



Shepherd Materials Management LLC, 56 Central Avenue, Ravena, NY 12143 (518) 756-1964 www.shepmaterials.com

Cut-N-Dry®

DRYING AGENTS FOR STABILIZING SHALE DRILL CUTTINGS

Shepherd provides select drying agents to gas well sites for stabilization of shale drill cuttings. We ship materials direct to well sites (source-to-site), or from our storage/distribution locations. Our storage/distribution capabilities enable us to accommodate on demand supply needs and prepare product blends designed to meet site-specific requirements. Shepherd personnel have been providing superior service to clients throughout the Northeast US for over 15 years and servicing natural gas development projects since 2009.

Why Shepherd drying agents?

DEMONSTRATED EFFECTIVENESS (SAVE TIME AND MONEY)

Drill site contractors have found that Shepherd products are superior to conventional wood-based drying agents.

USES:

- Drill cuttings stabilization/remediation
- Access road stabilization
- Site prep/stabilization
- Waste drill casing grout/concrete stabilization

BENEFITS:

- Reduced drying agent volumes needed
- Reduced drying/mixing time (i.e., reduced labor costs)
- Reduced site truck traffic
- Reduced volume of solidified material to landfill (i.e., reduced transportation and disposal costs)

TRANSPORTATION OPTIONS

Shepherd drying agents are shipped directly to well sites from our sources of material supply, or from our local designated storage/distribution facilities. Our multiple distribution points enable us to offer convenient access and quick response for emergency needs. Customer pick up or delivery can be arranged in:

- Bulk pneumatic trailers
- Bulk dump trailers
- Triaxles
- Rolloffs
- Supersacks

What materials are available?

Material	Cut-N-Dry® 100	Cut-N-Dry®	Cut-N-Dry® Blends
Description	Calcium Oxide (CaO)	Partially processed cement/lime – will not set hard like concrete	Blends of quicklime/kiln dust products
CaO Content	> 90%	Up to 30%	10% – 90%
Scale of exothermic reaction when mixed with wet cuttings	Significant	Minor	Medium to Significant
Absorptive?	Yes	Yes	Yes
How quickly does stiffening of treated cuttings initiate?	Immediate	Quickly	Per customer's specification
Neutralization potential	Excellent	Excellent	Excellent
Approved at PA, NY, OH, and WV landfills? Shepherd's drying agents have a pH of less than 12.5. Drill cuttings treated properly with these products will not be rejected at the landfill for high pH or free liquids.	Yes	Yes	Yes

Where can I get more information?

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"For the highest quality drying agents and most reliable service, it's 'cut-n-dry'....choose Shepherd Materials!"



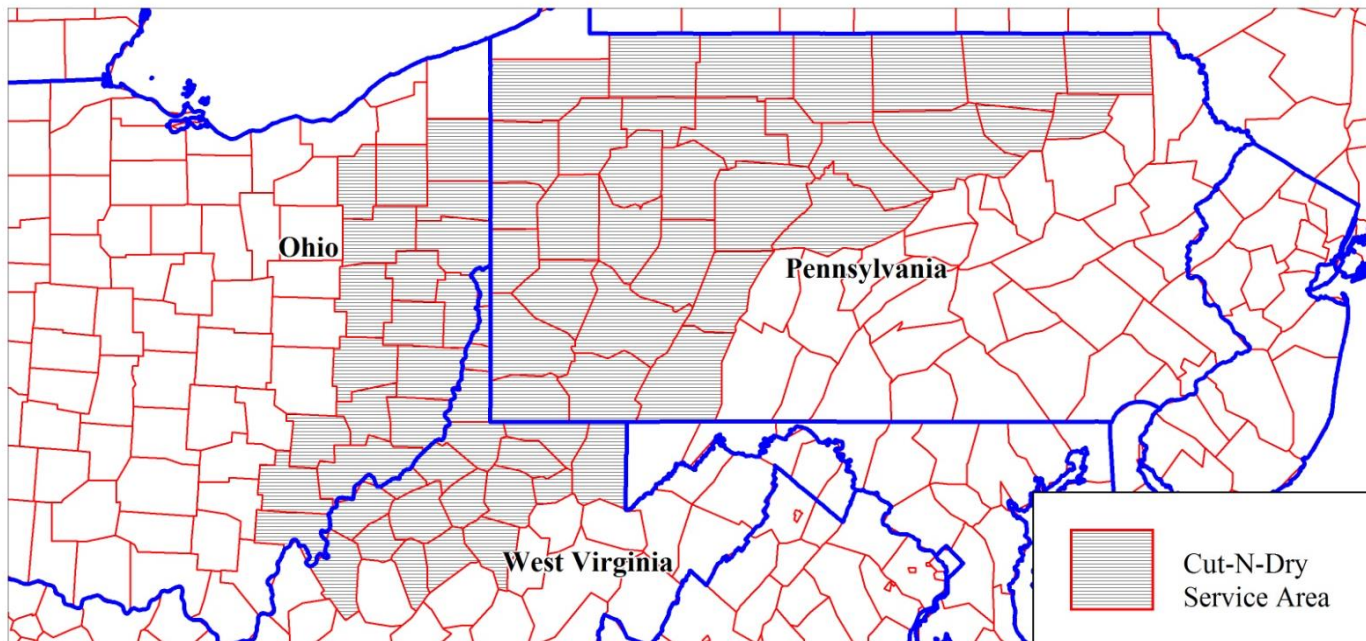
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OIL & GAS CUSTOMER SUPPLY LIST

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| <ul style="list-style-type: none">• ANADARKO• ANTERO RESOURCES• CAMPBELL OIL & GAS• CHESAPEAKE APPALACHIA• CHIEF OIL & GAS• CARRIZO OIL & GAS• CABOT OIL & GAS• CNX GAS CO.• EQT• EXCO RESOURCES• GASTAR EXPLORATION• GULFPORT ENERGY | <ul style="list-style-type: none">• H.A.D. DRILLING• HALCON RESOURCES• NOBLE ENERGY• PDC ENERGY• RANGE RESOURCES• REX ENERGY• SENECA RESOURCE CORP• SOUTHWESTERN ENERGY• STATOIL• TRIAD HUNTER, LLC• TRIANA ENERGY• WPX ENERGY |
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Cut-N-Dry® Service Area



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