



Storm Water Runoff from Construction Sites

May 12, 2011

PLEASE NOTE: Informational Bulletins should not be used as substitutes for actual codes and regulations. Detailed information regarding codes and regulations can be obtained by calling the Code Administration Division at (307) 721-5271.

This bulletin describes the general requirements of the LCGP and SCGP, how to get coverage and who to contact for additional assistance.

Runoff from construction sites is an environmental concern because runoff can carry materials harmful to the quality of receiving waters (creeks, rivers, aquifers, lakes and wetlands). **Sediment** is usually the most abundant pollutant from construction sites. If suspended in water, sediment can clog fish gills, reduce plant growth, clog storm sewer lines and increase treatment costs for public and private water supplies. Stream channels can accumulate so much sediment that the flow capacity may be altered and the potential for flooding, in extreme cases, can increase. **Fuels and lubricants** stored and used on site can contribute hydrocarbons to runoff. **Concrete washout** in its liquid form is highly alkaline and sediment laden. The pH of washout commonly exceeds 10 and may be as high as 12; more alkaline than ammonia. High pH waters are toxic to aquatic life, including fish.

Wyoming Department of Environmental Quality

All construction sites disturbing 1 acre or more need storm water permit coverage. If your construction site disturbs 1 or more acres of land through clearing, grading, excavating or stockpiling of fill material, then the project needs storm water permit coverage. You must count the acreage of the entire project, even if you are disturbing or responsible for only a small portion.

Why do I have to get permit coverage?

Regulations under the federal Clean Water Act and Chapter 2 of the Wyoming Water Quality Rules and Regulations require operators of construction sites that disturb an acre or more to obtain coverage under a storm water permit and to develop a plan to ensure that storm water runoff from the project is clean enough to discharge to surface waters without causing or contributing to water quality concerns. In Wyoming the Department of Environmental Quality (DEQ) implements the storm water program under the Wyoming Pollutant Discharge Elimination System (WYPDES).

There are two WYPDES permits for construction:

- 1) Large Construction General Permit (LCGP):** covers projects that disturb 5 acres or more and smaller projects that are part of a larger common development plan or sale that will disturb 5 or more acres. The five acres of disturbance does not have to be contiguous. ****As of 5/12/2011 updates have been made to the LCGP. As operator and permittee, it is advised that you revise the updated LCGP. You are responsible for following any new requirements or changes that have been made to the updated LCGP.*
- 2) Small Construction General Permits (SCGP):** covers projects that disturb between 1 and 5 acres or smaller projects that are part of a common development plan or sale that will disturb between 1 and 5 acres.

I need a permit. Where do I start?

- 1) Determine which permit you need.**
- Large Construction General Permit (LCGP):** This permit does require submission of a Notice of Intent (NOI) to DEQ to obtain coverage.
- Small Construction General Permit (SCGP):** This is a "do-it-yourself" permit in that you do not apply to DEQ for coverage. Simply follow the requirements of the permit and your site is automatically covered. The permit does require a storm water pollution prevention plan (SWPPP) and periodic inspections of site best management practices.
- You can download either permit from http://deq.state.wy.us/wqd/WYPDES_Permitting/WYPDES_Storm_Water/stormwater.asp or call

307-777-7781 to request a copy. You should read and understand whichever permit you use and remember that the operator is legally responsible for complying with and understanding all provisions of either permit.

2) Develop a storm water pollution prevention plan (SWPPP). The SWPPP is a written plan for your construction site describing which best management practices (BMPs) you will use to keep pollutants on the construction site and out of surface waters and storm drains. Remember, storm drains are almost always direct conduits to surface waters. SWPPP requirements are found in Part 7 of the LCGP and Part 8 of the SCGP.

For projects under 100 acres disturbance (all SCGP and LCGP) and not on class 1 water you don't have to submit the SWPPP with your application, but it must be kept on site and available for review during an inspection. You'll want to make sure your SWPPP is updated any time changes on the construction site might affect the quality of your storm water runoff.

3) Complete and submit a Notice of Intent (NOI) for projects that disturb 5 or more acres.

(LCGP): The NOI is the application you file with DEQ to obtain coverage under the LCGP. It is also your certification that you will develop and implement a SWPPP. Complete NOIs are processed in less than a month; often sooner. A letter of authorization will be returned to you authorizing storm water discharges under the LCGP.

(SCGP): No NOI is submitted to DEQ for coverage under the small construction general permit (SCGP). Your coverage is automatic if you follow all provisions of the permit. Keep in mind that wastewater discharges are not authorized under either the LCGP or the SCGP. Activities such as pumping ground water from your site, discharging hydrostatic test water and wash waters must be covered under a separate WYPDES permit specifically for those discharges.

4) Implement all BMPs described in your SWPPP. The SWPPP is a requirement of the permit and is enforceable as part of the permit. If you find the BMPs in your SWPPP are not effective, you are required to modify your existing BMPs, replace ineffective BMPs or add new BMPs to your SWPPP. All BMPs must be inspected at least once every 14 days and within 24 hours after any storm event of ½" or more (or every 7 days with no storm event requirement as part of the SWPPP). During inactive periods your BMPs must be

inspected every 30 days. All inspections must be documented.

5) File a Notice of Termination (NOT) or a Notice of Transfer and Acceptance (NOTA) when your project is complete or transferred to another party.

(LCGP): File a NOT when your project is "finally stabilized." This means that in areas that are not paved or built over, vegetation has been established at a uniform density of 70% of what would normally be expected in your area. File a NOTA when you have sold or transferred the project and you are no longer the operator. A timely termination or transfer is important since you are responsible for permit compliance as long as the permit is active and you are the operator. As operator and permittee, you are also responsible for an annual \$100 authorization fee.

(SCGP): To terminate coverage, document that the site is finally stabilized (70%) in your final inspection report. To transfer coverage, provide the new operation a copy of the SWPPP with a letter noting the change in operator.

Basic SWPPP Principles

- Divert storm water from disturbed areas of the construction site.
- Install appropriate BMPs to control erosion and sedimentation and manage storm water.
- Inspect and maintain BMPs regularly, especially after storm events.
- Revise the SWPPP as site conditions change and as BMPs are found to be ineffective in controlling sediment.
- Minimize clearing vegetation to the extent practicable.
- Minimize exposure of fuel, lubricants and other pollutants to storm water.
- Minimize off-site tracking of mud and frequently clean up sediment that is tracked off site.
- Implement good housekeeping measures.

Access to electronic and printable versions of all necessary applications and complete information regarding both the SCGP and LCGP can be found online at:

http://deq.state.wy.us/wqd/WYPDES_Permitting/WYPDES_Storm_Water/stormwater.asp#Smallconstructionpermit.

For any further questions regarding DEQ regulations, contact the WYDEQ water quality division at 307-777-7781.

City of Laramie Unified Development Code

In addition to DEQ regulations, all new development shall be subject to the following erosion prevention and sediment control standards:

- Compliance with applicable city and state requirements shall be required.
- Water shall be carried off the site without damage to downhill public or private properties and/or improvements.
- Water shall be directed away from buildings and other heavily used areas.
- Post-development discharge of stormwater shall not exceed predevelopment discharge for a 100-year storm event.
- Unnecessary ponding not intended for detention or retention purposes should be avoided.
- Implement erosion control measures as necessary to control erosion and sedimentation during site development and construction shall be implemented. These may include, but are not limited to, the placement of hay bales, siltation fences and implementation of BMPs.
- It is unlawful for any property owner, contractor or other person to cause or permit any building materials, machinery, sand, dirt or other object to be in or upon the streets, alleys or sidewalks of the city without first obtaining a permit from the city engineer. Information on obtaining a permit can be found at:
<http://cityoflaramie.com/cityhall/departments/engineering/documents/ROWObstructionLicenseApplication.pdf>
- As excavation work progresses, all streets shall be thoroughly cleaned of all rubbish, excess earth, rock and other debris resulting from such work. This includes mud that is tracked onto streets from construction sites. All cleanup operations shall be accomplished at the expense of the permittee and shall be completed to the satisfaction of the administrative authority. Failure to do so within twenty-four hours after having been notified to do so by the

administrative authority, such work may be done by the administrative authority and the cost thereof charged to the permittee or owner.

- Permittees shall maintain all gutters free and unobstructed for the full depth of the adjacent curb and for at least one foot in width from the face of such curb at the gutter line. Whenever a gutter crosses an intersecting street, an adequate waterway shall be provided and at all times maintained.
- Permittees shall make provisions to dispose of all surplus water, muck, silt, slickings or other runoff pumped from excavations or resulting from sluicing or other operations and shall be responsible for any damage resulting from its failure to so provide.
- Prior to commencement of site grading, a grading plan must be submitted and approved pursuant to Section 15.06.060.U Grading Permits and Section J110 of the International Building Code. This is only necessary for actions that do not already require a permit (buildings, subdivisions...etc) such as bringing in fill to a site. The online grading permit application can be found at: <http://cityoflaramie.com/cityhall/departments/engineering/documents/GradingPlanApplication.pdf>
- All sites, following construction, shall be graded, reclaimed and revegetated following the standards of Section 15.14.050, Landscaping and Screening Standards.
- In areas of subdivisions and development sites where landscaping is not required or not anticipated by the department, the developer shall reclaim all disturbed property and replant the entire area with native vegetation. Topsoil shall be stockpiled and placed on disturbed areas. Irrigation shall be provided to the revegetated areas if it is necessary to ensure survival of native species planted. The grading plan shall include a section outlining the type and extent of revegetation proposed to accomplish this requirement.

All redevelopment shall conform to the following storm water management requirements:

- Redevelopment of the site shall not have adverse effects on the city storm water drainage system.

- As determined by the City Engineer, redevelopment of the site shall not have detrimental effects on any applicable city approved drainage basin area.

The City of Laramie may require a violator who failed to retain sediment generated by a land-disturbing activity to restore the waters and lands affected by the failure so as to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this Title or applicable law (15.26.030.C).

General Provisions for landscaping for Multifamily (Four or more Dwelling Units), Commercial, Institutional and Industrial Uses

Landscaping is considered to be an effective, long-term method of erosion control. If landscaping is delayed because of weather or any other reason, you must provide a means of erosion control equal to that described by the WYDEQ SWPPP requirement. Planting of the required landscaping may be delayed for a period up to twelve months after issuance of the certificate of occupancy. Unless all such landscaping is installed, inspected and approved prior to issuance of the certificate of occupancy, a financial security for one hundred twenty five (125) percent of the landscaping materials and labor costs shall be required to be posted by the developer to ensure the placement of the required landscaping. More specifics on approved plant materials, required ratios of living to non-living landscaping materials and more information on drought tolerant landscaping can be found at the City of Laramie's online version of the Unified Development Code, Chapter 15.14.050.C: Development Standards by following this link: <http://cityoflaramie.org/cityservices/communitydevelopment/DevelopmentCode.htm>

Residential Front Yard Landscaping (1-3 Units)

A landscape plan shall be submitted with an application for a building permit and become part of the building permit. The landscape plan shall be approved prior to installation of the landscaping. Any modifications to the approved plan shall be reviewed and approved by the department. The landscaping shall be completed by the developer, builder or property owner and inspected by the department prior to

the issuance of a certificate of occupancy. The planting of the required landscaping may be delayed for up to 12 months past the certificate of occupancy. Failure to install the required landscaping within twelve months of issuance of a certificate of occupancy may result in a citation and fine issued by the city. There are two options available for residential front yard landscaping: Xeriscaping and Gardenscaping. Guidelines on these two options of landscaping and specifics on City standards of residential landscaping can be found in Chapter 15.14.050.E: Development Standards by following the link:

<http://cityoflaramie.org/cityservices/communitydevelopment/DevelopmentCode.htm>

International Building Code Requirements

Section J110 Erosion Control

The faces of cut and fill slopes shall be prepared and maintained to control erosion. This control shall be permitted to consist of effective planting. However, erosion control measures need not be provided on cut slopes not subject to erosion due to the erosion-resistant character of the materials. Erosion control for the slopes shall be installed as soon as practicable and prior to calling for final inspection. Where necessary, check dams, cribbing, riprap or other devices or method shall be employed to control erosion and provide safety.