







#### STORM WATER PROGRAM

#### **BACKGROUND**

The 1972 amendments to the Federal Water Pollution Control Act (FWPCA, also referred to as the Clean Water Act or CWA) prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Efforts to improve water quality under the NPDES program traditionally have focused on reducing pollutants in discharges of industrial process wastewater and from municipal sewage treatment plants. Efforts to address storm water discharges under the NPDES program have generally been limited to certain industrial categories with effluent limitations for storm water.

In response to the need for comprehensive NPDES requirements for discharges of storm water, Congress amended the CWA in 1987 to require the Environmental Protection Agency (EPA) to establish phased NPDES requirements for storm water discharges. To implement these requirements, EPA published the initial permit application requirements for certain categories of storm water discharges associated with industrial activity, and discharges from municipal separate storm sewer systems located in municipalities with a population of 100,000 or more on November 16, 1990, (55 FR 47990). Storm water discharge permits will provide a mechanism for monitoring the discharge of pollutants to waters of the United States and for establishing appropriate controls.

#### **ENVIRONMENTAL IMPACTS**

Pollutants in storm water discharges from many sources are largely uncontrolled. The "National Water Quality Inventory, 1990 Report to Congress" provides a general assessment of water quality based on biennial reports submitted by the States under Section 305(b) of the Clean Water Act. The Report indicates that roughly 30% of identified cases of water quality impairment are attributable to storm water discharges. The States identified a number of major sources of storm water runoff that cause water quality impacts including separate storm sewers, construction, waste disposal, and resource extraction.

#### INDUSTRIAL FACILITIES COVERED

EPA has defined the term "storm water discharge associated with industrial activity" in a comprehensive manner to address over 100,000 facilities (see Attachment VII for a complete definition). All storm water discharges associated with industrial activity that discharge through municipal separate storm sewer systems or that discharge directly to waters of the U.S., are required to obtain NPDES permit coverage, including those which discharge through systems located in municipalities with a population of less than 100,000. Discharges of storm water to a sanitary sewer system or to a Publicly Owned Treatment Works (POTW) are excluded. Facilities with storm water discharges associated with industrial activity include: manufacturing facilities; construction operations disturbing 5 or more acres; hazardous waste treatment, storage, or disposal facilities; landfills; certain sewage treatment plants; recycling facilities; powerplants; mining operations; some oil and gas operations; airports; and certain other transportation facilities. Operators of industrial facilities that are Federally, State or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14)(i)-(xi) must also submit applications.

## **TRANSPORTATION ACT OF 1991**

The Transportation Act of 1991 provides an exemption from storm water permitting requirements for certain industrial activities owned or operated by municipalities with a population of less than 100,000. Such municipalities must submit storm water discharge permit applications for only airports, powerplants, and uncontrolled sanitary landfills that they own or operate, unless a permit is otherwise required by the permitting authority. The Transportation Act of 1991 also revises group application deadlines for facilities that are owned or operated by municipalities with a population of less than 250,000. See Attachment II for revised deadlines.



#### 9th CIRCUIT COURT DECISION

The 9th Circuit United States Court of Appeals' opinion in NRDC v. EPA (June 4, 1992) and the opinion in AMC v. EPA (May 27, 1992), affirmed and upheld the basic structure and direction of the national storm water program. In "NRDC", the Court upheld the definition of "municipal separate storm sewer system." the standards for municipal storm water controls, the scope of storm water requirements for oil and gas operations, and EPA's decision not to provide public comment on Part 1 group industrial permit applications. On the question of deadlines, the Court noted that the storm water application deadlines clearly exceeded statutory requirements, but refused to "roll back" the current regulatory deadlines. The Court also emphasized, however, that any further regulatory extension would be illegal. In two other areas the Court invalidated and remanded for further proceedings two regulatory exemptions from the definition of "storm water discharges associated with industrial activity": (1) the exemption for construction sites disturbing less than 5 acres of land (category x), and (2) the exemption of certain "light" manufacturing facilities without exposure of materials and activities to storm water (category xi). In response to these two remands, the Agency intends to conduct further rulemaking proceedings on construction activities under 5 acres and light industry without exposure as ordered by the Court. EPA will not require permit applications for construction sites disturbing less than 5 acres of land and category xi facilities without exposure until this further rulemaking is completed. In "AMC," the Court upheld EPA's regulation of storm water discharges from inactive mines.

