# How Do I Know If I Need A Permit?

- Facilities involved in the recycling of materials, including metal scrap yards, battery
- Steam electric power generating facilities, facilities that generate steam for electric power by
- 1
- 1

# Industrial Activities Storm Water General Permit? What are the requirements of the

A Non-Storm Water Discharge is... any

A BMP is . . . a technique, process, activity,





WARNING: There are significant penalties for non-compliance: a minimum fine of \$5,000 for failing to obtain permit coverage, and, up to \$10.000 per day, per violation plus \$10 per gallon of discharge in excess of 1,000 gallons.

## Industrial Activities Storm Water General Permit? How do I obtain coverage under the



A Citizen's Guide to Understanding Stormwater



January 2003

S33-B-03-002





For more information contact:

## After the Storm



## What is stormwater runoff?



Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

## Why is stormwater runoff a problem?



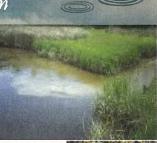
Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

## The effects of pollution

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- Debris—plastic bags, six-pack rings, bottles, and cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life.
   Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.









## Stormwater Pollution Solutions

Septic

poorly

septic

systems

Leaking and

maintained

systems release nutrients and

pathogens (bacteria and viruses) that can be picked up

by stormwater and discharged into nearby waterbodies.

Pathogens can cause public

Inspect your system every

3 years and pump your

household hazardous

waste in sinks or toilets.

tank as necessary (every 3

health problems and

to 5 years).

Don't dispose of

environmental concerns



Recycle or properly dispose of household products that contain chemicals, such as insecticides, pesticides, paint, solvents, and used motor oil and other auto fluids. Don't pour them onto the ground or into storm drains.

Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and

leaves can wash into storm drains and contribute nutrients and organic matter to streams.

- Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever
- Compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains or streams
- Cover piles of dirt or mulch being used in landscaping projects.

## Auto care

Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so the water infiltrates into the
- · Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.



Pet waste can be a major source of bacteria and excess nutrients

When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local

in local waters

waterbodies.



Education is essential to changing people's behavior. Signs and markers near storm drains warn residents that pollutants entering the drains will be carried untreated into a local waterbody.

## Residential landscaping

Permeable Pavement—Traditional concrete and asphalt don't allow water to soak into the ground. Instead these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak through, decreasing stormwater runoff.

Rain Barrels-You can collect rainwater from rooftops in mosquitoproof containers. The water can be used later on lawn or garden areas.

Rain Gardens and Grassy Swales-Specially designed areas planted

with native plants can provide natural places for rainwater to collect and soak into the

ground. Rain from rooftop areas or paved into these areas rather than into storm drains.

Vegetated Filter Strips-Filter strips are areas of native grass or plants created along roadways or streams. They trap the pollutants stormwater picks up as it flows across driveways and streets.



Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

- Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Report any chemical spill to the local hazardous waste cleanup team. They'll know the best way to keep spills from harming the environment.

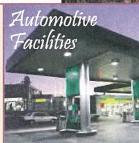
Erosion controls that aren't maintained can cause excessive amounts of sediment and debris to be carried into the stormwater system. Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by stormwater and deposited into local waterbodies.

- Divert stormwater away from disturbed or exposed areas of the construction site.
- Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and erosion controls and properly maintain them, especially after rainstorms
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.



Lack of vegetation on streambanks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local waterbodies. Excess fertilizers and pesticides can poison aquatic animals and lead to destructive algae blooms. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.

- Keep livestock away from streambanks and provide them a water source away from waterbodies
- Store and apply manure away from waterbodies and in accordance with a nutrient management plan.
- Vegetate riparian areas along waterways.
- Rotate animal grazing to prevent soil erosion in fields.
- Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.



Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by stormwater.

- Clean up spills immediately and properly dispose of cleanup materials
- Provide cover over fueling stations and design or retrofit facilities for spill
- Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies
- Install and maintain oil/water separators.



