

## 2.0 PLANNING, ORGANIZATION, AND SWPPP CERTIFICATION

### 2.1 Organization

The U.S. Army Corps of Engineers (COE) has developed a comprehensive approach to address the permitting of storm water discharges associated with construction activity. Due to the location and complexity of COE construction-related activities, the many contractors and subcontractors, and the number of projects related to COE operations and maintenance, the COE has elected to assume a role as a principal permittee with contractors who conduct construction activities at COE sites included as copermittees on the permit. Individual construction project operators (COE, tenants, and contractors) are responsible for the implementation of SWPPP provisions and the monitoring and reporting requirements of the general permit.

**Many of the facilities under COE jurisdiction are comprised of numerous leaseholds and tenants which are part of a "larger common plan of development," (i.e., military installations). For this reason, COE will also require construction projects associated with these types of facilities which disturb less than 2 hectares (5 acres) to be included under permit coverage and thus subject to provisions of the SWPPP. COE will assemble a working list of proposed construction projects at each facility, and the list will be updated semiannually and incorporated into the SWPPP. COE will annually submit NOI's to cover construction activities at these types of installations.**

This pamphlet is organized to function as a user's guide to meet SWPPP requirements. The step-by-step guidelines and checklists in the following sections are designed to assist in the organization of the required information. Using this information, the planner will develop and implement the SWPPP following the six basic phases listed below. Each phase is important and should be completed before advancing to the next one.

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

- Site Planning and Design Development Phase.
- Assessment Phase.
- Control Selection/Plan Design Phase.
- Notification/Approval Phase.
- Implementation/Construction Phase.
- Final Stabilization/Termination Phase.

Developing an SWPPP is basically a six-phase process. The first three phases are primarily the responsibility of the COE and any leasehold tenants planning construction activities. The final three phases are the joint responsibility of the COE and leasehold tenants and the construction site operators as co-permittees on a project-by-project basis. Because most aspects of the SWPPP take a significant amount of planning, its development must be closely connected to the development of the overall site plan for construction. Postconstruction storm water management controls must be considered in the planning stage.

The first phase in preparing an SWPPP for a construction project is to define the characteristics of the site and of the type of construction which will be occurring there. This phase is divided into three tasks: (1) Data collection, (2) Data Analysis, and (3) Site Plan Development. Section 3.0 describes these tasks in detail. The COE must address both project design considerations and the implementation of the SWPPP during construction and postconstruction phases of projects. Contractors will be primarily concerned with the implementation of the SWPPP during the construction and postconstruction phases of projects. The intent of this pamphlet is to place the various construction activities into perspective in terms of the intent of EPA with respect to storm water control of construction activities.

The reader should note the sections addressing special conditions, such as construction activities located on sites containing Title III, Section 313, water priority chemicals listed in the Superfund Amendments and Reauthorization Act of 1986 (SARA), and/or other priority pollutants. It is anticipated that most of the construction activities of the COE and leasehold

tenants will not involve these special conditions, but some sites will—hence the inclusion of these sections. Appendix H lists the Section 313 water priority chemicals as published in the Federal Register on September 9, 1992. Since this list is subject to change, the designer should review 40 CFR 122 and 40 CFR 372 for the current list of priority pollutants.

In order to ensure that the plan is completely developed and adequately implemented, the regulations require that authorized representative(s) of the operator(s) sign and certify the plan. Section 2.4 details this requirement. Once the planning, design, and certification are completed, construction may commence. Section 6.0 details the requirements of implementation, documentation, and termination.

## 2.2 SWPPP Planning

The term planning could include the project as a whole as well as planning for the SWPPP. Design considerations for the project as a whole will affect the development of the SWPPP. Three tasks should be completed before developing the SWPPP document. These tasks are: (1) designating the person(s) responsible for developing and implementing the SWPPP, (2) reviewing existing pollution prevention plans for procedures which overlap the requirements and purpose of the SWPPP, such as state and local erosion and sedimentation regulations, and (3) reviewing and addressing specific permit regulations included in individual state NPDES Storm Water Permit requirements.

Designating a specific individual or team that will develop and implement the pollution prevention plan serves several purposes. Naming the individual or team members makes it clear that part of the job of the identified person(s) is to prevent storm water pollution. Identifying a specific individual(s) also provides a point of contact for those outside of the jobsite who may need to discuss aspects of the SWPPP.

Where setting up a pollution prevention team is appropriate, it is important to identify the key people onsite who know the construction activity and its operations well, and to provide

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

adequate structure and direction for the construction activity's entire storm water management program. Specific activities of the pollution prevention team and the type and number of members vary for different sizes and types of projects.

