Missouri Department of Natural Resources

The Storm Water Issue

Water Protection Program Technical Bulletin 6/2006

General

This technical bulletin presents an overview of the storm water issue. Actual regulations should be consulted when making decisions on specific situations.

Under state regulations passed in August 1992, a Missouri State Operating Permit is required from the Missouri Department of Natural Resources for certain sites for storm water runoff. Overall, the law addresses pollution in rainwater runoff that is discharged from certain industrial sites, construction sites and urban storm sewers.

Background

In 1972, the U.S. Congress passed the Clean Water Act requiring a permit to discharge water that had any amount of contamination in it. In Missouri, this permit is called a Missouri State Operating Permit. Nationally, it is called a National Pollutant Discharge Elimination System (NPDES) permit. Permits contain certain requirements and may have limits on pollutant amounts discharged to the waters of the state.

During the 1970s and 1980s, the U. S. Environmental Protection Agency (EPA) addressed the most threatening and visible discharges, such as process waste waters that left industrial plants from pipes and municipal sanitary sewage that received inadequate treatment before being discharged. Regulations did not govern storm water discharges.

In the 1970s, environmental groups challenged the exemption of storm water discharges from the regulations. Studies showed that over 50 percent of pollution in waters throughout the United States were the result of storm water runoff. In 1987, the federal Clean Water Act was amended to include the regulation of storm waters.

EPA delegated authority for the NPDES permitting program to the department in 1974. This mean that the federal government oversees and reviews what the department does but it is the state that issues and enforces the permits. Under this authority, Missouri has published its own storm water regulations (10 CSR-20.6.200).

Missouri Storm Water Regulations

In Missouri, the storm water permitting requirements are being handled in two ways: general and site specific permits. When applicable, a general permit is written to cover industries identified in the law as needing permits. Department staff can write a general permit for similar industries and activities in the state. After the general permit is prepared, it is up to the individual facility operator to apply for a permit.

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General Permits
For a general permit to be written for a specific industrial type, a request should be submitted to the department to develop one. That request is generally initiated by an organization on behalf of a group of industries. Organizations interested in submitting a petition requesting for development of a general permit should contact the department for what information is needed.

General permits require facilities to manage their practices in the way that is beneficial to the environment and to Missouri streams. Examples include, mulching and planting grass to cover bare earth and keep soil on a construction site, or placing a roof over a chemical storage area to keep rainfall and runoff from moving substances off-site and into a nearby body of water. The permits specify that storm water discharges cause no water quality violations in Missouri streams.

Site Specific Permits
Site specific permits may be written for a business that stores toxic materials or large amounts of potential contaminants on-site that are exposed to rainfall, need close monitoring, or is one of a few of its kind in the state. An individual facility can make application directly to the department.

Exemptions
Certain exemptions are written into the regulations. For example, agricultural discharges, sites that disturb less than one acre, linear, strip or ribbon construction that is routine or less than two feet in width, or landfills that have been closed under conditions approved by the department. Storm water discharges to combined sewer systems are exempt. The regulation should be consulted for specific exemptions.

Applicability of Activities Covered Under the Law
The law and regulations apply to Activities covered under the law fall into three broad categories of entities and activities: certain industries that are likely to have significant storm water effects, land disturbance activities of one acre or more, and municipalities of more than 10,000 population or that lie within an urbanized area. In addition, federally, state or municipally owned or operated facilities are subject to the law if the activities on the site fall under a regulated category.

Industrial Classifications
To determine if an industry is covered under the law, storm water regulations use the Standard Industrial Classification (SIC) code system. The U.S. Office of Management and Budget devised this classification code to cover all economic activities.

The first group of identified SIC codes are required to obtain a permit to discharge storm water, unless certified as having no exposure of materials to storm water.

