



Springfield/Greene County Environmental Advisory Board



September 22, 2009

To: Office of Stormwater Services

From: Springfield/Greene County Environmental Advisory Board (EAB)

Re: Water Pollution—toxic Polycyclic Aromatic Hydrocarbons (PAHs)

To the Stormwater Services Staff,

The EAB has found scientific documentation supporting the position that stormwater runoff from parking lots and roadways contains elevated levels of coal tar pavement sealants. These contaminants contain high concentrations of PAHs, which pose substantial risks to human and environmental health; such as cancer, pre-natal birth defects and late biotic emergence. We consider the following list to be key findings from credible sources:

- PAHs are toxic to humans, fish, amphibians, and aquatic invertebrates (carcinogenic, skin irritant, lung irritant); some local citizens work with coal tar daily. Exposure to PAH's is manifested through inhalation, absorption and ingestion.
- The EPA has identified seven PAHs as probable human carcinogens: benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene.
- Coal tar pavement sealants contain approximately 50 percent PAHs by weight. We estimate between 1.1 and 1.9 million pounds of PAHs are applied to the greater Springfield metro areas road surfaces annually.
- Parking lots where coal tar sealants are used have been identified as point sources for PAHs in waterways. *USGS*
- Reducing, or banning coal tar sealants could benefit the City's ongoing efforts to reduce storm water pollution as required by its MS4 permit.
- Alternative products to coal tar sealants exist, at similar prices, and can be applied by local businesses using the same equipment as for applying coal tar sealants.

Continued use of coal tar pavement sealants will only further degrade our local water quality and aquatic biodiversity, as well as pose significant human health risks. Use of an available alternative(s) is price neutral, both for the product and the equipment used in its application. We therefore strongly urge a ban on coal tar pavement sealants in the City of Springfield with an 18 month phased enforcement date. We would be happy to assist you by providing further information or helping educate city council on this matter, and provide the sources of all key findings.


Mike Kromrey, EAB Chair