Effective organization of the pollution prevention team is important in order for the team to accomplish the task of developing and implementing a comprehensive SWPPP. There are two important features in organizing a team of this nature: (1) selecting dedicated individuals to serve on the team and (2) establishing good channels of communication.

The formation and operation of any team involves decision-making and planning within a group environment. The team structure allows for people with different ideas and areas of expertise to share knowledge and collectively determine what works best for a particular construction activity. To broaden the base of involvement in the construction activity's storm water pollution prevention program, team members should represent all phases of the construction activity's operations.

It is advantageous to incorporate relevant provisions of best management practices (BMP's) or Spill Prevention and Control Countermeasure (SPCC) plans from other activities into the SWPPP. Many construction activities may already be subject to similar requirements under a number of different regulations. The following is a partial list of Federal regulations relevant to controlling potential releases to surface waters of hazardous wastes from the operations of construction activities (and their contractors):

- 29 CFR 1910 (Subparts G, H, I, J, and K) Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard.
- 40 CFR 112 Oil Pollution Prevention (SPCC Plans).
- 40 CFR 116,117 Hazardous Substances and Reportable Quantities.
- 40 CFR 122 NPDES Regulations (Storm Water Discharges).

- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management.
- 40 CFR 280-281 Underground Storage Tanks.
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances Under CERCLA.
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know.
- 40 CFR 761 Toxic Substances.
- 49 CFR 171-173, 175, and 177 Department of Transportation Regulations.

It is the responsibility of the pollution prevention team to understand the NPDES Storm Water Permit requirements of the state where the construction activities are to take place and to determine which requirements of the SWPPP overlap with other plans or requirements and to so note them.

### 2.3 Storm Water Pollution Prevention Personnel

To ensure compliance with the NPDES permit regulations, it is necessary to establish a list of personnel who will be responsible for overseeing and coordinating and, when necessary, amending the policies, practices, and procedures of the SWPPP. These persons should be knowledgeable in construction operations and capable of understanding the technical aspects of the SWPPP. Trained personnel responsible for the execution of the SWPPP requirements should be available at the jobsite. Depending upon the size of the construction project and complexity of the SWPPP, it may be necessary to establish a team or committee of trained personnel to implement the SWPPP.

The personnel chosen should be identified by name and title. Exhibit D-1, in Appendix D, is provided to list names, titles, and phone numbers of the committee members. The storm water pollution prevention team concept is flexible and should be molded to conform to the resources and specific conditions of the construction activity. Specific activities of the storm water pollution prevention team and type and number of members vary for different projects.

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

The membership should be comprised of at least two responsible persons knowledgeable in the requirements of SWPPP.

For facilities leasing space to tenant operations, the SWPPP committee should include at least one representative from each tenant operation. The SWPPP committee will be responsible for overseeing the activities as outlined below and shall meet at least annually to address the implementation of these activities:

- Coordination of management in carrying out SWPPP objectives.
- Implementation of spill reporting procedures.
- Inspection programs for Stockpile Storage Areas.
- Identification of additional potential pollutant sources.
- Coordination of spill cleanup and containment activities.
- Reviewing the effectiveness of the SWPPP program.
- Updating the SWPPP program to comply with BMP policies and objectives.

#### 2.4 SWPPP Certification

In order to ensure that the SWPPP is completely developed and adequately implemented, state-issued NPDES permits typically require that authorized representative(s) of the operator(s) sign and certify the plan. In signing the plan, the authorized representative certifies that the information is true and assumes liability for the plan.

Official signatures provide a basis for an enforcement action to be taken against the person signing the document. The permittee should be aware that Section 309 of the CWA provides for significant penalties where information is false or the permittee violates, either knowingly or negligently, the permit requirements. Specific signatory requirements for the SWPPP will be listed in the state-issued permits.

On the Federal level, the SWPPP certification must be signed in accordance with the provisions of Part VII. G of the baseline general permit. All reports, certifications, or other information required by the permit or requested by the permit authority shall be signed by a person described below:

1. For a corporation, by a responsible corporate officer. For the purposes of this section, a responsible corporate officer is a president, secretary, treasurer, or vice-president of the corporation in charge of principal business function, or any person who performs similar policy or decision-making functions for the construction activity; or the manager of the construction activity if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively;
3. For a municipality, state, Federal, or other public agency, by either a principal executive officer or ranking elected official. For the purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

The person who signs the document may also be a "duly authorized representative." A person is a duly authorized representative only if:

1. The authorization is made in writing by persons described above and retained as part of the SWPPP.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated construction activity,

such as the position of manager, operator, superintendent, or position of equivalent responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.

3. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the construction activity, a new authorization must be attached to the SWPPP prior to submittal of any reports, certifications, or information signed by the authorized representative.

The SWPPP must clearly identify the contractor(s) and/or subcontractor(s) who will be responsible for implementing the plan, and each must sign a copy of the certification located in Appendix F. A certification page must also be signed by a duly authorized representative of the COE and retained in the SWPPP document.

#### 2.4.1 Notice of Intent

The NOI is essentially an application and contains important information about the site, including site location, owner information, operator (general contractor) information, receiving water(s), existing NPDES permit number, if any, an indication of existing quantitative data, and a brief description of the project. EPA has developed a one-page form to be used by industrial facilities and construction activities when they submit NOI's. A copy of the Federal NOI form is located in Appendix B.

There are different deadlines for submitting NOI's depending on the permitting authority responsible for issuing the NPDES permit. Time required to submit NOI's can vary from 2 days prior to construction for Federal regulated permits to over 120 days prior to construction for some states. The reader is referred to Appendix A for a list of state contacts to determine who and where the NOI is to be submitted. NOI's for the EPA general permit must be submitted directly to EPA's central processing center at the following address:

Storm Water Notice of Intent (4203)  
401 M Street, S.W.  
Washington, DC 20460

Each party or each of the parties who have day-to-day responsibilities for site operations and each party or each of the parties who have control over the designs and specifications necessary to ensure compliance with SWPPP requirements and permit conditions must be identified in the NOI. It is anticipated that there will be projects where more than one entity (e.g., the owner, developer, or general contractor) will need to submit an NOI so that both of the requirements for an operator are met. In this case, those persons will become co-permittees.

#### 2.4.2 Plan Location and Public Access

Some NPDES-delegated states may require SWPPP's to be submitted to the Program Director for review and approval, whereas other permits may only require that plans be maintained onsite. Permitting authorities may prefer not to require plans to be submitted to reduce the administrative burden of reviewing a large number of SWPPP's. However, when the Director requests the plan, permittees should submit the plan in a timely manner. In addition, when requested, permittees should also submit their plan to state or local sediment and erosion or storm water management agencies, or to a municipal operator where the site discharges through an NPDES storm water permitted municipal separate storm sewer system. Readers are again urged to examine the issued permit carefully to determine what requirements apply to the SWPPP regarding plan submittal.

Regardless of whether or not the SWPPP is submitted to the permitting authority or other public agency, the SWPPP and supporting materials must be kept at the site of the construction activity at all times throughout the project. In maintaining plans onsite, the SWPPP committee should keep all records and supporting documents compiled together in an orderly fashion. The state-issued permit may require that all records be maintained for a certain period of time after the project is completed. The Federal regulations require

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

permittees to keep the SWPPP and all reports and data for at least 3 years after the project is complete. This provision ensures that all records are available in case a legal situation arises for which documentation is necessary.

Despite the fact that plans and associated records are not necessarily required to be submitted to the Director, these documents are considered to be "reports" according to Section 308(b) of the CWA and, therefore, are available to the public. State-issued permits may require the submittal of copies of the SWPPP to the permitting authority, municipal operator, or state or local agency upon request. However, permittees may claim certain portions of their SWPPP as confidential according to the regulations at 40 CFR Part 2. Basically, these regulations state that records which contain trade secret information may be claimed as confidential.

## **2.5 Record of Revision**

SWPPP elements will be modified as required (site inspections, additional BMPs, etc.) under the general permit by the appropriate COE SWPPP coordinator. Elements specific to tenant construction projects can be modified by the tenant project coordinator or duly authorized representative, as required under the general permit. Copies of any changes made by the tenant construction project coordinator must be immediately provided to the local COE SWPPP coordinator. The SWPPP will also be amended at any time it inadequately addresses conditions of the general permit or any amendments to the permit. The record of revision forms are located in Appendix G and are labeled Table G-1 and Exhibit G-1.

## 2.6 Special Requirements - SARA Title III, Section 313 Facilities

In addition to the minimum "baseline" requirements discussed previously, facilities may be subject to additional "special requirements." Not all facilities will have to include these special requirements in their SWPPP. Special permit requirements for all facilities regulated by SARA Title III, Section 313 [Emergency Planning and Community Right-to-Know Act (EPCRA)], include;

### 2.6.1 Control Measures

Control measures as listed below must be practiced in areas where Section 313 water priority chemicals are stored, handled, processed, or transferred: (A list of Section 313 water priority chemicals is located in Appendix H.)

