



Haywood County Solid Waste

278 Recycle Road
Clyde, NC 28721
Telephone: (828) 627-8042
FAX: (828) 627-8137

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Stephen King
Solid Waste Director

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SOLID WASTE SECTION
ASHEVILLE REGIONAL OFFICE

February 7, 2008

Mr. Larry Frost, Regional Engineer
NCDENR
Division of Solid Waste Management
Asheville Regional Office
2090 US Highway 70
Swannanoa, North Carolina 28778

Re: Request Modification of Landfill Permit 44-07; Haywood County MSW Landfill: Final Approval of Alternate Daily Cover

Dear Mr. Frost:

This letter serves as a formal request for approval of the below listed Alternate Daily Cover (ADC) on a full-time basis at the Haywood County MSW Landfill; Permit #44-07. This letter is in response to your ADC Demonstration Authorization Letter, dated June 28, 2007. This letter is also accompanied by a separate Permit modification request for operational changes at the permitted Treatment and Processing facility under a separate cover. The following Demonstration Report follows generally follows the Draft Approval Process letter that was attached to the Demonstration Authorization Letter. Also attached are photos illustrating the ADC in place, an approval letter from Jim Patterson, DENR Waste Specialist in this region, and a revised facility Operation Plan.

Demonstration Report:

Alternate Daily Cover: Landfill Tarp System:

Landpac Cover by PacTec Inc.
6-oz. Coated Woven Polypropylene

<u>Properties</u>	<u>Test Method</u>	<u>Value</u>
Coating		1.5-Mil, one side
Weight		7.5-oz/yd ² coated
Thickness		20-Mil
Color		White
Warp Grab	ASTM D 5034-90	370-lbs.
Weft Grab	ASTM D 5034-90	380-lbs.
Warp Tear	ASTM D 2261-83	170-lbs.





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Weft Tear	ASTM D 2261-83	160-lbs.
Mullen Burst	ASTM D 3786-87	800 psi
Puncture	ASTM D 4833	106-lbs.
Accelerated UV Weathering	ASTM G53	>70% @ 1200 hrs.

Application/Removal, Storage and Maintenance of the ADC:

Each day at closing, the ADC tarp is walked onto the landfill face by attaching the two leading corners of the tarp to landfill equipment (loader, dozer) via Rope and or integrated D-ring clips. Final placement of the tarp is completed by hand as the operators adjust the tarp to ensure proper coverage. Blocks are attached at the corners and edges of the tarp to prevent displacement of the tarp due to high winds. Each morning, the blocks are removed and the cover is walked-off of the working face and stored at an adjacent area of the landfill. Care is taken to make sure that no vehicle traffic or landfill equipment is allowed to pass over the cover, which could result in shearing or tearing of the cover. Each morning and afternoon the tarp is inspected for tears. Should a break in the tarp be discovered, an attempt will be made to repair the area by stitching the material together. If a repair is inadequate or can not be made, the tarp will be replaced. Another tarp will be stored at the Treatment and Processing Facility adjacent to the landfill at all times for emergency replacement.

Coverage Area:

The landfill tarp ADC is 48-ft x 50-ft in size. The fill area will be maintained so that the ADC completely covers the entire working face each day. Any additional areas of uncovered waste (horizontal progression, side slopes and etcetera) will be covered each day with 6-inches of soil or approved mixture of soil and mulch. On rare occasions, such as the beginning or end of a landfill lift, it may be necessary to maintain a larger working face. Under such circumstances, the second tarp will be taken to the landfill for additional temporary coverage. The second tarp will be placed so that a maximum overlapping of the tarps is maintained.

Adverse Weather and Contingency Plans:

Due to the porous nature of the ADC, the tarp does not hold water, which might shear the tarp or make it difficult to apply/remove the tarp each day. Therefore, it is unnecessary to modify use of the ADC during wet weather conditions. Should a heavy snow be predicted, or occurring at the time of closing, the working





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face would be covered with a minimum of 6-inches of soil or approved soil and mulch mixture to prevent the risk of tearing the tarp during removal the next morning. During periods of high winds, extra weight will be added to the tarp and/or a narrow layer of soil and rocks will be applied to the edges of the tarp to prevent displacement of the tarp. In the event that the ADC can not be utilized for any reason, the working face will be covered with a minimum of 6-inches of soil or approved soil and mulch mixture until the problem is resolved.

Additional, Miscellaneous:

Due to the nature of the ADC, no testing (TCLP) of the material occurred.

Summary of Demonstration:

The ADC tarp has been utilized daily since receiving approval for demonstration of the ADC by DENR. Overall, the tarp has performed very well. Initially, it took the landfill operators a few days to become accustomed to restricting the size of the working face so that coverage was maintained. Soon, however, daily operation of the fill progression was adjusted and the smaller working face has become the norm. We also had one instance of the tarp being partially displaced by high winds. Since that time, we have added additional weights to the edges of the tarp, and had no reoccurrence of the problem. The lightweight and porous nature of the material is very user friendly. As mentioned above, wet weather and moderate winds pass over or through the material without adverse effects. Additionally, the tarp is relatively easy to manipulate.

In total, I believe that the ADC has successfully demonstrated effectiveness in meeting the requirements of Rule .1626(2)(a), and request approval of a Permit Modification for the full-time use of the ADC at the Haywood County MSW Landfill. I look forward to your response in this matter. Should you require additional information or have any questions regarding this request, please do not hesitate to contact me at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen King".

Stephen King
Director of Solid Waste Management