## INDUSTRIAL APPLICATION OPTIONS

The November 16, 1990, storm water regulation presents three permit application options for storm water discharges associated with industrial activity. The first option is to submit an individual application consisting of Forms 1 and 2F. The second option is to participate in a group application. This option, however, is no longer available as the deadlines have passed. The third option is to file a Notice of Intent (NOI) to be covered under a general permit in accordance with the requirements of an issued general permit. The following overview briefly outlines each of these three options and the subsequent attachments provide a more detailed explanation.



## A. INDIVIDUAL APPLICATIONS

Operators of facilities with storm water discharges associated with industrial activity who did not participate in a group application or did not obtain coverage under a general permit, must submit an individual application consisting of Form 1 and Form 2F. The information required in Form 2F includes a site drainage map, a narrative description of the site identifying potential pollutant sources, and quantitative testing data. There are specific requirements for construction activities and oil and gas operations and mining operations. See Attachment I for additional information.

## **B. GROUP APPLICATIONS**

The group application procedure was an option available for facilities that have similar industrial operations, waste streams and other characteristics. Group applications reduced the burden on the regulated community by requiring the submission of quantitative data from only selected members of the group. The group application was submitted in two parts. Part 1 of the application identified all participants, provided facility specific information and proposed a representative sampling subgroup. Part 2 of the application consists of sampling data from each member of the sampling subgroup identified in Part 1 of the application. See Attachment II for additional information.

## C. GENERAL PERMIT - NOI REQUIREMENTS

Industrial storm water dischargers that submit an NOI to be covered by the general permit are not required to submit an individual permit application or participate in a group application, provided the discharger is eligible for the permit and an individual permit application is not required by the Director on a case-by-case basis. Submitting an NOI represents a significantly less burden than submitting an individual application or participating in a group application. The NOI requirements for general permits usually address only general information and typically do not require the collection of monitoring data. Submittal of an NOI is only possible where applicable general permits have been issued by the permitting authority. EPA has finalized general permits for construction and industrial activity in the 12 States without NPDES authorization (57 FR 41176, September 9, 1992 and 57 FR 44412, September 25, 1992). As of March 1993, 35 of the 39 authorized NPDES States have general permit authority. See Attachments III, IV and V for additional information.

## INDUSTRIAL PERMIT APPLICATION DEADLINES

Type of Application	Deadline			
▲ Individual	October 1, 19	October 1, 1992		
▲ Group	Part 1	Part 2		
All industrial activities except those owned or operated by a municipality with a population of less than 250,000.	September 30, 1991	October 1, 1992		
Industrial activities owned or operated by a municipality with a population of less than 250,000.	May 18,1992	May 17, 1993		
▲ General Permit NOI	October 1, 1992 (for EPA's general permits)			



#### MUNICIPAL APPLICATIONS

"Municipal separate storm sewer" is defined as any conveyance or system of conveyances that is owned or operated by a State or local government entity designed for collecting and conveying storm water which is not part of a POTW. The application requirements do not apply to discharges from combined sewers (systems designed as both a sanitary sewer and a storm sewer). Municipal separate storm sewer systems that are addressed by the November 16, 1990, regulations include storm sewer systems located in 173 cities with populations of 100,000 or more; located in 47 counties identified by EPA as having populations over 100,000 in unincorporated, urbanized areas; and systems that are designated by the Director based on consideration of the location of the discharge with respect to waters of the United States, the size of the discharge, the quantity and nature of the pollutants discharged to waters of the United States, the interrelationship to other regulated storm sewer systems, and other factors. The operator of a designated system will be notified by the Director. Under the November 16, 1990, storm water rule, those municipal separate storm sewer systems identified must submit a two-part application. The first part requires information regarding existing programs and the means available to the municipality to control pollutants. In addition, part one requires a field screening analysis of major outfalls to detect illicit connections. Building on this information, the second part requires a limited amount of representative quantitative data and a description of a proposed storm water management plan. See Attachment V for a detailed explanation of the two-part application process.

