

Department of Legislative Services
 Maryland General Assembly
 2019 Session

FISCAL AND POLICY NOTE
 First Reader

House Bill 411 (Delegates Lafferty and Ebersole)

Environment and Transportation and
 Economic Matters

Environment - Sale and Application of Coal Tar and Coal Tar Pavement
 Products - Prohibition

This bill prohibits a person, beginning October 1, 2020, from selling, offering for sale, or applying to pavement or another similar surface, “coal tar” or a “coal tar pavement product.” A person who violates the bill’s prohibition is subject to a civil penalty of up to \$500 for a first offense and up to \$1,000 for a second or subsequent offense.

Fiscal Summary

State Effect: Under one set of assumptions, general fund expenditures increase by \$76,100 in FY 2020 to enforce the bill. Future year expenditures reflect annualization and ongoing costs. The bill’s penalty provisions are not expected to materially affect State revenues.

(in dollars)	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	76,100	64,100	66,100	68,200	70,400
Net Effect	(\$76,100)	(\$64,100)	(\$66,100)	(\$68,200)	(\$70,400)

Note: () = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease

Local Effect: Local government expenditures may increase due to the bill’s prohibition. Local revenues are not affected. **This bill may impose a mandate on a unit of local government.**

Small Business Effect: Potential meaningful.

Analysis

Bill Summary: “Coal tar” means a viscous substance that (1) is obtained from the distillation of bituminous coal and (2) contains levels of polycyclic aromatic hydrocarbons (PAH) greater than 10,000 milligrams per kilogram (mg/kg). “Coal tar” includes refined coal tar, high temperature coal tar, coal tar pitch, and coal tar pitch volatiles. A “coal tar pavement product” is a product that (1) is intended for use as a sealant on pavement or a similar surface and (2) contains coal tar.

Current Law: The Maryland Department of the Environment (MDE) advises that it does not currently regulate the distribution of coal tar/coal tar pavement products or the use of coal tar/coal tar pavement products. The Environment Article is silent with regard to coal tar. However, current regulations relating to water quality, air quality, and hazardous waste address coal tar and PAH, which is a substance contained in coal tar. Specifically, MDE regulations (1) establish a maximum concentration level of PAH for surface waters used as a public water supply; (2) require that a community water supply system identify if coal tar lined pipes and tanks are present in their distribution system and report to the approving authority; (3) require that a coal tar pitch impregnating operation obtain a State air quality permit to operate; and (4) designate certain residues from the recovery, distillation, and storage of coal tar as hazardous waste.

The Secretary of the Environment is required to carry out and enforce the provisions of the Environment Article.

Background: According to a 2016 U.S. Geological Survey (USGS) [fact sheet](#), pavement sealcoat is a commercial product that is applied to many asphalt parking lots, driveways, and playgrounds in North America in an effort to protect and beautify the underlying asphalt. It is rarely used on public roads. Most sealcoat products are either coal tar or asphalt emulsion, although some alternative products are now available. Coal tar is a byproduct of the coking, liquefaction, or gasification of coal and is a complex mixture composed primarily of aromatic hydrocarbons.

According to USGS, coal tar and coal tar pitch have extremely high concentrations of PAHs, as do coal tar-based sealcoat products, which are typically 20% to 35% coal tar or coal tar pitch. Asphalt and asphalt-based sealcoat products have much lower concentrations of PAHs. For historical and economic reasons, the use of asphalt-based sealcoat in the United States is more common west of the Continental Divide, and the use of coal tar-based sealcoat is more common east of the Continental Divide, except in states, counties, and municipalities where use of coal tar-based sealcoat is prohibited.

USGS reports that PAHs are a group of chemicals created by heating or burning material that contains carbon. The many sources of PAHs to the urban environment span a wide

range of PAH concentrations and include asphalt (2 to 9 mg/kg), tire particles (84 mg/kg), used motor oil (730 mg/kg), and coal tar-based sealcoat (34,000 to 202,000 mg/kg). PAHs are an environmental concern because many cause cancer, mutations, birth defects, or death in fish, wildlife, and invertebrates. Exposure to sunlight greatly intensifies the adverse effects of several PAHs. The U.S. Environmental Protection Agency (EPA) has classified 7 PAHs as probable human carcinogens and 16 PAHs as priority pollutants. Environmental and health effects depend on which PAHs are present and their concentrations.

Studies conducted by USGS, academic institutions, and state and local agencies have identified coal tar-based pavement as a major source of PAH contamination in urban and suburban areas and a potential concern for human health and aquatic life. Specifically, studies have found that, as coal tar-based sealcoat ages, it wears into small particles with high levels of PAHs that can be tracked into homes and incorporated into house dust. For people who live adjacent to coal tar sealcoated pavement, ingestion of PAH-contaminated house dust and soil results in an elevated potential cancer risk, particularly for young children. Exposure to PAHs, especially early in childhood, has been linked by health professionals to an increased risk of lung, skin, bladder, and respiratory cancers.

