

Trinity Consultants is a leading global environmental consulting firm that brings 50 years of experience providing services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Trinity has the technical expertise, industry depth, and specialized capabilities to help clients achieve their goals across the natural and built environments.

Particulate emissions are a concern for many facilities across a wide range of industries. As facilities work to maintain compliance with permitted particulate limits, many are seeking better methods for calculating emissions from fugitive sources. Silt and moisture testing may be a practical way to assist facilities in lowering calculated particulate emissions levels relative to outdated default values and provide an additional margin of safety below permitted limits.

### Background

AP-42, Section 13.2 provides facilities with the opportunity to reduce particulate emission rates based upon site-specific values, instead of using published default rates. This applies to paved roads, unpaved roads and bulk storage piles. By doing this, facilities may be able to achieve the following benefits:

- Reduce calculated fugitive dust emission rates by using site-specific values instead of published default values
- Reduce the magnitude of required control methods, such as over-watering, by reducing the underlying emission rates
- Reduce emissions fees paid to agencies



#### Silt and Moisture Analysis Methods

Trinity is well-versed in AP-42, Appendix C.2, "Procedures For Laboratory Analysis Of Surface/Bulk Dust Loading Samples", which presents information for the analysis of the samples. These recommended procedures are based on a review of American Society for Testing And Materials (ASTM) methods, such as C-136 (sieve analysis) and D-2216 (moisture content). The recommendations follow ASTM standards where practical.



# Who Benefits from Silt and Moisture Testing?

Trinity's offices are strategically positioned to assist with your silt and moisture testing and analysis needs. There are a wide range of industries that could benefit from silt and moisture testing including but not limited to:

- Agriculture and Farming Operations
- Bulk Terminals and Pipelines
- Cement, Lime, Aggregates, and Mineral Processing
- Chemical Manufacturing
- Electric Power Generation
- Iron and Steel Manufacturing
- Mining, Metals and Metal Processing
- Oil and Gas Refining
- Waste Management
- Any Facility with Numerous Roads and Storage Piles

## Trinity's Silt and Moisture Testing Services

Trinity's team of field technicians are highly trained in the recommended procedures for collecting samples and can instruct facility personnel in the procedures when a site visit is impractical. Trinity has the expertise to support clients with every step of the sampling and analysis process including:

- Develop silt and moisture sampling protocols
- Determine representative sampling areas and conduct sampling
- Perform a sieve analysis and document the particle size distribution and moisture content of the sample
- Prepare a report in Excel format with the results of the sieve analysis
- Prepare a customized detailed report with site-specific particulate emissions calculations (as requested)
- Assist in communicating and negotiating with regulatory agencies

# Why Choose Trinity

Trinity has the experience and insight to assist clients in reducing estimated particulate emissions and maintaining environmental compliance.

ISO 9001:2015 certified at our corporate office in Dallas, Texas

#### CONTACT OUR TEAM!

For more information about how we can help your organization, please contact us.

**Trinity Dallas Office** 

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