#### MUNICIPAL APPLICATIONS DEADLINES

	Part 1	Part 2
Large Municipalities (over 250,000)	November 18, 1991	November 16, 1992
Medium Municipalities (100,000 - 250,000)	May 18, 1992	May 17, 1993



#### ATTACHMENT I

## INDIVIDUAL APPLICATION REQUIREMENTS

These requirements address storm water discharges associated with industrial activity that are not authorized by a general permit and that are not included in a group application.

## **Application Forms**

- Applicants for discharges composed entirely of storm water must submit Forms 1 and 2F
- Applicants for discharges composed of storm water and process wastewater must submit Forms 1, 2C, and 2F
- Applicants for new sources or new discharges composed of storm water and non-storm water must submit Forms 1, 2D, and 2F
- Applicants for discharges composed of storm water and nonprocess wastewater must submit Forms 1, 2E, and 2F
- Authorized NPDES States may establish their own forms which are at least as stringent as EPA's forms.
- ▲ Forms are available from State permitting authorities for facilities located in NPDES authorized States, or from EPA Regional Offices for facilities located in States without NPDES authorization.

## **Form 2F Requirements**

- ▲ Site map showing topography and/or drainage areas and site characteristics.
- ▲ Estimate of impervious surface area and the total area drained by each outfall.
- ▲ Description of significant materials exposed to storm water, including current materials management practices.
- ▲ Certification that outfalls have been tested or evaluated for the presence of non-storm water discharges that are not covered by a NPDES permit.
- ▲ Information on significant leaks and spills in last 3 years.
- ▲ Quantitative testing data for the following parameters:
  - Any pollutants limited in an effluent guideline to which the facility is subject
  - Any pollutant listed in the facility's NPDES permit for process wastewater
  - Oil and grease, pH, BOD<sub>5</sub>, COD, TSS, total phosphorus, nitrate plus nitrite nitrogen, and total Kjeldahl nitrogen
  - Certain pollutants known to be in the discharge
  - Flow measurements or estimates
  - Date and duration of storm event.



## Individual Application Requirements for Construction Activities

- ▲ Provide a narrative description of:
  - Location and nature of construction activity (including a map)
  - Total area of the site and area to be excavated
  - Proposed measures to control pollutants in storm water discharges during and after construction operations
  - Estimate of runoff coefficient and increase in impervious areas after construction
  - Name of receiving water.
- No quantitative sampling.
- ▲ Application deadline
  - 90 days prior to date when construction begins.
- ▲ EPA has not developed a standard form for these discharges at this time (Form 2F is not required).

## Application Requirements for Oil & Gas Operations and Mining Operations

- Operators of oil & gas facilities are not required to submit a permit application unless the facility:
  - Has had a discharge of a reportable quantity for which notice is required under CERCLA or CWA in the past 3 years, or
  - Contributes to a violation of a water quality standard.
- ▲ Operators of active and inactive mining sites are not required to submit permit applications unless the discharge has come into contact with any overburden, raw material, intermediate or finished products, byproducts, or waste products located onsite (inactive coal mining operations released from SMCRA performance bonds and non-coal mining operations released from applicable State or Federal reclamation requirements after December 17, 1990, are not required to submit permit applications).

## **Available Guidance**

Guidance Manual For The Preparation of NPDES Permit Applications for Storm Water Discharges Associated with Industrial Activity (Order #PB92199058), available from NTIS, (703) 487-4650; NPDES Storm Water Sampling Guidance Document, available from the Storm Water Hotline, (703) 821-4823.

### **Deadline**

October 1, 1992, or 180 days prior to commencement of a new discharge.



## ATTACHMENT II

## GROUP APPLICATION REQUIREMENTS

Facilities that discharge storm water associated with industrial activity had until September 30, 1991, to file Part I of the group application in lieu of submitting a complete individual application or an NOI to be covered by a general permit. The Transportation Act of 1991, however, extended the group application deadlines for certain industrial activities of the correct by a municipality with a population of the correct by the correct part of the correct by the correct part of t less than 250,000. Facilities that are part of the same effluent guideline subcategory or with similar activities and operations were eligible to submit a group application. EPA received 1,243 Part I group applications coverings approximately 60,000 facilities.

