

Case Study

Erosion Control

Sediment Run-off Management Using Reactive Filter Media
Project Manager: Tollaust Pty Ltd

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 are used to physically, biologically and chemically 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 could have potential erosion problems.

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 Safe Sox ® 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 Safe Sox ® are more durable, easier to handle and potentially longer lasting than sandbags which degrade relatively quickly. The degrading sandbags are threatening the very same waterways that 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.