Armor Guard Soil Stabilizer

BROCHURE

ARMOR GUARD

The purpose of road stabilization is one of many. We want to stabilize roads to reduce airborne particles that can affect respiratory related illness, lack of visibility, effective transportation routes, minimize road maintenance and equipment malfunction.

HEALTH

Initially, fugitive dust can cause many health issues. PM 10 and PM 2.5 can be extremely harmful if it enters the airways which can result in it settling in the lungs. Additionally, fugitive dust can affect visibility and in addition cause eye and skin irritation. **Armor Guard** dust control polymers can reduce fugitive dust emissions effectively.

SAFETY

Roads that are not stabilized can cause safety issues. A poor sub-base can cause vehicles to malfunction and even lose control. Treating a road with **Armor Guard** Soil Stabilizers will not deteriorate the traction of the road, although in many cases, it will increase it. **Armor Guard** polymers will increase the load bearing capacity on all soils. Lab results will show increased CBR over 650%. Extreme weights are not an issue, even for haul roads. **Armor Guard** products will reduce the permeability of the roads and will eliminate water penetration, a cause in the road surface turning into mud. Roads that are subject to monsoons or snow conditions will maintain their grade and will be safe to travel.

ENVIROMENT

Our **Armor Guard** line of products, are manufactured with the environment in mind. They are safe to treat soils and will not harm humans or wildlife once applied. Unlike other products such as mulch, **Armor Guard** will not sheet off, but will stay adhered to the soil and will not harm vegetation.

ARMOR GUARD

When a road is constructed with **Armor Guard** Soil Stabilizing engineered polymers, it will not need to be maintained near as often as it would with water and gravel. **Armor Guard** polymers will hold the grade and greatly reduce potholes and washboarding. Once incorporated into the soil, a fog seal is recommended, at a greatly reduced rate of the initial application, every 12 to 24 months, subject to traffic. **Armor Guard** line of polymers when incorporated into the soil will encapsulate the soils particles and bind them together.

In the construction of a road, the sub-base layer serves three functions. First, it protects the sub-grade from over stressing. Second, it provides a platform for a wear course layer. Third, it serves as a drainage and filter layer. The United State Department of Transportation generally recommends that the minimum soaked unconfined compressive strength required for a cementitious sub-base be at 250 PSI or greater. Soils and sand stabilized with very low dosage of **Armor Guard** Soil Stabilization polymer can easily achieve a soaked UCS many times greater than the 250 PSI. Use **Armor Guard** engineered polymers to create a stable and durable sub-base that when constructed will cater to heavy traffic and can absorb more deflection.

Armor Guard Soil Stabilization polymers are designed to with stand jet blasts many hundreds of miles per hour and to eliminate FOD (Foreign Object Damage). **Armor Guard** Soil Stabilization polymers will reduce the permeability of the treated soils that will with stand heavy winds and wind based erosion and prevent water from over saturating the soil particles preventing water based erosion. **Armor Guard** effectively will laminate the soils to protect the slopes and embankments from both wind and water erosion. Once cured, **Armor Guard** will not re-emulsify and wash away or leach with water.

Armor Guard product characteristics:

- **55 to 60% active solids**
- **Increased flexibility and tensile strength**
- **Easy to apply and water based**
- **Increased load bearing strength**
- **Non-hazardous and does not leach**
- **Eliminates dust**
- **Can be colored**
- **Eliminate the need to regrade**
- **Reduces water penetration**
- **Performs under freeze/thaw conditions**
- **Dries odorless and colorless**
- **Reduces soil loss**
- **Increases CBR strengths to pavement/concrete levels**
- **Increase traction and eliminates the need to import base or engineered soils.**
- **Makes roads Safer**

COST EFFECTIVE

Building a road with **Armor Shield** polymers will cost a fraction of traditional road building methods. Additionally, roads constructed with **Armor Guard** will not need to be maintained near as often, as it would with water and gravel roads. **Armor Guard** Soil Stabilized roads will hold the grade and greatly reduce potholes, blow outs and washboarding. A smooth road that maintains its grade, presents less stress on a vehicle. This reduces maintenance and increases vehicle performance and saves money. **Armor Shield** polymers are easy to apply and will save time building roads compared to other traditional methods. One crew could easily treat a mile in a period of a day, which will reduce job costs with often a one-time application that will last for years.