(3) Drainage—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 runoff 56 and process wastewater discharges (including mine drainage), surface water bodies (including wetlands), places where significant materials 57 are exposed to rainfall and runoff. The map also must show the location of the following: any remaining equipment storage, fueling, and maintenance areas; areas used for outdoor manufacturing, storage, or disposal of materials; the boundaries of former mining and milling sites; the location of each storm water outfall and an outline of the portions of the drainage area that are within the facility boundaries; tailings piles and ponds; mine drainage or any other process water discharge point; and an estimate of the direction of flow. In addition, the site map must also indicate 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.

(b) Inventory of Exposed Materials— The storm water pollution prevention plan shall include, for each outfall, an inventory and narrative description of any significant materials that may still be at the site. The description and locations of the significant materials should be consistent with those shown on the site map. 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.

(c) Risk Identification and Summary of Potential Pollutant Sources-The description of potential pollution sources culminates in a narrative assessment of the risk potential that 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. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., total suspended solids, arsenic, etc.) associated with each source.

(4) Measures and Controls. Following completion of the source identification and assessment phase, 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, capping of contaminated sources, and treatment of storm water discharges. 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. EPA recognizes that inactive mine sites and abandoned mine sites will most likely require different storm water controls because the sources and types of contamination may vary. EPA notes that inactive facilities are not required to conduct inspections such as those described in Part XI.G.3.a.(4)(d) of the permit for active and temporarily inactive facilities. Inactive sites must, however, conduct comprehensive site compliance evaluations as discussed in paragraph (5) below.

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.

(5) Comprehensive Site Compliance Evaluation. Where annual site compliance evaluations are shown in the plan to be impractical for inactive mining sites due to the remote location and inaccessibility of the site, site evaluations required under this part shall be conducted at appropriate intervals specified in the plan, but, in no case less than once in 3 years.

6. Monitoring and Reporting Requirements

a. Analytical Monitoring *Requirements.* EPA believes that active copper ore mining facilities may reduce the level of pollutants in storm water runoff from their sites through the development and proper implementation of the storm water pollution prevention plan requirements discussed in today's permit. In order to provide a tool for evaluating the effectiveness of the pollution prevention plan and to characterize the discharge for potential environmental impacts, the permit requires active copper ore mining and dressing facilities to collect and analyze samples of their storm water discharges for the pollutants listed in Table G-5. The pollutants listed in Table G-5 were found to be above levels of concern for a significant portion of active copper ore mining and dressing facilities that submitted quantitative data in the group application process. Because these pollutants have been reported at levels of concern from active copper ore mining and dressing facilities, EPA is requiring monitoring after the pollution prevention plan has been implemented to assess the effectiveness of the pollution prevention plan and to help ensure that a reduction of pollutants is realized.

At a minimum, storm water discharges from active metal mining facilities must be monitored quarterly during the second year of permit coverage. Samples must be collected at least once in each of the following periods: January through March; April through June; July through September; and October through December. At the end of the second year of permit coverage, a facility must calculate the average concentration for each parameter listed in Table G–5. If the permittee collects more than four samples in this period, then they must calculate an average concentration for each pollutant of concern for all samples analyzed.

<sup>&</sup>lt;sup>56</sup>Nonstructural features such as grass swales and vegetative buffer strips also should be shown.

<sup>&</sup>lt;sup>57</sup> 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; heap leach pads; tailings piles/ponds, both proposed and existing; and manufactured products, waste materials or by-products used or created by the facility.