



Site Navigation

- Cleanups, Remediation
- Emergency Response
- Licensing
- Permits, Registrations
- Preventing Pollution
- Recycling
- Reporting
- Rules

- ✉ Data
- ✍ Forms
- 📍 Maps
- 📄 Public Notices
- 📁 Publications
- 🔍 Records
- 📺 Webcasts

- About Us
- Contact Us

⌚ How 's our Customer Service? Please fill out our [Customer Satisfaction Survey](#)

You are here: [Home](#) → [Publications](#) → [Periodicals](#) → [Natural Outlook](#) → [Fall 2005](#) → [When It Rains, It Drains](#)

» Questions or Comments: [ac@tceq.texas.gov](mailto:ac@tceq.texas.gov)

# When It Rains, It Drains

With the state storm water program fully implemented, the TCEQ oversees the issuance of thousands of permits each year. The permits are required for industrial, construction, and municipal activities having the potential to affect water quality.

## Storm water program strives to minimize pollution runoff

### *In this story:*

- [Permits Profile](#)
- [Permit Numbers Grow](#)

Left to its own devices, nature has a highly efficient system of filtering runoff after a good shower. In undisturbed countryside, rainfall soaks into the grassy fields, nourishing the soil and replenishing groundwater supplies. Or it flows downhill, encountering natural vegetative filters before reaching a body of water.

Once land has been developed, however, those natural filters often are eliminated, replaced by hard surfaces such as rooftops, sidewalks, streets, and parking lots. In the absence of filters, pollutants are swept up by runoff and deposited directly into storm drains, which discharge into streams and rivers.

Oil, pesticides, animal droppings, litter, and hazardous metals are among the many pollutants captured by runoff and emptied into surface waters. Sediment from construction sites, where the land has been disturbed, also becomes a problem once deposited into water bodies.

Contaminated storm water runoff can lead to substantial problems as water quality deteriorates. Water bodies can eventually become unsafe for fishing or swimming, or as a source of drinking water; wildlife habitat also can be harmed.

The TCEQ has led successful projects to restore many contaminated water bodies, but the process is expensive and can take years. It is easier and cheaper to tackle problems before pollutants reach a storm drain. This responsibility is shared by everyone—from homeowners and business owners to local governments.

The TCEQ's responsibility is to oversee a sizable regulatory program that regulates storm water discharges in three major categories: industrial facilities, construction activities, and municipal storm drainage.

In this role, the agency receives thousands of applications a year seeking coverage under the state's general storm water permits.

[Back to the top](#)

## Permits Profile

Texas assumed jurisdiction over storm water regulation from the Environmental Protection Agency (EPA) in 1998. As the designated permitting agency, the TCEQ began renewing federal permits as they expired and developing new permits to conform with updated federal and state requirements.

The TCEQ fulfills this function through the Texas Pollutant Discharge Elimination System. These permits are issued for five-year terms.

**Industry.** In 2001, the TCEQ developed the statewide Multi-Sector General Permit for regulating storm water discharges from industrial sites. This runoff originates from manufacturing, processing, material storage, and waste disposal.

Under this permit, similar industrial activities are grouped into 29 sectors, with requirements specific to each sector. Industry activities range from asphalt paving and landfill operations to chemical and timber production.

## Storm Water Permitting

Fiscal Year	Applications Received	Notices of Termination
2003	11,700	1,000
2004	13,300	5,500
2005	12,900	10,000

These numbers represent activity in the categories of industrial activity, construction, and municipal systems. The application process begins when the TCEQ receives a "notice of intent," or a written request for coverage by a permit. Each application is evaluated for administrative requirements. Most are approved unless information is missing or the site has a history of poor regulatory compliance. Any reports of permit violations will be turned over to TCEQ enforcement staff. When the activity covered by the permit is completed, the facility submits a "notice of termination" to the TCEQ.

Industrial facilities are required to develop and implement a storm water pollution prevention plan, conduct regular monitoring, and use "best management practices" to reduce the discharge of pollutants into storm water. The permit also contains limits on discharges from certain facilities.

**Construction.** The TCEQ issued the Construction General Permit in 2003 to address runoff associated with construction activities. This category includes projects to clear, grade, or excavate land—activities related to the building of homes, schools, roads, and businesses.

The size of a construction project—large or small—determines the level of regulation under this permit. "Large" applies to construction projects that disturb five or more acres of land, or are part of a common plan of development that will disturb five or more acres. These construction operators apply for coverage under the general permit.

"Small" projects are one to five acres in size, or included in a common development plan of one to five acres. Small-site operators need not submit a permit application, but must post a notice informing the public that discharges of storm water are authorized.

Regardless of size, all the construction sites are expected to develop a storm water pollution prevention plan that describes, for example, the sediment controls that will be in place before grading begins or the use of rock berms or other best management practices to cover storm drains and filter debris.

**Municipal.** The TCEQ also regulates discharges from municipal separate storm sewer systems, or MS4s.

MS4 refers to the citywide system of ditches, curbs, gutters, and storm sewers that collect storm water runoff, but also includes other publicly owned systems, such as drainage from state roadways.

MS4 permits, which are being implemented in two phases, are intended to prevent harmful pollutants from being washed into storm drains and discharged without treatment into local water bodies.

In Phase I, which applies to medium-sized cities (population 100,000 to 249,999) and large cities (250,000 or more), the TCEQ has been renewing federal permits previously issued for cities of this size.

When completed, Phase II requirements will cover small MS4s in urban areas. This portion of the program was delayed during a legal challenge to federal guidelines. Once the lawsuit was resolved, the TCEQ revised the draft permit and began receiving public comments.

Regulated MS4s will need to develop comprehensive storm water management programs to include:

- education, outreach, and training;
- runoff controls;
- runoff monitoring; and
- pollution prevention.

[Back to the top](#)

## Permit Numbers Grow

Storm water is one of the largest regulatory programs at the TCEQ, in terms of permit processing. The construction permit leads, with about 33,000 applications, or "notices of intent," filed with the agency since 2003.

Another 7,000 applications have been submitted by the various industrial sectors since 2001, as well as some 4,000 notices from sites stating none of their industrial activities are exposed to rainfall.

In addition, the TCEQ is renewing 26 Phase I MS4 permits as they expire. Also, 300 to 500 municipalities are expected to seek coverage from the Phase II MS4 permit, when it is issued.

As the workload has expanded, the agency has moved to get outside help.

In 2002, the agency outsourced the management of the multi-sector and construction storm water applications to Texas State University at San Marcos. Students in the geography department perform the administrative processing of about 15,000 forms a year.

The TCEQ also is working to make the permit process easier by creating online applications. Electronic submittals are available for the Multi-Sector General Permit and the Construction General Permit through the State of Texas Environmental Electronic Reporting System (STEERS). [Electronic filing](#) is also available.

[Back to the top](#)

## Industrial Activities

Some of the activities covered under the Multi-Sector General Permit are:

- timber and paper production
- chemical production
- asphalt paving and roofing
- glass and cement production
- mining for metals, coal, and minerals
- oil and gas extraction
- storage of hazardous waste
- landfilling
- automotive salvage
- scrap recycling
- boat building
- food production
- furniture making
- printing and publishing