The group application was submitted in two parts. Part 1 of the application was due by September 30, 1991, and Part 2 of the application was due by October 1, 1992. These deadlines applied to all industrial activities except those owned or operated by a municipality with a population of less than 250,000. For these facilities, Part 1 of the application was due by May 18, 1992, and Part 2 of the application is due by May 17, 1993. Both parts were submitted directly to U.S. EPA Headquarters, Office of Wastewater Enforcement and Compliance (EN-336), 401 M Street, SW, Washington, DC 20460, regardless of whether or not the included facilities are in a NPDES authorized State. The Transportation Act also addressed municipally owned or operated industrial activities that were denied by EPA from the group application process. Such facilities must submit an individual application or be covered by a general permit within 180 days after the denial was made, or by October 1, 1992, whichever is later.

EPA is currently taking both parts of the application and formulating model permit language. The complete applications and model permit language will then be distributed to every NPDES authorized State or EPA Region (if the State is not NPDES authorized) in which participants are located. The State then reviews the application and model permit language. The State may consider the application and model permit language when issuing permits (either individual or general). The State may ask each or any of the applicants for more information on their facility and/or discharge if the State needs additional information. EPA Regional Offices will follow these same steps for participants located in States without NPDES authorization.

## Part 1

A list of participants by name, location, and precipitation zone A summary of each participant's industrial activities

An explanation of why the participants are sufficiently similar

A list of significant materials stored outside by each participant and materials management

À list of representative dischargers that will submit test data in Part 2.

#### Part 2

- Quantitative testing data must be submitted by those facilities identified as "samplers" in Part I of the application.
  - For groups of 4 to 20 members, 50 percent of the facilities must submit data; for groups with 21 to 99, a minimum of 10 dischargers must submit quantitative data; for groups with 100 to 1,000 members, a minimum of 10 percent of the facilities must submit data; for groups with greater than 1,000 members, no more than 100 facilities must submit data; there must be 2 dischargers from each precipitation zone in which 10 or more members of the group are located, or 1 discharger from each precipitation zone in which 9 or fewer members are located. Testing requirements are described under 40 CFR 122.26(c)(1)(i)(E) and 40 CFR 122.21(g)(7).



## Additional Information

A model group application accompanied by detailed information on how to complete both Part 1 and Part 2 group applications is available from the Storm Water Hotline, (703) 821-4823. Technical support with regard to sampling procedures is also available from the hotline (NPDES Storm Water Sampling Guidance Document).

## **Deadlines**

All Industrial Activities Except
Those Owned Or Operated By
A Municipality With A
Population Of Less Than
250,000

Part 1 - September 30, 1991 Part 2 - October 1, 1992 ▲ Industrial Activities Owned or Operated By A Municipality With A Population Of Less Than 250,000

Part 1 - May 18, 1992 Part 2 - May 17, 1993



#### ATTACHMENT III

## EPA GENERAL PERMIT REQUIREMENTS (GENERAL INFORMATION)

On September 9 and 25, 1992, EPA issued general permits for construction and industrial activities (57 FR 41176 and 44412) which are intended to initially cover the majority of storm water discharges associated with industrial activity in 12 States and 6 territories without authorized NPDES programs. As of March 1993, 35 of the 39 authorized NPDES States have authority to issue general permits. Facilities in authorized NPDES States should contact their State permitting agencies to determine the status of the general permitting program. The following tables (Attachments III, IV and V) outline conditions in EPA's general permits for industrial activities and construction activities.