- Provide containment, drainage control, and/or diversionary structures.
- Minimize discharges from liquid storage areas (install liquid materials in compatible storage containers and/or provide secondary containment or equivalent measures designed to hold the largest volume of the largest storage tank plus precipitation).
- Minimize discharges from material storage areas.
- Minimize discharges from loading/unloading areas (use drip pans and/or implement a strong spill contingency and integrity testing plan).
- Minimize discharges from handling/processing/transferring areas (use covers, guards, overhangs, door skirts and/or conduct visual inspections or leak tests for overhead piping).
- Minimize discharges from all the above-listed areas (use manually activated valves with drainage controls in all areas, and/or equip the plant with a drainage system to return spilled material to the storage facility).
- Introduce facility security programs to prevent spills (use fencing, lighting, traffic control, and/or secure equipment and buildings).

### **2.6.2 Preventative Maintenance**

The SWPPP must include methods, controls, and procedures which will be incorporated to minimize, limit, and/or prevent leaks or spills of Section 313 water priority chemicals, as defined in the CWA, from occurring on the construction site. To prevent spills from occurring, these facilities are required to designate a person responsible for spill prevention, response, and reporting procedures. Any contaminated soil, material, or debris resulting from a spill of a priority chemical shall be removed promptly and disposed of in accordance with Federal, state, and local requirements and as described in the SWPPP. All areas of the construction activity must be inspected at appropriate intervals for the following as specified in the plan:

- Leaks or conditions that would lead to discharges of Section 313 water priority chemicals.
- Conditions that could lead to direct contact of storm water with raw materials, intermediate materials, waste materials or products thereof.
- Piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas for leaks, wind blowing loose material, corrosion, support or foundation failure, or other deterioration or noncontainment problems.

### **2.6.3 Training**

Employees and contractor personnel must be trained in the following areas, at least once per year:

- Preventative measures, including spill prevention and response, construction activity inspections, and preventative maintenance.
- Pollution control laws and regulations.
- The construction activity's SWPPP.
- Features and operations of the construction activity that are designed to minimize discharges of Section 313 water priority chemicals, particularly spill prevention procedures.

#### 2.6.4 Engineering Certification

Certain states require that SWPPP plans be reviewed and certified by a Registered Professional Engineer and recertified every 3 years or anytime the plan is significantly changed.

#### 2.6.5 Monitoring Requirements

SARA Title III Section 313 facilities must monitor semiannually storm water discharges that come into contact with equipment, tanks, containers, or other vessels or areas used for storage of Section 313 water priority chemicals, or located at a truck or rail car loading or unloading area. Note that the permit provides an alternative to whole effluent toxicity (WET) testing. In lieu of monitoring for acute WET, the facility may monitor for pollutants that the facility "reasonably" believes are present onsite. Such determinations are to be based on reasonable best efforts to identify significant quantities of materials or chemicals present onsite. The pollutants are identified in Tables II and III of Appendix D of 40 CFR 122. Further, the permit provides that if the discharger certifies that industrial activities in a given drainage area are not exposed to storm water, monitoring is not required.

### 2.7 Special Requirements—Discharges to Municipal Separate Storm Sewer Systems

Additional requirements for storm water discharges associated with industrial activity discharging to municipal separate storm sewer systems serving a population of 100,000 or more include:

#### 2.7.1 Compliance With Municipal Storm Water Management Programs

Activities must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the municipal separate

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

storm sewer system that receives the construction activity's discharge, provided the discharger has been notified of such conditions, in addition to complying with the permit requirements.

### 2.7.2 Availability of Plans

Permittees which discharge storm water associated with industrial activity through a municipal separate storm sewer system serving a population of 100,000 or more must make plans available to the municipal operator of the system upon request.

## 2.8 Special Requirements—Releases of Reportable Quantities

Due to the fact that construction activities may handle certain hazardous substances over the course of the project, spills of these substances in amounts that equal or exceed Reportable Quantity (RQ) levels are a possibility. EPA has issued regulations which define what reportable quantity levels are for oil and hazardous substances. These regulations are found at 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302. For oil, if an oily sheen is detectable in the storm water runoff, the reportable quantity level has been exceeded. For hazardous substances, the final RQ levels depend on the chemical. For example, for dieldrin, a pesticide, the level is 1 kilogram (kg). If there is a spill or other release of 1 kg or more, the RQ threshold has been exceeded. Spill events such as these can be avoided if the SWPPP addresses this possibility. Section 4 discusses spill prevention and control.