

# May 2019 Vol. 1

Author : GNA

## GNA the Leading Geosynthetics eNews Magazine Covering the Geosynthetics Industry

---

### **Lining of Vale Mine Canal with Carpi Geomembrane - Major Shutdown Capital Project – Vale Indonesia**

<https://www.youtube.com/watch?v=TrU7IChBZfw>

### **Expert Report Released on Australian Tailings Dam Failure (Declassified)**

Excavations at the toe of the Northern Tailings Storage Facility (NTSF) at Newcrest Mining's Cadia copper-gold operation in New South Wales, Australia, contributed to the tailings dam's failure, an expert review of the March 9, 2018, incident has found

<https://www.miningmagazine.com/life-cycle-end-of-life-management/news/1361881/newcrest-releases-details-on-cadia-tailings-dam-failure>

### **Fracking Court Case Update - Court dismissed the claims for strict product liability against Halliburton Energy, Services, Saxon Drilling, and Solmax International, Inc. (but left intact a claim for negligence against Solmax)**

[https://udayton.edu/directory/law/documents/watson/blake\\_watson\\_hydraulic\\_fracturing\\_primer.pdf](https://udayton.edu/directory/law/documents/watson/blake_watson_hydraulic_fracturing_primer.pdf)

### **Geocomposite Peel Strength Failures Cause Concern Through Geosynthetics Industry (Special Feature)**

More than a decade ago, a third-party case study described a geocomposite drainage layer installed as part of a landfill cap system. The project was typical and progressing exactly as planned with all appropriate construction and installation procedures being followed according to standard industry practice. Yet, as the filler sand was being placed on the composite, onsite construction quality assurance personnel began noting a tearing sound. Somehow, this geocomposite that had passed all standard testing of the time was failing as the geotextile was actively delaminating from the geonet. How could this happen?

In late 2018, Richard Thiel published a follow-up article discussing the shortcomings of the test methods used in ASTM D7005 'Standard Test Method for Determining the Bond Strength (Ply Adhesion) of Geocomposites'. To summarize, he shows that there is significant variability of peel strength across a roll width. For this reason, the five samples required for ASTM D7005 is likely to overlook potential defects in the geocomposite as it did more than a decade ago.

<https://agruamerica.com/suggested-changes-to-a-test-method-illustrate-the-importance-of->

[continuous-development-of-quality-control-processes/](#)

### **Fine Ash Tailings Dam and its Impact on the Underlying Aquifers**

An impermeable liner is recommended prior to the tailings dam fill

<https://www.sciencedirect.com/science/article/pii/S0301479719304918>

### **Golder Associates Seeking Geotechnical Tailings Engineer (QLD)**

[https://www.recruit.net/job/senior-geotechnical-tailings\\_queensland\\_jobs/F9C10753FD95A993](https://www.recruit.net/job/senior-geotechnical-tailings_queensland_jobs/F9C10753FD95A993)

### **Raven Release Annual Report 2019 (Declassified)**

Engineered Film's operating income decreased by 16.1% to \$39.7 million from \$47.3 million in the prior year. The decrease in operating income was led by lower plant utilization from the reduction in hurricane recovery film sales and approximately \$2 million of cost over-runs on a large geomembrane installation project that was completed in the fourth quarter of fiscal 2019. The geomembrane and construction markets had the largest increases in net sales, but all markets were up year-over-year. Engineered Films achieved sales growth due to improved end-market demand and increased market share. Delivery of hurricane recovery film to support relief efforts and the recent acquisition of CLI contributed net sales of \$24.2 million and \$13.1 million, respectively.

[http://www.annualreports.com/HostedData/AnnualReports/PDF/NASDAQ\\_RAVN\\_2019.pdf](http://www.annualreports.com/HostedData/AnnualReports/PDF/NASDAQ_RAVN_2019.pdf)

### **Raven Exhibiting its Dura-Skrim™ and Absolute Barrier™ Geomembranes at Major Wastewater Exhibition**

<https://ravenefd.com/news/join-raven-at-esos-may-15-17-in-tn-water-wastewater-containment-systems>

### **FGI Welcomes Tonkin + Taylor**

The Fabricated Geomembrane Institute (FGI) is pleased to welcome its newest consultant member– New Zealand's leading environmental and engineering consultancy, Tonkin +Taylor. Head-quartered in Auckland (NZ), Tonkin + Taylor operates throughout the South Pacific, Australasia and Southern Asian region. The company is 100% employee owned and operated and is highly experienced and skilled at delivering significant solid waste, transport, utilities, coastal management, flood protection and climate change adaptation capital works programs. Their FGI liaison is senior civil/environmental engineer Jonathan Shamrock,

<https://www.fabricatedgeomembrane.com/about-us/industry-and-member-news>

### **Raven Industries' RPE geomembrane Selected to Resist Failure from Rapid Drawdown**

This proved challenging because there are few geomembranes that can withstand the design rapid drawdown

The Taproot Storage Pond is a fresh water storage pond intended to service oil fields in Northeastern Colorado. This pond also had a rapid drawdown design issue because the drilling process utilizes a large volume of water for the oil/gas well development. The bottom liner system consists of a geomembrane placed on the existing fine-grained soils that had to be ballasted to prevent failure during rapid drawdown. Also designed by J & T Consulting, with civil operations performed by Northern Colorado Constructors, this project posed many challenges from a design and construction standpoint. A geomembrane that could not only withstand the

harsh chemical and windy conditions of the eastern Colorado plains, but also could be installed in a short installation window, was needed. Raven Industries' 45 mil thick RPE geomembrane (see Figure 5) was used because of its durability and longevity in harsh conditions, as well as designing of an integrated ballast system for the slopes that would ensure that the high winds and rapid drawdown would not affect liner system integrity.

