



Case Study: Sediment Run-off Management Using Products Containing Recycled Organics

| | |
|----------------------|---|
| Location: | M2 Motorway, Epping, NSW |
| Participants: | NSW Roads & Traffic Authority & Northern Sydney Waste Board |
| Product: | Enviro-media |
| Market: | Rehabilitation |

Enviro-media is a specifically engineered infiltration medium that uses selected organic matter or a blend of selected organic matter and minerals such as sand and soil that is used to physically, biologically and chemically purify or treat contaminated air, soil and water. Treatment and purification is achieved by physically filtering sediments and contaminants, chemically binding contaminants to organic matter and biologically degrading contaminants.

Many large building and construction projects such as freeway developments require measures to be implemented to control erosion and sediment run-off. The M2 Motorway in Northern Sydney passes through a number of ecologically sensitive bushland areas and has numerous embankments, escarpments, gardens and steep sloping sites.

With three traffic lanes each way and substantial paved surfaces, the potential for large volumes of surface run-off to cause erosion to sensitive areas is a major environmental concern. Although drainage systems are in place there are a number of areas that pose erosion potential.

A trial was established with the Roads and Traffic Authority on the M2 Motorway south of the Pennant Hills Rd. exit. The trial, which also included Abi Groups' toll-way management company Tollaust Pty Ltd., trialed a range of products containing recycled organics in and around median strip garden beds. The purpose of the trial was to compare the performance of these products with conventionally used products such as sandbags.

Operational staff indicate that the recycled organic content products (filter bags and filter socks) are more durable, easier to handle and potentially longer lasting than sandbags that degrade relatively quickly. The degrading sandbags are threatening the very same waterways they are intended to protect.

Dean Sullivan, Landscape Supervisor for Tollaust Pty Ltd. reports,

“ So far, the new products containing recycled organics are performing better than previously used methods. We believe this may lead to long term cost savings and reduce the risk of contaminating adjacent waterways.”

The trial is also expected to demonstrate that these recycled organic content products have a superior permeability rate than conventional products. The following picture shows the RO filter bags placed in front of degraded conventional sandbags on the M2 Motorway.

