#### ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING Wednesday, February 17, 2021 – 6:30 P.M. REMOTE ACCESS MEETING

#### AGENDA

Please be advised that all of the Environmental Sustainability Committee members will be remotely attending this Committee meeting by electronic means, in compliance with Governor's Executive Order 2020-39, issued on May 29, 2020, that extended the suspension of certain Open Meetings Act provisions relating to in-person attendance by members of a public body. Specifically, the Governor's Order: (1) suspends the requirement in Section 2.01 that "members of a public body must be physically present;" and (2) suspends the limitations in Section 7 on when remote participation is allowed. This Executive Order is effective the duration of the current Gubernatorial Disaster Proclamation. The City will be providing members of the public with various opportunities to watch or attend this meeting, as well as provide public comment at the meeting. For example, members of the public can participate remotely in the meeting by following the public audience link which will provide both video and audio means to attend the meeting.

Public audience link:

https://us02web.zoom.us/i/85161938791?pwd=djN2bHZJVHVGRIEzdXZiM3hYdWIWUT09

Or dial by phone at: 312-626-6799 Webinar ID: 851 6193 8791 Passcode: 1861

#### I. CALL TO ORDER AND ROLL CALL

\_\_\_\_\_ Ald. Melanie Rummel, Chairman

\_\_\_\_\_ Ald. Jed Morris

\_\_\_\_\_ Ald. Jim Preschlack

#### II. INFORMATIONAL ITEMS

- a. None
- III. ACTION ITEMS
  - a. APPROVAL OF DECEMBER 17, 2020 MEETING MINUTES
  - b. APPROACHES TO REGULATE THE USE OF COAL TAR-BASED SEALANTS – Presented by Layla Werner, Administrative Intern

#### IV. ADDITIONAL ITEMS

- a. UPDATE ON BEACH CLEANUP EVENT Presented by Layla Werner, Administrative Intern
- b. PREVIEW OF SUSTAINABILITY PROJECTS INCLUDED IN FY2022 BUDGET RECOMMENDATION – Introduced by Mike Strong, Assistant City Manager
- V. PUBLIC COMMENT
- VI. NEXT MEETING DATE(S)
- VII. ADJOURNMENT

# ACTION ITEM: APPROVAL OF DECEMBER 17, 2020 MEETING MINUTES

1 2 3	ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING Thursday, December 17, 2020 – 6:30 P.M. REMOTE ACCESS MEETING
4 5	ROLL CALL/CALL TO ORDER
6 7 8 9	Chairman Melanie Rummel called the meeting to order at 6:30 P.M. Alderman Jed Morris was present. Alderman Jim Preschlack was absent
10 11 12 13 14	Staff in attendance included Mike Strong, Assistant City Manager; Michael Thomas, Director of Public Works; Dan Martin, Superintendent of Public Works; Cathy Czerniak, Director of Community Development; Chuck Myers, Superintendent of Parks, Forestry and Special Facilities; Robert Ells, Superintendent of Engineering and Layla Werner, Administrative Intern.
16 17	Also in attendance was Mark Pruitt, Consultant.
18 19 20	There were approximately 2 members of the public that attended the meeting remotely.
20 21 22 23 24 25 26 27	Chairman Rummel made the following statement as required by the Open Meetings Act. In accordance with state statute, Chairman Rummel has made a determination that it was not practical or prudent to schedule an in-person Committee meeting because of the COVID-19 pandemic, which is why this October 26, 2020 Environmental Sustainability Committee meeting is being held remotely.
27 28 29 30 31 32 33 34 25	Chairman Rummel introduced Michael Thomas, Director of Public Works to present to the Committee on fleet electrification. Director Thomas gave a brief overview of the attended webinar hosted by ComEd. He explained that specific vehicles will be converted for fleet purposes to utilize renewable energy resources within the next four years. Mr. Thomas stated his interest in pursuing vehicles lie this for the City, if they are able to fulfill the level of service current vehicles are able to conduct.
35 36 37 38	The Committee thanked Director Thomas for sharing this information, with the potential of adding vehicles like this to the City's fleet.
39 40 41	Additionally, there was discussion about hybrid vehicles versus 100% electric vehicles.
42 43	ACTION ITEMS
44 45 46 47 48	I. APPROVAL OF OCTOBER 26, 2020 MEETING MINUTES Alderman Morris moved to approve the October 26, 2020 Environmental Sustainability Committee meeting minutes subject to changes shared with Layla Werner. Chairman Rummel seconded the motion. The following voted "Aye": Chairman Rummel and

