



# Geomembranes



**Case Study:** Albany Treated Wastewater Storage Dam Number Two  
**Client:** Water Corporation of Western Australia  
**Contractor:** JMS Civil and Mining Pty Ltd  
**Date:** 2008

## Overview:

The Water Corporation of Western Australia, were increasing capacity in Albany located on the south coast of Western Australia, 450 kms from Perth by constructing a second Wastewater Storage Dam.

The Water Corporation selected Trelleborg Elastoseal 1.00 mm thick for the project where it was used to line a channel 310 meters in length with a 70 metre radius curve. Elastoseal was appealing to the Water Corporation due to a number of reasons including; flexibility and elasticity, Specific Gravity higher than water (1.2), and, easy to install prefabricated panels.



## Logistics:

To meet the needs of the Client Trelleborg manufactured a single panel 310 meters long and 5 meters wide which was supplied to site as a single panel on an easily transported pallet. Using equipment and staff already on site, there was no need to employ specialist "installation contractors" to install the liner. A channel was dug; the membrane unrolled, and then back filling of the anchor trenches took place to anchor the liner in place.



Due to the flexibility of Trelleborg Elastoseal there was no requirement to cut and join wedges around the 70 metre radius of the channel, meaning that the installation was completed quickly and easily by JMS Civil and Mining Pty Ltd

## **EPDM – The Water Tight Difference**

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### **RUBBER MEMBRANE**

Elastoseal EPDM Geomembrane and vulcanised rubber liners. The long rubber molecules have been cross-linked to an elastic and chemically stable membrane. Strength and elasticity are not affected by high or low temperatures and physical properties are practically unchanged over decades of service, without becoming brittle, cracking or shrinking. This is also valid for exposed installations, while the rubber sheet stays unaffected by ozone and UV radiation.

### **SPLICING**

The Thermobond dual track seaming technique provides a fast, easy method for making quality seams. The seaming is performed with a thermal hot wedge, or hot air, producing a dual track seam that can be tested with air pressure. Another splicing method that can be used is the Hotbond-splicing technique that creates a completely vulcanised splice using a vulcanisation machine.

### **Elastoseal EPDM Geomembrane**

Has got what it takes for Landfill capping and leachate reservoir. It is flexible enough to accommodate all movements and settlements in the substrate without breaking. With performance that is not affected by age, temperature, mechanical loads, biological or most chemical influence.

### **FIELD OF APPLICATION**

Elastoseal EPDM Geomembrane is used for Capping of municipal landfills, leachate reservoirs at municipal landfills, surface water drainage from apartment block areas, road dams, ground water protection, dams, tanks and closed storage sites for industrial or agricultural waste and contaminated water. Elastoseal Pondliner can be used for ornamental lakes in parks and recreation areas, garden ponds, fish farming, zoological gardens, and irrigation reservoirs.

### **TRELLEBORG QAS**

Elastoseal EPDM Geomembrane and Elastoseal Pondliner are complete engineered geomembrane systems, where products, seaming, details, installation technique and on site quality assurance system guarantees a maximum of safety and performance.

### **ENVIRONMENT FRIENDLY**

Long lifetime in combination with low weight and volume makes rubber membranes an environmental friendly product throughout the entire life cycle. No chemicals are emitted or released. The rubber membrane leaves the environment unharmed. EPDM membranes can be burned (energy production), dumped or recycled with very little affect on the environment.



Trelleborg Engineered Systems Australia  
25 Glassford Road Kewdale WA 6105

Phone 08 9256 6000 Fax 08 9353 2550  
Email: [membranes@trelleborg.com.au](mailto:membranes@trelleborg.com.au)  
Web: [www.trelleborg.com.au](http://www.trelleborg.com.au)