## **Areas of Coverage**

Region I— MA, ME, NH; Indian lands in MA, NH, ME. Region II—PR and Indian lands in NY. Region III—DC, Federal facilities in DE. Region IV— FL; Indian lands in FL, MS, NC. Region VI—LA, NM, OK, TX. Region VII—SD; Indian lands in CO, MT, ND, SD, UT (except Goshute Reservation and Navajo Reservation lands), WY; Federal facilities in CO; Ute Mountain Reservation in CO, and NM. Region IX— American Samoa and Guam; AZ; Territories of Johnston Atoll, and Midway and Wake Island; Indian lands in CA, and NV; Goshute Reservations in UT and NV, Navajo Reservations in UT, NM, and AZ, Duck Valley Reservation in NV and ID. Region X—AK, and ID; Indian lands in AK, ID (except Duck Valley Reservation lands), and WA; Federal facilities in WA.

## **Types of Discharges Covered**

- ▲ EPA's general permits cover the majority of storm water discharges associated with industrial activity. Storm water discharges associated with industrial activity that cannot be authorized by EPA's general permits include those:
  - With an existing effluent limitations guideline for storm water
  - That are mixed with non-storm water, unless the non-storm water discharges are in compliance with a different NPDES permit
  - With an existing NPDES individual or general permit for the storm water discharges
  - That are or may reasonably be expected to be contributing to a violation of a water quality standard
  - That are likely to adversely effect a listed or proposed to be listed endangered or threatened species or its critical habitat
  - From inactive mining, or inactive oil and gas operations or inactive landfills occurring on Federal lands where an operator cannot be identified (industrial permit only).

## **NOI Requirements**

- ▲ A facility must submit a Notice of Intent (NOI) to be authorized by the general permit.
- ▲ NOI's do not require the collection of discharge sampling data.
- Facilities which discharge to a large or medium municipal separate storm sewer system must also submit signed copies of the NOI to the operator of the municipal system.
- ▲ Operators of construction activities must also submit signed copies of the NOI to State or local agencies approving sediment and erosion or storm water management plans under



# which the construction activity is operating. **Deadlines for NOI's**

- ▲ On or before October 1, 1992 for existing industrial activities
- For facilities or construction activities which begin industrial activity after October 1, 1992, an NOI shall be submitted at least 2 days prior to the commencement of the industrial activity.
- ▲ NOI's must be sent to the following address:

Storm Water Notice of Intent P.O. Box 1215 Newington, VA 22122

## **Special Conditions**

- ▲ Prohibition on most types of non-storm water discharges as a component of discharges authorized by this permit. (These discharges should already have an NPDES permit.) However, EPA's permits authorize certain types of non-storm water discharges.
- ▲ In the event there is a release(s) of a hazardous substance in excess of reportable quantities established under the CWA or CERCLA (see 40 CFR 117.3, 40 CFR 302.4) the discharger must:
  - Notify the National Response Center and the Director, and modify the storm water pollution prevention plan.

## **Pollution Prevention Plan Requirements**

▲ Operators of all facilities covered by EPA's general permits must prepare and implement a storm water pollution prevention plan.

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## ATTACHMENT IV

## EPA INDUSTRIAL GENERAL PERMIT (SPECIFIC REQUIREMENTS)

## **Contents of NOI for Industrial Activities**

- ▲ Street address or latitude/longitude
- ▲ SIC Code or identification of industrial activity
- ▲ Operator's name, address, telephone number, and status as Federal, State, private, public, or other entity
- ▲ Permit number(s) of any existing NPDES permit(s)
- ▲ Name of receiving water(s)
- ▲ Indication of whether the owner or operator has existing quantitative data describing the concentration of pollutants in storm water discharges
- A certification that a storm water pollution prevention plan has been prepared for the facility (for industrial activities that begin operations after October 1, 1992).

## Pollution Prevention Plan Requirements for Industrial Activities

The Pollution Prevention Plan is considered to be the most important requirement of the General Permit. Each industrial facility covered by the general permit must develop a Plan, tailored to the site specific conditions, and designed with the goal to control the amount of pollutants in storm water discharges from the site.

