contamination. Ultimately, capping should reduce or eliminate the contaminants in discharges. In addition, by reducing infiltration, the potential for seepage and leachate generation may also be lessened.

The use of this practice depends on the level of control desired, the materials available, and cost considerations. Many common liners may be effective including common soil, clay, and/or synthetic liners. Generally, soil liners will provide appreciable control for the lowest cost. Synthetic or clay liners may be appropriate to cover materials known to have a significant potential to impact water quality.

4. Storm Water Pollution Prevention Plan Requirements

Specific requirements for a pollution prevention plan for mineral mining and processing facilities are described below. These requirements must be implemented in addition to the common pollution prevention plan provisions discussed previously.

Under the description of potential pollution services, each storm water pollution prevention plan must describe activities, materials, and physical features of the facility that may contribute to storm water runoff or, during periods of dry weather, result in dry weather flows and mine pumpout. This assessment of storm water pollution 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. Plans must describe the following elements:

The plan must contain a map of the site that shows the pattern of storm water drainage, structural features that control pollutants in storm water runoff⁸¹ and process wastewater discharges, surface water bodies (including wetlands), places where significant materials⁸² 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, haul roads, access roads, and rail spurs. In addition, the site map must also indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls (e.g. storm water and air conditioner condensate). 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.

Facility operators are required to carefully conduct an inspection of the site and related records to identify significant materials that are or may be exposed to storm water. The inventory must address materials that within 3 years prior to the date of the submission of a Notice of Intent (NOI) to be covered under this permit have been handled, stored, processed, treated, or disposed of in a manner to allow exposure to storm water. Findings of the inventory must be documented in detail in the pollution prevention plan. At a minimum, the plan must describe the method and location of onsite storage or disposal; practices used to minimize contact of materials with rainfall and runoff; existing structural and nonstructural controls that reduce pollutants in storm water runoff; existing structural controls that limit process wastewater discharges; and any treatment the runoff receives before it is discharged to surface waters or a separate storm sewer system. The description must be updated whenever there is a significant change in the types or amounts of materials, or material management practices, that may affect the exposure of materials to storm water.

The description of potential pollution sources culminates in a narrative assessment of the risk potential that those sources of pollution pose to storm water quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to storm water. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: loading and unloading operations; outdoor storage activities; outdoor processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., total suspended solids, total dissolved solids, etc.) associated with each source.

Under the measures and controls section of the pollution prevention plan, the permittee must evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. The permittee must assess the applicability of the following BMPs for their site: discharge diversions, drainage/storm water conveyance systems, runoff dispersions, sediment control and collection mechanisms, vegetation/soil stabilization, and capping of contaminated sources. In addition, BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in storm water runoff.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address the potential sources of storm water pollution. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential storm water contamination problems.

Under the preventive maintenance requirements of the pollution prevention plan, permittees are required to develop a preventive maintenance program that includes regular inspections and maintenance of storm water BMPs. The maintenance program requires periodic removal of debris from discharge diversions and conveyance systems. These activities should be conducted in the spring, after snowmelt, and during the fall season. Permittees already controlling their storm water runoff frequently use impoundments or sedimentation ponds. Maintenance schedules for these ponds must be provided in the pollution prevention plant.

¹ Under the inspection requirements of the pollution prevention plan, operators

 $^{^{\}rm 81}$ Nonstructural features such as grass swales and vegetative buffer strips also should be shown.

⁸² Significant materials include, ''* * * but [are] not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; hazardous substances designated under section 101(14) of CERCLA; any chemical facilities required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharge." (40 CFR 122.26(b)(12)) Significant materials commonly found at mining facilities include: overburden; raw materials; waste rock piles; tailings; petroleum based products; solvents and detergents; and manufactured products, waste materials or by-products used or created by the facility.