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Debut of Portuguese Geomembrane Manufacturer Evolution and Newpack (E&N)

<https://evolucaoenewpack.com/en/products/geomembrane/isoterra-hdpe-geomembrane/>

New Player in HDPE Geomembranes – Isoterra™ HDPE

<https://evolucaoenewpack.com/en/products/geomembrane/isoterra-hdpe-geomembrane/>

Organic Contaminant Diffusion in Triple-layer Composite Liner System Considering the Effect of Degradation

<https://link.springer.com/article/10.1007/s11440-019-00783-0>

Liquid Flow Mechanism at a Geosynthetic Clay-Liner Overlap- New Publication

https://www.researchgate.net/profile/Isuri_Weerasinghe/publication/331522672_Liquid_Flow_Mechanism_at_a_Geosynthetic_Clay-Liner_Overlap/links/5c7e383ba6fdcc4715afb4ba/Liquid-Flow-Mechanism-at-a-Geosynthetic-Clay-Liner-Overlap.pdf

Jaylon QLD Seeking Geomembrane Technicians

<https://www.seek.com.au/job/38430172?searchrequesttoken=9074b189-1896-46fe-addf-66e7ff0abcd3&type=standard>

Aeramix Floating Disks Has Evaporation Covered

<https://cloud.excelplas.com/index.php/s/PBBW86GjtSzKZM0>

New Cement Panels Made with HDPE Geogrids

<https://www.sciencedirect.com/science/article/pii/S2214785318328566>

Flexible Geosynthetic-Concrete Matting Solutions

<https://www.earthlok.com.au/>

ExcelPlas Assuring the Quality and Durability of HDPE Geomembrane Liners

The use of geomembranes for the containment of solid and liquid waste, for the collection, containment, and conveyance of water, for the pollution protection of groundwater has grown rapidly in recent years. The geomembrane of choice for chemical resistance is still HDPE.

There is approximately 40 years of experience with HDPE liners, during which there have unexpectedly been a number of failures and problems, but from which much has been learned.

However more testing and analysis needs to be done with respect to an HDPE geomembranes particularly in the following areas;

- The effect that blooming of antioxidants in the high performance grades has on field welding
- Heat distortion and partial melting of glossy HDPE liner due to solar heating of parabolic geometries
- Compatibility of HDPE and BGM liners in intimate contact
- Methods for assessing uniformity of antioxidant dispersion in extruded liners
- Premature Embrittlement of white layers on white-surface black geomembrane
- Stress Cracking of HDPE geomembrane due to PFAS detergents/surfactants
- OIT depth profiling through the thickness of HDPE liners to model Fickian diffusion of additives
- Use of Non-Reactive HALS for HDPE liner exposed to highly acid service environments.
- Use of Cyclic Flex testing (Fatigue Testing) to predict long-term integrity of HDPE double wedge welds and the influence of the Heat Affected Zone (HAZ)

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

Cirtex NZ Offer Hatelit™ Composite Reinforcing Geogrid for Asphalt Reinforcement

<https://cirtexcivil.co.nz/product/hatelit/>

Brazilian Prosecutors Probe More Than 100 Tailings Dams Following Deadly Collapse

<https://www.wsj.com/articles/brazilian-prosecutors-probe-more-than-100-dams-following-deadly-collapse-11552503686>

Sconset Erosion-Control Workgroup Considers 3000 Foot Expansion of Geotextile Tube

<https://www.ack.net/news/20190314/select-board-considers-forming-sconset-erosion-control-workgroup>

3D Confinement System Protects and Stabilizes Eroded Embankments

<https://www.estormwater.com/channel/casestudies/3d-confinement-system-protects-stabilizes-eroded-embankment>

Behaviour of Sandy Soil Reinforced with Geotextile Layer having Partially and Fully Wrapped Ends

<https://www.icevirtuallibrary.com/doi/abs/10.1680/jgrim.18.00102>

Problem Question for GNA Readers

A landfill containing system is used to prevent leakage of contaminants from the landfill into the soil stratum after the rainfall. The system consists of a thick layer of clay (highly impermeable material) placed between the landfill and the surrounding soil stratum, and a layer of synthetic material called geomembrane placed above the clay material to provide additional protection.

The quality of workmanship during construction may not be completely satisfactory. First, the clay might have been compacted poorly; second, the geomembrane might have holes punctured by sharp stones that were not detected during inspection. Additionally, extremely heavy rainfall could happen during the operation of the landfill, which could induce excessive pore pressure on the geomembrane and clay layers.

The site engineer believes that leakage will happen if “during extremely heavy rainfall”, and either the clay was not well compacted or there were holes in the geomembrane (call this event E1). Leakage can also occur if “during ordinary rainfall”, but only when clay was not well-compacted, and the geomembrane contained holes (call this event E2).

The site engineer has determined the following:

- The probability of the clay not being well compacted (C) is 15% (i.e $P(C) = 0.15$)
- The probability of the geomembrane containing holes (H) is 25% (i.e $P(H) = 0.25$)
- The probability of having extremely heavy rainfall (R) is 15% (i.e $P(R) = 0.15$)

The quality of the construction has no effect on the rainfall, but if the geomembrane contained holes, the probability of not having well compacted clay increases to 50%.

- a. Express E1 and E2 in terms of the symbols defined above.
- b. Determine the probability of events E1 and E2.
- c. Are C and H mutually exclusive? Are C and H statistically independent? Are events E1 and E2 mutually exclusive? Provide explanations to support your answers.
- d. Determine the probability of leakage for this landfill containment system.

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- 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.

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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.

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