June 3, 2019

Pascal Saunier
Afitex Texel
Tel: 514-792-7724
Email: psaunier@draintube.net

Subject: Electrical Leak Location testing on Draintube Product

Dear Mr. Saunier,

TRI Environmental (TRI) performed electrical leak location testing on the primary geomembrane of several installed ponds, with the Draintube product installed between the primary and secondary geomembranes. The Draintube product was the sole carrier of current for the electrical leak location methods applied. The applied methods included the water puddle and arc testing methods. Each method is described below. Both methods were successfully applied and leaks were detected in the primary lining systems.

WATER PUDDLE METHOD (ASTM D7002)

The water puddle method is used for exposed geomembranes. Water is sprayed onto the liner as an electrically conductive medium. A low voltage supply was grounded to the underlying conductive layer (Draintube product) and connected to the water puddle probe. In the presence of a hole, current flows from the probe, through the hole to the conductive layer beneath the liner. An ammeter in series with the probe converts the increase in current to an audible signal, which alerts the operator of the presence of a leak.

ARC TESTING METHOD (ASTM D7953)

The arc testing method utilizes a very high voltage, which is impressed across the geomembrane. The voltage source was grounded to the underlying conductive layer (Draintube product) and connected to the arc testing probe. In the case of a breach in the geomembrane, the equipment forms an electrical arc through the leak. The equipment produces a visual and audio alarm with the formation of the arc, alerting the operator of the presence of a leak.

If you have any questions regarding the information provided, please feel free to contact me at your convenience.

Abigail Gilson, P.E.
Director of Liner Integrity Services,
TRI Environmental, Inc.