

What is a Storm Water Pollution Prevention Plan?



Pima County Department of
Environmental Quality
October 2007

Background

In 1972, Congress passed the Clean Water Act (CWA). The CWA seeks to protect and improve the quality of the nation's waters. Toward this end, the Clean Water Act prohibits the discharge of any pollutants to waters of the United States unless that discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit.

Initial efforts under the NPDES program focused on reducing pollutants in discharges of industrial process wastewater and municipal sewage. As pollution control measures were implemented, it became evident that there were other sources contributing to the degradation of water quality.



In 1990, the U.S. Environmental Protection Agency (EPA) published regulations governing storm water discharges under the NPDES program. These regulations established requirements for permitting storm water discharges from industrial facilities, construction sites, and municipal separate storm sewer systems.

In December 2002, EPA delegated the NPDES storm water program to the Arizona Department of Environmental Quality (ADEQ). At that time, the storm water program was renamed the Arizona Pollutant Discharge Elimination System (AZPDES).

Polluted storm water runoff is a leading cause of lowered water quality in our desert environment. In response to this problem, the Arizona Department of Environmental Quality established requirements to control storm water discharges that could harm the quality of waterways and washes in Arizona.

What is a Storm Water Pollution Prevention Plan?

Federal regulations and State rules require many types of businesses to obtain an industrial storm water permit and to prepare a written Storm Water Pollution Prevention Plan (SWPPP). To see the list of businesses that must obtain coverage under the industrial storm water permit, or Multi-Sector General Permit (MSGP) for industrial storm water discharge, go to:

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

A Storm Water Pollution Prevention Plan (SWPPP) identifies structural and non-structural controls that will be put in place to minimize negative impacts, caused by offsite storm water discharges, to the environment. The purpose of these controls is to minimize erosion and run-off of pollutants and sediment.

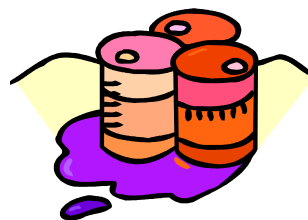
What is the Purpose of an Industrial Storm Water Permit?

The purpose of an industrial storm water permit is to confirm that industrial facilities properly monitor and control storm water discharges and their impacts to the environment. Through preparation of a SWPPP, potential sources of pollutants in storm-water discharges are identified.

A SWPPP establishes procedures for minimizing the potential for pollutants to be carried away in storm water discharges. These procedures emphasize the use of *Best Management Practices* (BMPs) to provide the flexibility to address varying sources of pollutants at different categories of industrial facilities.

A more detailed discussion of industrial storm water permit requirements may be found in the fact sheet entitled *Do I Need an Industrial Storm Water Permit?* (PDEQ, October, 2005).

A SWPPP must describe the site characteristics and list the pollutants that could impact storm water quality. The plan must also identify pollution prevention measures designed to minimize the discharge of pollutant-laden storm water.



What are the Requirements of a Storm Water Pollution Prevention Plan?

1. Description of Potential Pollutant Sources

A SWPPP provides a description of potential sources expected to add pollutants to storm water discharges. In addition, the SWPPP addresses the potential for pollutants to be discharged (during dry weather) from separate storm sewers or facility drainage conveyances.

Specifically, a SWPPP must include:

- a map detailing the type of work, processes, and storage areas;
- a topographic map extending one-quarter of a mile beyond the property boundaries (for determining discharge locations);
- an estimate of the overall runoff coefficient¹;
- a narrative description of significant materials, onsite storage/disposal, materials management practices, loading and access areas, existing structural and non-structural controls, and storm water treatment processes;
- a list of any significant spills and/or leaks of toxic or hazardous pollutants (three years prior to the effective date of the storm water permit, up to the present);
- a list of any pollutants that are limited in relevant effluent guidelines;
- the direction of storm water flow and an estimate of the types of pollutants present within the flow;
- existing sampling data; and
- any allowable non-storm water discharges.



¹**runoff coefficient** is the fraction of total rainfall that will appear at the conveyance as runoff.

2. Storm Water Management Controls

Each facility must develop a description of storm water management controls appropriate for the facility and implement the management controls. The description of storm water management controls must address the following minimum components, and include a schedule for implementing such controls:

- a pollution prevention team;
- risk identification and assessment/material inventory;
- preventative maintenance;
- good housekeeping;
- spill prevention and response procedures;
- Storm water management;
- sediment and erosion prevention;
- employee training;
- visual inspections;
- recordkeeping and internal reporting procedures; and
- non-storm water discharge(s).

3. Site Inspection

An annual site inspection must be performed by personnel identified in the SWPPP. These personnel must verify that the description of potential pollutant sources is accurate, that the drainage map has been updated or otherwise modified to reflect current conditions, and controls to reduce pollutants in storm-water discharges associated with industrial activity are being implemented and are adequate. Records documenting significant observations made during the site inspection must be retained as part of the SWPPP for a minimum of five (5) years.

Storm Water Pollution Prevention Plan (SWPPP) Examples

Storm Water Discharges from Industrial Facilities:

http://cfpub.epa.gov/npdes/stormwater/indust.cfm?program_id=6

Auto Salvage Yard SWPPP:

<http://www.epa.gov/reg3wapd/stormwater/pdfs/auto.pdf>

Scrap & Recycling Facility SWPPP:

<http://www.epa.gov/reg3wapd/stormwater/pdfs/scraprecycling.pdf>

Ready-Mix Concrete Plant SWPPP:

<http://www.epa.gov/reg3wapd/stormwater/pdfs/concrete.pdf>

Airport SWPPP:

<http://www.epa.gov/reg3wapd/stormwater/pdfs/airport.pdf>

Transportation Facility SWPPP:

<http://www.epa.gov/reg3wapd/stormwater/pdfs/transportation.pdf>

Construction Site SWPPP:

<http://www.epa.gov/reg3wapd/stormwater/pdfs/construction.pdf>

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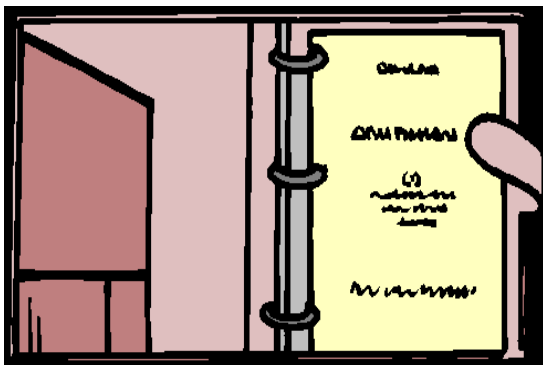


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MAILING LABEL

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For More Information

This brochure is intended to alert local business owners and operators to storm water regulatory issues. If you need more information about storm water, please contact any of the following agencies:

United States Environmental Protection Agency:
NPDES Storm Water Program:
http://cfpub.epa.gov/npdes/home.cfm?program_id=6

Arizona Department of Environmental Quality:
Dennis Turner / 602-771-4501
<http://www.adeq.state.az.us/environ/water/permits/storm.html>

Pima County Department of Environmental Quality:
Bill Petroustson or Marc Herman / 520-740-3340
<http://www.deq.pima.gov/water/storm.htm>

City of Tucson / Department of Transportation
Jim DuBois / 520-791-4251