Eclipse Soils saves water with ashes

Innovative Kwinana-based company Eclipse Soils has again shown that its comprehensive, scientific approach to soil manufacture can result in exceptional environmental and watersaving benefits for the whole community.

In the process of continually looking to improve its award-winning water-retentive soils, Eclipse Soils has collaborated with the Public Transport Authority to solve a unique problem arising from the State Government's move into rail car manufacture.

When the state decided to build the railway carriage workshops on the old shunting yards at Bellevue in Perth's north-east, it was confronted with what to do with thousands of cubic metres of boiler ash that had been dumped on the site through 90 years of steam engine transport.

Boiler ash from burning coal in steam trains covered the site and had to be removed before building could commence.

The Public Transport Authority was also aware that the government targets required 85 per cent of material removed through earthworks should be recycled.

Enter Eclipse Soils which, since 2008, has been developing water-retentive soils for large commercial infrastructure projects such as



Sean Bennet with the boiler ash at Kwinana. councils and developers. In 2012, Eclipse Soils was awarded the Australian Water Association Conservation and Efficiency Award by the Water Corporation and the Department of Water.

The company's products also carry the Smart Approved WaterMark, which is issued by The Water Conservancy and endorsed by the Water Corporation.

Eclipse Soils has never stopped searching for new and better ways to conserve water while developing high-quality soils, and the boiler ash presented another opportunity to enhance the products. The company has now received 30,000m³ of the boiler ash to its Kwinana resource facility that would have otherwise gone to landfill.

"Boiler ash has a high carbon content, which improves water retention and microflora and fauna, as well as nutrient retention. It also adds trace elements and improves the soil structure," Eclipse Soils General Manager Sean Bennett said.

The boiler ash is screened down to 10 mm to remove any large particles and blended with various soil inputs, including compost fines, clays, peats and spongelite.

"It also looks good, giving the soils a nice, dark colour, which is really popular with our customers," Mr Bennett said.

Mr Bennett was full of praise for the Public Transport Authority in grasping the importance of widespread use of water-retentive soil in the Perth landscape construction industry.

The State Government had introduced a requirement that all major infrastructure projects must adhere to reuse criteria.

"They have targets for 85 per cent of total re-use across the project and generally 50 per cent of that has to be re-used on-site," said Mr Bennett."