Fugitive Dust Operation and Control Plan

Overview

The goal of this presentation is to provide the membership with a basic understanding of the requisite elements of the fugitive dust control program practices mandated under the General FESOP Permit and the requisite elements of a written plan required by IEPA for certain Hot Mix Asphalt Plants based on their physical location.

Under the current General FESOP permit, all subject facilities are required to address potential dust generation at their site and explicitly provides a number of requirements, (i.e. water sprays on emission units associated with crushers – moisture content = 1.5%, watering of trafficked facility roads).
Overview (continued)

However, a written Fugitive Dust Operations Plan is also required for “certain facilities” located within identified “Geographical Areas”. Under 35 IAC Section 212.302, the term certain facilities includes:

- Mining operations (SIC Codes 10 through 15)
- Manufacturing operations (SIC Codes 20 through 39) (with a few exceptions)
- Electric Generating Operations (SIC Code 491)

“Geographical Areas” include:
- All, or portions of 11 counties for a total of 83 townships

Overview (Continued)

Geographical Areas by County and Township

- Cook All townships
- Lake Shields, Waukegan, Warren
- DuPage Addison, Winfield, York
- Will DuPage, Plainfield, Lockport, Channahon, Peotone, Florence, Joliet
- Peoria Richwoods, Limestone, Hollis, Peoria & City of Peoria
- Tazewell Fondulac, Pekin, Cincinnati, Groveland, Washington
- Macon Decatur, Hickory Point
- Rock Island Blackhawk, Coal Valley, Hampton, Moline, South Moline, Rock Island, South Rock Island
- LaSalle LaSalle, Utica
- Madison Alton, Chouteau, Collinsville, Edwardsville, Fort Russell, Godfrey, Granite City, Nameoki, Venice, Wood River
- St. Clair Canteen, Caseyville, Centerville, St. Clair, Stites, Stookey, Sugar Loaf, Millstadt
Objectives of a Fugitive Dust Program

• Reduce the potential for the generation of particulate emissions at the Site to the lowest level possible by application of a control technology reasonably available and which is technologically and economically feasible.

• Meet the permit conditions established for fugitive emissions in the General FESOP (or Individual Permit) and/or the statutory requirements, and;

• Establish and maintain the Facility’s standing as a “good neighbor” within the community.

Example of Requisite Elements of a Fugitive Dust Operations Program

• All normal traffic routes surrounding storage piles and roadways (including parking areas) on mining and/or manufacturing properties shall be paved or treated with water or chemical dust suppressants. If roadways are paved, they shall be cleaned (swept) on a regular basis. If they are watered or treated, the frequency and the amount applied shall be recorded and maintained for records.

• Material Storage piles are covered, sprayed or maintained in such a manner to prevent wind erosion from conveying fugitive particulate emissions from crossing the property boundary.

• Fugitive emissions from crushers, screening operations, conveyor transfer points, storage bins, conveyors and bucket elevators shall be controlled using a water spray, choke-feeding operations or treated by an equivalent method to prevent emissions from becoming airborne.
Example of Requisite Elements of a Fugitive Dust Program

- Conduct performance testing on crushing, screening and conveying equipment and transfer points to insure compliance with Opacity standards. (NSPS Standards – 40 CFR 60 Subpart A and OOO) within 180 days of initial start-up.
- Transport of aggregate should be conducted under tarp or cover to prevent wind erosion during transport.
- Unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall use other methods for reducing fugitive emissions – i.e. spraying, screw conveyors, etc.

Written Fugitive Dust Operations and Control Program

At a minimum the written Fugitive Dust Operations and Control Program must include:

- The name and address of the fugitive dust emission source
- The name and address of the owner/operator responsible for implementing the operating program.
- A map of the Site showing locations of:
  - Stockpiles
  - Conveyors and loading operations
  - Traffic Patterns within the source
  - Ingress and egress points (entry and exit)
  - Location of unloading and transportation operations equipped with pollution control equipment (baghouses, silos, etc.)
**Written Fugitive Dust Operations and Control Program (continued)**

- A narrative description of the "best" management practices utilized to reduce fugitive emissions from the facility.
  - typically includes descriptions of facility operating procedures employed to reduce fugitive emissions
  - reduce wind erosion
  - prevent fugitive dust from exiting the property
- Estimated frequency of application of dust suppressants by location of materials.
  - Included with this would be any sweeping used to address dust on paved surfaces.
  - Although the permit and regulatory guidance references oil and chemical suppressants – we typically don't recommend them

**Written Fugitive Dust Operations and Control Plan (continued)**

- Such other information as may be necessary to facilitate the Illinois EPA’s review of the operating program.
  - Posted speed limit signs
  - VE Readings on the property (if on-site personnel are certified)
  - Frequency of plan review and revision by Owner/Operator
  - Standard stockpile sizes (tonnage or cubic yards)
  - Prevailing wind direction and speeds
**Written Fugitive Dust Operations and Control Plan (continued)**

The original written plan and any revisions to it are to be submitted to the Illinois EPA. 
(and guess what…. There’s a form that goes with it)

See APC 391 – Operating Program for Fugitive Particulate Control