Washington, DC, banned the sale and use of coal tar pavement products in July 1, 2009. According to EPA, several other jurisdictions have taken actions to ban the sale and use, or limit the use of, coal tar pavement products, including the city of Austin and the states of Texas, Minnesota, and Washington. EPA advises that alternatives to coal tar sealcoat exist. Several counties in Maryland indicate that they either ban coal tar pavement products or do not use coal tar pavement products, including Anne Arundel, Baltimore, Charles, Howard, Montgomery, and Prince George's counties.

State Expenditures:

MDE Enforcement Costs

General fund expenditures increase by \$76,051 in fiscal 2020, which accounts for the bill's October 1, 2019 effective date. This estimate reflects the cost of hiring one full-time environmental compliance specialist within MDE to handle enforcement and compliance responsibilities, including conducting outreach to affected entities, conducting inspections, mailing warning notices, and preparing enforcement cases. It includes a salary, fringe benefits, one-time start-up costs (including the purchase of a vehicle), and ongoing operating expenses.

The information and assumptions used in calculating the estimate are stated below:

- pursuant to current law, MDE must enforce the bill;
- MDE does not currently regulate the distribution or use of coal tar or coal tar pavement products; and
- in order to enforce the bill, MDE needs to conduct outreach and conduct inspections of facilities that would otherwise sell or apply affected products.

Position	1
Salary and Fringe Benefits	\$44,828
Vehicle Purchase	22,545
Other Operating Expenses	<u>8,677</u>
Total FY 2020 State Expenditures	\$76,050

Future year expenditures reflect a full salary with annual increases and employee turnover and ongoing operating expenses.

The Department of Legislative Services notes that the need for MDE to hire an environmental compliance specialist is based largely on the assumption that MDE enforces the bill by conducting inspections. To the extent that a less robust enforcement effort is implemented, MDE's costs may be less.

Other State Agencies

Currently available information suggests that most State agencies do not use coal tar or coal tar pavement products on pavement or similar surfaces. Thus, the bill's prohibition is not anticipated to materially affect State expenditures with respect to paving.

To the extent that some agencies do use these products in a manner prohibited by the bill, expenditures may increase to use an alternative replacement product. MDE advises that the cost difference between coal tar pavement products and alternative products is not considered significant due to the availability of alternative products. The Department of General Services advises that any impact resulting from the bill is minimal. Baltimore City Community College estimates that costs increase by less than \$10,000 annually for alternative products to seal and patch parking lots.

The University System of Maryland advises, however, that coal tar products are widely used on roofing systems throughout the State. Although it appears that the bill is intended to apply to the use of coal tar on *pavement (or similar surfaces)*, to the extent that the use of coal tar for roofing projects is affected by the bill's prohibition, expenditures increase to purchase alternative products.

Local Fiscal Effect: Several local jurisdictions indicate that they either already ban the use of coal tar pavement products or do not use such products for paving; thus, the bill's prohibition has no effect on those entities. For example, Charles County advises that it does not use coal tar products on any county-owned roads. Baltimore County advises that the county only uses petroleum-based paving materials. Anne Arundel and Montgomery counties both advise that they already ban the use of coal tar pavement products. In addition, Howard and Prince George's counties ban the sale and use of coal tar pavement products.

For any local jurisdictions that use coal tar or coal tar pavement products on pavement or similar surfaces, expenditures increase to purchase alternative products.

Small Business Effect: The bill may have a meaningful impact on any small businesses that manufacture coal tar or coal tar pavement products. The number of affected manufacturers in the State, if any, is unknown.

The bill may also result in a loss of revenues and sales for any small businesses that sell coal tar or coal tar pavement products. Further, expenditures may increase for any small businesses that use coal tar or coal tar pavement products in a manner prohibited by the bill and must switch to a different product or develop a new business model. Affected businesses could include construction companies, paving companies, and driveway resurfacing companies. However, because the bill's prohibition does not take effect until October 1, 2020, the bill provides time to use existing inventory and to identify and purchase alternatives.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Maryland Environmental Service; Anne Arundel, Baltimore, Charles, Howard, Montgomery, and Prince George's counties; Maryland Association of Counties; City of Havre de Grace; Maryland Municipal League; Judiciary (Administrative Office of the Courts); Baltimore City Community College; University System of Maryland; Morgan State University; St. Mary's College of Maryland; Maryland Department of the Environment; Department of General Services; Maryland Department of Transportation; U.S. Geological Survey; U.S. Environmental Protection Agency; Department of Legislative Services

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Analysis by: Kathleen P. Kennedy

Direct Inquiries to:
(410) 946-5510
(301) 970-5510