<https://www.fabricatedgeomembrane.com/about-us/industry-and-member-news>

### **Geomembrane Durability Study**

Geomembrane samples were previously collected and tested after two, four, five, ten and twenty years in the basin, and the materials still meet the original specifications. Following the retrieval of the 20-year samples, it was determined that there was sufficient space available in the basin to install additional materials. After discussions with the MN DNR, it was decided to install eight new materials with dimensions of 6-feet (1.8-m) wide and 25-feet (7.6-m) long. These samples also contained a seam at the centerline, but all seams were created using a thermal welder. The FGI and the MN DNR installed eight additional geomembrane material samples on the bottom of the mine settling. The eight new geomembranes installed are:

- \* 36-mil reinforced polypropylene, provided by Cooley Group (CG)
- \* 30-mil single film laminated woven coated polyethylene, provided by Owens Corning Inc. (OC)
- \* 30-mil single scrim coated woven coated polyethylene, provided by Intertape Polymer Group (IPG)
- \* 40-mil unreinforced LLDPE, provided by Raven Industries (RI)
- \* 30-mil XTRM Ply ethylene interpolymer alloy (EIA) formulation geomembrane, provided by Engineered Polymer Technologies (EPT)
- \* 30-mil XR-5 ethylene interpolymer alloy (EIA) formulation geomembrane, provided by Seaman Corporation (SC)
- \* 30-mil PVC geomembrane, provided by Plastatech Inc. (PI)
- \* 30-mil smooth HDPE geomembrane, provided by GSE Environmental (GE)

### **ExcelPlas Develops Rapid Screening Test for Assessing Durability of Geomembranes in Mining Liquors**

Contact: [john@excelplas.com](mailto:john@excelplas.com)

### **Revitalizing the Beach with Geotextile Breakwater**

<https://iopscience.iop.org/article/10.1088/1755-1315/248/1/012080/pdf>

### **Ramsey Completes China Geosynthetic Education Tour**

<https://www.boydramseyconsulting.com/ramsey-completes-china-tour/>

---

**Stay Up to Date with the Latest Geosynthetic News by Signing Up for the GNA Newsletter!**

<https://www.geosyntheticnews.com.au/subscribe/>

- GNA now has +30,000 views per month
- Articles published on GNA get thousands of views and are distributed widely through 3rd Party Affiliates
- GNA is now the most read source of Breaking News on Geosynthetics Worldwide
- Since GNA is published up to 12 times per month, no other source of Geosynthetic Industry News comes close to being as current and up-to-date
- In 2017 we have increased readership by 10,000+ though India, Africa and Asia
- Special Advertising Packages Available for Geosynthetic Manufacturers, Installers, and Service Providers.

### **ExcelPlas Geosynthetics Testing Expands Geosynthetic Testing Offerings**

ExcelPlas now performs more than 120 standard geosynthetic tests in accordance with relevant ASTM, GRI and ISO standards.

We have extensive experience with all types of geosynthetics - from geomembranes (HDPE, LLDPE, fPP), geotextiles to geonets, geogrids, geocomposites and geosynthetic clay liners (GCLs).

As a Nationally Accredited Testing Laboratory, our technicians, equipment and quality system are monitored regularly for proficiency and compliance assuring that you can count on quality results every time.

? Geosynthetic News Alerts - Your Global Source of Geosynthetic News and Technology. Current and Updated!

<http://www.geosyntheticnews.com.au>

Among GNA's objectives are:

- To promote and educate on the development of specifications and practices that help ensure the proper use of geosynthetics.
- To locate, interpret and disseminate new scientific research to manufacturers and users of geosynthetic materials.
- To enhance the knowledge and awareness of contemporary geosynthetic technologies amongst specifiers, users and installers.

? GNA – World's Leading Source of Breaking News on Geomembranes, Geotextiles and other

Geosynthetics

**This Newsletter is brought to you by ExcelPlas Labs ? Australia's Largest group of Geosynthetics Testing Labs.**

<http://www.excelplas.com/>

GNA is currently sent to over 7500 Geosynthetic Industry Members Globally every week.

Any news requests should be sent to [john@excelplas.com](mailto:john@excelplas.com)

To subscribe, visit <https://www.geosyntheticnews.com.au/subscribe/>

GNA™ (Geosynthetic News Alerts™)

GBN™ (Geosynthetic Breaking News™)

GNAu™ (Geosynthetic News Australia™)

GNAf (Geosynthetic News Africa™)

GNC™ (Geosynthetic News China™)

GNCa™ (Geosynthetic News Canada™)

GNI™ (Geosynthetic News India™)

GNInd™ (Geosynthetic News Indonesia™)

GNU™ (Geosynthetic News United States™)

(c) 2019 Copyright ExcelPlas Labs ? and Geosynthetic News Agency