49		Alderman Morris. The following voted "Nay": None. 2-Ayes, 0 Nays,
50		motion carried.
51		
52	II.	CONSIDERATION OF AMENDMENTS TO THE CITY'S PLAN OF
53 54		ACCPECATION AND GOVERNANCE FOR ITS ELECTRICITY
55		AGGREGATION FROGRAM - Fresented by Mike Strong
56		Mike Strong Assistant City Manager, gave a brief presentation
57		undating the Committee regarding Electrical Aggregation. He
58		gave the Committee a brief background on Municipal
59		Aggregation when the program first began in 2012 and how
60		customers were able to benefit through reduced rates. Upon
61		ComEd costs becoming more competitive, the program was idled
62		in May 2017. He continued to explain the participation in a new
63		Aggregation program, which would still generate savings for
64		customers. Mr. Strong stated that at this time, 7% of the energy
65		supplied in the ComEd territory is from a renewable energy source,
66		with an overall 25% target by 2025.
67		
68		Chairman Rummel asked if there were any questions or comments
69		from the public.
70		
71		The Committee had lengthy discussion about customer rates, and
72		reimbursement of funds to the City.
73		
74		Chairman Rummel asked if there were any questions or comments
75 70		from the public.
76 77		There was additional discussion reporting the timeline of the
79		project and implementation
70		project, and implementation.
80		Chairman Rummel moved to recommend approval to the City
81		Council to Amend the City's Plan of Operation and Governance to
82		Eacilitate the Exploration of an Electricity Aggregation Program
83		Alderman Morris seconded the motion. The following voted "Ave"
84		Chairman Rummel and Alderman Morris. The following voted
85		"Nay": None. 2-Ayes, 0 Nays, motion carried.
86		5 5 5 .
87		Chairman Rummel asked if there were any additional comments
88		from the Committee. Seeing none she asked if there were any
89		questions or comments from the public.
90		
91		Seeing none, she moved to the next agenda item.
92		
93		
94		
95		

96 97	III.	CONSIDERATION OF SINGLE-USE PLASTIC RECYCLING PARTNERSHIPS – Presented by Layla Werner		
98				
99		Mike Strong, Assistant City Manager introduce Layla Werner,		
100		Administrative intern to provide background on a potential		
101		partnership for a single-use plastic recycling campaign. Layla		
102		Werner gave a brief presentation regarding opportunities to		
103		partner with local retailers in Lake Forest, as designated drop-off		
104		locations for residents. She further explained the partnership local		
105		retailers have with the identified company Trex, who collect single-		
106		use plastic bags which are ethically recycled for eco-friendly		
107		composite decking alternatives. Staff has identified the initial		
108		location as the Lake Forest Compost & Recycling Center to be a		
109		collection site, which would be dropped off at Jewel-Osco.		
110				
111		Chairman Rummel asked if there were any questions or comments		
112		on this agenda item.		
113				
114		The Committee had discussion regarding the potential of having		
115		additional drop off locations.		
116				
117		Alderman Morris moved to recommend approval to begin a single-		
118		use plastic bag recycling campaign. Chairman Rummel seconded		
119		the motion. The following voted "Aye": Chairman Rummel and		
120		Alderman Morris. The following voted "Nay": None. 2-Ayes, 0 Nays,		
121		motion carried.		
122				
123		Chairman Rummel asked if there were any additional comments		
124		from the Committee. Seeing none she asked if there were any		
125		questions or comments from the public.		
126				
127		Seeing none, she moved to the next agenda item.		
128				
129	ADDITIONAL	ITEMS		
130				
131	I.	REVIEW OF SUSTAINABILITY INITIATIVES & PRIORITIES –		
132		Presented by Mike Strong		
133				
134		Assistant City Manager, Mike Strong gave a brief overview of the		
135		potential sustainability initiatives and priorities as developed by MIST		
136		Environment and the Committee. Additionally, he updated the		
137		Committee on the status of specific projects discussed at the		
138		previous meeting. Mr. Strong explained the budgetary impacts of		
139		future sustainability initiatives, as they correlated with the "grey to		
140		green" infrastructure concept developed by the Committee. He		
141		stated that this idea log would be attached in the monthly agenda		
142		packet, to ensure the Committee can continually discuss potential		
143		projects.		

144		
145	The Committee discussed future projects	, and potential timelines.
146		
147	Chairman Rummel asked if there were a	ny additional questions or
148	comments from the Committee. Seeing i	none, she asked if there
149	were any questions or comments from th	e public.
150		
151	Seeing none, she moved to the next age	enda item.
152		
153	PUBLIC COMMENT	
154		
155	Chairman Rummel asked if there were any public com	nments on any non-
156	agenda items.	-
157		
158	Seeing none, Chairman Rummel moved to the next ag	genda item.
159		-
160	NEXT MEETING DATE(S)	
161		
162	Mike Strong stated the next meeting would be schedu	lled for the third week in
163	January.	
164		
165	ADJOURNMENT	
166		
167	Alderman Morris moved to adjourn the meeting of the	Environmental
168	Sustainability Committee at 8:02 P.M. seconded by Ch	airman Rummel. The
169	motion carried unanimously by voice vote.	
170		
171		Respectfully Submitted,
172		
173		Layla Werner
174		Administrative Intern
175		
176		
177		Reviewed by,
178		
179		Mike Strong
180		Assistant City Manager

# ACTION ITEM: APPROACHES TO REGULATE THE USE OF COAL TAR-BASED SEALANTS



# MEMORANDUM THE CITY OF LAKE FOREST OFFICE OF THE CITY MANAGER

TO:	Members of the Environmental Sustainability Committee
FROM:	Layla Werner, Administrative Intern
DATE:	Friday, February 12, 2021
SUBJECT:	Approaches to Regulate the Use of Coal Tar-based Sealants

#### **Background**

Coal tar is an inexpensive sealant product used to seal the surface of a driveway or parking lot. This product contains a group of chemicals known as polycyclic aromatic hydrocarbons (PAHs). PAHs are toxic and carcinogenic to aquatic life, and some of which are probable human carcinogens. PAHs infiltrate ecosystems and natural resources via storm water runoff, foot traffic, adhesion to tires, and by wind. After a sealant application is completed, the concentration of PAHs in runoff can be elevated for months.

