

**Product Evaluation**

Product ID: 8030-1-1  
Initiation Date: March 2011  
Revision Date: March 17, 2011  
Expiry Date: March 2014

**RE: Review of TEPHRALITE (Lightweight Volcanic Aggregate)**

**PRODUCT**

TEPHRALITE is manufactured by Lava Works, Lightweight Advanced Volcanic Aggregates Inc located in Coquitlam, British Columbia and distributed by Lightweight Advanced Volcanic Aggregates Inc located in Coquitlam, British Columbia.

**VENDOR CLAIMS AND INFORMATION**

**CLAIMS**

TEPHRALITE significantly reduces weight, minimizing lateral and overburden pressures which can cause structural movement. TEPHRALITE offers good insulation and improved drainage which minimizes hydrostatic loading, is ideal for around and over pipe lines, and storage tanks. The inherent properties of TEPHRALITE make it perfect for supporting roadways in sensitive ground conditions with poor load bearing characteristics where settlement and heaving potential exists. Web link for this product: <http://www.lavaworks.ca/>

**DESCRIPTION**

TEPHRALITE is comprised of basaltic volcanic rock deposited in molten form it is quarried and consists of red to grey vesicular basalt and black to dark grey scoria.

**POTENTIAL USAGE**

TEPHRALITE is used for lightweight construction backfill, trench fill, road base and embankment fill and lightweight concrete aggregate. TEPHRALITE advantage over traditional lightweight materials is well established, its ease of transportation and installation reduces construction time and costs.

**STANDARDS**

Many ASTM Standards for backfill material

**ALBERTA TRANSPORTATION COMMENTS**

**EXPERIENCE**

Alberta Transportation has no experience with this product.

**APPLICABLE STANDARDS**

Alberta Transportation references the specifications for Bridge Construction – Section 2 – Backfill.

**RECOMMENDATIONS:**

TEPHRALITE be listed as a Potential Product under Alberta Transportation Products List, Backfill – Lightweight Fill – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

**TRIAL PROJECTS**

Joe Filice

cc New Product Evaluation Standing Committee – Roger Skirrow  
Jim Poole  
Dave Beusyen  
Jim Gavin