

1.0 INTRODUCTION

1.1 Purpose

This pamphlet provides guidance for the preparation and development of Storm Water Pollution Prevention Plans for construction projects. The requirement for such plans is regulated by Section 402 of the Federal Water Pollution Control Act (henceforth referred to as the Clean Water Act or the CWA).

1.2 Applicability

The pamphlet applies to HQUSACE elements and USACE commands having civil works and military construction responsibilities.

1.3 Explanation of Terms

Terms and abbreviations used in this pamphlet are defined in Appendix J.

1.4 Regulatory Background

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is effectively prohibited unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Amendments to the CWA in 1987 added Section 402(p) to the Act, which established a framework for regulating municipal and industrial discharges of storm water under the NPDES. Regulations that established NPDES application requirements for regulated municipal and industrial storm water discharges were promulgated by the U.S. Environmental Protection Agency (EPA) and published in the Federal Register on 16 November 1990. Additional regulations promulgated by the EPA and published in the Federal Register on 9 September 1992 broadened the classification for industrial dischargers to include discharges associated

EP 1110-1-16
28 Feb 97

with construction activities. EPA further defined construction activities to include any clearing, grading, or excavation which results in the disturbance of at least 2 hectares (5 acres) of total land area. The EPA regulations require that construction activities disturbing an area of 2 hectares or more be regulated as an industrial activity and covered by an NPDES permit. Construction activity on sites of less than 2 hectares requires a permit if the construction is part of a larger common plan of development or sale. Future revisions to the regulations are expected to require NPDES permits for construction activities at substantially less than 2 hectares. Presently, some states are requiring an NPDES permit for construction sites less than 2 hectares and for construction sites located in environmentally sensitive areas.

According to the Federal regulations, permit coverage for storm water discharges associated with construction activity can be obtained through *individual* permits or *general* permits. *Individual* permitting involves the submittal of specific data on a single construction project to the appropriate permitting agency who will issue a site-specific NPDES permit for the project. NPDES coverage under a *general* permit involves the submittal of a notice of intent (NOI) by the regulated construction project to comply with a *general* permit, to be developed by the EPA or a delegated State with general permitting authority.

The final Federal regulations (40 CFR 122.26[a][6]) require that storm water associated with industrial activity from point sources which discharge through a nonmunicipal storm sewer system be regulated either under a single NPDES permit issued to the system operator (the principal permittee) with each discharger to the system listed as a copermitttee to the operator, or that each discharging entity to the nonmunicipal system obtain separate permit coverage. The sole permitting of the nonmunicipal system is not an available option according to the Federal regulations since the control of discharges into a private system is often beyond the control of the system operator. The selection of one of the two available options is at the discretion of the regulating authority.

1.5 Program Approach

In terms of implementing the final regulations, the states are divided into three basic categories: delegated NPDES states with general permitting authority; delegated NPDES states without general permitting authority; and states without NPDES delegated authority. Most states have moved toward implementation of the permitting process. However, not all state programs are in place at this time. Appendix A contains a list of contacts for each state, and readers are encouraged to contact the applicable regulatory representatives for up-to-date information early in the permitting process.

The first step in the NPDES permitting process is the development of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP has two major objectives: (1) to identify the source of pollutants that affect the quality of the industrial storm water discharge; and (2) to describe practices which shall be implemented to reduce the pollutants in the industrial storm water discharge. The SWPPP is a requirement of the storm water discharge permit and is considered by EPA to be a very important requirement of the NPDES permit. EPA requires the development of a SWPPP for each construction activity covered by a general permit. SWPPP's shall be prepared in accordance with good engineering practices emphasizing storm water Best Management Practices (BMP's) and complying with Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT). The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect storm water discharges associated with the construction activity. In addition, the SWPPP shall describe and ensure the implementation of practices which are to be used to reduce pollutants in storm water discharges associated with the construction activity and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions of the SWPPP required under this part as a condition of this permit.

This pamphlet is to be used as an environmental guidance manual for developing SWPPPs for construction activities. It is *not* designed or intended to be used as a *directional or operations document*. Any operations developed for construction activity must be in

**EP 1110-1-16
28 Feb 97**

compliance with EPA and other Federal and state regulations. The storm water control measures and practices described herein should be used only when they meet or exceed all applicable EPA or other Federal and state regulations concerning the control of hazardous or toxic materials, erosion, sedimentation, storm water management, pollutants, and worker safety. Any pollution prevention measures used on a construction site, but not identified herein, should be included in the SWPPP.

