates and is somewhat equivalent to the manmade factors influencing soil stabilization. The scarcity of vegetation or the bunching of vegetation between bare areas is more prevalent in arid areas. For this reason, undeveloped areas are more susceptible to erosion than the developed areas in arid climates.

When it rains in arid areas, more erosion happens naturally. Because there is less precipitation in arid areas, revegetation happens much more slowly and growth is slow outside of rain events. Without control measures, construction activity increases erosion in arid areas, but the increased erosion is not as significant as in wetter areas.

ARID ADAPTATIONS TO THE PERMIT

EPA recognized the arid climate issues in its stabilization requirements in 40 CFR 450.21(b) as follows:

"In arid, semi-arid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures shall be employed as specified by the permitting authority."

The EPA CGP standard for final stabilization (70 percent evenly revegetated with no bare areas) is an example of the challenges arid areas face. This standard does not account for the time needed for revegetation to occur in arid areas. To address this issue, Utah's CPP requires erosion control measures be placed and left after the permit is terminated with no requirement to remove them. These control measures can be either permanent (e.g., rock check dam, geotextile lined waterway) or temporary, but if they are temporary, they must be biodegradable natural products. The objective is to slow erosion to match what occurs naturally while requiring a seed mix and species compatible with the climate and to allow a longer time frame for seed germination and plant maturation which permanently restores the natural stabilizing forces.

Other adaptations for temporary stabilization measures are also included in the permit, see the last paragraph under Part 2, found in the section BRIEF DESCRIPTIONS FOR EACH PART OF THE PERMIT AND THE BASIS FOR THEIR REQUIREMENTS.

REQUIREMENTS CONTAINED IN THE PERMIT

All control elements found in 40 CFR 450 (The Construction and Development Point Source Category) are included in the CPP. Additional controls are incorporated by best professional judgement and are referred to as best management practices (BMPs).

The CPP is designed to be protective of water quality throughout Utah. DWQ believes that if appropriate pollution controls are properly placed and maintained in locations where erosion and sediment transport is likely to occur or is occurring, this permit is protective of all areas, including impacted waters and high-quality waters.

In the NOI, the permittee must identify the waterbody and if the waterbody is high-quality or impacted. As required in the CPP, the permittee must take steps to eliminate or mitigate any pollution effects caused by the construction activity so water quality standards are not compromised. If information becomes available indicating a permitted site is causing or contributing to a violation of a water-quality standard, coverage may be re-evaluated and may result in permit revocation, and/or a requirement to obtain an individual permit or another general permit.

DESCRIPTION OF DISCHARGE

This permit covers storm water discharges from construction activities as defined in UAC R317-8-3.9(6)(d) 10 & (e) 1. Also, under UAC R317-8-3.9(6)(e)2 any construction activity can be required to obtain

a permit by DWQ based on potential contribution to a violation of a water-quality standard or for significant contribution of pollutants to waters of the State.

Storm water discharges covered by the CPP have potential for erosion and sediment transport from areas of disturbed soil cause by construction activity (clearing, grading, and excavating for construction purposes) or by exposure to construction-related chemicals and materials.

ANTIDEGRADATION REQUIREMENTS

The antidegradation requirements for this permit can be found in UAC R317-2-3.5.b.3, which states:

"An Anti-degradation Level II review is not required where (any of the following conditions apply): …Water quality impacts will be temporary and related only to sediment or turbidity and fish spawning will not be impaired." Therefore, because this permit relates to only temporary construction projects with sediment or turbidity constituents, a further antidegradation review is not required.

BRIEF DESCRIPTIONS FOR EACH UPDATED PART OF THE PERMIT FOR THE 2020 UPDATE

Part 1: Permit Part [1.4.] was updated to reflect the new Online Permits Database website URL, as well as adding a requirement to download and maintain a copy of the Authorization to Discharge Letter for proof of coverage.
Permit Part [1.5.] was updated to include the requirement to maintain the Authorization to Discharge Letter in the SWPPP.

Permit Part [1.7.] was updated to clarify that the permittee's coverage begins when an Authorization to Discharge Letter was received by the permittee.

