

IV.J Sedimentation and Drainage Control

Sedimentation and drainage control systems utilized in the "D" Portal Area are shown on Maps 24, 25, 26, 27 and 34, Loadout Area are shown on Map 103a, in the Refuse Disposal Area are shown on Maps 77, 77a, 78, 79, 80, 162, and 165 along the Conveyor and Slot Storage area on Maps 106-113, in the East Portal Area are shown on Map 89. These measures were in addition to mining and reclamation procedures intended to protect the quality and quantity of existing surface and ground water. Emergency spillways on all ponds are designed to safely pass the peak flow from a 25-year, 24-hour storm event (2.1 inches). Illustration 40 shows that the spillway design for Pond RR-1 can pass 14.39 cfs when only 11.5 cfs is the maximum flow of runoff. Illustration 39 shows that the ponds at the slot storage area (SS-1 and SS-2) have double the capacity of a 10-year, 24-hour storm event. Since a 10-year, 24-hour event is 1.6 inches and a 100-year event is 2.4 inches, a 3.2 inch event is improbable. Therefore, no emergency spillways were designed into either SS-1 or SS-2. Sedimentation and drainage control utilized for the B Seam ventilation shaft facility and access is either shown on Map 151 or covered by the Small Area Exemptions in Illustration 44.

Sump dewatering holes SDH-2 and SDH-3 currently allow for the dewatering of the D-Seam workings if needed. Ponds near these holes are designed to allow settling of suspended solids and to allow aeration or other treatment prior to discharge. SDH-3 discharges by pipe to a pond next to this site. SDH-2 can discharge by pipe to the SDH-3 pond or to the ponds between SDH-2 and SDH-1. The SDH-2/SDH-1 ponds discharge to the SDH-3 pond via gravity feed through a pipe. The primary spillway for SDH-3 pond was sized to handle 307 gpm of mine discharge. See Map 140 for spillway rating. Therefore, the inflow of these sources did not exceed the capacity of that spillway. The SDH-3 pond discharges to an unnamed tributary to Red Wash through outfall #026 of NPDES Permit No. CO0038024 (see Illustration I-46).

The Deserado Mine is also allowed to remove water from the underground workings through the portals to PP-2 pond. PP-2 pond is permitted to discharge through outfall #004 of the NPDES Permit.

Other sump dewatering holes have been permitted, constructed and decommissioned through the course of mining. Initially mine water was pumped out through the 'D' and East Portals. The East Portals and associated treatment ponds have been reclaimed and removed from the NPDES Permit.

SDH-1 was the first sump dewatering hole. It became obsolete once SDH-2 was constructed. SDH-1 has since been plugged and reclaimed. The associated treatment ponds are still available for use near SDH-2.