

MACCNEWS

Issue 7

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MACCAFERRI GOES LIVE



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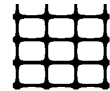
We are pleased to announce the introduction of our web site specifically designed for engineers, specifiers and users of our products. The easy navigable site contains a wide range of information on our

business, our products and solutions, including case studies and up to date news.

The information contained on the site will be reviewed on a regular basis to ensure that users are fully up to date with product use.

Product brochures and specifications contained in our binders along with software aids and product samples will still be available to customers on request.

TENSAR INTERNATIONAL



Tensar
international

Maccaferri NZ Ltd are pleased to announce that we have been appointed as exclusive Distributor for the **Tensar** range of geosynthetic products in the New Zealand and South Pacific markets.

The acquisition of Tensar to our portfolio enhances the existing Maccaferri business sectors which will remain unchanged. In particular, this will allow Maccaferri to offer a total package to

our existing and new clients serving their needs to an unprecedented level in geosynthetics.

Should you require technical assistance on any matters pertaining to the use and application of the Tensar product range, or any of our existing material solutions, please be assured that Maccaferri will be able to assist and continue to partner you nationwide.

Stock will continue to be available from our depots in Invercargill, Queenstown, Dunedin, Christchurch, Wellington, Palmerston North, Hastings, Tauranga, Hamilton and Auckland.

Wishing you and your staff a



Merry Christmas and



a prosperous New Year

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MACCAFERRI

**Continuing to partner
you NATION WIDE**

BENTOFIX ORNAMENTAL POND

A natural looking lake of approximately 400m² was constructed using Maccaferri's **Bentofix** solution.

The **Bentofix** replaced previous plastic liners that had not proved adequate.

Bentofix was being able to be easily placed to conform to the designed curves and shape of the pond and made for simple installation. Imported river run gravel was brought in to achieve a minimum of 300mm cover on top of the liner.



Bentofix with gravel cover prior to filling

Installation was easily achieved by the Landscape contractor to create a very natural looking and clear ornamental lake, with no liner visible and vegetation established to the water's edge.



Note clarity of water and grass up to water's edge



Finished Pond

PROJECT:

Ornamental Pond

LOCATION:

Havelock North, Hawkes Bay

CONSULTANT:

Beca Carter Hollings & Ferner

CONTRACTOR:

Drainways Contracting

DATE:

April 2002

PRODUCT:

Bentofix X100

AEON PROTECTION OF EPS FROM HYDROCARBON DAMAGE

The use of expanded polystyrene (EPS) as a lightweight fill for construction over poor load bearing soils was employed on the Botany Downs Town Centre development in East Tamaki.

To protect the EPS from damage in areas where petrochemical spillage could accumulate the polystyrene fill was lined with **Aeon** Elvaloy flexible geomembrane.

Aeon is a specialist plastic liner having high resistance to a wide range of petrochemicals. It is ideally suited to this application as it's flexibility allows it to conform to the rectangular block structure and it may also be prefabricated into large panels to limit on site welding.

Aeon has high elongation and biaxial strength giving it good resistance to puncturing and tearing.

The unique properties of **Aeon** mean it has application in lining of petrochemical storage facilities, truck washdown areas, contaminated sites and tank linings.



Polystyrene block after encapsulation

PROJECT:

Botany Downs Town Centre

LOCATION:

East Tamaki, Auckland

CONSULTANT:

Tonkin & Taylor

CONTRACTOR:

Works Infrastructure

LINER INSTALLER:

Skellerup Industries

DATE:

November 1999

PRODUCT:

Aeon 0.75mm



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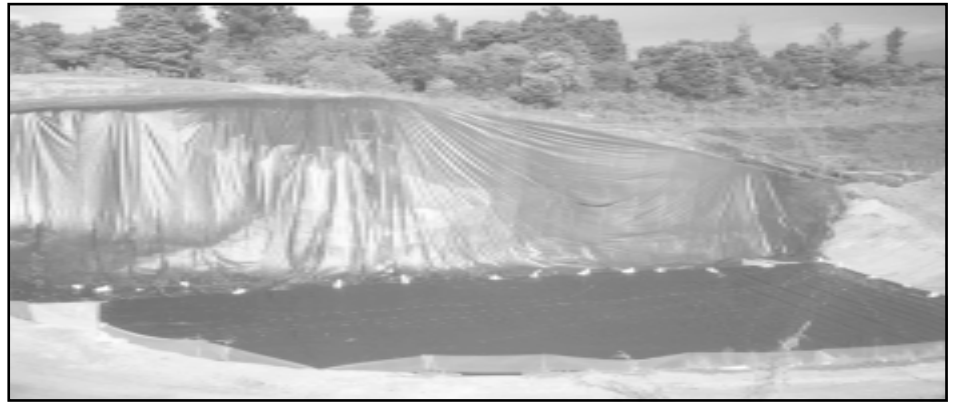
ISO 9002

MILLENNIUM FOR WHAKATANE

The 3,500m² of reinforced geomembrane liner stalled at the Whakatane District Council's Burma Road landfill last November has helped the council to extend the life of the site. Having been granted resource consent to continue using the landfill for a further five years, the council took positive action to contain potential leachate.

