



Storm Water Permit & Storm Water Pollution Prevention Plan (SWPPP)

It is Ogden City's Building Services and Engineering policy that any construction or development of 5000 sq. ft. or greater be required to obtain and maintain an Ogden City Storm Water Pollution Prevention Plan (SWPPP) Permit. SWPPP permits may be obtained on the 2nd floor of the Ogden City Municipal Building at 2549 South Washington Boulevard. Please contact Dave Daniels at the north counter or contact him at (801) 629-8986 with any questions.

The SWPPP Best Management Practices (BMPs) and erosion control devices must be in place prior to commencement of the project. An Ogden City Inspector must be called out to inspect the site and review the SWPPP before general construction of the project can begin. Any deficiencies that exist can be remedied at this time, thus insuring compliance to storm water regulations. Inspections can be scheduled by calling Ogden City Building Services at #801-629-8950.

SWPPP permits have an expiration date and it is the sole responsibility of the permit holder to obtain a new permit should the existing permit expire. Sites without a valid permit will be considered by Ogden City to be an illegal non-permitted site.

Any site one acre or larger must also file a Notice of Intent (NOI) with and acquire a Utah State Storm Water General Construction Permit from the Utah Department of Environmental Quality Division of Water Quality. This process can usually be completed through the Division of Water Quality's website (see Helpful Internet Links section at the end of this document).

Ogden City Municipal Separate Storm Sewer System Permit (MS4) and SWPPP Submission Requirements

Ogden City has a Municipal Separate Storm Sewer System (MS4) Permit with the State of Utah. This permit authorizes and obliges Ogden City to keep all construction and industry within Ogden City limits in compliance with State and Federal Storm Water Regulations. A Storm Water Pollution Prevention Plan (SWPPP) needs to be completed per Ogden City Code and per project requirements and then submitted for review to the City in order to obtain a SWPPP permit.

An acceptable Storm Water Pollution Prevention Plan will come in one of the following forms:

- A completed State of Utah SWPPP template
- A completed United States Environmental Agency (EPA) SWPPP template
- SWPPP details and notes included with the site plan. This type of submittal will only be acceptable if it is functional, easy to navigate and meets requirements for site stabilization, phasing, minimum BMPs, pre-stabilization and post-stabilization.

These templates can generally be found online at the related agencies websites:

http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm

<http://www.waterquality.utah.gov/UPDES/stormwatercon.htm>

<http://cfpub.epa.gov/npdes/stormwater/swppp.cfm>

<http://websoilsurvey.nrcs.usda.gov/app/>

<http://soils.usda.gov/>

Ogden City Inspection Policy

Ogden City reserves the right to inspect project sites, easements, and associated systems within Ogden City Limits as per State and Ogden City Municipal Code. Inspections may be performed at reasonable times and performed by employees, inspectors, and city officials acting in their official capacity as City Representatives.

Construction Sites Less Than 5,000 Square Feet

Home construction sites less than 5,000 square feet do not require a City SWPPP permit; however, these sites must still comply with Municipal, State, and Federal Storm Water Regulations.

Suggested BMPs For Construction Sites Greater Than 5,000 Square Feet

Both structural and non-structural Best Management Practices (BMPs) can be varied and many, depending on the size and complexity of a project. For projects less than one acre and not located in sensitive areas of the City, these basic BMPs are required:

- Stabilization can be achieved by using a sediment barrier around the downstream limits of disturbance. These barriers can be in the form of silt fencing, a small ditch/berm combination of greater than 1.5 ft high, sand bags or wattles (straw, bark or stone filled).
- Drop inlet or curb inlet protection will need to be provided on any inlet impacted by the home construction project. In addition to inlet protection, a small sediment pond at the point at which storm water leaves the property may be required.
- Street sweeping along with curb and gutter cleaning are required in order to control sediment that has entered City Right of Way.
- Basement spoil stock piles must be protected to prevent erosion into the storm sewer system.
- A SWPPP and a SWPPP permit posted at the entrance of the site in a water proof container marked "SWPPP" (for sites 5,000 square feet or greater).
- A certified construction entrance using 6" cobble or crushed rock 12' wide x 50' length on solid ground or 6" of untreated base course for bearing strength on soft ground. A steel rumble cage with a sump may also be used (Truck wash and cleanout sump required with rumble cage).
- Concrete washout area or wash pans with a large sign designating it as such for all mixer and pump truck drivers to see.
- An onsite porta-potty must be staked down to prevent tip over by storms or other factors. If site is near sensitive land or water a 1.5' berm must surround the porta-potty.
- An erosion control device such as an erosion control blanket, mulch, tackifier, straw cat tracking must be placed on any slopes de-nuded for more that 2 weeks.
- Any slope that has been made via cut or fill shall also be stabilized using said BMPs no more than 2 weeks after construction unless planting of sod or other flora as permanent stabilization.
- Regularly remove trash from around the site and empty any dumpsters.
- Provide a designated materials storage area in a connex container, a building or in a bermed area with an impermeable floor.

Reference the 2007 Manual of Standard Specifications and the United States EPA website for more detailed descriptions of BMPs.

Additional BMPs For Projects One Acre Or Larger And Projects Involving Sensitive Lands Or Waters

Large projects and projects next to sensitive lands or waters need additional BMPs as follows:

- a. Post state NOI in water proof container along with the SWPPP and SWPPP permit.
- b. Provide an equipment storage/parking and service area with an impermeable floor and containment berm.
- c. Provide spill kits in critical areas.
- d. Regularly train construction personnel with regards to storm water regulations and sensitive lands and waters.
- e. Designate a responsible person to lead a competent hazardous spill response team.
- f. Place a sedimentation pond where storm water leaves the site and enters municipal, state or federal lands or waters.
- g. Place an oil and sand separator where storm water leaves the site and enters municipal, state, or federal lands or waters.

Reference the 2007 Manual of Standard Specifications and the United States EPA website for more detailed descriptions of BMPs.

Site Self Inspection Requirements

The permit holder is required to inspect the site briefly each day in order to be aware of and therefore remedy any problems that may arise during the project. A formal inspection needs to be completed each week by a competent storm water inspector. Additional inspections must be performed within 24 hours of a storm event in excess of 0.1 inch rainfall during a one hour period. These inspections need to be taken seriously and completed thoroughly as a requirement to keep the site in compliance.

Erosion and Sediment Control Plan-Self Inspection and Maintenance Form (*available online at www.ogdencity.com*)

The inspection reports must be kept with the SWPPP and SWPPP permit at the entrance to the project. A copy of the self inspection reports must be kept in the field office for a permanent record. At any time Ogden City may request a copy of these reports. Federal Regulations require these records to be kept for 3 years after the project has ended.

Post Construction Stabilization

Upon completion of the project the site must be stabilized using permanent flora, pavement, or other approved method. This must be done prior to bond release and issuance of certificate of occupancy.

Sites with a Utah State Department of Environmental Quality, Division of Water Quality Construction Permit require a Notice of Termination (NOT) be filed to conclude the project at the state level and end inspection requirements.

Ogden City Seed Mix and Re-vegetation Specifications

All areas that have been cleared and grubbed (de-nuded) and will not be covered by pavement, a building footprint or landscape ground cover require the following; permanent stabilization must be complete prior to bond release and issuance of certificate of occupancy:

1. A minimum of 6" of topsoil shall be placed on the existing ground prior to seeding. The topsoil shall be obtained from a local vendor and meet the designation of "topsoil" as per ASTM 5268. The topsoil shall be free of noxious weeds and pollution.
2. The native ground shall be moistened and scarified to 3 "depth before the topsoil is placed. The topsoil shall be moistened and lightly raked (blended) into the native soil so as not to create a slip plane between the two soils.
3. An ultra long lasting organic fertilizer consisting of one part nitrogen, one part phosphorous and one part potassium (commonly sold as 16:16:16) will be applied to the topsoil at a rate between 20lbs and 28lbs per acre. The fertilizer may be applied using one of the following methods:
 - I. Using the broadcast method (typically with a device utilizing an impeller) with or without seed and then raked into the topsoil
 - II. Drilling the fertilizer and seed mix into the topsoil
 - III. Hydraulic mulching the seed and fertilizer at the aforementioned rates of application
4. The Ogden City Slope Seed Mix will be applied at a rate of 57 lbs / acre on flat areas and slopes.
5. The Ogden City Ditch Seed Mix will be applied at a rate of 55 lbs / acre in drainage structures, easements such as ditches, swales, and detention ponds.

