



MUCA Successful Practice Article

Construction Site Dust

Submitted by Robert D. Rice

For a construction contractor, few four letter words are as dreaded as D.U.S.T. Every construction site must be concerned with the accumulation of dust and the containment therein. Inadequate dust control precautions will result in problems that can be physically and financially catastrophic. Though weather conditions may arise that may threaten construction site workers as well as the surrounding community, expert professional precautions must be established well in advance of all eventualities.

Dust is caused by any activity at the construction site. That includes, but not limited to, on site preparation, all types of vehicle and worker movements as well as the uncovering any stockpiles that may have been hidden before construction began. Unsafe working conditions may result, leading to breathing problems relating to the nose, throat and lungs. This is especially troublesome for individuals with existing breathing difficulty. The resulting health conditions may include all types of Chronic Obstructive Pulmonary Disease (C.O.P.D.) These may include chronic bronchitis, emphysema, silicosis and occupational asthma.

Dust greatly reduces visibility. This can be in the form of vehicular and pedestrian traffic patterns. Property damage to the surrounding community can be widespread and quickly worsen if the construction site dust is not properly contained. This damage may also be environmental--enter the E.P.A. Inadequate dust containment

may lead to fines or the construction site being shut down. Construction companies should alert--not alarm--the community near the construction site, informing that construction activity will soon commence nearby. The letter--addressed to each household and business should outline the name of the company doing the work, company address and contact telephone numbers--in the event of any problems that may occur as the result of said construction being performed.

Pre-construction precautionary steps should include:

1. Limiting cleared areas.
2. Installing physical barriers. IE. mesh fences and tarps, emission control blankets and fiber rolls. These devices must be dug-in fully to the ground to prevent leakage from beneath.
3. Traffic control in and around the site. IE. Use paved roads whenever possible.
4. Diligent care involving earth moving equipment.
5. Watering vehicles that may use Soil₂O's dust suppression and erosion control. Over-watering may lead to soil erosion.
6. Proper vehicles for soil compaction.
7. Environmental and chemical stabilization.
8. Daily and post site clean-up. Including proper stockpile management, proper placement of containment filter bags around sewer and drainage outlets.

There are several courses of actions that the construction company should take to minimize the problems of construction site dust. Poor adherence to items 1-8 will result in work possible stoppage and costly litigation incurred by the contractor, the site supervisors, owners and other principals.

References:

1. Geltech Solutions <http://www.geltechsolutions.com/soil2o/home.aspx>
2. E How http://www.ehow.com/how_8561466_control-dust-construction.html
3. Midwest Industries <http://www.midwestind.com/industries/construction-dust-control.html>
4. E.P.A. <http://www.epa.gov/tribalcompliance/buildandveh/bvbuildrill.html#buildings>
(see new construction)
5. Soils Control International <http://www.soilscontrol-usa.com/HR-TS.html>

For questions on this article, please contact:

Robert D. Rice

Title: Freelance writers

(former construction field supervisor)

Location: New Jersey

Email: icey44@outlook.com

Memberships: Project Management Institute