

- c. Sedimentation ponds hold runoff from disturbed areas a required length of time (theoretical detention time) to allow most of the solids to settle out and release the supernatant back into the natural drainage system.
- d. Rock check dams in areas otherwise hard to control.
- e. Rip-rap lined ditches.
- f. Use of a chemical flocculent such as Nalco Enact 7888 or equivalent for decreasing settling time in sediment ponds.

In the "D" Portal Area, special washdown facilities in and around the preparation plant are provided for areas where significant amounts of fine coal dust might accumulate. Water from plant operations which gets into these areas is collected in sumps and pumped to the process water settling pond. This water is then used in the makeup water cycle. Special attention is given to water containing significant amounts of coal fines as the water might have characteristics more objectionable and more difficult to treat than would runoff from other disturbed areas.

Sediment control systems along the conveyor consist of ditches and berms to return runoff to a natural drainage area. Culverts are also used for controlling drainage. Two ponds are used at the slot storage area (SS-1 and SS-2). Ditches, berms, and culverts direct runoff from the top of the slot area into SS-1. Diversion ditches direct runoff from a disturbed laydown area on the west side of the slot storage area to SS-2.

The sedimentation and drainage control system used in the Refuse Disposal Area are slightly different as shown on Maps 76, 77, 77A, 78, 79, 80, 80A, 162, and 165. The watershed of a sub-area is progressively disturbed as the sub-area is filled with refuse. During this process, runoff from undisturbed areas is diverted away from disturbed areas by temporary ditches. The purpose of these temporary ditches is to prevent excessive erosion of the refuse and not to prevent mixing of runoff from disturbed areas. The perimeter diversion ditches into the sedimentation ponds carry both runoffs. Both types of runoff are mixed. This is not considered detrimental as the watersheds are small and the ponds are designed for the worst expected situations (i.e., when most of the watershed is disturbed). Sediment design and diversion ditch calculations are given in Illustrations I-4 for refuse area 1 and I-6A for refuse area 5A. With the approval of TR74 to combine refuse area RP-2/3/4 and RP-5A into RP2/3/4/5, the sedimentation design and ditch calculations are given in Illustration 61. The sedimentation and discharge design and ditch calculations for RP-A are included in Illustration 59. Red Wash Pond will be utilized for water quality compliance. Calculations are provided in Illustration 60.