



Second installation of ground-breaking Australian graphene innovation

- **Second successful installation of Imagine IM's graphene coating for geotextiles**
- **Provides hole detection for tailings dams and containment tanks**
- **Lower cost of materials, and lower installation cost**
- **Holes down to 0.7 mm can be detected**
- **Firm purchase orders for coatings to cover 100,000 m² received**
- **Case studies of first installations will aid US market entry**

Imagine Intelligent Materials (Imagine IM), Australia's leading graphene applications company, is delighted to announce the second commercial installation of its pioneering imgne[®] X3 solution, at a Queensland coal seam gas site.

The two-stage, world-first installation was completed during the 2nd week of May. The installations comprise a total of over 10,000 square metres of bidim C geotextiles, manufactured by Geofabrics Australasia and coated with Imagine IM's imgne[®] X3. The conductive coating enables detection of holes as small as 0.7 mm using pre-existing, proven electrical testing techniques.

Frequently described as a "wonder material", graphene was isolated in 2004 and among other attributes is an excellent conductor of electricity. Imagine IM is one of a handful of companies globally that has established paths to market for graphene. The company has also established Australia's first commercial graphene manufacturing plant with a capacity to produce over 10 tonnes of graphene per year.

"These CSG installations validate our ability to deliver solutions for civil engineering and infrastructure. Geosynthetic materials are a key component of all infrastructure building, and mining, waste and water management represent a major market opportunity for us" said Imagine IM CEO Chris Gilbey.

The solution allows operators to reduce the risk of leakage of toxic leachate from CSG mining into groundwater and aquifers.

"Installers told us that they were impressed by both the efficiency of the product and the ease of installation" Gilbey continued.

"This is an important first step toward delivering our vision of graphene-enabled smart materials that can report changes in stress, temperature and moisture in real-time. Our vision is for our solutions to be a valuable component of both manufacturing and infrastructure in the future."

Case studies from the two installations will give compelling evidence of the value of imgne[®] X3 in identifying leaks in dams and containment systems before commissioning. These will assist Imagine IM's entry into the US market.

The installations are a major step towards global market penetration in the geosynthetics industry, currently experiencing 11 per cent CAGR and predicted to reach over \$US15.4 billion by 2019, according to research firm Markets and Markets¹. The expansion of Coal Seam Gas mining is driving growth of geosynthetic sales at a much higher rate than the general market.

Imagine IM is also pleased to announce that it has achieved firm purchase orders for its sufficient imgne[®] X3 over the next four months to coat a further 100,000 square metres of geotextiles.

Imagine IM's unique business model includes licensing, certification and manufacturing of graphene-based solutions, expertly developed for specific applications. The imgne[®] X3 coating was manufactured at the company's pilot plant in Geelong. The company is the lead industrial partner in a research centre at Swinburne University to study graphene throughout the supply chain.

Imagine IM has research development partnerships with a number of Australian universities that it believes position the company as a global leader in the commercialisation of graphene solutions.

For further information please contact:

¹ <http://www.marketsandmarkets.com/PressReleases/geosynthetics.asp>

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About graphene:

Graphene's discoverers were awarded the Nobel Prize in 2010. Graphene is the first two-dimensional material and is classed as a "super-material" offering extremely high electrical and thermal conductivity, hydrophobicity, strength, and impermeability to all gases.

About Imagine Intelligent Materials:

Imagine IM is the leading Australian developer of graphene-based coatings for industrial textiles and fibres. It was founded in 2014 by a group of scientists led by Chris Gilbey and Phil Aitchison, with a vision to create disruptive products and solutions that use graphene. Imagine IM has developed a licensing and certification model to ensure that participants in the supply chain are required to meet a set of standards of materials quality. Imagine IM is the first company in the world to develop conductive geosynthetic materials using functionalised graphene.