Since the early 2000s, there has been growing concern and questions over the use of coal tar-based sealants to protect asphalt surfaces. In 2003, the City of Austin implemented the first coal tar sealant regulation within the United States, after studies they, and the United States Geological Survey, conducted which found correlation between coal tar parking lots and high levels of PAH concentrations. Since this time, nearly a hundred communities have adopted bans prohibiting coal tar products. There is an especially high rate of bans in place within the great lakes region.

Within our region, policy discussions surrounding this topic have been occurring over the last several years both at the County and local level. Some of this response is due to various regional watershed groups who are encouraging communities to adopt local bans on coal-tar based sealants. In June 2020, the Des Plaines River Watershed Workgroup (DRWW) issued a press release stating that recent annual water quality monitoring they conduct detected elevated concentrations of PAHs within the sediments of the Des Plaines River and its urban tributaries. DRWW contributes these elevated levels to stormwater runoff that that is carrying a class of chemicals commonly found in coal-tar sealants used to protect and enhance the appearance of asphalt on driveways, parking lots and playgrounds. Various municipalities have adopted ordinances banning the application of coal-tar based sealants, implemented licensing programs for seal coaters, or taken softer approaches, such as public education campaigns to heighten resident and commercial awareness.

In Lake Forest, these discussions have mainly occurred within local environmental advocacy groups and the Lake Forest Collaborative for Environmental Leadership (LFCEL). To help educate residents on the risks associated with coal tar, the LFCEL developed a brochure and education materials, and the City has included information on its website and within the City's Dialogue Newsletter outlining the risks of its usage. Additionally, the Committee last discussed this during its meeting on June 10, 2020, and

suggested the topic be discussed at a future meeting date. Additional background material on these sealants is attached to this memorandum.

#### Current Lake Forest Standards and Activity

The City does not currently have any regulations restricting the use of coal-tar within the community, and does not use sealcoats on parking lots or other city-owned parking surfaces in its operations.

Data on the overall use of these sealants on residential and commercial properties within the City is not currently available as this type of maintenance does not require a permit. However, based on staff conversations with residents and other municipalities, most residential applications are done by commercial sealcoating businesses which apply sealants through organized neighborhood efforts every two to three years. Some comments staff has received also suggest that while sealcoaters may offer coaltar alternatives, those products are not typically promoted or suggested by vendors.

On whether coal-tar products are readily available for residents to use on their own, staff found that multiple major retailers, such as Ace, Home Depot, Lowes and Menards, have begun the process of phasing out these products for purchase, or no longer sell the products at their locations. Instead they offer alternatives such as asphalt-based sealants. In addition to the major retailers stated, Lake Forest Hardware does not carry the product, as there is no demand for the sale of it in the community.

#### Community Approaches Taken to Regulate Coal Tar Usage

Within the North Shore, Highland Park, Glenview, Winnetka, and Deerfield have adopted local bans on coal-tar sealants. To enable enforcement, some communities have created a licensing process associated with a licensing fee requiring sealcoating professionals to be licensed by a local authority and have enacted a penalty those contractors who violate their ordinance. Most communities that staff spoke with deploy complaint-based enforcement, whereby inspectors verify contractors are using appropriate sealants if they are called upon. There is minimal data collected from these communities to suggest any decrease in the use of coal-tar based sealants, as there was a lack of data of use prior to their ordinance adoption. A copy of Deerfield's Ordinance is attached, along with a Coal Tar Ban Information Guide that the Village of Winnetka developed as part of their regulations.

Rather than adopting an ordinance banning its use, some communities such as Glencoe, have established educational campaigns to encourage using alternatives to coal tar-based sealants. They have promoted coal tar alternatives such as asphalt-based sealants, replacing asphalt with concrete driveways, or leaving driveways unsealed.

As stated, many major retailers in the surrounding areas of these communities began the process of phasing out coal tar-based products in 2014, when the first set of ordinances were adopted. If they still sell this product, businesses are required to post notices near the product explaining the ordinance and fines associated with usage.

#### **Discussion and Direction Requested**

It is evident that there are different approaches that can be taken to reduce the use of coal tar sealants. Based on staff's research, there seem to be two patterns of policy action, outright bans prohibiting the use and/or sale of the product or broad public marketing campaigns and education-based strategies to communicate risks associated with coal tar and encourage use of alternate products.

Since the retail availability of these sealants seems to be diminishing as a result of local advocacy and policy pressure, proactive marketing and education may help offer a solution in communities where potential administration and enforcement questions or challenges exist.

City staff is seeking Committee direction on whether the City should consider preparing an ordinance banning the use of coal tar-based sealants in Lake Forest, or if an alternate approach should be undertaken.

