



## DustLess – Lifespan Expectations

A DustLess application typically last about year. There are substantial variations to this due to type of soil/aggregate that makes up the road, amount of traffic shear, depth of dust, amount of dust that blows in from untreated areas, etc.

Most dirt roads are hard packed base from long term use with a layer of dust on the surface created by tire slippage (shear) scuffing and wearing away at the surface of the hard packed base.

A brief discussion of each issue:

- 1) Aggregate made from softer rock break up from traffic faster than harder rock therefore more dust sooner. Soils with high clay content tend to absorb much of the DustLess, especially the first application thus shortening the life span of the application or requiring higher initial application rate to make up for the high initial absorbance.
- 2) Rubber tired traffic that just rolls over a straight, level surface makes very low shear. Traffic that must accelerate or decelerate due to hilly terrain creates much more shear due to tire slippage during acceleration and deceleration. Traffic turning, stopping, backing, etc creates large amounts of shear. More shear equals more dust which means shorter treatment life or higher application rates.
- 3) Road surface material of such poor quality that it becomes muddy during wet periods or road base that is of such poor material that it cannot support traffic load and allows mud to ooze up through the application from the pressure of the load will not be a good candidate for DustLess except during the dry season because the mud when it dries and became pulverized by subsequent traffic will result in a dust layer covering a perfectly good DustLess application.
- 4) The deeper the dust layer the more DustLess that will be required for adequate treatment. Sweeping or blading a heavy dust layer off of the surface may allow for reduced applications rates.
- 5) The vacuum or draft from passing traffic may pull dust from the soft shoulder along the side of the road and this dust settles out on the treated driving surface of the roadway contaminating the application and prematurely overwhelming the DustLess treatment. A light application of DirtGlue polymer to the sides of the roadway can mitigate this problem.
- 6) Sometimes high winds can blow dust from a substantial distance onto the treated road surface thus prematurely overwhelming the treatment.

DustLess is typically used in high traffic or heavy traffic areas as a solution for extreme dust. It soaks into the individual soil/dust particles making them too heavy to move thus eliminating dust. It does not form a crust and never evaporates thereby being unaffected by traffic. Because it never evaporates it lasts for a very long time, 6 - 12 months dust control with one application. As long as the treated soil is still in place if retreatment becomes desirable it may be accomplished at lower rates. Application is very simple (anything that will apply water would apply DustLess) and there is no equipment clean up necessary.

There is no question that a dirt road that is regularly watered has a higher cost than an annual or even semi-annual treatment of DustLess just because of the expense of the truck, the driver, the maintenance, and the fuel.