

2011 Rhodes Canyon Cap Repair

White Sands Missile Range (WSMR) has the requirement to continue cap inspections at the Rhodes Canyon Landfills (SWMU 114 and 115) and ensure that the site has restricted access. If the cap inspections note areas of concern that could eventually expose landfill material, WSMR is required to complete repairs. During the February 2011 cap inspection, personnel noted a few deficiencies that need to be addressed. Zia will mobilized (27-29 June) to the Rhodes Canyon (SWMU 114-115) cap with suitable rock and construction equipment to complete required repairs noted during the cap inspection. The following repairs were conducted:

- Used 8 inch size rock (rip rap) to repair the 2 under-cut channels. Added rock to channels as noted in the February 2011 cap inspection. Third channel from entrance gate required additional rock along sides using a front end loader with backhoe. See photos below.



Rock Lined Channel Prior to Repair.



Rock Lined Channel Following Repair.

- Reworked sides of fourth channel due to undercuts from water flow. See photos below.



Undercuts of Fourth Rock Lined Channel.



Repaired Sides of Channel.



Reworked Head of Channel to help with flow.

- Removed 8 inch rock acting as a dam (was causing deposition of silt in swale), removed silted gravel, and repaired base of Swale. See photos below.



Base of Swale Prior to Repair.



Rock Dam Removed, silted gravel removed, new gravel placed.

- Backfilled gullies forming on slope of borrow area with soil and $\frac{3}{4}$ inch gravel. See photo below.



New gullies prior to repair.



Gullies Repaired.

- Removed hay bales where increased rills/gullies were forming. See photo below.



Placed hay bales along north fence line where fence was undercut.

- Cleared dead/dried brush from the inner fence line.
- Shoveled gravel from center of swale to cover exposed liner along sides of swale. See photo below.



Exposed liner along Swale.

- Backfilled animal burrows with shovel and soil from burrow.
- Scraped remaining length of the Swale down to 3 inches to remove built up silt.



Swale Following 3 inch scrape.