

ConCover SW and SuperSeal 40

Accelerate Landfill Closure

**(Dealing with Perchlorates, Nitrogen based Waste Propellants
& Other Explosive Material)**

Extraordinary control measures were used by this contractor in dealing with the remedial action required by the Department of the Navy. The project called for the creation of a permanent vegetative cap over explosive contaminated soil. To accomplish this, the contractor had to mitigate explosive material (the perchlorates and the nitrogen based waste propellants), re-grade the property and import soil. The risks to public health requiring special and exacting controls were:

1. precision excavation techniques because of chemical and energetic hazards
2. solubility of perchlorate required special controls to prevent contact with ground water or surface/storm water – and compliance with Storm water pollution plan
3. prevention and suppression of dust migration of contaminated sediments for dry stockpiled soils

ConCover SW helps solve a problem with using water as normal dust suppression technique to make the explosive material inert. The problem with water was the way it destabilized silty-clay and promoted downward migration of the perchlorates into the groundwater during construction, not to mention how it dramatically slowed production by immobilizing tracked equipment and soil transport equipment.

Advantages of Use:

1. crews could open larger work areas and maneuver more easily in the work areas
2. once the ConCover SW was applied – immediate reduction in ignition potential
3. after curing – soil stability was sufficient to support trucks and heavy equipment traffic
4. elimination of double and triple handling of spoils and fill materials because open excavations were encapsulated with ConCover SW at the end of each shift and left open until the next shift
5. quick curing SW with SuperSeal 40 prevented mobilization of soluble perchlorate during periods of heavy rain
6. Large savings over the use of tarps, and better flexibility to work crews.

The final benefit was a \$30,000 savings resulting from being able to complete the job one month ahead of schedule.