



Mix-Tek

Pavement Solutions

Manufacturing Pitch Black®
Wisconsin & Minnesota

Is your community aware of the State Assembly Bill 797? This bill was voted and passed unanimously by the Assembly to ban the use of highly carcinogenic products that are being spread across your community as you read this letter.

The State Senate was set to vote on this bill in mid-March just prior to the COVID outbreak and was sure to pass it as well. Due to the inability for the Senate to vote on this matter, this caustic material, coal-tar, is likely to be spread across your community in 2021.

Do not allow this to happen on your watch. Your citizens' health and the health of the waterways, soils, and wildlife depend on your duty to stop this material from being applied. Many municipalities have already taken on the responsibility of banning these toxic chemicals in their backyards.

For more information on how to change your community to a Coal-Tar Free Zone please contact Clean Wisconsin for more information. <https://www.cleanwisconsin.org/>

The science regarding the danger of PAH's is indisputable. Here is a brief overview of the dangers of PAH's, high-PAH sealants, and their effect on the environment and those living in it:

- Young children are the most vulnerable to health effects from PAH contamination from high-PAH sealants. *Children living from birth to age 6 near parking lots treated with coal tar-based sealants are estimated to have a 14-times higher lifetime cancer risk.*
- Coal Tar sealants can have thousands of times more PAH's than other common sources, such as engine exhaust or motor oil. Additionally, Coal Tar and other sealants are used to resurface millions of SF of asphalt every year. The amount of this carcinogenic material spread in our state is almost unimaginable.
 - *Fresh Asphalt - 1.5 PPM (.00015%)*
 - *Engine Exhaust - 102-370 PPM (.01-.037%)*
 - *Motor Oil - 440 PPM (.044%)*
 - *Cracked Asphalt - 15,000 - 20,000 PPM (1.5-2%)*
 - *Coal Tar - 70,000 - 100,000 PPM (7-10%)*
- The scientific communities safety recommendations for the limits of hazardous chemical exposure are set at .10%. I support the restriction of PAH's to that same level. The more recent Cracked asphalt sealants contain 15 to 20 times the scientific communities widely considered safe amount.

Local Changes - Milwaukee Metropolitan Sewage District & US Geological Survey Study

- Coal-tar-sealant contributed up to 94 percent of the PAHs in the samples collected.
- 78% of the sediment samples collected had PAH levels that could adversely affect aquatic organisms.
- The reality is sealants wear off and when they do they are brought into homes on shoes, into our waterways as runoff, and into our lungs as dust.
- Due to the dangers of PAH's 22 communities and 1 county in WI have restricted PAH's to .10%

The Safe Alternative; Asphalt Emulsion Sealants-Where We Were, Where We Are

- In asphalt emulsions' early years, there were some inherent consistency issues. This existed both with the product and the education of those applying the product. Over the last 10 years, products and education have improved greatly. Over the last 3-5 years we have seen both applicators and manufacturers working together to understand and improve performance with environmentally friendly additives and processes.
- Mix-Tek the manufacturer of Pitch Black was told by several applicators that the sealant made in 2019 was across the board the best sealant that they had used in the last 20 years
- Some of these changes and improvements have come from understanding what Asphalt Emulsions are - They are, quite literally, liquid asphalt, liquid road - we like to say we are "nano-paving" the asphalt by sealing with an asphalt emulsion sealant.
- Asphalt Emulsions protect the asphalt by "nano-paving" the surface with actual asphalt and polymers that aid in protecting and moisturizing the surface and increase longevity.
- Coal-tar as a product is much like paint. If you add water to paint, it thins out, still sticks, but wears away quicker than it should. With Coal Tar, Margin can be created by the applicator simply by adding water.
- Asphalt emulsions are more sensitive to excess water and are more likely to fail if over watered. If you over water asphalt emulsion sealant, it loses its bonding characteristics and is likely to wash away quickly. Early on, applicators did not understand this, had failures, and blamed it on the product.
- With improvements in the product as well as educating applicators, asphalt emulsion sealants have shown to perform better long-term than the coal-tar alternative.
- It has also been shown that coal-tar based sealants, due to its chemical properties, draws moisture out of the pavement, causing micro-cracking, which can shorten the lifespan of pavement. For this reason, the Asphalt Institute of America now recommends asphalt emulsion sealants as the preferred product to seal asphalt pavements.
- Pitch Black, like some other pure asphalt emulsions, has 0.00% PAH's while performing as well or better than it's environmentally hazardous competitors.

