TABLE H-2.—STATISTICS FOR	SELECTED POLLUTANTS	REPORTED BY COAL	MINES AND COAL	MINING-RELATED
FACILITIES	SUBMITTING PART II SA	MPLING DATA ⁱ (mg/	L)—Continued	

									1							
Pollutant Sample type	No. of Facilities No. of Samp		Samples	s Mean		Minimum		Maximum		Median		95th percentile		99th percentile		
	Grab	Comp ⁱⁱ	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
Total Suspended Solids	18	11	22	12	2551	462	0	2	33420	3880	7	131	3167	3011	23454	13634
Iron, Total	11	9	13	10	193.9	53.3	0.6	1.1	930.0	294.0	9.2	11.0	1639.1	284.0	9593.9	981.7

Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics. Values reported as non-detect or below detection limit were sumed to be 0. Composite samples

Storm water discharges from inactive and abandoned coal mines, preparation, refuse disposal sites, haul roads and other inactive mining-related areas may contain substantial amounts of pollutants without the benefits of sediment and erosion control measures. Sampling data in the EPA 1982 "Development Document for Effluent Guidelines and Standards for Coal Mining" reveal typical ranges for untreated mine drainage and are indicated in Table H-3. The data are based on untreated surface and underground drainage and may not be typical of inactive sites subject only to storm water runoff. For example, a high proportion of underground mines in the survey may have resulted in the relatively low median levels of suspended solids. However, it does indicate the potential array of conventional mining pollutants which could be present in abandoned mine drainage.

3. Options for Controlling Pollutants

Mining facilities are often dissimilar to other types of industrial facilities because they may be situated in remote locations, operate only seasonally or intermittently, yet need year-round storm water management controls. EPA believes that the most effective storm water management controls for limiting the offsite discharge of storm water pollutants from active and inactive coal mines are source reduction BMPs. Source reduction BMPs are methods by which discharges of contaminants are controlled with little or no required maintenance. Examples of these types of controls include diversion dikes,

vegetative covers, and berms. Source reduction practices are typically (but not always) low in cost and relatively easy to implement. In some instances, more resource intensive treatment BMPs, including sedimentation ponds and infiltration trenches, may be necessary depending upon the type of discharge, types and concentrations of contaminants, and volume of flow.

The selection of the most effective BMPs will be based on site-specific considerations such as: facility size, climate, geographic location, hydrogeology and the environmental setting of each facility, and volume and type of discharge generated. Each facility will be unique in that the source, type, and volume of contaminated storm water discharges will differ. In addition, the fate and transport of pollutants in these discharges will vary. EPA believes that the management practices discussed herein are well suited mechanisms to prevent or control the contamination of storm water discharges associated with active and inactive coal mines.

BMPs that minimize erosion and sedimentation are effective for areas along haul and access roads, and for inactive mines. Many BMPs were not listed by part 1 group application participants because the major application submitted by the National Coal Association and the American Mining Congress was comprised of only active mine sites. The only portions of an active mine site to which this section of today's permit applies are haul roads, railways, and conveyor belts, chutes, and aerial tramway haulage areas. Because the scope of storm water

program, as it applies to active coal mining sites, is limited, the applicants were not required to provide EPA with BMP data for process wastewater discharges. Furthermore, active surface mines are subject to 30 CFR Part 816 and active underground mines are subject to 30 CFR Part 817, both which require the implementation of BMPs.

Since many coal facilities are required to have BMPs, the data presented in part 1 of the application may underestimate the percentage of facilities with storm water BMPs.

Because BMPs described in the part I data are limited, EPA is providing an overview of supplementary BMPs for use by facility operators to determine appropriate BMPs for haul and access roads at active coal mines and for inactive coal mines. However, due to the site-specific nature of facilities within this sector, BMPs cited do not preclude the use of other viable BMP options. Table H-3 summarizes BMP options as they apply to land disturbance activities at active and inactive coal mining facilities. Sources of BMP information include: "Sediment and Erosion Control: An Inventory of Current Practices-Draft," EPA, April 20, 1990; "Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices," EPA, September, 1992, (EPA 832-R-92-006); "Best Management Practices for Mining in Idaho," Idaho Department of Lands, November 1992; and "Erosion & Sediment Control Handbook," Goldman et al., McGraw-Hill Book Company, 1986.

TABLE H–3.—SUMMARY OF MINE AREAS AND APPLICABLE BEST MANAGEMENT PRACTICES

Land-disturbed area	Discharge diver- sions	Conveyance sys- tems	Runoff dispersion	Sediment control & collection	Vegetation	Containment
Haul Roads and Access Roads.	Dikes, Curbs, Berms	Channels, Gut- ters, Culverts, Rolling Dips, Road Sloping, Roadway Water Deflectors.	Check Dams, Rock Outlet Protection, Level Spread- ers, Stream Al- teration, Drop Structures.	Gabions, Riprap, Native Rock Retaining Walls, Straw Bale Bar- riers, Sediment Traps/Catch Basins, Vege- tated Buffer Strips.	Seeding, Willow Cutting Estab- lishment.	