Dust, The Scourge Of Civilization

How Does Dust Affect Our Day To Day Lives?

- Reduces the longevity of our vehicle motors, aswellasunprotectedmachinery
- Reduces crop yields by asmuch as 25%
- Promotes respiratory illness and makes breathing difficult.
- Decrease in visibility resulting insafety hazards
- Loss of constructionmaterials costingwethetaxpayers millions.
- Soil erosionmostly of ourvaluable top soil.

What Can We Do About It ?

- **Apply "Enviroseal "LDC" <u>Once Or Twice Per Year</u>**
- Continually Spray Water
- Plant grasses, trees, and shrubbery

How Does Enviroseal "LDC" Work ?

- By encapsulating the fugitive dust particles, we make them increase their weight and they are less likely to be blown around.
- By making applications every six months or as needed, a barrier is built up on the roadway or dust origination area sufficient to seal the surface or allow the grass seed to take hold. If it is a road way the surface becomes similar to a paved surface that resists water. This improved surface after three treatments will last for up to three years depending on usage.
- The coating of our environmentally friendly polymers also make the particulate become attached together and thus creating a Cementeous reaction

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Press Release s U.S.. DepartmentOfHealth andE PA

Hawaii July29, 1999

Public advised to take precautionary health measures against fugitive dust Due to extremely dry and dusty conditions in parts ofWestHawaii, the Department of Health is advising the public to take precautions to minimize the health effects of exposure to high levels of dust.

"Exposure to large quantities of fugitive dust may exacerbate existing conditions such as asthma or other lung diseases," says Health Director Dr. Bruce Anderson. "Persons predisposed to such conditions should contact your physicians before being exposed and develop an action plan to address your particular situation."

What Is Particulate Matter And Where Does It Come From?

Particulate matter includes dust, dirt, soot, smoke and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, fires and natural windblown dust. It is found in a range of sizes. What are the health effects of particulate matter? Children are especially sensitive to particulate matter, which may cause respiratory disease and aggravate asthma. Particulate matter is inhaled, the particles accumulate in the respiratory system. Exposure to coarse particles is primarily associated with the aggravation of respiratory conditions, such as asthma. Fine particles are most closely associated with such health effects as increased hospital admissions and emergency room visits for heart and lung disease, increased respiratory symptoms and disease, decreased lung function, andeven premature death.

PARTICULATE MATTER BACKGROUND and HEALTH EFFECTS

Air pollutants called "particulate matter" include dust, dirt, soot, smoke, and liquid droplets directly emitted into the air by sources such as factories, power plants, transportation sources, construction activity, fires, and windblown dust. Particulates are also formed in the atmosphere by condensation or transformation of emitted gases such as sulfur dioxide, nitrogen oxides, and volatile organic compounds into tiny droplets.

Based on studies of human populations exposed to high concentrations of particles (often in the presence of sulfur dioxide) and on laboratory studies of animals and humans, the major concerns for human health include effects on breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular disease, alterations in the body's defense systems against foreign materials, damage to lung tissue, carcinogenesis and premature death. The major subgroups of the populations that appear likely to be most sensitive to the effects of particulate matter include individuals with chronic obstructive pulmonary cardiovascular disease, individuals with influenza, asthmatics, the elderly, and children. Particulate matter may injure crops, trees and shrubs, andmay cause damage to metal surfaces, fabrics, etc. Fine particulates also impair visibility by scattering light and reducing the visual range in urban, rural, and wilderness areas. The haze caused by fine particles can diminish crop yields by reducing sunlight.

The current NAAQS for particulate matter was established in 1987. The particulate size measurement used, known as PM10, includes particles with an aerodynamic diameter of less than 10microns. These smaller particles are most likely responsible for the adverse health effects on humans because particles so small can reach the thoracic or lower regions of the respiratory tract. The PM10 annual mean standard is 50 micrograms per cubic meter of air (µg/m3). The 24-hour standard is attained when the expected number of days per calendar year above 150 µg/m3 is no more than one. EPA is currently reviewing recent health effects studies on fine particulates, and may revise the PM10 NAAQS to focus on particles smaller than ten microns. In addition, EPA is considering standards for visibility impairment and regional haze, which may be part of the revised PM NAAQS or separate standards.

This is a typical un-paved road during a period of little or no rain. The red sky in the background is dust in the atmosphere During this period of LaNina, the above condition is becoming more commonplace in many parts of theworld.Do youhave roads likethis? **Enviroseal canhelp.**

Effect of the "dust bowl" in the 1930's The below condition was a direct result of drought, wind erosion, and poor soil management.

Manufactured by

1019 SE Holbrook Ct Port St. Lucie, FL 34952
Phone: 800-775-9474 561-335-8225 fax:561-335-3991
email: soils@enviroseal.com web http//:www.enviroseal.com