The True Costs of Coal Tar Sealants is Far More than the Benefits

- The State of Minnesota estimated the clean-up cost of coal tar contamination in the Minneapolis-St. Paul area to be over \$1 billion! The cost of clean-up far exceeded the value of the product.
- The City of Austin was encouraged by the State of Texas to clean up a small drainage swale which had been contaminated by coal tar sealers from a single apartment complex near Barton Springs Pool. The cost, complete with workers in moon suits because of the high PAH concentrations, was nearly \$500,000! This was for a single parking lot drainage basin.
- The obvious health risks of highly carcinogenic materials in the environment and their cost effects are well known and indisputable. To put a price tag on it would be insensitive and at this point is nearly immeasurable.
- There have been some arguments that asphalt emulsion based sealants cost more than coal-tar sealants, but in the current marketplace, that is not always true.
 - There are high-quality asphalt-based sealants and low-quality asphalt based sealants, the same for coal tar, or just about any other product.
 - An analogy for this: You can buy a base-model GMC SL for relatively low cost, when compared to the GMC Denali's higher cost. But one clearly has more features and higher performance.
 - This is true in coal-tar and asphalt based sealants, which have relatively the same cost.

- Due to the alternatives that are in the marketplace, a coal-tar ban would have little to no negative impact on sealcoat applicators across our region.
- Asphalt Sealcoaters who have adopted Asphalt Emulsion Sealants have seen growth in their business as anticipated by industry analysts.
- In the projected period through 2024, the industry is expected to experience “moderate growth” but “rising bans on coal tar-based sealers, the improved performance of asphalt-based sealers, and competitive pricing are expected to result in the increased consumption of bitumen and asphalt sealers...”
- Regarding Manufacturing, most pavement sealant manufacturers are already making Asphalt Emulsions Sealants. The removal of Coal Tar sealants would simply cause manufacturers to remove harmful environmentally caustic materials from their product line up and therefore our environment.
- As a whole State Highways and Roadways do not use Coal-Tar based sealants, due to better performing alternatives for their application and the environmental and health concerns.

Liability Risk- Affects Property Owners, Municipalities, Retailers

- Now that it is widely known that some asphalt sealants contain highly carcinogenic material all businesses that have sealed asphalt have a potential liability to manage.
- Lowes and Home Depot Stopped Selling Coal Tar Sealers
 - In 2007 Chief Sustainability Officer for Lowes, Michael Chennard, said that they stopped selling coal tar sealants based on their business model after learning about PAH dangers from the Austin, TX PAH Restriction. Here’s the Lowes’ equation:
 1. Identify products that have a high potential liability. He said their pockets were now deeper than many of their suppliers, so they have more to lose.
 2. Find out if there are suitable alternatives in quality and price.
 3. If both the quality and prices are similar, then remove the problematic product from the shelves
 - If it isn’t good enough for Lowes and Home Depot, why is it good enough for our community, our children, and our businesses? Who would continue to use a product that has a sound replacement and reduces liability, as well as increases the safety of our communities and families.

As a manufacturer of Asphalt Emulsion Sealant I have seen the attitude toward Asphalt Emulsions change dramatically over the past 5 years. While there are some Manufacturers and Applicators in the marketplace standing by Coal Tar or other High PAH sealants, the vast majority have come to the conclusion that Low or No PAH Sealants are the industry’s next step and that Coal Tar Based or other high PAH sealants will be eliminated. Largely, the opposition to restricting PAH’s in sealants has grown silent. Very few businesses or organizations are willing to speak up in favor of PAH’s knowing that it is a losing battle, one in which the potential liabilities far outweigh the benefits.

Thank you for your time and attention to this matter. If you would like more information on this issue or would like to speak with me directly, please feel free to contact me.

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