Staff will present more information on this topic to the Committee during its regular meeting.

#### **Attachments**

- Coal Tar-Based Sealant Presentation
- The Use, Impact, and Ban of Coal Tar-Based Sealants (2016)
- Des Plaines River Watershed Workgroup Newsletter (May 2020)
- Lake Forest Coal Tar Brochure
- Coal Tar Ordinance (Village of Deerfield)
- Coal Tar Ban Information Guide (Village of Winnetka)

# Discussion on Coal Tar-Based Sealants

ENVIRONMENTAL SUSTAINABILITY COMMITTEE MEETING

WEDNESDAY, FEBRUARY 17, 2021

# Agenda

- 1. Background and Introduction to Coal Tar
- 2. Review Community Responses to Manage Coal Tar
- 3. Discuss Current Standards and Practices
- 4. Review Potential Strategies
- 5. Discussion & Next Steps

# Background

 Coal tar is a component of certain types of sealants used to protect and beautify pavement such as driveways and parking lots

- Coal tar contains high levels of carcinogenic chemicals known as polycyclic aromatic hydrocarbons (PAH) that are harmful to wildlife and humans
- Municipalities have established local policies and bans prohibiting the use and sale of coal tar products
- The Lake Forest Collaborative for Environmental Leadership has investigated coal tar, and developed a brochure to help educate residents on its risks





# Review of Adjacent Communities

Community	Ordinance Ban	License/Permit	Public Education
Deerfield	X	Х	
Glencoe			X
Glenview	X	X	
Highland Park	X	X	
Northbrook	X	X	
Vernon Hills	X		
Wilmette	X		*Х
Winnetka	Х	Х	

\*Wilmette has an ordinance banning the use of coal tar, but is engaged in an educational campaign to encourage the usage of permeable pavement

# **Current Standards and Practices**

- No federal or state-wide ban in place
- No current regulations or standards for sealcoating driveways or parking lots in Lake Forest
- City does not currently sealcoat its asphalt driveways or parking lots
- Local and Major Retailers have been phasing the product out since 2014. Current retails that no longer carry coal tar sealants:
  - Lake Forest Hardware
  - Ace Hardware Highland Park
  - Home Depot Vernon Hills
  - Lowes Vernon Hills
  - Menards Vernon Hills

# **Potential Strategies**

Establish an ordinance banning the use and sale of high-PAH sealants within the community

- Prohibit use and/or sale of high-PAH sealants within the community
  - Considerations:
  - Reduce potential for high-PAH runoff
  - Aligns the City with regional efforts to eliminate high-PAH concentration
  - Concern over the cost and quality of high-PAH alternative sealants
  - Major retailers do not carry coal tar based sealants

Establish local regulations, permits, and/or contractor licenses for sealcoating

- Develop annual license for seal coaters certifying they won't use high-PAH sealants in Lake Forest
- Considerations:
  - Ensures high-PAH products aren't used in the community
  - Residents would have access to licensed contractors
- Program administration and enforcement

Develop a marketing and educational campaign to raise awareness about the potential harms of coal tar sealants

- Revamp the current pamphlet and educational tools utilized by the community to reinforce the negative effects of coal tar
- Engage in PAH monitoring with watershed groups
- Considerations:
- Gives residents the opportunity to make an informed decision when choosing a product and contractor
- Understand current baseline PAH levels
- High-PAH products can still be used

# Discussion

- Should the City Consider Adopting an Ordinance Banning The Use of Coal Tar?
- Are There Alternate Approaches the City Should Consider?
- What Level Of Support Exists Within The Community To Pursue These Regulations?

# Recommendation/ Next Steps

Given the phasing out of these products in the marketplace, proactive education and messaging may provide an effective alternative approach to a ban by educating residents on the effects of coal tar and encouraging the use of alternative products.

 City staff is seeking Committee direction on whether the City should consider preparing an ordinance banning the use of coal tar-based sealants in Lake Forest, or if an alternate approach should be undertaken.

# COAL TAR-BASED SEALANT BACKGROUND MATERIAL

# The Use, Impact, and Ban of Coal Tar-Based Sealants

Hannah Needleman Virginia Coastal Policy Center at William & Mary Law School Class of 2016







**FALL 2015** 

#### **Contact Us**

Please contact Roy Hoagland at rahoagland@ wm.edu if you have comments, questions, or suggestions.



#### About the Author

Hannah Needleman is a member of the 2016 class at the William & Mary Law School. Her experience with the W&M Virginia Coastal Policy Center in the spring of 2015 preceded a summer clerkship with the Environmental Protection Agency's headquarters office in Washington, DC. Her undergraduate degree is in biology from the University of Florida and her past employment has included work with the International Development Law Organization (IDLO) in Rome, Italy. Hannah is on the staff of the W&M Journal of Women and the Law.

#### About the Virginia Coastal Policy Center

The Virginia Coastal Policy Center (VCPC) at the College of William & Mary Law School provides science-based legal and policy analysis of ecological issues affecting the state's coastal resources, providing education and advice to a host of Virginia's decision-makers, from government officials and legal scholars to non-profit and business leaders.

