

Satellite Imagery Reveals Tiltex Barrier Failure at Drainage Control Mining Project for Newmont Mines

By GNA Sub-Editor

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Satellite imagery has uncovered a significant liner failure at the Havieron gold-copper project in Western Australia's Paterson Province. The failure pertains to the Tiltex ground surface barrier installed on the slopes of the mine portal, which serves as the entry point to the underground ore body.



Figure 1. Shows the Tiltex surface barrier failure (in red) on the slope of the portal of the Havieron gold-copper mine in WA. [Google Maps link [here](#)]

The photograph below which is a highly magnified image of the failure zone with digital enhancement shows the crumpled barrier piled on the bench.



The photograph below taken around the time of installation of the liner shows no issues with the liner. (Source Tiltex Australia Press Release June 2024

<https://cloud.excelplas.com/s/ypiiZONfUKdeA9g>)



Understanding the Tiltex Barrier Failure

The liner, specifically identified as the Tiltex 10B Basalt fibre enhanced Anti Cracking GCCM, was installed to prevent erosion and stabilize the box cut benched batter sidings leading to the underground access tunnel. However, recent satellite images indicate failure and collapse.

Implications and Future Considerations

The failure of the GCCM liner at Havieron raises several concerns and necessitates immediate action and reconsideration in several areas:

- **Material Selection and Longevity:** The apparent rapid deterioration of the Tiltex liner despite its intended durability calls into question the selection of materials and their suitability for the harsh environmental conditions typical of the Paterson Province.
- **Structural Integrity:** The incident underscores the importance of robust structural engineering and material science in mining infrastructure projects. Future designs may need to incorporate more durable and resilient materials or alternative stabilization methods.
- **Environmental Impact:** The environmental impact of such failures, including potential soil erosion and contamination risks, must be carefully assessed and mitigated to ensure the project's compliance with environmental standards and sustainability goals.
- **Operational Continuity:** The access provided by the portal is crucial for ongoing mining operations at Havieron. Addressing the liner failure promptly is essential to avoid disruptions and maintain operational efficiency.

Conclusions

The discovery of the Tiltex barrier failure at Havieron through satellite imagery serves as a poignant reminder of the challenges inherent in large-scale mining projects and the critical importance of robust infrastructure and material selection. As efforts continue to address and rectify this issue, stakeholders must collaborate closely to implement effective solutions that ensure the long-term viability and sustainability of mining operations in the region.

As developments unfold, further assessments and remedial actions will likely be necessary to safeguard against similar incidents in the future and uphold environmental and operational integrity at the Havieron project site.