Improperly managed logging operations can result in erosion and

- Conduct preharvest planning to prevent erosion and lower costs.
- Use logging methods and equipment that minimize soil disturbance.
- ♦ Plan and design skid trails, yard areas, and truck access roads to minimize stream crossings and avoid disturbing the forest floor
- Construct stream crossings so that they minimize erosion and physical changes to streams
- Expedite revegetation of cleared areas

SPILL RESPONSE AGENCY:

(909) 358-5055 1-800-366-SAVE 1-800-506-2555 (909) 358-5055 TO REPORT ILLEGAL DUMPING OR A CLOGGED HAZARDOUS WASTE DISPOSAL: RECYCLING INFORMATION: STORM DRAIN:

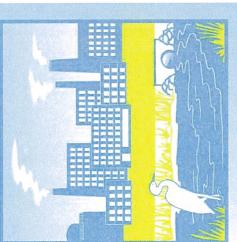


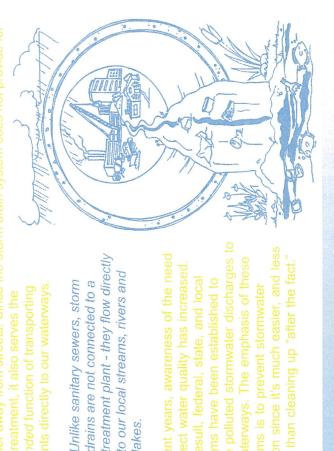
Industrial Activities Storm Water must obtain coverage under the and manufacturing operations Many industrial facilities

General Permit

# DID You Know ....

StormWater Pollution . . . What you should know





to our local streams, rivers and

Unlike sanitary sewers, storm drains are not connected to a

# National Pollutant Discharge Elimination System (NPDES)

# How Do I Know If I Need A Permit?

collowing are general descriptions of the ndustry categories types that are regulated by the ridustrial Activities Storm Water General Permit. Contact your local Region Water Quality Control Soard to determine if your facility/operation requires coverage under the Permit.

- Facilities such as cement manufacturing; feedlots; fertilizer manufacturing; petroleum refining; phosphate manufacturing; steam electric power generation; coal mining; mineral mining and processing; ore mining and dressing; and asphaltemulsion;
- Pacilities classified as lumber and wood products (except wood kitchen cabinets); pulp, paper, and paperboard mills; chemical producers (except some pharmaceutical and biological products); petroleum and coal products; leather production and products; stone, clay and glass products; primary metal industries; fabricated structural metal; ship and boat building and repaining.
- Active or inactive mining operations and oil and gas exploration, production, processing, or treatment operations:
- Hazardous waste treatment, storage, or disposal facilities:

- Landfills, land application sites and open dumps that receive or have received any industrial waste; unless there is a new overlying land use such as a golf course, park, etc., and there is no discharge associated with the landfill;
- Facilities involved in the recycling o materials, including metal scrap yards, battery reclaimers, salvage yards, and automobile innkards;
- Steam electric power generating facilities, facilities that generate steam for electric power by combustion;
- Transportation facilities that have vehicle maintenance shops, fueling facilities, equipment cleaning operations, or airport deicing operations. This includes school bus maintenance facilities operated by a school district:
- Sewage treatment facilities
- Facilities that have areas where material handling equipment or activities, raw materials intermediate products, final products, waste materials, by-products, or industrial machinen are exposed to storm water

# What are the requirements of the Industrial Activities Storm Water General Permit?

The basic requirements of the Permit ar

- The facility must eliminate any non-stormwater discharges or obtain a separate permit for such discharges.
- The facility must develop and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must identify sources of pollutants that may be exposed to stormwater. Once the sources of pollutants have been identified, the facility operator must develop and implement Best Management Practices (BMPs) to minimize or prevent polluted runoff.

uidance in preparing a SWPPP is available from a document prepared by the California Storm Water. Quality Task Force called the California Storm Water Best Management Practice Handbook.

