storm water contamination and comply with the terms and conditions of this permit. The authorization to include best management practices in the permit to control or abate the discharge of pollutants is derived from 40 CFR 144.45(k).

EPA believes the pollution prevention approach is the most environmentally sound and cost-effective way to control the discharge of pollutants in storm water runoff from industrial facilities. This position is supported by the results of a comprehensive technical survey EPA completed in 1979.6 The survey found that two classes of management practices are generally employed at industries to control the nonroutine discharge of pollutants from sources such as storm water runoff, drainage from raw material storage and waste disposal areas, and discharges from places where spills or leaks have occurred. The first class of management practices includes those that are low in cost, applicable to a broad class of industries and substances, and widely considered essential to a good pollution control program. Some examples of practices in this class are good housekeeping, employee training, and spill response and prevention procedures. The second class includes management practices that provide a second line of defense against the release of pollutants. This class addresses containment, mitigation, and cleanup. Since publication of the 1979 survey, EPA has imposed management practices and controls in NPDES permits on a case-by-case basis. The Agency also has continued to review the appropriateness and effectiveness of such practices,7 as well as the techniques used to prevent and contain oil spills.8 Experience with these practices and controls has shown that they can be used in permits to reduce pollutants in storm water discharges in

a cost-effective manner. In keeping with both the present and previous administration's objective to attain environmental goals through pollution prevention, pollution prevention has been and continues to be the cornerstone of the NPDES Permitting program for storm water. EPA has developed guidance entitled "Storm Water Management for Industrial **Activities: Developing Pollution** Prevention Plans and Best Management Practices," September 1992, to assist permittees in developing and implementing pollution prevention measures.

1. Pollution Prevention Team

As a first step in the process of developing and implementing a storm water pollution prevention plan, permittees are required to identify a qualified individual or team of individuals to be responsible for developing the plan and assisting the facility or plant manager in its implementation. When selecting members of the team, the plant manager should draw on the expertise of all relevant departments within the plant to ensure that all aspects of plant operations are considered when the plan is developed. The plan must clearly describe the responsibilities of each team member as they relate to specific components of the plan. In addition to enhancing the quality of communication between team members and other personnel, clear delineation of responsibilities will ensure that every aspect of the plan is addressed by a specified individual or group of individuals. Pollution Prevention Teams may consist of one individual where appropriate (e.g., in certain small businesses with limited storm water pollution potential).

2. Description of Potential Pollution Sources

Each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute significant amounts of pollutants to storm water runoff or, during periods of dry weather, result in pollutant discharges through the separate storm sewers or storm water drainage systems that drain the facility. This assessment of storm water pollution risk will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Some operators may find that significant

amounts of pollutants are running onto the facility property. Such operators should identify and address the contaminated runon in the storm water pollution prevention plan. If the runon cannot be addressed or diverted by the permittee, the permitting authority should be notified. If necessary, the permitting authority may require the operator of the adjacent facility to obtain a permit.

Part XI of the permit includes specific requirements for the various industry sectors covered by today's permit. The storm water pollution prevention plans generally must describe the following elements:

a. Drainage. The plan must contain a map of the site that shows the location of outfalls covered by the permit (or by other NPDES permits), the pattern of storm water drainage, an indication of the types of discharges contained in the drainage areas of the outfalls, structural features that control pollutants in runoff,9 surface water bodies (including wetlands), places where significant materials 10 are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the date of the submission of a Notice of Intent (NOI) to be covered under this permit. The map also must show areas where the following activities take place: fueling, vehicle and equipment maintenance and/or cleaning, loading and unloading, material storage (including tanks or other vessels used for liquid or waste storage), material processing, and waste disposal. For areas of the facility that generate storm water discharges with a reasonable potential to contain significant amounts of pollutants, the map must indicate the probable direction of storm water flow and the pollutants likely to be in the discharge. Flows with a significant potential to cause soil erosion also must be identified. In order to increase the readability of the map, the inventory of the types of discharges contained in each outfall may be kept as an attachment to the site map.

b. Inventory of Exposed Materials. Facility operators are required to

⁶See "Storm Water Management for Industrial Activities," EPA, September 1992, EPA-832-R-92-006.

⁷For example, see "Best Management Practices: Useful Tools for Cleaning Up," Thron, H. Rogoshewski, P., 1982, Proceedings of the 1982 Hazardous Material Spills Conference; "The Chemical Industries' Approach to Spill Prevention," Thompson, C., Goodier, J. 1980, Proceedings of the 1980 National Conference of Control of Hazardous Materials Spills; a series of EPA memorandum entitled "Best Management Practices in NPDES Permits—Information Memorandum," 1983, 1985, 1986, 1987, 1988; Review of Emergency Systems: Report to Congress," EPA, 1988; and "Analysis of Implementing Permitting Activities for Storm Water Discharges Associated with Industrial Activity," EPA, 1991.

^{*}See for example, "The Oil Spill Prevention, Control and Countermeasures Program Task Force Report," EPA, 1988; and "Guidance Manual for the Development of an Accidental Spill Prevention Program," prepared by SAIC for EPA, 1986.

⁹Nonstructural features such as grass swales and vegetative buffer strips also should be shown.

¹⁰ Significant materials include, but are not limited to the following: raw materials; fuels; solvents, detergents, and plastic pellets; finished materials, such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products, such as ashes, slag, and sludge that have the potential to be released with storm water discharges. (See 40 CFR 122.26(b)(8)).