

Containment Area 1. A total of 1.51 acre-feet of storage is required to handle a 10-year 24-hour event and 2.01 acre-feet for a 25-year 24-hour event. The three-year sediment storage volume is 0.07 acre-feet. Containment Area 1 also controls drainage from the sediment drying area and the soil storage area associated with the DWDA #3.

The sediment drying area will be located where the non-coal waste area was previously permitted. Material excavated from ditches, catchments and sediment ponds will be placed in the sediment drying area and allowed to dry before being hauled to a suitable stockpile. Material from the sediment drying area may be used as plant growth medium.

Ditch 29 collects runoff from 67.2 acres of undisturbed runoff and directs this runoff to the lay down area without impacting any disturbed area. Culvert C-27 has been installed at the east end of the lay down area to handle peak flows from Drainage Basins CC and DD as shown on Map 13B Drainage Basins.

Ditches 39a and 39aa are proposed to route storm water around the cut slope of the substation and rock dust system to maintain the integrity of the slope. At the time of construction, the slope material characteristics will be evaluated to determine if a drop structure is necessary to carry the cut slope runoff. The details of the cut slope are included as Figure 2d.

Sedimentation control for the RDA haul road is shown on Map 13 and Map 24. Map 24A shows the clean water ditch alignment profile and Map 24B shows the haul road alignment profile. Runoff from the haul road will be managed with ditches and culverts and the design for each structure is included in Exhibit 19 (24). Runoff for the eastern portion of basin draining to the haul road will be routed and discharged to the east. Runoff from the western portion of the basin collected in the clean water ditch will be conveyed to the west along the haul road and conveyed through a proposed culvert to tie into existing ditches to ultimately discharge into Pond 8. Runoff from the haul road is not considered to be in the disturbed area as deemed by Rule 4.05.2(4) and is therefore not required to be routed to a Sediment Pond, although the western segment of the clean water ditch (D55-W-1 – D55-W-4) is being routed to Pond 8.

Sedimentation control at the Bates Portal is shown on Map 13A Sediment and Surface Water Control Silo Area. Six new ditches and four new culverts and the design size and routing of each structure are provided in Exhibit 19 (16). Runoff from the 10-year, 24-hour event at the Portal will be routed to Pond 007.

The C & W train shop, 10-stall garage and other associated structures are located on the west side of the east mine sedimentation control system. The land slopes approximate 2% from the C & W train shop to the east towards pond 7. Flow from this general area will be collected in either ditch D-5 or D-6 and conveyed to sediment pond 7 and can be found on Map 13C, West Side of the East Mine-Sedimentation Control Plan.

A small area exemption has been established for subsoil storage pile #1 due to its proposed location outside of areas where disturbed runoff will be routed to a sediment pond. Berms and silt fences provide alternative sedimentation control for this area. The design of the silt fences are included Exhibit 19 (16). This SAE area is shown on Maps 11 and 12.