- ▲ Pollution Prevention Team Each facility will select a Pollution Prevention Team from its staff, and the Team will be responsible for developing and implementing the Plan.
- ▲ Components of the Plan The permit requires that the Plan contain a description of potential pollutant sources, and a description of the measures and controls to prevent or minimize pollution of storm water. The description of potential pollutant sources must include:
  - A map of the facility indicating the areas which drain to each storm water discharge point
  - An indication of the industrial activities which occur in each drainage area
  - A prediction of the pollutants which are likely to be present in the storm water
  - A description the likely source of pollutants from the site
  - An inventory of the materials which may be exposed to storm water
  - The history of spills or leaks of toxic or hazardous materials for the past 3 years.

The measures and controls to prevent or minimize pollution of storm water must include:

- Good housekeeping or upkeep of industrial areas exposed to storm water
- Preventive maintenance of storm water controls and other facility equipment
- Spill prevention and response procedures to minimize the potential for and the impact of spills
- Test all outfalls to insure there are no cross connections (only storm water is discharged)



- Training of employees on pollution prevention measures and controls, and record keeping.

The permit also requires that facilities:

- Identify areas with a high potential for erosion and the stabilization measures or structural controls to be used to limit erosion in these areas
- Implement traditional storm water management measures (oil/water separators, vegetative swales, detention ponds, etc) where they are appropriate for the site.
- ▲ Inspection/Site Compliance Evaluation Facility personnel must inspect the plant equipment and industrial areas on a regular basis. At least once every year a more thorough site compliance evaluation must be performed by facility personnel
  - Look for evidence of pollutants entering the drainage system
  - Evaluate the performance of pollution prevention measures
  - Identify areas where the Plan should be revised to reduce the discharge of pollutants
  - Document both the routine inspections and the annual site compliance evaluation in a report.
- ▲ Consistency The Plan can incorporate other plans which a facility may have already prepared for other permits including Spill Prevention Control and Countermeasure (SPCC) Plans, or Best Management Practices (BMP) Programs.
- ▲ Deadlines The plan must be prepared on or before April 1, 1993, and the facility must be in compliance with the plan on or before October 1, 1993.
- ▲ Signature The plan must be signed by a responsible corporate official such as the president, vice president or general partner.
- ▲ Plan Review The plan is to be kept at the permitted facility at all times. The plan should be submitted for review only when requested by EPA.

# Semi-Annual Monitoring/Annual Reporting Requirements

- ▲ EPCRA Section 313 facilities
- ▲ Primary metal industries Standard Industrial Classification (SIC) 33
- ▲ Land disposal units/incinerators/BIF's
- ▲ Wood treatment facilities
- ▲ Facilities with coal pile runoff
- ▲ Battery reclaimers

## Annual Monitoring/No Reporting Requirements

- ▲ Airports with at least 50,000 flight operations per year
- ▲ Coal-fired steam electric facilities
- ▲ Animal handling/meat packing facilities



- ▲ Additional facilities, including:
  - SIC 30 and 28 with storage piles for solid chemicals used as raw materials that are exposed to precipitation
  - Certain automobile junkyards
  - Lime manufacturing facilities where storm water comes into contact with lime storage piles
  - Oil handling sites at oil fired steam electric power generating facilities
  - Cement manufacturing and cement kilns
  - Ready-mix concrete facilities
  - Shipbuilding and repairing facilities

## **Additional Monitoring Requirements**

- ▲ Testing parameters for facilities are listed in the general permits.
- At a minimum, all dischargers must conduct an annual site inspection of the facility.

## **Alternative Certification**

- A discharger is not subject to the monitoring requirements for a given outfall if there is no exposure of industrial areas or activities to storm water within the drainage area of that outfall within a given year.
- ▲ The discharger must certify, on an annual basis, that there is no exposure to storm water, and such certification must be retained in the storm water pollution prevention plan. Facilities subject to semi-annual monitoring requirements must submit this certification to EPA in lieu of monitoring data.

#### **Numeric Effluent Limitations**

▲ Coal pile runoff: 50 mg/l Total Suspended Solids (TSS) and 6-9 pH

#### Available Guidance

Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices, available from NTIS (703) 487-4650, order number PB 92-235969; Summary: Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices (October 1992), available from the Storm Water Hotline, (703) 821-4823.