With two nationally prominent science partners – the Virginia Institute of Marine Science, one of the largest marine research and education centers in the United States, and Virginia Sea Grant, a nationally recognized broker of scientific information – VCPC works with scientists, local and state political figures, community leaders, the military, and others to integrate the latest science with legal and policy analysis to solve coastal resource management issues. VCPC activities are inherently interdisciplinary, drawing on scientific, economic, public policy, sociological, and other expertise from within the College and across the country. With access to internationally recognized scientists at VIMS, to Sea Grant's national network of legal and science scholars, and to elected and appointed officials across the nation, VCPC engages in a host of information exchanges and collaborative partnerships.

VCPC grounds its pedagogical goals in the law school's philosophy of the citizen lawyer. VCPC students' highly diverse interactions beyond the borders of the legal community provide the framework for their efforts in solving the complex coastal resource management issues that currently face Virginia and the nation. Whether it is working to understand the underlying realities of local zoning policies or attempting to identify and reconcile the concerns of multiple stakeholders, VCPC students experience the breadth of environmental lawyering while gaining skills that will serve them well regardless of the legal career they pursue upon graduation.

VCPC is especially grateful to Virginia Sea Grant for providing generous funding to support its ongoing work.

#### I. Introduction

The new Chesapeake Bay Agreement contains commitments to reduce toxics. One substance receiving an increasing amount of scrutiny is coal tar-based sealant because of its toxic contributions. This sealant is applied to driveways, parking lots, and other paved surfaces. This report investigates the use of coal tar-based sealants, their ban, their impacts, etc., and provides recommendations regarding their future use.

#### II. Coal Tar-Based Sealants

#### A. Function

Coal tar-based sealant is a black, shiny substance sprayed or painted on top of asphalt pavement—including parking lots, driveways, and some playgrounds—to protect the underlying asphalt.<sup>1</sup> Some consumers also believe that the sealant improves the appearance of the asphalt.<sup>2</sup> An estimated 85 million gallons (320 million liters) of coal tar-based sealant are applied to pavement nationwide each year.<sup>3</sup>

Coal tar-based sealant is a potent source of polycyclic aromatic hydrocarbons (PAHs).<sup>4</sup> Many PAHs are toxic, carcinogenic, and mutagenic.<sup>5</sup> Moreover, some PAHs are teratogenic (causing birth defects) to aquatic life; there have been no studies on the developmental effects of PAHs on humans, which raises potential concerns.<sup>6</sup> Coal tar is the byproduct of coking coal for the steel industry, and coal tar pitch is 50 percent or more PAHs by weight.<sup>7</sup> Coal tar-based sealant is typically 20-35 percent coal tar pitch<sup>8</sup> and typically contains about 50,000 mg/kg (parts per million, or ppm) PAH.<sup>9</sup>

Coal tar-based sealant is primarily used east of the Continental Divide in the United States and parts of Canada, while the alternative, asphalt-based sealant, is primarily used in the West.<sup>10</sup> Coal tar-based sealant contains about 100 times more PAHs than motor oil and about 1,000 times more PAHs than its alternative, asphalt-based sealant.<sup>11</sup> As a result of coal tar-based sealant application, residential and commercial/industrial land uses are major urban PAH sources.<sup>12</sup>

PAHs move from a coal tar-based sealant into our environment by stormwater runoff, adhesion to tires, wind, foot traffic, and volatilization (see graphic below). Coal-tar sealcoat is abraded to a fine dust by car tires and snowplows.<sup>13</sup> The dust is then blown, washed, or tracked into nearby soil,<sup>14</sup> stormwater ponds,<sup>15</sup> streams,<sup>16</sup> lakes,<sup>17</sup> and into personal residences in the form of settled house dust.<sup>18</sup> Following coal tar-based sealant application, concentrations of PAHs remain elevated for months in runoff from sealed pavement.<sup>19</sup> As a result of this runoff, coal tar-based sealant is the largest source of PAHs to urban lakes.<sup>20</sup>



Run-off

Original graphic coutesy of Aaron Hicks, City of Austin, Tex.

Besides coal tar-based sealants, there are many other sources of coal tar and PAHs in the urban environment. However, these other sources are relatively insignificant, compared to coal tar-based sealant runoff and manufacturing exposure. Coal tar is found in some cosmetics and personal care products, such as shampoos and scalp treatments (specifically for dandruff treatment), soaps, hair dyes, and lotions.<sup>21</sup> Moreover, many household products contain PAHs, including mothballs, blacktop, and wood preservatives.<sup>22</sup> In addition, the Austin, Texas, Watershed Protection Department explains:

Besides urban runoff as a pathway, PAH can originate from atmospheric fallout of particulates from naturally occurring combustion sources like forest fires or from fossil fuel combustion - incomplete burning of carbon-containing materials like oil, wood, garbage, and coal. Automobile exhaust and industrial emissions are additional sources. They contain high levels of PAHs. More PAHs form when materials burn at low temperatures such as in wood fires and cigarettes than in high-temperature furnaces.<sup>23</sup>

#### **B. Human Health and Environmental Impact**

There are significant human health and environmental risks associated with the use of coal tar-based sealants. The use of coal tar-based sealants is associated with a 38 times greater lifetime cancer risk, especially for young children. Moreover, coal tar-based sealants have documented, dramatic effects on the environment, such as inhibiting growth and development of aquatic life, which raises serious concerns for potential effects on human health.