Construction activities that are covered by the EPA baseline general permit (Issued 3 September 1992) must have a completed SWPPP prior to mobilization. It must include the following:

1. Certifications required under Part IV.E of the general permit, prior to the submittal of a notice of intent (NOI) to be covered under the permit and updated as appropriate;
2. For construction activities that have begun on or before October 1, 1992, except for sediment basins required under Part IV.D.2.a(2) (structural practices) of the general permit, the plan shall provide for compliance with sediment basins required under Part IV.D.2.a(a) of the general permit by no later than December 1, 1992;
3. For construction activities that have begun after October 1, 1992, the SWPPP shall provide for compliance with the terms and schedule of the general permit beginning with the initiation of construction activities.

Other facilities that have filed an individual application must comply with the conditions of their individual permit, when issued. In most states, the SWPPP is not submitted to the permitting authority, but it must be retained onsite at the facility generating the discharge in accordance with Part V of the general permit. The SWPPP must be made available upon request to the Program Director; to a state or local agency approving erosion and sediment control plans,

grading plans, or storm water management plans; or, in the case of discharge through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system. The SWPPP must be available for review by the permit authority and the public. The permit authority may notify the construction activity representatives if the SWPPP for the construction activity does not meet the minimal requirements. Table 1-1 gives a brief description of each state's status, concerning SWPPP's, as of October 1993.

1.6 Statement of Policy for the Storm Water Pollution Prevention Plan

The U.S. Army Corps of Engineers (COE) intends to develop and implement the SWPPP (with the expressed cooperation of any tenants, contractors, or subcontractors (contractors)) for the purpose of minimizing the potential for the release of sediments and toxic or hazardous substances directly, or indirectly, to the storm drainage system. To achieve this objective, the responsibilities of both the COE and any contractors for the facilities they individually operate include:

- Implementing the policies and procedures presented in the SWPPP.
- Conducting periodic reviews of policies and procedures to evaluate the effectiveness of the current SWPPP.
- Updating the SWPPP and related materials whenever there is a significant physical change in a construction activity or a significant change in the operational procedures of a construction activity that could result in the discharge of pollutants to the storm water drainage system, or an increased risk of such discharge.

**Table 1-1
Comparison of State General Permits for Industrial Storm Water Dischargers**

Permits				SWPPPs					Monitoring		
State	No. of Permits	Expiration date	Fees	Completion deadline	Implementation deadline	Special rqts SARA Title III W.P.C.	Require PE cert.	Submit SWPPP	Monitoring required	Submit results	Rep. discharge allowed
EPA baseline permit	1	10/1/97	N	4/1/93	10/1/93	Y	Y(1)	N	Y; industry-specific, risk-based	Y(2)	Y
AL	15	mid to late 1997	Y	varies	varies	N	N	N*	varies	Y	Y(3)
AK**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
AZ**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
AR	1	9/30/97	Y	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
CA	1	1/15/97	Y	10/1/92	10/1/92	N	N	N	Y	Y	Y
CO	5	6/30/96	Y	5/1/93	11/1/93	Y*	N	Y(4)	Y*(4)	Y	Y
CT	1	10/1/97*	Y	4/1/93*	10/1/93*	N	Y	N*	Y(5)	N(6)	Y(7)
DE	1	8/6/98	Y	8/6/94	2/6/94	Y	N	N	Y(1)	N	Y*
FL**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
GA	1	5/31/98	N	12/31/93	5/31/94	N	N	N	Y	N	Y*
HI	1	10/29/97	Y	120 days after coverage	180 days after coverage	Y*	Y	Y	Y	Y	Y
ID**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
IL	1	10/1/97*	N	w/in 180 days of coverage	w/in 365 days of coverage	N	N	Y(8)	N	N	N
IN	permit by rule	none	Y	none	365 days after NOI	N	N	N	Y(5)	Y	Y

1-6

Table 1-1 (Continued)

