



## CCR LANDFILL CLOSURE

### Project Scope Highlights

- Clear and grub 58 acres (includes fine grading of slopes)
- Install 18 acres of 40 mil liner
- Install 48 acres of 50 mil liner
- Install 66 acres of closure turf
- Place 64 acres of manufactured sand
- Install 2 acres of hydro-binder
- Install pre-cast concrete culverts and headwalls (includes grading and placement): 2 sets



Phase 1 Initial Fill

### Project Overview

Due to new Federal and State CCR regulations, multiple CCR basins had to be excavated and the material placed in a newly constructed, adjacent landfill. This large volume, high visibility project had a state mandated completion date that required minimal CCR exposure, necessitating landfill closure immediately upon completion of the first phase fill.

### Project Challenges and Solutions

Several items were encountered throughout the project life cycle, creating the following challenges:

- The harsh, coastal climate and heavy rains, including a Category 1 hurricane/1,000 year rain event created constant weather challenges. Trans Ash's construction plan created a project and water management system that ensured the site was constantly prepared for extreme weather events.
- With the mandated schedule, portions of the landfill had to remain active during liner placement making access to certain areas challenging. Trans Ash coordinated deliveries with material suppliers and employed smaller, more flexible equipment to ensure timely delivery of closure materials and provide uninterrupted, landfill operation.
- During closure, Trans Ash noted that the original rip rap downshoot, dissipater design did not include protection for the closure turf cover system. Trans Ash worked cooperatively with the client and design engineer to design and install a geo-composite base system that protected the turf and ensured stability.
- The native, sandy soil interfered with the liner, seam sealing process. Trans Ash employed extra work force and equipment to regrade slopes, remove obstructions and add moisture to the soil to ensure proper liner seam integrity.



Initial line/Turf Installation

*“By organizing their staff into dedicated project teams, and providing the necessary, support equipment, Trans Ash was able to easily transition from basin excavation and landfill placement into the landfill closure phase.”*



Grading of Landfill Cover



Rip-Rap Installation



Liner/Closure Turf Installation



Final Stages of Completion