Industry	SIC Code
Metal Mining	10xx
Coal Mining	12xx
Oil and Gas Extraction	13xx
Mining and Quarrying of Nonmetallic Minerals (except fuels)	14xx
Lumber and Wood Products (except furniture)	24xx

Paper and Allied Products	26xx
Chemical and Allied Products	28xx
Petroleum Refining and Related Industries	29xx
Leather Tanning and Finishing	311x
Stone, Clay, Glass and Concrete Products	32xx
Primary Metal Industries	33xx
Fabricated Structural Metal	3441
Ship and Boat Building and Repairing	373x

In addition, the following industrial types are subject to the same requirements as the first group:

1. Hazardous waste treatment, storage or disposal facilities; however, hazardous waste generator sites that accumulate wastes on-site for less than 90 days are exempt,
2. Landfills, land application sites and open dumps,
3. Recycling facilities including metal scrap yards, battery reclaiming, salvage yards and automobile junk yards; however, recycling collection centers are exempt from the regula tions,
4. Steam electric power generation facilities including coal handling sites, and
5. Domestic sewage and wastewater treatment facilities with a design flow of 1.0 million gallons per day or more, and disposal areas.

The second group of identified SIC codes are required to obtain a storm water permit only for those portions of the facility that are involved in equipment cleaning operations, airport deicing operations or vehicle maintenance, including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication.

Industry	**SIC Code**
Railroad Transportation	40xx
Local and Suburban Transit and Interurban Highway Passenger Transportation	41xx
Motor Freight Transportation and Warehousing	42xx
United States Postal Service	43xx
Water Transportation	44xx
Transportation by Air	45xx
Petroleum Bulk Station Terminal	5171

The third category of identified SIC codes may need to obtain a storm water permit only if certain activities or materials are exposed to storm water. For example, some of these are discharges from industrial plant yards, finished products, by-products or waste products, storage and maintenance of material handling equipment and storage areas for raw materials.

Industry	**SIC Code**
Food and Kindred Products	20xx
Tobacco Products	21xx
Textile Mill Products	22xx
Apparel and Other Finished Products Made from Fabrics and Similar Materials	23xx
Wood Kitchen Cabinets	2434
Furniture and Fixtures	25xx
Paperboard Containers and Boxes	265x

Converted Paper and Paperboard Products	267x
Printing, Publishing and Allied Industries	27xx
Drugs	283x
Paints, Varnishes, Lacquers and Enamels and Allied Products	285x
Rubber and Miscellaneous Plastic Products	30xx
Leather and Leather Products (except 311x)	31xx
Glass Products, Made of Purchased Glass	323x
Fabricated Metal Products, Except Machinery and Transportation Equipment (except 3441)	34xx
Industrial and Commercial Machinery and Computer Equipment	35xx
Electronic and other Electrical Equipment and Components	36xx
Transportation Equipment (except 373x)	37xx
Measuring, Analyzing and Controlling Instruments, Photographic, Medical and Optical Goods; Watches and Clocks	38xx
Miscellaneous Manufacturing Industries	39xx
Public Warehousing and Storage	4221-4225

If a general permit has been written for an industry, the applicant should complete Missouri Form E and submit it with a $150 fee. If the industry is of such a nature that a site specific permit is required, then the applicant should submit a fee of $1,500 or $2,500 fee depending on calculated flow at the site's outfalls, and complete Missouri Form A along with either Missouri Form C or EPA Form 2F.

Land Disturbance

State law requires land disturbance activities of one acre or more to have a permit to discharge storm water. Four general permits have been written for land disturbance. Two of these permits cover land disturbance in cities or counties that have approved erosion control plans in place; one covers land disturbance activities near sensitive waters, and the fourth covers all other land disturbance activities in the state. To apply, an owner or developer should complete Missouri Forms E and G and submit the forms with a $300 fee.

The department's Water Protection Program offers land disturbance permitting and best management practices training.

Municipalities

Cities with populations of over 10,000 or even smaller municipalities within urbanized areas that have a population density of 1,000 people per square mile are required to apply for a storm water permit. (In Missouri, three cities came under the Phase I law: Kansas City, Independence and Springfield. These cities are exempt from Phase II.) Adjustments in population can be made if storm water is treated by means of a combined sewer system.. In Missouri, three cities come under the Phase I law: Kansas City, Independence and Springfield. Approximately 250 incorporated areas and other publicly owned or operated storm sewer systems will be required to get permits under Phase II. To apply or to determine if your community needs this permit, contact the Water Pollution Control Branch at 1-800-361-4827.

To get its permit, your community would develop a storm water management program and submit it to the Water Pollution Control Branch for approval. Applications are due by March 10, 2003, but you are encouraged to submit your application well in advance of that deadline.

The department's Environmental Service Program offers municipal storm water management training.

For more information call or write:
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