

Product Evaluation

RE: NGP-DSS-VFCA-H6

PRODUCT INFORMATION

Product Name: NGP-DSS-VFCA-H6 Manufacturer: Next Gen Polymers, Coeur d’Alene, Idaho, USA
Website: www.nextgenpoly.com Supplier: SureCap Solutions Inc., Cold Lake, AB

VENDOR CLAIMS AND INFORMATION

CLAIMS

When used for pipe abandonment, the NGP-DSS-VFCA-H6 foam can be injected into abandoned pipelines to prevent collapse and ensure long-term stability. Its expansive properties enable it to fill voids and cavities efficiently, providing robust support and mitigating the risks of subsidence. Additionally, in soil stabilization, polyurethane foam enhances ground stability by penetrating and consolidating weak soil structures, thereby improving load-bearing capacities and reducing erosion. Its quick-setting nature, high compressive strength, and adaptability to different environmental conditions make it an ideal choice for the critical applications, ensuring both durability and reliability.

DESCRIPTION

NGP-DSS-VFCA-H6 is a two component pour-in-place closed cell, high density, polyurethane foam providing excellent structural performance. NGP-DSS-VFCA-H6 uses a water-blown agent to expand the polyurethane polymer into a cellular insulation.

POTENTIAL USAGE

Filling abandon pipelines, void fills.

STANDARDS

ASTM D1622: Pour-In-Place Density	ASTM C1621: Compressive Parallel to Rise
ASTM C1623: Tensile Strength	ASTM D273: Shear Strength
ASTM D2856: Closed Cell Content	ASTM C355: Water Vapor Transmission
ASTM D 2842: Water Absorption	

ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS COMMENTS

EXPERIENCE

Transportation and Economic Corridors has no experience with this product.

APPLICABLE STANDARDS

Transportation and Economic Corridors specification 2.4 Culverts for grouting of abandoned culverts.

RECOMMENDATIONS

NGP-DSS-VFCA-H6 be listed as a Potential Product under Transportation and Economic Corridors Products List, Void filling – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

RESTRICTIONS ON USE

Caveat:

- 1) High density pour foams may exhibit excessive heat and exotherm so testing should be done to qualify the thickness of pour for the end Mine-Fill/Void-Fill application. Too great of a pour could contribute to thermal splitting or fire.
- 2) Minimum compressive strength of 0.5 MPa is required to prevent future collapse of the culverts.

TRIAL PROJECTS

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