Ogden City Ditch Seed Mix Legend

Common Name	Botanical Name	Form	Rate: lbs / acre
<i>Ephraim Crested Wheatgrass</i>	<i>Agropyron Cristatum</i>	<i>Slightly Rhizomatous</i>	8.0
<i>Sodar Strambank Wheatgrass</i>	<i>Bromus Inermis</i>	-----	16.0
<i>Western Wheatgrass</i>	<i>Elymus Smithii</i>	<i>Strongly Rhizomatous</i>	16.0
<i>Covar Sheep</i>	<i>Restuca Ovina</i>	<i>Bunch</i>	6.0
<i>Perennial Ryegrass</i>	<i>Lolium Perenne</i>	-----	4.0
<i>Canada Wildrye</i>	<i>Elymus Canadensis</i>	-----	2.0
<i>Slender Wheatgrass</i>	<i>Elymus Trachycallus</i>	-----	3.0
<i>Regreen</i>	<i>Triticom Elongatus</i>	<i>“Cover Crop” Short Lived Perennial Grass</i>	10.00
		<i>Total =</i>	55 lbs / acre Pure Live Seed (PLS)

***It is suggested that if you want some aesthetic value to the landscape that you put into this mix a mountain flower mix at about 10% by weight of the above seed mix.**

Ogden City Slope Seed Mix Legend

Common Name	Botanical Name	Form	Rate: lbs / acre
<i>Ephraim Crested Wheatgrass</i>	<i>Agropyron Cristatum</i>	<i>Slightly Rhyzomatous</i>	5.5
<i>Smooth Brome</i>	<i>Bromus Inermis</i>	<i>Sod Forming</i>	5.5
<i>Intermediate Wheatgrass</i>	<i>Agropyron Intermedium</i>	<i>Sod Former</i>	5.5
<i>Great Basin Wildrye</i>	<i>Elymus Cinereus</i>	<i>Slightly Spreading</i>	3.5
<i>Russian Wildrye</i>	<i>Elymus Junceus</i>	<i>Bunch</i>	4.5
<i>Western Wheatgrass</i>	<i>Agropyron</i>	<i>Strongly Rhyzomatous Sod Former</i>	2.0
<i>White Yarrow</i>	<i>Achillea Millefolium</i>	<i>Wildflower</i>	1.0
<i>Blue Flax</i>	<i>Linum Lewisii</i>	<i>Wildflower</i>	2.5
<i>Palmer Penstemon</i>	<i>Penstemon-Palmer</i>	<i>Wildflower</i>	1.5
<i>California Poppy</i>	<i>Eschscholzia</i>	<i>Wildflower</i>	1.0
<i>Canada Wildrye</i>	<i>Elymus Canadensis</i>	<i>“Cover Crop”</i>	3.5
<i>Slender Wheatgrass</i>	<i>Agropyron Trachyacaulum</i>	<i>Bunch Grass</i>	5.0
<i>Basin Big Sagebrush</i>	<i>Artemesia Tridentata</i>	<i>Evergreen Shrub</i>	0.1
<i>Regreen or Quickgaurd</i>	<i>Triticom Elongatus</i>	<i>“Cover Crop” Short-Lived Perennial Grass</i>	15.9
		<i>Total =</i>	57 lbs / acre Pure Live Seed (PLS)

Definitions

1. Best Management Practices are referred to as BMPs.
2. A bi-weekly Storm Water Inspection Report is the formal report made by a storm water inspector for each construction site and is the minimum reporting requirement for a site permitted by the State or the Federal Government. A copy of each report is to be stored at the site entrance with the city storm water permit, storm water pollution prevention plan, and notice of intent. Copies of the reports must be provided at the request of the city inspector or storm water specialist.
3. Convey or conveyance of storm water is defined as storm water moving through, under or over the construction site via pipe, hose, waterway, armored swale or any other man made device made to convey water.
4. Effluent is defined as any water leaving a property which includes storm water runoff and water leaving an impoundment system, reservoir or treatment plant.
5. An erosion coefficient is a value applied to the soils and surfaces on a construction site and relates a specific rainfall volume to the site's erosion loss in tons per acre per year. The standard industry equation is the Revised Universal Soil Loss Equation or RUSLE and is defined as the following:

$$A = RKLSCP$$

Where:

A = Average Annual Soil Loss

R = Rainfall Erosivity Factor

K = Soil Erodibility Factor

L = Slope Length **S** = Steepness Factor **C** = Cover Management Factor **P** = Support Practice Factor

6. Municipal Separate Storm Sewer System Permit is referred to as an MS4 Permit
7. Non-structural BMPs are practices and procedures that control and minimize pollution and prevent sediment from leaving a construction site. Examples of non-structural BMPs are regular removal of trash from site and dumpsters, regular street sweeping, maintenance of on-site structural BMPs, training subcontractors and related personnel on construction site pollution prevention and reporting procedures, etc.
8. Notice of Intent is the Utah State Construction Storm Water Permit and is referred to as NOI.
9. Notice of Termination is the termination of the Utah State Construction Storm Water Permit and is referred to as NOT.
10. An Ogden City Storm Water Permit is a limited and temporary permit given to contractors, developers and owners to implement approved Storm Water Pollution Prevention Plans on their construction site. The permit authorizes the site to drain treated storm water into Ogden City, State, or Federal Lands or Waters for the life of the permit.
11. Operator is a general term that includes the owner, general contractor, excavator sub-contractor or any other pertinent entity that will impact storm water leaving a construction site.
12. Pollution is the contamination of water, land, or air by any substance that is harmful to living organisms. Pollution also includes the production and or transport of any substance that is deemed objectionable to or a liability for Ogden City. Examples of pollution include: industrial waste or

byproducts, trash, fertilizers, pesticides, lawn clippings, petroleum and petroleum byproducts, sediment, plant waste such as leaves and straw, farm waste, pet feces, un-treated sewage, sludge, concentrated de-icers such as sodium chloride & potassium chloride, byproducts and dust from granary operations, saw dust, wood byproducts, heavy metals, and many other chemicals and substances deemed to be harmful to health and property.

13. A rain event is any rainfall measuring 0.1 inch or more during a 1 hour period. This is generally considered enough rainfall to produce sheet flow and concentrated storm water runoff.
14. A Rain Event Report is the inspection report required by State and Federal Authorities for a permitted construction site. This inspection must be performed by a certified storm water inspector within 24 hours of a rain event.
15. Runoff Coefficient is a value applied to impervious surfaces (i.e. concrete, asphalt, etc.) or pervious surfaces (i.e. natural ground) and corresponds to runoff volume generated by the surface. A smooth hard impervious surface such as glass would have a coefficient of 1.0. A rough and highly porous gravel surface with high absorption would have a coefficient of less than 0.1
16. Storm Water Inspector is the designated inspector on a permitted construction site that has enough storm water inspection training and experience to be competent in storm water inspection and documentation. This inspector must hold a current storm water inspector certificate issued by Municipal, State, Federal, CISEC, NICET or ICC authority. The general contractor or developer may use a designated employee if said employee meets the above criteria and has been approved by the local city official/inspector.
17. Storm Water Pollution Prevention Plan is referred to as SWPPP.
18. Storm Water Runoff is defined as moisture from any precipitation moving by sheet flow or concentrated flow from any higher land to the lowest land and final receiving body of water.
19. Structural Best Management Practices are those devices and techniques used on a construction site to prevent or minimize erosion and sediment transport via wind and water. Examples of structural BMPs are: berms, silt fencing, erosion control blanket, tackifier, mulching, sedimentation ponds, concrete washout areas, inlet protection, spill kits, etc.
20. Weekly inspection is an inspection required by State and Local storm water regulations and is included in the Storm Water Pollution Prevention Plan as a requirement for construction sites.

A construction site is any site where the existing drainage conditions are going to be modified in any way.