Permits				SWPPPs					Monitoring		
State	No. of Permits	Expiration date	Fees	Completion deadline	Implementation deadline	Special rqts SARA Title III W.P.C.	Require PE cert.	Submit SWPPP	Monitoring required	Submit results	Rep. discharge allowed
IA	1	10/1/97*	Y	4/1/93*	10/1/93*	Y*	N	N*	Y	Y(9)	Y*
KS	draft										
KY	7	10/1/97*	N	180 days after coverage	365 days after coverage	N	N	N*	Y(5)	N	Y
LA**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
ME**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y	N	Y
MD	1	9/28/97	Y	9/29/93	3/29/94	Y	N	N*	N	N	N
MA**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
MI	draft										
MN	1	9/30/97	Y	1 year from coverage	2 years from coverage	N	N	N	N	N	N
MS	98	7/13/97	N	4/1/93*	10/1/93*	Y	Y	Y	Y(10)	Y	Y
MO	many	varies	Y	varies	varies	varies	varies	varies	varies	varies	varies
MT	2	11/30/94	N(11)	6 months after coverage	12 months after coverage	N	N	Y	Y(5)	Y	Y
NE	1	varies	N	w/in 180 days of coverage	w/in 180 days of completion deadline	N	Y*	N	Y	Y	N
NV	3	5/14/98	Y	w/in 6 months of authorization	w/in 1 year of authorization	N	N	Y	Y(15)	Y(15)	N
NH**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
NJ	1	11/1/97	Y	5/2/93	11/2/94	N	N	N*	N	N	N
NM**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y(14)	Y	Y(13)

1-7

(Sheet 2 of 4)

Table 1-1 (Continued)

Permits				SWPPPs					Monitoring		
State	No. of Permits	Expiration date	Fees	Completion deadline	Implementation deadline	Special rqts SARA Title III W.P.C.	Require PE cert.	Submit SWPPP	Monitoring required	Submit results	Rep. discharge allowed
NY	1	8/1/98	Y	2/1/94	8/1/94	Y(14)	Y*	N*	Y	Y	Y*
NC	12	8/31/93	Y	12 months after coverage	12 months after coverage	Y(12)	N	N*(13)	Y(14)	Y	Y(13)
ND	2	3/31/95	N	w/in 90 days of coverage	w/in 180 days or 90 days of approval	Y*	Y*	Y(5)	Y	Y	Y(7)
OH	1	4/26/94	Y	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
OK**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
OR	12	9/30/96	Y	w/in 180 days of coverage	w/in 360 days of coverage	N	Y	N	Y(5)	Y	Y
PA	1	11/6/97	Y	before submitting NOI	before submitting NOI	Y	Y	N	Y	Y	Y*
RI	2		Y	4/1/93*	10/1/93*	Y*	Y*	N*	Y	Y*	Y*
SC	1	9/30/97	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
SD**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
TN	1	10/26/97	N	w/in 180 days of coverage	within 1 year of coverage	Y*	Y*	N*	Y	Y	Y
TX**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
UT	1	9/30/97	Y	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*(2)	Y*
VT**	1	10/1/97*	N	4/1/93*	10/1/93*	Y*	Y*	N*	Y*	Y*	Y*
VA	emergency permits										

1-8

Table 1-1 (Concluded)

Permits				SWPPPs					Monitoring		
State	No. of Permits	Expiration date	Fees	Completion deadline	Implementation deadline	Special rqts SARA Title III W.P.C.	Require PE cert.	Submit SWPPP	Monitoring required	Submit results	Rep. discharge allowed
WA	1	11/18/95	Y	11/18/93	11/18/94	N	N	N*	N	N	N
WV	1	6/7/97	Y	w/in 180 days of coverage	w/in 365 days of coverage	Y*	Y*	N*	Y	Y	Y(13)
WI	draft										
WY	1	8/31/97	N	w/in 180 days of coverage	w/in 365 days of coverage				N	N	N

Note:

Abbreviations and footnotes:

- SWPPP Storm Water Pollution Prevention Plan
- SARA Superfund Amendments and Reauthorization Act
- W.P.C. Water priority chemicals
- * Same as EPA requirements
- ** EPA State
- PE Professional Engineer
- Y Yes
- N No
- (1) If SARA Title III water priority chemicals are involved
- (2) Only for semiannual monitoring requirements
- (3) Request-by-request basis
- (4) Heavy industry only
- (5) All permittees
- (6) Unless acute toxicity exceeds minimum
- (7) Subject to the 20-percent rule
- (8) Annual reports submitted; not SWPPP
- (9) Only those subject to effluent limitations
- (10) SARA Title III, coal piles, wood treaters
- (11) Anticipated later
- (12) Semiannual inspections required
- (13) Upon request and approval
- (14) Must post onsite