



What's the greenest way to maintain an asphalt driveway?

Is there a sealcoat that does less environmental damage than others?



Over time asphalt sealcoats degrade and contribute pollutant related runoff into wetlands or other surface waters.

To reduce these pollutant contributions, some choose not to seal their driveways. Civil engineers and black-topping contractors say sealcoating is completely optional and doesn't affect durability. Sealants provide a deep black appearance, but the durability protection they provide is temporary. The sealcoat industry suggests reapplication every two to three years, depending on wear.

If you do decide to sealcoat your driveway, the product you use can make a difference. Choose one with an asphalt rather than coal tar base. Tests of parking lots by the U.S. Geological Survey found that a small amount of pollutants came off the unsealed parking lots. Lots with asphalt-based sealers had 10 times that amount and 65 times more pollutants came from the lots sealed with coal tar. The following list of products* contain no coal tar according to the product labels:

- Henry PM Premium Driveway Sealer/Filler (retail)
- Henry Elastometric Emulsion Crack Filler (retail)
- Pavesheid (wholesale or commercial)
- Jennite Asphalt Emulsion Pavement Sealer (wholesale or commercial)
- Gilsonite Asphalt Sealer (wholesale or commercial)

Never pour unused sealant down a stormdrain. Try to use up what you have (if product is usable) or donate it to a neighbor, paving contractor or other who may use it. Dried driveway sealer, either latex or oil-based, can be thrown in the trash with the lid off.

** Listings of a specific product trade name does not constitute an endorsement of its use. Many other sealant products are available and may be suitable for use other than those listed here.*

Information courtesy of Minnesota Pollution Control Agency and the City of Austin, Texas.

Driveway Sealcoats: There is a Difference!

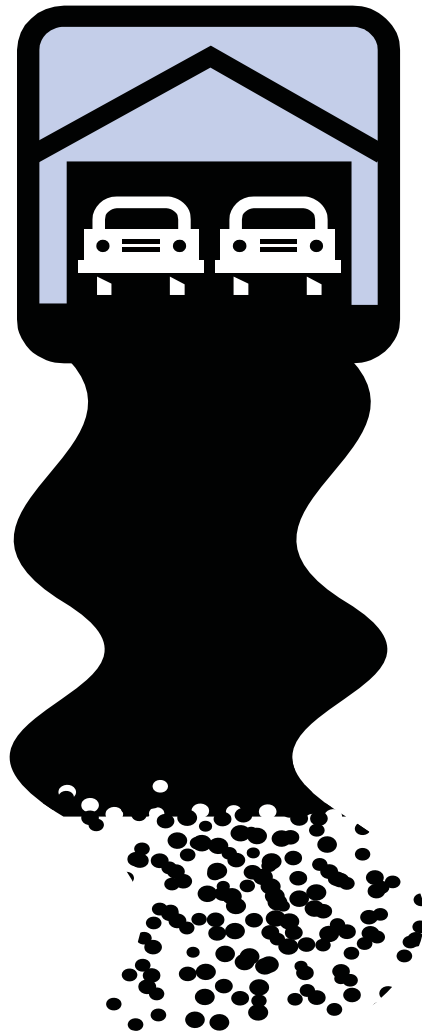
Driveway Sealcoat comes in two basic varieties: coal tar-based and asphalt-based. The coal tar variety is more resilient, but contains much higher levels of a class of chemicals called PAHs (polycyclic aromatic hydrocarbons) that harm fish, and with prolonged exposure, pose a risk of cancer in humans.

Environmental problems

Coal tar is a waste material generated in the conversion of coal to coke. Manufacturers choose coal tar for sealcoat because of its resistance to petroleum products like gasoline and oil, which drip from cars and deteriorate asphalt surfaces. In time, sunlight and vehicle traffic wears down sealcoat and sealcoat flakes are washed away by rain or carried away by wind, contaminating stormwater ponds, streams and lakes with PAHs. PAHs cause tumors in some fish, disrupts the reproduction of aquatic organisms, and causes some water-bottom species to avoid sediment altogether. Health risks to humans related to PAHs are based on the length of exposure to vapors or sediments contaminated with PAHs.

PAH Concentrations

Coal tar contains as much as 30 percent PAHs by weight. A study in Austin, Texas, compared the level of PAHs in water coming off parking lots without sealcoat to water coming off parking lots coated with asphalt- and coal-tar sealcoat. The study revealed that the asphalt-based sealcoat runoff contained 10 times more PAH than the uncoated



parking lot and the coal-tar sealcoat runoff had concentrations of PAH that were 65 times higher than the uncoated lot.

Local regulation of coal tar based sealcoat is anticipated in the future.

Maintenance expenses

Besides the health effects and the danger to the environment, PAHs

are making routine maintenance of stormwater ponds by cities and townships many times more expensive because sediment with high-enough concentrations of PAHs must be disposed of differently. In Minnesota, when some communities removed sediment from their stormwater ponds as part of regular maintenance, they found elevated levels of PAHs. This discovery required them to use special disposal methods, costing them many thousands of dollars more.

Current regulation

Because of the environmental problems associated with PAHs, recent legislation passed in Minnesota bans the purchase of coal-tar sealcoat products by state agencies by July 1, 2010. Recently, two national home-improvement retailers, Lowe's and Home Depot, took coal tar-based sealcoat off their shelves. Local regulation of coal tar based sealcoat is anticipated in the future.

Make the right choice

The best choice may be to not sealcoat your driveway at all. But if you do choose to sealcoat, study labels carefully to be sure to find an asphalt-based product. Lower concentrations of PAHs in waterways will prevent costly maintenance for your communities and keep waterways safe for fish and other aquatic organisms. If you have leftover material after sealing your driveway, you can re-use or recycle it at your community's household hazardous waste facility. To find your local facility, visit: www.pca.state.mn.us/waste/hhw.

Courtesy: Minnesota Pollution Control Agency.