#### 1. Impact on Human Health

PAHs in settled house dust in residences adjacent to coal tar-based sealed parking lots are 25 times higher than those in residences adjacent to unsealed or asphalt sealed lots.<sup>24</sup> PAHs are known to cause cancer in humans.<sup>25</sup> Living adjacent to pavement with coal tar-based sealant (such as a parking lot or driveway) increases lifetime cancer risk up to 38 times – and much of this increased risk occurs during early childhood (ages 6 and younger).<sup>26</sup> There are two main ways individuals are exposed to PAHs in settled house dust: (1) direct ingestion from hand-to-mouth contact and (2) indirect ingestion from mouth contact with inanimate objects such as toys (a serious concern for young children).<sup>27</sup> Individuals that live in residences adjacent to coal tar-sealed parking lots are likely exposed to 14 times the amount of PAHs through non-dietary means than residents with unsealed pavement. Further, these high-exposure individuals likely ingest more than twice the amount of PAHs through dietary means.<sup>28</sup>

Individuals that work directly with coal tar-based sealants face greater exposure to PAHs than the general population. Numerous studies indicate that occupational exposure to coal tar can increase risk of skin, lung, bladder, kidney, and digestive tract cancers.<sup>29</sup> Workers are often exposed to coal tar at foundries; during coke production, coal gasification, and aluminum production; and while producing or using pavement tar, roofing tar, coal-tar paints, coal-tar enamels, other coal-tar coatings, or refractory bricks.<sup>30</sup> The National Institute for Occupational Safety and Health, the American Conference of Governmental Industrial Hygienists, and the Occupational Safety and Health Administration have all recommended limiting occupational exposure.<sup>31</sup>

#### 2. Impact on the Environment

Coal tar-based sealants also have significant, well-documented negative effects on the environment. The use of these sealants is associated with slower rates of growth and diminished ability to swim in salamanders,<sup>32</sup> impaired growth and development of frogs,<sup>33</sup> and decreased righting ability and diminished liver enzyme activities in newts.<sup>34</sup> Liver damage is a common result of PAH toxicity in fish.<sup>35</sup> Moreover, coal tar-based sealants and PAHs are associated with a decrease in species richness and abundance in benthic invertebrates (organisms such as crabs and clams that live on the bottom of a water body or in the sediment and have no backbone).<sup>36</sup> As a result, the detrimental impacts of PAHs on marine life could harm industries that depend on these fragile ecosystems. Additionally, there is a possibility of biomagnification ("the sequence of processes in an ecosystem by which higher concentrations of a

particular chemical... are reached in organisms higher up the food chain")<sup>37</sup> affecting larger animals and humans.<sup>38</sup> The dramatic effect of PAHs on marine life also raises serious concerns about the unstudied aspects of PAHs on human health.



#### 3. Environmental Justice

The United States Department of the Interior (DOI) has identified coal tar-based sealants as an environmental justice issue. In March 2012, the DOI released its Environmental Justice Strategic Plan for the years 2012-2017, fulfilling a federal requirement under Executive Order 12898 to address disproportionate adverse impacts to minority or low-income communities.<sup>39</sup> Their vision statement says the goal is "to provide outstanding management of the natural and cultural resources entrusted to us in a manner that is sustainable, equitable, accessible, and inclusive of all populations." The environmental justice implications of coal tar-based sealants pollution are addressed as part of DOI's Goal #3 to reduce adverse environmental impacts on minority and low income populations.<sup>40</sup> The report discusses "coal-tar-based sealcoat . . . as a major source of [PAH] contamination in urban areas for large parts of the Nation," and acknowledges that bans like the Washington, DC, coal tar-based sealant ban could provide a remedy for disproportionately-impacted communities.<sup>41</sup>

#### C. Economic Analysis

#### 1. Response from Area Associations

Gary Hoffman, the Executive Director of Pennsylvania Asphalt Pavement Association ("an industry group devoted to achieving a high level of quality asphalt paving products and services"<sup>42</sup>) explained there is no economic incentive for consumers to select coal tar-based sealants over asphalt-based sealants. Moreover, a ban on coal tar-based sealants would not negatively affect the members of the Pennsylvania Asphalt Pavement Association (PAPA), including asphalt producers, paving contractors, asphalt suppliers, associates, and engineer and architectural consultants. PAPA supports a ban on coal tar-based sealants.

Patrick Dean, the President of the Associated Builders and Contractors Virginia Chapter ("a statewide, pro-business association representing construction and construction-related firms"<sup>43</sup>) stated, "[t]here is no economic benefit to using coal tar-based sealants to consumers. It is actually harder for the contractor to attain and costs more." Moreover, "[c]ontractors would not feel any impact with a ban as they would just switch over to the asphalt-based product or [another alternative]."

