

# PZS STABILIZATION

## AS THE DUST SETTLES



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*Dust control and road stabilization are major issues in the United States. Twenty years after its invention, PennzSuppress D is finally being made available to a wider marketplace. Bruce Coulthard, president of PZS Stabilization, talks about this revolutionary product*

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**D**ust is a major problem in many walks of life, from mining and agriculture through to the timber industries and even the military. Many products on the market attempt to tackle some aspects of the problem, with varying degrees of success. Only now becoming recognised beyond the north east United States, PennzSuppress D is highly effective across all dust control and road stabilization applications and is safe to use and environmentally benign. So why is this product, which was developed nearly 20 years ago, still a newcomer to the marketplace?

“PennzSuppress D was originally designed, invented and patented by Pennzoil in the early 1990s to reduce float dust in mines, to protect the workers from black lung disease and reduce the risk of explosions,” explained Bruce Coulthard, president of PZS Stabilization, the company bringing the product to market.

“Pennzoil invested some \$30 million developing the product and working aggressively with various state and local government bodies in Pennsylvania to gain product approval for its use in a variety of applications. However, Pennzoil merged with Quaker State in 1998 and then became part of Royal Dutch Shell in 2002 and had to divest certain domestic assets in order to comply with US Department of Justice Requirements.”

PennzSuppress D was one of the casualties and was sold to American Refining Group (ARG). For ARG, however, the product represented a nominal percentage of revenues and was peripheral to their lube



oil refined product mix.

ARG first limited its sales and marketing of the product to the north east of the United States, and eventually decided to sell it. Coulthard was part of a small consortium that understood its potential and believed it could deliver significant environmental benefits. PZS Stabilization was granted exclusive sales territories in the US, Canada, Mexico and South America.

PennzSuppress D is based on water emulsified paraffin wax resin which can be effortlessly applied using proprietary water trucks. It contains none of the usual highly damaging solvents or asphalts. It soaks into the surface layer where salts in the soil deactivate the oxygen, enabling the resin to dry and lock hard.

“The only thing that can reactivate PennzSuppress is more PennzSuppress,” Coulthard continued, “so two or three coatings over a period of days produces a really tough surface. It has a crush rate of 600 to 700 tons which is exactly what is required for a mine road. This compares favourably with a crush rate of 30 tons for asphalt. It doesn’t wash away and is very durable, withstanding up to 7,000 vehicle passes before a light maintenance application may be needed in the worst affected areas.”



Wine grape production, central coast, California

The product has an impressive range of properties. It’s non-flammable, non-corrosive to metals and causes no harm to humans, animals or plant life. It was originally designed to protect health, and one of its major selling points is its environmental benefit. It can even promote plant growth by holding fine dirt particles on seeded slopes to actively promote seed germination. It is also being used increasingly in mine

tailing remediation. By combining PennzSuppress with beneficial fungi and bacteria, seed germination and growth are rapid. This reduces almost 10-fold the time it takes for the grass to remove toxins from the soil, a process known as phytoremediation.

Since acquiring the product PZS has rapidly established a customer base across the United States and is currently expanding into Canada. “We market it anywhere that requires dust control, other than to home owners.” The company is continuously pushing the boundaries and developing new uses for the product.

**7,000**  
.....  
**PennzSuppress can withstand 7,000 vehicle passes**

“A new project I’m personally working on is with the railroads. Wooden railroad ties are impregnated with creosote that leaches out and washes into the waterways. It’s toxic and a huge issue for the environment,” said Coulthard. PennzSuppress seals the ties, locking in the creosote without introducing any other toxins. This has proved such a benefit that one of the largest railroad companies in the US has a policy to use only PennzSuppress throughout the network because of the storm water pollution issues caused by other products. PennzSuppress can be used anywhere

**“PENNZSUPPRESS HAS A CRUSH RATE OF 600 TO 700 TONS WHICH IS EXACTLY WHAT IS REQUIRED FOR A MINE ROAD”**



Dust control helps crop productivity



PennzSuppress prevents creosote leaking from railroad ties



United States Military Training Centre

“OUR AIM IS TO GROW WITH EACH NEW CUSTOMER, ONE CUSTOMER AT A TIME, AND TO DO EVERYTHING WE CAN FOR THEM”

that requires road stabilization, erosion control, or storm water protection. In road construction, the current prime coats used as a base for the asphalt are highly toxic. PennzSuppress performs as well if not better, is some 30 percent cheaper and is environmentally benign. In forestry, lumber company roads in the Pacific north west usually run parallel to streams and a range of dust suppression methods are

required to prevent soils eroding into the water. Most alternative dust suppression products, however, are toxic. Under pressure from major customers such as Home Depot, lumber companies are switching to PennzSuppress to reduce their impact on the environment.

Picture the dusty roads of California as they pass through plantations of almonds, grapes and walnuts. The first few rows of

crops perform badly because spider mites, carried in the dust, infect the plant and cripple productivity. “That’s a huge cost, not only in lost productivity but also in the use of miticides which don’t work,” said Coulthard. PennzSuppress is safe to use alongside crops. “Excessive nitrogen in plant leaves are what attract mites. Combining proper dust control we are giving the farming communities the best alternative for financial stability.”

Military training centres are another expanding market. Tanks create a tremendous amount of dust which reduces visibility and vehicle life expectancy as well as polluting the environment. PennzSuppress reduces dust and erosion and also helps cut water consumption by over 80 percent.

After 18 months of rapid expansion, PennzSuppress is attracting considerable interest from countries as geographically spread as India and South America. PZS is investigating routes to these markets. “Our aim is to grow with each new customer, one customer at a time, and to do everything we can for them,” Coulthard concluded. “It’s a wonderful product, and we’re looking for people who truly understand it and want to make decisions based on a rich history of science and successful applications with PennzSuppress.” **BE**

For more information about PZS Stabilization visit: [www.pzsstabilization.com](http://www.pzsstabilization.com)



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