

## Research Project 21

# Developing and Implementing National Erosion/Sediment Control Specifications for Composted Products

Recycled Materials Resource Center

The final report for Project 21 is available on-line at:

## http://www.rmrc.unh.edu/Research/Rprojects/Project21/P21finalreport.asp

## **Project Objectives**

- Develop product and usage specifications for the use of composted (and similar) products in erosion and sediment control.
- Gain approval of the specifications, as well as their placement in American Association of State Highway and Transportation Official's (AASHTO) Standard Specifications for Transportation Mater-
- ials and Methods of Sampling and Testing manual.
- Promote the specifications through associated industries. The development of a national specification for the use of composted products in erosion and sediment control, which is then approved by AASHTO.



### **Project Progress**

The principal investigator developed this project around the three objectives above. Completion of all three objectives was considered crucial to the success of the project because erosion and sediment control techniques hinge on specific guidelines, best practices and specifications. Only through the development of such tools, as well as their approval through appropriate organizations, will end users accept organic materials for these applications.

The principal investigator was very successful in carrying out all three tasks. Two provisional specifications for compost for erosion/sediment control (filter berm) [MP-9] and for compost for erosion/ sediment control (compost blanket) [MP-10] were accepted by AASHTO in the spring of 2003. The specifications were developed by gathering and evaluating existing specifications from state DOTs and industry, as well as by reviewing past research and field demonstration data pertaining to the use of compost/mulch materials as both a soil blanket and berm material. At the request of industry and DOT reviewers, the PI also created an additional end product in the form of a database on nutrient release data from organic material to help regulators evaluate these applications. A formal information package pertaining to the use of compost/mulch in erosion and sediment control was developed and distributed to state DOTs. The package explained the AASHTO specifications and provided guidance on how to implement them. The information package

was also reformatted and will be published as an article in BioCycle magazine in the summer of 2004. In the meantime, Mr. Alexander has been promoting this project at industry trade shows. The project was completed in March. The final report and all related products can be found on the RMRC website.



A compost blanket being spread on an unvegetated slope to prevent erosion.



Follow-up photo of slope that was protected using a compost blanket. The slope shows thick, uniform vegetation and no evidence of erosion.

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Federal Highway Administration

## Project Partners

Biocycle Magazine, Green Horizons, U.S. EPA, Maine DOT, Texas DOT, Texas NRCS, CalTrans, Pennsylvania DOT, Minnesota DOT

## **End Products**

- Compost blanket erosion/sediment control specification submission to AASHTO
- Filter berm erosion/sediment control specification submission to AASHTO
- "Manuals of Practice" to be published and distributed by Biocycle
- Database on nutrient release information

## **Further Information**

The Recycled Materials Resource Center (RMRC), a cooperative agreement between the University of New Hampshire and the Federal Highway Administration, is a national center that promotes the appropriate use of recycled materials in the highway environment. Its focus is on the long-term performance and environmental implications of using recycled materials.

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#### RMRC

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