- The facility must develop and implement a Monitoring Program that includes conducting visual
  observations and collecting samples of the facility's storm water discharges associated with industrial
  activity. The General Permit requires that the analysis be conducted by a laboratory that is certified by the
  State of California.
- The facility must submit to the Regional Board, every July 1, an annual report that includes the results of
  its monitoring program.

# A Non-Storm Water Discharge is... any discharge to a storm drain system that is not composed entirely of storm water. The following non-storm water discharges are authorized by the

composed entirely of storm water. The following non-storm water discharges are authorized by the General Permit: fire hydrant flushing; potable water sources, including potable water related to the operation, maintenance, or testing of potable water systems; drinking fountain water atmospheric condensates including refrigeration air conditioning, and compressor condensate irrigation drainage; landscape watering; springs non-contaminated ground water; foundation of footing drainage; and sea water infiltration where the sea waters are discharged back into the sea water source.

A BMP is . . . a technique, process, activity, or structure used to reduce the pollutant content of a storm water discharge. BMPs may include simple, non-structural methods such as good housekeeping, staff training and preventive maintenance. Additionally, BMPs may include structural modifications such as the installation of berms, canopies or treatment control (e.g. setting basins, oil/water separators, etc.)



WARNING: There are significant penalties for non-compliance: a minimum fine of \$5,000 for failing to obtain permit coverage, and, up to \$10,000 per day, per violation plus \$10 per gallon of discharge in excess of 1,000 gallons.

# How do I obtain coverage under the Industrial Activities Storm Water General Permit?

tain a permit application package from your local Regional Water Quality Control Board listed on the back his brochure or the State Water Resources Control Board (SWRCB). Submit a completed Notice of Intent 2I) form, site map and the appropriate fee (\$250 or \$500) to the SWRCB. Facilities must submit an NOI by (30) days prior to beginning operation. Once you submit the NOI, the State Board will send you a letter inowledging receipt of your NOI and will assign your facility a waste discharge identification number (WDID ). You will also receive an annual fee billing. These billings should roughly coincide with the date the State and processed your original NOI submittal.

## Stormwater Pollution Found in Your Area!

This is not a citation.

This is to inform you that our staff found the following pollutants in the storm sewer system in your area. This storm sewer system leads directly to

- ☐ Motor oil
- ☐ Oil filters
- ☐ Antifreeze/ transmission fluid
- □ Paint
- □ Solvent/degreaser
- ☐ Cooking grease
- ☐ Detergent
- ☐ Home improvement waste (concrete, mortar)
- ☐ Pet waste
- ☐ Yard waste (leaves, grass, mulch)
- ☐ Excessive dirt and gravel
- ☐ Trash
- ☐ Construction debris
- ☐ Pesticides and fertilizers
- □ Other



For more information or to report an illegal discharge of pollutants, please call:



www.epa.gov/npdes/stormwater

EPA 833-F-03-002 April 2003



Stormwater runoff is precipitation from rain or snowmelt that flows over the ground. As it flows, it can pick up debris, chemicals, dirt, and other pollutants and deposit them into a storm sewer system or waterbody.

Anything that enters a storm sewer system is discharged *untreated* into the waterbodies we use for swimming, fishing, and providing drinking water.

## Remember: Only Rain Down the Drain

To keep the stormwater leaving your home or workplace clean, follow these simple guidelines:

- Use pesticides and fertilizers sparingly.
- Repair auto leaks.
- Dispose of household hazardous waste, used auto fluids (antifreeze, oil, etc.), and batteries at designated collection or recycling locations.
- Clean up after your pet.
- Use a commercial car wash or wash your car on a lawn or other unpaved surface.
- Sweep up yard debris rather than hosing down areas. Compost or recycle yard waste when possible.
- Clean paint brushes in a sink, not outdoors. Properly dispose of excess paints through a household hazardous waste collection program.
- Sweep up and properly dispose of construction debris like concrete and mortar.