Caroline Fahed, a spokeswoman for the Virginia Asphalt Association (whose mission is "to promote the increased use and quality of asphalt pavements in Virginia"<sup>44</sup>) agreed that there are no economic advantages for using coal tar-based sealants over asphalt-based sealants. She noted that while the VAA does not have an official position on banning coal tar-based sealants, it is a decision that "must be based on sound, supported science."

#### 2. Debunking the "Job Killer" Myth

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A 2011 report by the Chesapeake Bay Foundation, *Debunking the "Job Killer" Myth: How Pollution Limits Encourage Jobs in the Chesapeake Bay Region*, maintains that a clean Chesapeake Bay means more jobs–not fewer.<sup>45</sup> This report concludes that environmental regulations spark economic activity and create jobs, despite the allegations of many opponents. "Virtually all economists who have studied the jobs-environment issue agree. . . . [T]here has simply been no trade-offs between jobs and the environment," wrote Dr. Eban Goodstein, Director of the Center for Environmental Policy at Bard College, who is quoted in the CBF report.

The report concludes that new pollution limits for the Chesapeake Bay (the Chesapeake Bay Total Maximum Daily Load) would create nearly 250,000 jobs across the watershed. Moreover, the report notes that "[m]ore fish, crabs, and oysters will provide renewed work opportunities and hope for watermen, processors, packers, restaurant workers, people in tourism-dependent businesses, and many others." The effects of coal tar-based sealants and the associated PAHs on fish, crabs, oysters, and other aquatic life could be putting these industries and jobs at stake. Baywide bans on coal tar-based sealants could similarly boost employment in the region both directly, through cleanup and removal efforts and, indirectly, from healthier fisheries and expanded aquatic recreation opportunities.

#### 3. Retail Costs

Many major retailers have stopped selling coal tar-based sealants. According to the Minnesota Pollution Control Agency, as of 2014, Ace Hardware, Do It Best, Lowe's, The Home Depot, and True Value have ceased nationwide distribution of coal tarbased sealants.<sup>46</sup> Moreover, the following regional distributors have stopped selling coal tar-based sealants: Agway, Menards, United Hardware (including Hardware Hank and Trustworthy). Furthermore, applicators and suppliers in Wisconsin, Michigan, North Dakota, Iowa, Illinois, New York, Ontario, and Pennsylvania have committed to phase-out coal tar-based sealants. Most state Departments of Transportation no longer use coal tar-based sealants, according to the Center for Environmental Excellence, a research group developed by the American Association of State Highway and Transportation Officials.<sup>47</sup>

Historically, most coal tar has been imported into the United States.<sup>48</sup> According to Tom Ennis from Coal Tar Free America (an integral architect of the Austin, Texas

ban), approximately <sup>2</sup>/<sub>3</sub> of U.S. supplies were imported in 2003.<sup>49</sup> Ennis explains, "[t]his point was illustrated by the sealant industry's coal tar shortage in 2006. The supply ran low here... because of factory problems outside our borders."

There is limited information available on the price comparison of coal tar-based sealant and its main alternative, asphalt-based sealant. However, Tom Ennis compares the retail costs of coal tar-based sealant and asphalt-based sealant via Google on an annual basis.<sup>50</sup> Ennis's research indicates that since 2001, asphalt-based sealants have been, on average, just slightly more expensive than coal tar-based sealants. In 2015, Ennis' results included four coal tar-based products, costing an average of \$15 per five-gallon bucket. By comparison, Ennis found fourteen asphalt-based sealant, costing an average of \$21. However, Ennis found both types of sealant available for \$13, indicating price parity in some instances at a more affordable price. Ennis also notes, "Keep in mind that the cost of the two dominant products [coal tar-based and asphalt-based] are sensitive to the price of fuel and susceptible to interruptions in the supply chain." Although coal tar-based sealants may have a lower sticker cost than asphalt-based sealants, the true cost of coal tar-based sealants, including environmental costs and PAH cleanup discussed in Part 4 below, can be exorbitant.

#### 4. Cleanup Costs

The cost of cleaning up bodies of water contaminated with PAHs from coal tarbased sealants is expensive and extensive. In 2012, the Minnesota Pollution Control Agency estimated that cleanup costs for the stormwater ponds contaminated with PAH runoff could approach \$1 to \$5 billion in the Twin Cities area alone.<sup>51</sup> The high cost of cleanup is one factor that ultimately drove Minnesota to a statewide ban of coal tar-based sealants. In 2013, The University of Wisconsin-Extension Solid and Hazardous Waste Education Center urged Wisconsin communities: "To avoid additional costs related to disposal of PAH contaminated sediment, municipalities should consider eliminating a major source of PAHs to their Municipal Separate Storm Sewer Systems - coal tar-based asphalt sealcoats."52 Tom Kaldunski, the City Engineer for Inver Grove Heights, Minnesota, gave a presentation in a Fall 2013 webinar on coal tar-based sealants and discussed the costs of cleaning stormwater ponds and disposing of the PAH contaminated sediment.<sup>53</sup> He explained that there are an estimated potential 140 basins with PAH contaminated sediment, and the average basin cleaning cost is \$150,000. This could cost \$21 million for a city with 34,000 residents.