## ATTACHMENT V

## EPA CONSTRUCTION GENERAL PERMIT REQUIREMENTS (SPECIFIC REQUIREMENTS)

## Coverage

Storm water discharges from construction sites that are authorized by this permit include those that will result in the disturbance of 5 or more acres of land.

## **Contents of NOI for Construction Activities**

- Street address or latitude/longitude
- The name, address, telephone number of the operator(s) with day to day operational control and operator status as Federal, State, private, public, or other entity
- Permit number(s) of any existing NPDES permit(s)
- Name of receiving water(s)
- Indication of whether the owner or operator has existing quantitative data describing the concentration of pollutants in storm water discharges
- An estimate of the project start date and completion dates and estimates of the number of disturbed acres
- A certification that a storm water pollution prevention plan has been prepared for the facility

## **Deadlines for Notification**

An NOI shall be submitted at least 2 days prior to the commencement of construction (commencement of construction is defined as the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities) at any site that will result in the disturbance of 5 or more acres total land area.

## Pollution Prevention Plan Requirements for Construction Activities

The Pollution Prevention Plan is considered to be the most important requirement of the General Permit. Each construction activity covered by the general permit must develop a Plan, tailored to the site specific conditions, and designed with the goal to control the amount of pollutants in storm water discharges from the site.

- Components of the Plan The permit requires that the Plan contain a site description, and a description of the measures and controls to prevent or minimize pollution of storm water. The site description must include:
  - A description of the nature of the construction activity
  - A sequence of major construction activities
  - An estimate of the total area of the site and of the area to be disturbed
  - An estimate of the runoff coefficient of the site after construction is complete
  - Any existing data on the quality of storm water discharge from the site The name of the receiving water

  - Any information on the type of soils at the site; and
  - A site map indicating drainage patterns and slopes after grading activities are complete, areas of soil disturbance, the outline of the area to be disturbed, the location of stabilization measures and controls, and surface waters at the discharge points.



- ▲ Measures and Controls Measures and controls to prevent or minimize pollution of storm water must include three different types of controls: erosion and sediment controls, storm water management controls and other controls:
  - Erosion and Sediment Controls
    - Stabilization (seeding, mulching, etc.) Disturbed areas where construction has permanently or temporarily ceased must be stabilized within 14 days of the last disturbance or as soon as practicable in semi-arid and arid areas. (Areas which will be redisturbed within 21 days do not have to be stabilized).
    - Structural Controls Sites with common drainage locations that serve 10 or more disturbed acres must install a sediment basin where it is attainable (where a basin is not attainable, sediment traps, silt fence or other equivalent measures must be installed. Sediment basins must provide 3,600 cubic feet of storage per acre drained. Drainage locations which serve less than 10 disturbed acres must install either a sediment basin, sediment trap or silt fence along the down slope and side slope perimeter.
- ▲ Plan shall be completed prior to submittal of an NOI and updated as appropriate.
- ▲ For construction activities that have begun after October 1, 1992, the plan shall provide for compliance with the terms and schedule of the plan beginning with the initiation of construction activities.

## **Available Guidance**

Storm Water Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, available from NTIS (703) 487-4650, order number PB 92-235951; Summary: Storm Water Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices (October 1992), available from the Storm Water Hotline (703) 821-4823.



#### ATTACHMENT VI

## MUNICIPAL APPLICATION REQUIREMENTS

The CWA requires that NPDES permits for discharges from municipal separate storm sewer systems include a requirement to effectively prohibit non-storm water discharges into the storm sewers, and controls to reduce the discharge of pollutants to the maximum extent practicable (including management practices, control techniques and system design and engineering methods, and other provisions appropriate for the control of such pollutants). EPA or authorized NPDES States may issue system-wide or jurisdiction-wide permits covering all discharges from a municipal separate storm sewer system. The November 1990 storm water final rule established requirements for a two-part permit application designed to facilitate development of site specific permit conditions. The permit application requirements provide municipal applicants an opportunity to propose appropriate management programs to control pollutants in discharges from their municipal systems. This increases flexibility to develop appropriate permit conditions and ensures input from municipalities in developing appropriate controls.