NEL DUMPING! DRAINS TO HAY



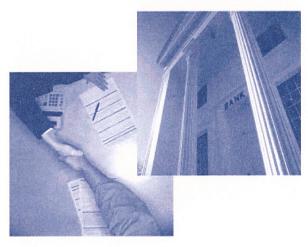


## ACTIVITY Innovative use of Clean Water State Revolving UPDATE Funds for Nonpoint Source Pollution **Funds for Nonpoint Source Pollution**

States are successfully using linked deposit and pass-through loans to fund important nonpoint source pollution remediation projects

any states are successfully using the USEPA's Office of Water, Clean Water State Revolving Fund (CWSRF) loan program to fund important nonpoint source pollution remediation projects. Nonpoint source pollution is widely viewed as one of the most serious threats to our nation's water quality. State and local governments, local watershed and agricultural organizations, and many others are working to devise solutions that address nonpoint source pollution. The CWSRF program provides very attractive low-interest loans that spread project costs over a repayment period of up to 20 years. Today, CWSRF programs are funding projects that address agriculture runoff, leaking on-site septic systems, and urban nonpoint source pollution, including stormwater runoff and brownfield contamination.

During the initial operating phase of CWSRF programs, states designed loan



options and implemented administrative procedures that would best serve municipal wastewater system projects. However, when considering how the CWSRF program could be used to address nonpoint source pollution, a number of states recognized that they would need to go beyond the typical municipal borrower and provide loan assistance to farmers, homeowners, and nonprofit organizations. States also recognized that providing loans to small private borrowers could be challenging. The loans would fund a variety of small projects, there would be more of them to service and manage, and there would be a greater risk of loan defaults.

States have taken different approaches to addressing these challenges. In some states, the CWSRF program has called upon internal expertise and the expertise of other state personnel to help manage loans to private borrowers. Other states have used creative lending approaches that pass loan risks and loan servicing responsibilities to financial institutions, local governments, or other state agencies. These lending methods include linked deposit loan programs with local financial institutions and pass-through loan programs with local government or state agencies. This activity update will highlight these loan structures with three case studies of successful state programs.

## What is a linked deposit loan?

Under a linked deposit loan approach, a state works with local private lending institutions to provide assistance for nonpoint source pollution control. The state agrees to accept a reduced rate of return on an investment (e.g., a certificate of deposit) and the lending institution agrees to provide a loan to a borrower at a similarly reduced interest rate. For example, if the typical earnings rate for a certificate of deposit (CD) is five percent, a state might agree to purchase a CD that earns two percent interest, and in exchange, the lending institution agrees to provide a loan to a borrower at an interest rate that is three percentage points lower than the market rate for the borrower. In this program, the CWSRF investment (deposit) is linked to a low-interest loan,

thereby earning the description "linked deposit loan."

Linked deposit loan programs provide benefits for CWSRF programs, local financial institutions, and borrowers. The linked-deposit approach benefits CWSRF programs because they support high priority nonpoint source projects and because they place risk and management responsibilities with local financial institutions. Financial institutions earn profits from the linked deposit agreements and add an additional service for their customers. Borrowers find linked deposit programs to be economical and comfortable; they save money with lowinterest loans, and they are comfortable working with local financial institutions.

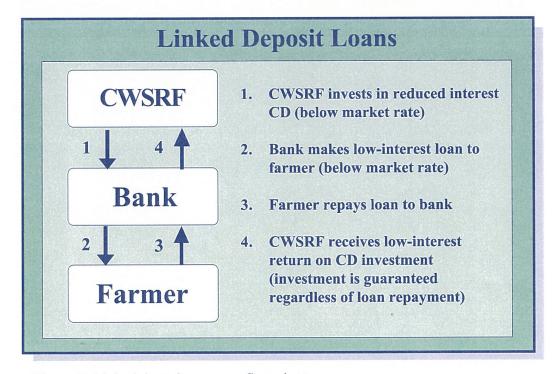


Figure 1. Linked deposit program flow chart