

**COUNTY OF MILWAUKEE
INTER-OFFICE COMMUNICATION**

DATE: September 6, 2018

TO: Theodore Lipscomb, Sr., Chairperson, Milwaukee County Board of Supervisors

FROM: Greg High, Director, AE&ES Section, Facilities Management Division, Department of Administrative Services

SUBJECT: **Restrictions on Use of Coal-Tar-Based Sealants**

Action Item

POLICY

The Department of Administrative Services Director is recommending adoption of a resolution restricting the use of coal-tar-based (CTB) pavement sealants on road and parking lot improvement projects undertaken by Milwaukee County in the future.

BACKGROUND

Studies by the U.S. Geological Survey have identified coal-tar-based sealant (sealcoat) as a major source of polycyclic aromatic hydrocarbon (PAH) contamination in urban areas of the United States. Some of the PAHs are known to cause cancer and are toxic to aquatic life.

In Milwaukee County, PAHs are often present in the sediments of ponds, lagoons, and rivers. The concentrations of PAHs in these sediments sometimes exceed thresholds established by the WDNR for aquatic life or thresholds for human exposure. Sediments with elevated concentrations of PAHs can increase the cost to dredge and dispose of these sediments. A 2016 study by US Geological Survey on Milwaukee-area streambed sediments supported the nationwide observations, and concluded that “coal-tar-based pavement sealant was the primary source of PAHs to the majority of streambed sediment samples collected”, and “removing the PAH contribution from coal-tar-based pavement sealant dust to Milwaukee-area streams ... would significantly improve stream health.”

Sound alternatives to coal-tar-based pavement sealants exist that are much less toxic. The Wisconsin DOT’s specifications for pavement sealants, for example, do not allow the use of CTB sealants. Milwaukee County standard specifications, which are used on capital improvement projects, do not allow the use of CTB sealants, and the FAA does not allow their use on airports. While these efforts heavily limit the potential for the use of CTB sealants on Milwaukee County projects, there is no formal policy in place restricting its use.

The State of Minnesota has banned its use in 2014 and the City of Milwaukee banned its use in 2017. In March of 2017, a model ordinance was introduced by Milwaukee

County's Office of Emergency Management to the Intergovernmental Cooperation Council (ICC). In total, eleven municipalities within Milwaukee County have enacted bans. While the majority of municipalities within Milwaukee County have instituted bans, not all have done so, and this recommendation is limited to the lands owned and maintained by Milwaukee County.

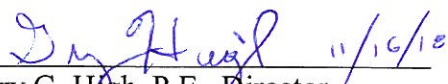
Coal tar pavement sealant products have been defined as a pavement sealant product that contains coal tar, coal tar pitch, coal tar pitch volatiles, RT-12, Refined Tar or any variation assigned the Chemical Abstract Service (CAS) numbers 65996-92-1, 65996-93-2, 65996-89-6, or 8007-45-2 or related substances. High-PAH sealant product means any pavement sealant product that contains greater than 0.1% PAH by weight.

RECOMMENDATION

The Department of Administrative Services Director recommends adoption of a resolution restricting the use of coal-tar-based (CTB) pavement sealants or high-PAH sealants on road and parking lot improvement projects undertaken by Milwaukee County, unless required by state or federal authorities.

Prepared by: Stevan Keith, P.E., Principal Environmental Engineer

Approved by:



Gregory G. High, P.E., Director
AE&ES Section, DAS-FM Division

Attachments:

1. USGS fact sheet 2016-3017 "Coal-Tar-Based Pavement Sealcoat – Potential Concerns for Human Health and Aquatic Life", April 2016.
2. Baldwin et al. 2016. "Primary Sources and Toxicity of PAHs in Milwaukee-Area Streambed Sediment", Environmental Toxicology and Chemistry, Vol 9999.

cc: Chris Abele, County Executive
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