Part 6: Permit Part [6.] was updated to include a definition for the Authorization to Discharge Letter

BRIEF DESCRIPTIONS FOR EACH UPDATED PART OF THE PERMIT FOR THE 2021 RENEWAL

Part 1: Permit Part [1.1.5.] was added to give MS4s greater authority in permit coverage decisions in their jurisdiction, and provides a tool to target high risk sites in order to minimize discharges from that population.

Permit Part [1.1.6.] was added to clarify when the permit is applicable to subdivisions that are partially completed.

Permit Part [1.4.] was updated to include the new online permits database link and location on DWQ's website

Permit Part [1.5.] was updated to clarify a technical issue for signatures on the online permits database

Permit Part [1.10.] was updated to match the requirements in the CGP for responses to information requests in permit coverage

Part 2: Permit Part [2.2.1.] was updated to clarify timeframes at which material stockpiles are required to install perimeter controls and siting requirements.

Permit Part [2.1.3.] was updated for grammatical clarity and the inclusion of gravel bags as a BMP to avoid during winter

Permit Part [2.3.5.] was moved under Permit Part [2.3.] for clarity purposes

Permit Part [2.3.5.] was updated to match the requirements of the CGP for vegetative buffers changing the 30 foot buffer to a 50 foot buffer between the edge of the project disturbance and a perennial surface water.

Permit Part [2.4.5.] was updated to match the language for washout container requirements in the CGP, and to clarify requirements for containers to exclude non-rigid containers such as inflatable pools used in concrete washout.

Permit Part [2.5.] was updated to include to include SWPPP documentation requirements for soil compaction exemptions.

Permit Part [2.8.3.] was updated for grammatical clarity

Permit Part [2.10.] was added to protect water quality in already impaired areas, and targets pollutants that are a high risk due to the nature of residential construction; sediment and nutrients.

Part 3: Permit part [3.2.2.a.] was added to tie the daily site checks to any impaired water bodies for sediment and nutrients, to target specific potential pollutants and minimize the risk of discharges of them.

Permit Part [3.5.] was updated to clarify corrective actions stemming from inspections by an oversight authority versus corrections initiated through other means.

Permit Part [3.6.] was added to make requirements for corrections in line with the CGP, and provide clarity for when corrections are required.

Part 4: Permit Part [4.2.4.] was updated to reflect the 50 foot buffer requirement

Permit part [4.2.5.] was added to include the first receiving water the site discharges into, the impairment status of the receiving water, and the nature of the impairment to reflect the requirements in Permit part [2.10.].

Permit Part [4.2.9.] was updated to reflect the requirement to keep and document the Authorization to Discharge letter received after successfully applying for permit coverage.

BRIEF DESCRIPTIONS FOR EACH PART OF THE PERMIT AND THE BASIS FOR THEIR REQUIREMENTS

Part 1: Part 1 of the permit contains the scope of coverage under this permit, including types of projects and discharges allowed, and the mechanics of coverage, renewal, and termination of coverage. The contents of Part 1 define the tools that allow DWQ to identify, control, and permit construction

activity.

Part 2: The permit requirements pertaining to storm water and water quality are found in Part 2 of the permit. Controls for stockpiles of materials, perimeter controls, and inlet protection (Parts 2.1.1, 2.1.2., and 2.1.3) are requirements based on best professional judgement.

The federal limitations in 40 CFR 450 required for storm water discharges related to construction activity are represented in Part 2 of the permit. Table 1 below outlines the federal requirements and the corresponding CPP requirements. Part 4 includes portions of 40 CFR 450 that are not in Part 2).

Table 1. Requirements from 40 CFR 450 and the location of their analogue in the permit.

Federal Requirement from 40 CFR 450.21		**Citation for Comparable CPP SW Permit Requirement**
Section Number	**Section Name/Description**	
(a)	**Erosion and sediment controls**	
(a)(1)	Control storm water volume and velocity to minimize soil erosion in order to minimize pollutant discharges.	Part 2.3.3
(a)(2)	Control storm water discharges, including both peak flowrates and total storm water volume, to minimize channel and stream-bank erosion and scour in the immediate vicinity of discharge points.	Parts 2.3.4
(a)(3)	Minimize the amount of soil exposed during construction activity.	Part 2.3.1
(a)(4)	Minimize the disturbance of steep slopes.	Part 2.3.2
(a)(5)	Minimize sediment discharges from the site.	Part 4.1.1
(a)(6)	Provide and maintain natural buffers around waters of the United States, direct storm water to vegetated areas and maximize storm water infiltration to reduce pollutant discharges, unless infeasible.	Part 2.3.5

