Training Solutions, Delivered!

UNDERSTANDING YOUR FACILITY'S STORMWATER POLLUTION PREVENTION PLAN *(Concise)*

Leader's Guide, Fact Sheet & Quiz

Item Number: 4085

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.

b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.

c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.

d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes *before* the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.

b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.

c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.

d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

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FACT SHEET

LENGTH: 10 MINUTES

PROGRAM SYNOPSIS:
When stormwater flows through parking lots, chemical storage areas, areas of outside industrial activity, waste management areas material loading and unloading operations and similar areas, it can pick up debris such as chemicals, fertilizers, fecal bacteria, pollutants and other hazardous materials. This now-contaminated stormwater can then flow untreated directly into nearby bodies of water used for swimming, drinking, recreation and farming. Pollution spread by contaminated stormwater is a real problem and understanding your organization's Stormwater Pollution Prevention Plan is the purpose of this program.

Topics include the National Pollution Discharge Elimination System, stormwater pollution prevention teams, site assessments of potential sources of stormwater pollution, various methods of minimizing pollutant exposure and spill and leak response.

PROGRAM OBJECTIVES:
Upon completion of the program, viewers should be able to explain the following:
- What the National Pollution Discharge Elimination System is;
- How the stormwater pollution prevention team functions;
- What activities should be considered when conducting a site assessment of potential sources of stormwater pollution;
- What the various methods for minimizing the exposure of pollutants are;
- How facilities respond to spills and leaks effectively;

INSTRUCTIONAL CONTENT:

THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM
- In the United States, the Environmental Protection Agency, the EPA, is the controlling authority tasked with reducing stormwater pollution. As part of the federal Clean Water Act, the EPA has developed the National Pollution Discharge Elimination System, or NPDES.
- The NPDES requires permits for various types of "point source" discharges into the environment. The EPA's definition of "point source" discharge includes stormwater discharges associated with industrial activity.
- Stormwater runoff is water from rain or snowmelt that does not immediately infiltrate into the ground and flows over or through natural or manmade storage or conveyance systems.
- These various conveyances from which stormwater is or may be discharged are considered by the EPA to be a "point source" of stormwater discharge. The conveyances for discharge are also called "outfalls."

THE STORMWATER POLLUTION PREVENTION TEAM
- The process of developing a site-specific Stormwater Pollution Prevention Plan can be divided into the following four steps: Step One: creating a pollution prevention team; Step Two: conducting a site assessment of potential sources of stormwater pollution; Step Three: selecting the appropriate pollution control measures for each potential source of stormwater pollution; and Step Four: developing procedures for conducting the monitoring and inspection activities required by the permit.
- The pollution prevention team should be "cross-functional" and include members from various departments who are most familiar with the facility's operations.
- Team members will be assigned responsibilities related to their area of operation. For example, a maintenance supervisor may be tasked with stormwater-related upkeep of buildings and grounds; a material handling supervisor may be asked to ensure proper placement of stored materials; the hazardous waste coordinator may be assigned the duty to routinely inspect all chemical storage areas; while the safety and environmental manager may be given the duty of overseeing the sampling of stormwater runoff for contaminants.

• Your facility's Stormwater Pollution Prevention Plan will specifically name members of the pollution prevention team either by name or job title.

CONDUCTING A SITE ASSESSMENT OF POTENTIAL SOURCES OF STORMWATER POLLUTION

• Once the stormwater pollution prevention team is assembled, the next step is conducting a site assessment of potential sources of stormwater pollution.

• Be sure to consider the following common activities identified by the EPA as major sources of industrial stormwater pollution.

• Loading and unloading operations: There are a wide variety of ways materials may be loaded, unloaded and moved about a facility. Material spills or leaks during these operations may accumulate and be washed away during a storm event.

• Outdoor storage: Many facilities' operations require the outdoor storage of materials. These storage areas, when exposed to rainfall or runoff, can become a source of stormwater pollution if precautions aren't taken.

• Outdoor process activities: When industrial activity occurs outdoors, the various liquid spills and dispersement of material solids associated with the processing activity can also be a source of pollutants exposed to stormwater.

• Dust and particulate generating processes: This includes industrial activities with stack emissions or processes which generate dust. These particulates can settle on exposed surfaces and be exposed to rain or runoff, allowing pollutants to enter the stormwater runoff.

