



November 8, 2012



Ms. Teresa Bradford
Mooresville Regional Office
NC Department of Environment & Natural Resources
610 East Center Avenue
Suite 301
Mooresville, North Carolina 28115

**Re: Charlotte Motor Speedway Landfill
Permit No. 13-04
ADC (Posi-shell) Request
Demonstration Project**

Dear Ms. Bradford:

As allowed under 15A NCAC 13B.1626 (2)(b), Republic Services Inc., is requesting approval to conduct a trial usage of the Posi-shell cover material as an alternative daily cover at our Charlotte Motor Speedway (CMS) Landfill V located in Cabarrus County. We currently use onsite soils for daily and intermediate cover and are approved to use several alternative daily cover materials. We also use our onsite soils for cell construction and capping projects and would like to preserve our soils for these uses.

The Posi-shell product, equipment, and materials will either be purchased or provided through a lease agreement. We understand that Posi-shell has been approved and is in use at several sites across North Carolina and that it is performing well as an alternative daily cover material.

Our CMS Landfill will use Posi-shell for daily cover on all active working areas and may also use this as a method of reinforcing our berms and ditches to prevent soil migration and costly repairs. All exterior slopes that are at final grade will be covered with soils. Roads and pads for any tipper units will use soil and stone. We will also use the Posi-shell spray equipment for application as a hydro-seeder. Clean water will be used in the mix for applications of daily cover and all other applications.

Onsite training of our personnel will be conducted in the proper use of the equipment as well as the recommended application rates to provide sufficient cover. We anticipate an early 2013 timeframe for this demonstration project to begin. This demonstration project will coincide with our aerial survey and will allow us a good point for comparison of compaction rates and airspace utilization.

CMS Landfill
5105 Morehead Road
Concord, NC 28027-0113
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Listed below is a Summary of the Trial Usage of Posi-shell for your review:

TRIAL USAGE OF POSI-SHELL COVER SYSTEM ALTERNATE DAILY COVER

The CMS Landfill V proposes to use Posi-Shell Cover System (Posi-Shell) as an alternate daily cover material on a trial basis for 120 days. The trial will be conducted, under careful scrutiny, following the manufacturer's recommendations for use. Full documentation of the use of Posi-Shell, including photos and other records, will be provided to the Solid Waste Section at the completion of the trial.

A. MATERIAL DESCRIPTION

Posi-Shell is a non-flammable, cement mortar coating that is spray-applied to the working face using hydro-seeder type or similar spray equipment. The cementitious binder material and reinforcement fiber material are mixed with a liquid component immediately prior to application in the spray equipment. After application, the solution hardens to a non-flammable shell coating. Posi-Shell Material Safety Data Sheets will be included in the revised Operation Plan.

B. REQUIREMENTS FOR ALTERNATIVE DAILY COVER

An alternative daily cover must control disease vectors, fires, odors, blowing litter and scavenging without presenting a threat to human health and the environment. Posi-Shell will accomplish these requirements as follows:

1. Posi-Shell will be spray-applied daily to form a hardened, non-flammable shell over waste. The hardened shell will control disease vectors, odors, blowing litter, scavenging and fire in a manner similar to soil and consistent with the Rules.
2. A complete soil intermediate cover will be applied at the completion of each lift. This soil cover will help to control disease vectors, odors, blowing litter, scavenging and fire.
3. Use of Posi-Shell Alternate Daily Cover is not expected to cause excess dust. Normal site operations will be utilized to control dust.
4. Areas receiving applications of Posi-shell will be covered by 6" of daily cover soil or an additional layer of waste within 30 days.

C. PROCEDURES

Posi-Shell will be spray-applied daily to provide a complete waste cover.

If rain is expected, the Extreme Rain Shield additive shall be used with the Posi-Shell mixture or Posi-shell will be suspended for the day. Posi-Shell will be applied using hydro-seed or similar spray equipment. Application procedures will strictly follow the recommendations provided by the manufacturer.

When Posi-Shell is applied as daily cover, or utilized outside the lined landfill area for erosion control applications, clean water will be utilized as the liquid component of the Posi-Shell mixture.

D. TRIAL PERIOD

Posi-Shell will be used initially for a 120-day trial period. Photos and records demonstrating the effectiveness of Posi-Shell will be maintained and submitted to the Section at the completion of the trial period.

E. FINAL DOCUMENTATION

The landfill Manager and/or Engineer shall closely observe the application and effectiveness of Posi-Shell during the 120-day trial period. Use of Posi-Shell will be fully documented with photos and records of use. This information will be submitted to the Section at the completion of the trial period.

With favorable documentation from the trial period and concurrence by the Section, a request will be submitted that use of Posi-Shell material for alternative daily cover will become part of the Permit to Operate. We will modify our Operations Plan to include the use of Posi-shell as an alternative daily cover and will submit this through DENR's Solid Waste Permitting Branch after the Demonstration Period. If you have any questions, or require additional information, please contact me at (803) 428-2400.

Sincerely,



Bart Keller
Division Manager

cc: Mike Gurley
H. Lowry Tribble, Jr., P.E.
Ed Mussler, NCDENR Solid Waste
John Murray, NCDENR Solid Waste