The liner chosen was reinforced **Millennium** flexible polypropylene liner, which was specially selected for its high tensile strength, conformability and puncture resistance.

The dimensions of the site made it a difficult project with a very steep wall 100m long and ranging from 12 to 20m in height. To minimise field welds, large panels of the liner were prefabricated before being transported to Whakatane.



Reinforced Millennium Liner

On site the prefabricated panels were laid in position at the top of the landfill's vertical face for welding and seam testing before the liner was secured in a specially designed reverse anchor trench. The liner was then deployed down the vertical face of the landfill by attaching geoclamps. The base liner was then laid in place and welded to the vertical face liner to complete the installation.

PROJECT:
Burma Road Landfill
LOCATION:
Whakatane
CLIENT:
Whakatane District Council
CONTRACTOR:
Waiotahi Contractors
INSTALLER:
Skellerup Industries
DATE:
Nov 2001
PRODUCT:
Millennium 1.1mm Reinforced

GCL SEMINAR/WORKSHOP

In November 2002, Maccaferri NZ Ltd, conducted a Seminar/Workshop in Auckland on the International trends in use for liners and special geosynthetics. This Seminar was well received with over 50 key industry personnel from around the country in attendance. The organisers were privileged to have five International Keynote speakers who gave presentations related to the use of geosynthetic systems in containment, environmental and coastal engineering. One of the main focal points of the Seminar was "Minimising Environmental Impact and Material Resources".

Maccaferri N.Z. are the distributors of leading International Liner Systems including; Bentofix GCL's, Flexible Polypropylene (Millennium) and Elvaloy Kee (Aeon) and HDPE (G.S.E.). In liner protection and hydraulic works, Maccaferri distribute Terrafix specialist heavy (1 to 3kg/m²) non woven geotextile cushions and fabricated tubes and bags for coastal works.

The five presenters were:

Mr Kelvin Legge - Department of Water Affairs & Forestry S.A.
Mr. Peter Davies - Kaytech Engineered Fabrics, S.A
Mr John Cowland - Consulting Geotech & Geosynthetic Eng, Hong Kong
Dr. Michael Heibaum - Fed. Waterways Eng. & Research Inst. Germany
Mr Kent P. von Maubeuge - Naue Fasertechnik GmbH, Germany

The papers presented at the Seminar/Workshop are available on CD Rom from your nearest Maccaferri Office.



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ISO 9002

BENTOFIX FOR OCEAN TERMINAL

The project involved the relocation of four massive fuel tanks from Marsden power station by sea barge over a distance of approximately 300km to Mt. Maunganui, Tauranga. Each 40m diameter tank weighed 400 tonne.

The secondary containment bund liner for the tank farm design detailed the use of a 2mm textured HDPE liner in the area below the tank and **Bentofix X1000**.



Placement of Bentofix over HDPE liner

Bentofix X1000 geosynthetic clay liner (G.C.L.) was used as part of the

secondary containment system within the bund wall around the four large tanks that made up the complex. **Bentofix** is a composite liner system consisting of heavily needled nonwoven fabric and high quality bentonite sandwich. **Bentofix** was easy and quick to lay and required no specialist welding details with edges being lapped to effect a water proof seal.

Bentofix is being regularly used in a wide variety of engineering and architectural landscape applications, reservoirs and waste containment. A single layer of **Bentofix** G.C.L. has very low permeability when hydrated and can replace the equivalent of up to one metre of engineered compacted clay fill without the concern of site quality issues often associated with bulk earthworks and dessication cracks in clay.

McConnell Smith's innovative approach to this project won awards at the Contractors Federation Annual Conference.

PROJECT Gull Petroleum Ocean Terminal
LOCATION Mt Maunganui
CLIENT Gull Petroleum
CONSULTANT Beca Carter Hollings & Ferner
CONTRACTOR McConnell Smith Ltd
DATE August 1998
PRODUCT Bentofix X1000

Errors & Omissions

In our previous Issue 6 there was an error in the item on Tauranga Sand Tubes. The location for this project is McMillan Reserve, Beach Road, Katikati and the Council should have read Western Bay of Plenty District Council. We apologise for any inconvenience due to this error.



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For further information about these projects or products listed freephone 0800 60 60 20



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