• Waste management: All facilities are involved in some type of waste management. Trash, recyclables, hazardous waste, discarded equipment and other waste streams must be properly controlled to prevent pollution discharge into stormwater.

• Non-stormwater discharge: Non-stormwater discharge is any discharge from your facility that is not entirely composed of runoff from rain or snowmelt. With few exceptions, non-stormwater discharges are prohibited and must be eliminated or permitted separately under a different NPDES discharge permit.

• Inspection for non-stormwater runoff should be conducted in dry weather.

• In addition to creating a detailed list of the site-specific industrial activities which are exposed to stormwater, a detailed material inventory is another essential element of the stormwater pollution prevention plan that should be compiled during the initial site assessment.

• This material inventory should include the various types of materials stored, handled or processed at the facility as well as their purpose and proper storage location.

• After the site assessment is completed, the items found which will impact stormwater discharge should be included on a detailed site map. This detailed site map is a critical part of the stormwater pollution prevention.

STRUCTURAL & NON-STRUCTURAL CONTROL MEASURES

• Once the pollution prevention team is in place and the potential sources of stormwater pollution have been identified, the next step is to develop and implement the control measures which will be used to reduce or prevent the discharge of pollutants into stormwater runoff.

• These measures, often called "Best Management Practices" include practices and procedures which reduce or eliminate the exposure of pollutants to stormwater.

• The best way to control stormwater pollution is to prevent the runoff from becoming polluted in the first place. This is commonly referred to as "minimizing exposure."

MINIMIZING EXPOSURE

• One method of minimizing exposure includes relocating industrial activities and material handling operations to be under covered areas or to areas where any runoff is contained and controlled.

• Ensuring employees understand that certain activities and materials must be located in designated areas is an important part of the Best Management Practices necessary to minimize exposure.

• For example, material handlers must be trained to understand which materials may be placed outside for storage and which may not.

• Improperly stored materials and equipment are a major source of polluted stormwater runoff.

GOOD HOUSEKEEPING & MAINTENANCE PROGRAMS

- Minimizing the exposure of pollutants to stormwater also depends on good housekeeping, especially in the following areas: dumpsters and waste containers, outdoor material storage areas, vehicle and equipment maintenance areas and loading docks and material handling areas.
- Another important control measure to minimize exposure is to implement a good maintenance program.
- A maintenance program designed to reduce stormwater pollution will not only be designed to keep all structural control measures in proper operating condition, but will also keep industrial equipment, machines and vehicles in proper good condition. Good condition includes minimizing or preventing equipment and vehicles from leaking oil and other pollutants.
- Remember, the best way to minimize polluted stormwater is to prevent pollutants from being exposed to stormwater in the first place.

SPILL & LEAK RESPONSE

- The control methods we have discussed so far are designed to help minimize exposure; however, in the event that a spill or leak does occur, your facility's Stormwater Pollution Prevention Plan must include procedures to ensure an effective response.
- Any employee who notices potential stormwater problems such as clogged storm drains, improperly stored materials, indications of leaks or spills, non-stormwater discharges, poor housekeeping or other potential problems should report them right away to their supervisor or a member of the stormwater pollution prevention team.
- The Stormwater Pollution Prevention Plan will also include procedures for inspecting the site and monitoring the stormwater discharge. Inspecting and monitoring procedures are critically important in determining whether the pollution control methods are working as intended.

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ANSWERS TO THE REVIEW QUIZ

1. b
2. b
3. a
4. c
5. b

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REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program.

Name_____Date_____

1. Inspection for non-stormwater runoff should be conducted in rainy weather.

a. True
b. False

2. Non-structural control measures that reduce or prevent the discharge of pollutants into stormwater runoff are known as _____.

a. Best Minimizing Procedures
b. Best Management Practices
c. Beneficial Management Processes

3. The best way to minimize polluted stormwater is to prevent pollutants from being exposed to stormwater.

a. True
b. False

4. What is the first step in the process of developing a Stormwater Pollution Prevention Plan?

a. Selecting pollution control measures for potential sources of stormwater
b. Conducting a site assessment of potential sources for stormwater pollution
c. Creating a pollution prevention team

5. The conveyances from which stormwater is or may be discharged are commonly known as _____.

a. Spillways
b. Outfalls
c. Overruns