deral Requirement from 40 CFR 450.21		**Citation for Comparable CPP SW Permit Requirement**
Section Number	**Section Name/Description**	
(a)(7)	Minimize soil compaction	Part 2.5
(a)(8)	Preserve topsoil unless infeasible	Part 2.5
(b)	**Soil stabilization**	Part 2.6
(c)	**Dewatering**	Part 2.7
(d)	**Pollution prevention measures**	
(d)(1)	Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters	Part 2.8.1

(d)(2)	Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to storm water	Part 2.8.2
(d)(3)	Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak-prevention and response procedures	Part 2.8.3
(e)	**Prohibited discharges**	
(e)(1)	Wastewater from washout of concrete, unless managed by an appropriate control	Part 2.9.1
(e)(2)	Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials	Part 2.9.2
(e)(3)	Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance	Part 2.9.3
(e)(4)	Soaps or solvents used in vehicle and equipment washing	Part 2.9.4
(f)	**Surface outlets**	Part 4.1.2

Other permit requirements found in Part 2 are:

1. Protection of critical and sensitive areas (Part 2.2);
2. Control of track-out (Part 2.4.1);
3. Management of waste and debris (Part 2.4.2);
4. Securing of portable sanitary devices (Part 2.4.3), and
5. Washout procedures for paint, concrete, stucco, and etc. with management of oil-based paint cleanout (Part 2.4.4).

The list of five items immediately above are based on best professional judgement and are common in storm water permits nationwide. However, due to climate reasons stated previously, soil-stabilization requirements for arid and semi-arid areas are modified in the CPP as follows:

- Stabilization on visually flat areas will not be required.
- Stabilization for mild slopes (up to 20 percent) will not be required, but velocity dissipation devices shall be placed across all storm water drainages at a frequency that removes the energy that causes erosion.
- Non-vegetative stabilization is required on all slopes over 20 percent unless irrigation is available and vegetative stabilization can be implemented. The intent is to increase the robust nature of stabilization with increasingly steeper slopes.
- Permanent stabilization requires seeding on all areas that are not covered with structural elements such as building or paving, or that are engineered or intended for structural purposes like graveled parking or dirt roads. The revegetation process implemented must mimic the natural revegetation process for germination and growth of seeds during the infrequent storm

events.

- Disturbed areas on projects outside of populated areas where no irrigation is available shall be reclaimed with a seed mix of plants indigenous to the area. No invasive species are allowed.

Part 3: Part 3 contains requirements for the permittee concerning self-inspection reports. Only the essential elements that are deemed necessary for an effective inspection of the site are included in this section plus requirements for the inspection report. An inspection report form will be made available on the DWQ web site at: http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm.

Some inspections in the permit require a written report and some do not. The required written inspection reports are necessary because they give regulators and the permittee a record of how compliance and corrective action has occurred on the site.

Part 4: Part 4 contains the requirements for a storm water pollution prevention plan (SWPPP). The development of a SWPPP is required. The SWPP is used as a planning tool and metric for the builder and the regulator to address storm water quality concerns as construction progresses and gives the regulator the ability to measure performance. A SWPPP is a common element of a storm water permits nationwide. They have been required from the beginning of the construction storm water program and have proved valuable for management of storm water on an active construction site in the same way that charts and specifications are valuable or necessary for the erection of structural elements of a project. The SWPPP requirements in the CPP were pared down and streamlined from the requirements for a SWPPP in the CGP.

Part 5: Part 5 contains the standard conditions for all UPDES permits issued by DWQ for the State of Utah. The requirements in Part 5 come from UAC R317-8.

Part 6: Definitions.

PERMIT DURATION

This permit is scheduled to be effective for a duration of five (5) years from date of permit issuance. This permit and fact sheet have been drafted by Ryan Curtin, Construction Storm Water Program Coordinator, November , 2020.

PUBLIC NOTICE INFORMATION

Began:
Ended:
Public Notice Publication:
Comments Received: