

THE STATE



OF WYOMING



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STATEMENT OF BASIS

**STATE OF WYOMING GENERAL PERMIT
FOR
STORM WATER DISCHARGES ASSOCIATED WITH
SMALL CONSTRUCTION ACTIVITIES
(Permit WYR10-A000)**

In 1972, the federal Clean Water Act (CWA) was amended to provide that the discharge of any pollutants to surface waters of the United States had to be regulated through the issuance of a National Pollutant Discharge Elimination System (NPDES) permit. Under the CWA, the states were given the authority to assume "primacy" for the issuance of such permits and Wyoming obtained that primacy in 1974. Congress added section 402 (p) to the CWA in 1987 to establish a comprehensive framework for addressing storm water discharges under the NPDES program. On November 16, 1990, the Environmental Protection Agency (EPA) published regulations requiring all storm water discharges associated with industrial facilities, including large construction projects where five or more surface acres are disturbed, to obtain NPDES permits. EPA published additional regulations on December 8, 1999 requiring NPDES permit coverage for storm water discharges from small construction activities. Small construction activities are those that disturb at least one acre, but less than five acres.

General Permit

A "tool" which can be used to issue a large number of permits with a relatively small administrative burden, is the "general permit." Under the general permitting approach, a single generic permit is issued to cover a large number of similar facilities within a geographic area. EPA granted the Wyoming Department of Environmental Quality (DEQ) primacy for the NPDES storm water program in 1991. In 1992, the DEQ issued its first general permit for storm water discharges from large construction activities. Since then that permit has been renewed and reissued twice. This new permit covers only small construction activities. Large construction activities will continue to be covered under another NPDES general permit.

DEQ is issuing this new general permit to operators who discharge storm water associated with small construction activities. Specifically, this permit will cover any clearing, grading or excavation project which will disturb at least one, but less than five (not necessarily contiguous)

surface acres. Discharges from ongoing small construction projects that began prior to March 10, 2003, and that do not meet the condition of final stabilization as described in Part 2.7, must be authorized under this general permit or a separate Wyoming NPDES permit by March 10, 2003. Discharges from sites where the commencement of construction occurs on or after March 10, 2003 must be authorized under this general permit or a separate Wyoming NPDES permit prior to beginning construction activities.

Discharges of storm water from associated asphalt plants, concrete plants, and sand and gravel operations may be covered by this permit under the limited conditions described in Parts 1.2 of the permit. *Discharges of **process** water from asphalt and concrete plants and sand and gravel operations **cannot** be authorized by this permit. All such non-storm water discharges require coverage under another NPDES permit.*

There are some non-storm water discharges which may not require coverage under another NPDES permit. These include, but are not be limited to, non-storm water discharges such as from water main flushing (water must not be super-chlorinated), uncontaminated flow from foundation drains, lawn irrigation, and discharges from fire fighting activities.

Routine Maintenance

The definition of storm water discharges associated with small construction activity in Part 2.13 specifies that “routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility” is not considered construction activity.” As such, surface disturbances associated with “routine maintenance” need not be covered under the small construction general permit.

Activities that may be considered routine maintenance include, but are not limited to, regrading dirt roads, cleaning out roadside ditches, chip sealing or resurfacing existing paved roads, guardrail repair or replacement with minor grading, culvert repair or replacement, grading and shaping of road shoulders to establish proper drainage, and sign maintenance or replacement. All of these activities must maintain or restore the original “as built” line and grade, hydraulic capacity, or original purpose of the facility.

Rainfall Erosivity Waiver

The rainfall erosivity waiver is an option allowed for small construction projects under federal regulation. It allows the DEQ to waive NPDES storm water permit requirements for small construction activities that will occur during periods of expected low rainfall and which are, therefore, unlikely to adversely affect the quality of state waters. The availability of the waiver is also intended to encourage construction during times when the potential for erosion is limited.

Typically, rainfall erosivity is measured indirectly using the Revised Universal Soil Loss Equation (RUSLE) developed by the US Department of Agriculture (*Agricultural Handbook 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)*, Chapter 2, pp 21-64, USDA, January 1997) to help farmers control topsoil losses. The equation estimates erosivity values, also called “R factors,” which relate primarily to the average annual energy and intensity of rain events for specific rainfall distribution zones throughout the country. The USDA has collected annual R factor data for each rainfall distribution zone that reflect average precipitation patterns in each area. That data

can then be used to determine if and when a “dry season” is likely to occur at any location. Lower R factors correspond to a lower probability of significant rain-induced erosion.

The waiver is based on the calculation of a “project R factor” which is by determined by calculating an R factor for the portion of a year when construction will occur. The project R factor is calculated for the period of time between the project “start date” and the project “end date.” The project “start date” is the day land disturbing activities commence and the project “end date” is the date the site is “finally stabilized” (see Part 2.7 of the permit). A project R factor of less than 5 is considered to have a low potential for significant storm-related erosion and the operator is eligible to apply for the rainfall erosivity waiver.

The erosivity waiver applies only to storm water discharges associated with construction activities. Associated asphalt and concrete batch plants and associated sand and gravel operations must be permitted under another NPDES storm water permit if the construction storm water discharges are waived from permit coverage. The operator must also obtain authorization under a non-storm water NPDES permit to discharge any process water, including but not limited to, construction site dewatering, washing activities, and discharges related to utility installation such as hydrostatic test water, super chlorinated water, and so on.

Determination of Waiver Eligibility - Two Methods

The Department provides applicants with two methods of determining waiver eligibility based on the project R factor; a simplified method (Appendix A of the permit) and a method in Appendix B based on the Environmental Protection Agency’s Guidance, Storm Water Phase II Final Rule; Construction Rainfall Erosivity Waiver (EPA 833-F-00-014, January 2001, Fact Sheet 3.1). Both methods are ultimately based on the Revised Universal Soil Loss Equation (RUSLE).

The simplified method in Appendix A uses the same calculations as found in Appendix B, however, most of the calculations are already completed on a county-by-county basis. Table A.1 represents the cumulative R factor for each county calculated on a semi-monthly basis. To determine the project R factor, the operator must first identify the project start and end dates and determine the part-year R factors associated with those dates. The “project R factor” is determined by subtracting the starting R factor from the ending R factor. If the project R factor is less than 5, the project is eligible for the waiver. A slightly modified procedure is also provided in Appendix A for projects that begin in one calendar year and end in another.

The simplified method in Appendix A is provided for the convenience of small construction site operators. However, Table A.1 was developed using the most conservative assumptions for each isoerodent value and erosivity index zone on a county-wide basis (please refer to EPA Fact Sheet 3.1, referenced above, for more a more detailed explanation of these parameters). The alternative, site-specific calculation in Appendix B may be useful for some longer duration projects located in an area of a county that has a lower isoerodent value than the conservative value used to develop Appendix A. The method of calculation in Appendix B is taken directly from EPA Fact Sheet 3.1.

Application for a Waiver

Applicants using the state simplified method must complete the application and worksheet found in Appendix A. Applicants using the alternative Fact Sheet 3.1 calculation must complete the application and worksheet found in Appendix B. The completed application and worksheet for

the method chosen must be signed in accordance with section 11.7 and submitted to the DEQ at least five days prior to the start of land disturbing activities. By signing and submitting the rainfall erosivity waiver application and worksheet, the applicant is certifying that the project R factor is less than five, as determined using either Appendix A or Appendix B.

Effluent Limits

The permit does not establish numeric effluent limits. However, the control measures specified in the SWPPP shall ensure that storm water discharges from the facility do not cause a violation of state water quality standards as defined in Chapter 1 of the Wyoming Water Quality Rules and Regulations.

Location of Covered Discharges

The permit covers all areas within the State of Wyoming except areas within the Wind River Indian Reservation where the state does not have jurisdiction.