

MINESEAL, LLC

Engineered Foam Solutions

GOT CLOSURE?... GET PUF-Seal®



MINESEAL, LLC

- Woman & Veteran-owned small business
- Produce, package & distribute, PUF-Seal®, a polyurethane foam mine cavity sealant
- Pre-closure u.g. safety assessments by certified MSHA and/or CMEs
- Pre-closure surface/u.g. bat-surveys
Engineering design of bat gates, cupolas
- Field going engineers & geologists have yrs of actual hands-on foam plug installation
- Mining, geological & environmental services on small mine development, clean-up, operation and mine reclamation. CERCLA

MINESEAL PUF-Seal® (Products)

- Box - 1 yd³ - portable, 200 lbs burst-strength
- Bucket sets, 1.5 yd³ - require 3rd mixing bucket
- Barrel sets (14 yds³) for mechanical application
- Field site training in PUF set-up / application
- PPE field kits (Tyvex, boot covers, eye goggles and vinyl gloves)

PUF-Seal® - Boxed



PUF-Seal® - 1/3 yd³ bag



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PUF-Seal® - Ready to Mix



2007/01/26

PUF-Seal® Use

Construct bottom or back wall to hold PUF - US Bureau of Mines

Polyurethane foam (PUF) is wet-mixed on-site in 6 mil poly bags

Plastic divider removed, chemicals mix, PUF forms, spray/pour

PUF results from exothermic reaction forming CO^2 gas + heat

IMPORTANT: Mix well, pour slow (18" lifts) & never into rising foam

Use local mine waste, grout to protect PUF from fires or UV light

PPE recommended - Class C u.g./confined areas use forced air

PUF-Seal® Facts

Compressive strength typically low (10-15 psi)

1 ft³ holds 1,140 lbs in compression, forces transferred

PUF unaffected by acidic water; Concrete degrades

PUF life unknown - Foam plugs still in place after 30 yrs

PUF foam can be removed should metal economics change

PUF is a non-hazardous substance; DOT Class 55

PUF is an alternative closure method - Not for every site

PUF-Seal® Field Applications

- Mine adit closures
- Mine shaft closures
- Set culvert bat gates
- Well / cistern closure
- Misc construction uses
- Archaeological site preservation

New Mexico – Bland Canyon











Alaska - Crown Point





















Mohave Desert - Johnny Shaft

















New Mexico - Fluorite Mine













Ruth Mine – Arizona













Blue John Mine - Arizona















NEW MEXICO - Archaeological Site Stabilization





































