



Sustainable Technology Evaluation and Demonstration (STED) Program

Biobased Dust Suppressant Demonstration



Technology Description

Biobased dust suppressant products applied to ground surfaces to improve stability and reduce dust generation; materials such as plant oils, glycerin, lignin, and saccharides replace fossil fuel-derived and salt-based components.

Potential Impact

- Improve dust mitigation, resulting in environmental and safety benefits (e.g., reduced brownout accidents).
- Reduce negative impacts resulting from environmental exposure (e.g., runoff).
- Reduce equipment metal corrosion and road surface slickness compared to salt-based suppressants.
- More resistant to some weather and vehicle impacts compared to synthetic polymer-based suppressants.

Benefits

- Non-toxic and biodegradable; little to no Volatile Organic Compounds.
- BioPreferred Product Category: expand markets for domestic agricultural products.

Demonstration Sites

- Edwards AFB
- Fort Irwin
- NASA AFRC, Palmdale
- MCAGCC 29 Palms

For additional information please contact:

- [DoW STED Program email](#)



**Edwards Air Force Base, Dust Generation at 35 mph
Prior to Application (Top) and 6 Months After Application (Bottom)**