## Part 1

- ▲ General information (name, address, etc.)
- ▲ Existing legal authority and any additional authorities needed
- ▲ Source identification information
- ▲ Discharge characterization including:
  - Monthly mean rain and snow fall estimates
  - Existing quantitative data on volume and quality of storm water discharges
  - A list of receiving water bodies and existing information on the impacts of receiving waters
  - Field screening analysis for illicit connections and illegal dumping.
- ▲ Characterization plan identifying representative outfalls for further sampling in Part 2
- ▲ Description of existing management programs to control pollutants from the municipal separate storm sewer and to identify illicit connections
- ▲ Description of financial budget and resources currently available to complete Part 2.

## Part 2

- ▲ Demonstration of adequate legal authority to control discharges, prohibit illicit discharges, require compliance, and carry out inspections, surveillance, and monitoring
- ▲ Source identification indicating the location of any major outfalls and identifying facilities that discharge storm water associated with industrial activity through the municipal separate storm sewer
- ▲ Discharge characterization data including
  - Quantitative data from 5-10 representative locations in approved sampling plans
  - For selected conventional pollutants and heavy metals, estimates of the annual pollutant load and event mean concentration of system discharges



- Proposed schedule to provide estimates of seasonal pollutant loads and the mean concentration for certain detected constituents in a representative storm event
- Proposed monitoring program for representative data collection.
- ▲ Proposed management program including descriptions of:
  - Structural and source control measures that are to be implemented to reduce pollutants in runoff from commercial and residential areas
  - Program to detect and remove illicit discharges
  - Program to monitor and control pollutants from municipal landfills, hazardous waste treatment, disposal, and recovery facilities; EPCRA Section 313 facilities; and other priority industrial facilities
  - Program to control pollutants in construction site runoff.
- ▲ Estimated reduction in loadings of pollutants as a result of the management program
- ▲ Fiscal analysis of necessary capital and operation and maintenance expenditures.

## **Available Guidance**

Guidance Manual for the Preparation of Part 1 of the NPDES Permit Application for Discharges from Municipal Separate Storm Sewer Systems and NPDES Storm Water Sampling Guidance Document, available from NTIS (703) 487-4650, order number PB 92-114578; Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Seperate Storm Sewers Systems, available from the Storm Water Hotline, (703) 821-4823.

## **Deadlines**

▲ Large Municipal Systems With A Population Of 250,000 Or More:

(55 <u>FR</u> 48073, Novemer 16, 1990, Appendices F and H)

Part 1 - November 18, 1991 Part 2 - November 16, 1992 ▲ Medium Municipal Systems With A Population of 100,000 to 250,000:

(55 <u>FR</u> 48074, November 16, 1990 Appendices G and I)

Part 1 - May 18, 1992 Part 2 - May 17, 1993



#### ATTACHMENT VII

#### STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY

The discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR Part 122. For the categories of industries identified in subparagraphs (i) through (x) of this subsection, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in subparagraph (xi), the term includes only storm water discharges from all the areas (except access roads and rail lines) that are listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste material handling equipment of activities, raw materials, intermediate products, main products, waste material, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Endarelly, State, or municipally expend or operated that meet the description of the al facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in this paragraph (i)-(xi) include those facilities designated under the provision of 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial" activity" for purposes of this subsection:

> (i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are excepted under category (xi) of this paragraph);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285) 29, 311, 32 (except 323), 33, 3441, 372; (iii) Facilities classified as Standard Industrial Classifications 10 though 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990 and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining mining

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are oper-

ating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobiles junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

fied as Standard Industrial Classification 5015 and 5093; (vii) Steam electric power generating facilities, including coal handling sites; (viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this subsection are associated with industrial activity: subsection are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater (ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with Section 405 of the CWA;

(x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than five acres of total land area which are not part of a larger common plan of development or sale; (xi) Facilities under Standard Industrial Classification 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x))

Note: The Transportation Act of 1991 provides an exemption from storm water permitting requirements for certain facilities owned or operated by municipalities with a population of less than 100,000. Such municipalities must submit storm water discharge permit applications for only airports, power plants, and uncontrolled sanitary land-fills that they own or operate, unless a permit is otherwise required by the permitting authority.