#### D. Availability of Alternatives

There are many alternatives to coal tar-based sealants readily available on the market – especially since many major retailers have stopped selling coal tar-based sealants as discussed in Part B above. The most popular and cheapest alternative to coal tar-based sealants is petroleum asphalt-based sealant.<sup>54</sup> While asphalt-based sealants do contain PAHs, they contain as little as 1/1000th the PAH level of coal tar-based sealants.<sup>55</sup> According to the Minnesota Pollution Control Agency, "Good asphalt sealcoat emulsions are very affordable, will provide a black appearance for 1-2 years, and can provide less-visible protection for 2-4 years if properly applied.<sup>56</sup>

Other alternatives contain fewer or no PAHs, such as gilsonite-based, acrylicbased, and agricultural oil-based sealants.<sup>57</sup> These products tend to be relatively more expensive, and they have less of an established performance track record than asphaltbased sealants.<sup>58</sup> However, as major retailers move away from coal tar-based sealants, there may be a shift to some of these low and no PAH alternatives.

#### III. Coal Tar-Based Sealant Bans

This section examines current bans of coal tar-based sealants outside of Maryland, Virginia, and Pennsylvania, including location and scope. There are two states with statewide coal tar-based sealant bans, Minnesota and Washington. There are currently four countywide bans: Dane, Wisconsin; Montgomery County, MD; Prince George's County, MD and Suffolk, NY. In total, there are eight states/districts with a ban within the boundaries of the state (Texas, Wisconsin, New York, Washington, Illinois, Maryland, Minnesota and District of Columbia), and there are fifteen states/districts with known restrictions within the boundaries of columbia, Michigan, North Carolina, South Carolina, Washington, California, Kansas, Illinois, Maryland, Minnesota and Missouri).

#### A. Locality Bans

#### 1. Austin, Texas: The First Ban

In 2006, Austin, Texas, adopted the first ban of coal tar-based sealants in the United States. The City of Austin's City Council voted unanimously to ban the sale and use of coal tar-based sealants in the city and in its Extra Territorial Jurisdiction. <sup>59</sup> Regarding enforcement, Austin's Watershed Protection Department says:

Field staff (inspectors, investigators, biologists, etc.) for the Watershed Protection Department watch for sealant applications in progress and freshly sealed parking lots as they drive throughout the city on their other job duties. Whenever new sealant is found, it is screened for the presence of coal tar. Enforcement action is taken when coal tar-based pavement sealant is found applied after the ban was initiated. Enforcement actions proceed through municipal court and typically result in remediation of the applied sealant. The requirement for remediation is full removal of the coal tar sealant. Besides remediation, legal action can include fines and jail time.<sup>60</sup>

The ban has proven to be very effective. In 2010, the City of Austin published the results of the coal tar-based sealant ban. According to Nancy McClintock, Assistant Director of the Watershed Protection Department, approximately one million pounds of PAHs have been prevented from entering Austin's environment since January 2006. Moreover, a United States Geological Survey study conducted in 2014 showed a 58% reduction in PAH's in lake sediment from Lady Bird Lake after the ban.<sup>61</sup>



#### 2. Dane County, Wisconsin

Effective July 1, 2007, Dane County, Wisconsin banned the use, sale, and/or retail display of coal tar-based sealants.<sup>62</sup> Moreover, "[i]t also requires retailers to prominently display information about the ordinance where customers make their driveway sealant purchases." The notice must contain the following language:

The application of coal tar sealcoat products on driveways, parking lots and all other paved surfaces in Dane County is prohibited by section 80.08 of the Dane County Code of Ordinances. Coal tar is a significant source of polycyclic aromatic hydrocarbons (PAHs), a group of organic chemicals that can be carried by stormwater and other runoff into Dane County's lakes and streams. PAHs are an environmental concern because they are toxic to aquatic life.<sup>63</sup>

Any person who violates the ban is subject to subject to a forfeiture of \$25 per violation.

#### 3. District of Columbia

Effective July 1, 2009, it is illegal to sell, use, or permit the use of coal tar-based sealants in the District of Columbia under the Comprehensive Stormwater Management Enhancement Amendment Act of 2008.<sup>64</sup> Any person who violates this law is subject to a daily fine of up to \$2,500.<sup>65</sup> According to the District Department of Environment, "the District of Columbia issued this ban to protect human health and our environment."<sup>66</sup>

Chris Kibler, Environmental Protection Specialist at the District Department of Environment, worked on the Washington, DC, ban and was able to provide additional information on the ban.<sup>67</sup> According to Kibler, there are no distributors of coal tarbased sealants in the District of Columbia. Distributors from outside the District of Columbia bring coal tar-based sealants into the District of Columbia, which makes coal tar-based sealants difficult to regulate. Because there are no manufacturers or distributors in the District of Columbia, the Comprehensive Stormwater Management Enhancement Amendment Act of 2008 only regulates contractors and end users in the District of Columbia. Kibler explained that the District of Columbia would benefit from having neighboring states (such as Maryland, Virginia, and Pennsylvania) regulate manufacturers and distributors of coal tar-based sealants to prevent these sealants from coming into the District of Columbia.

Kibler outlined how the District Department of Environment (DDE) enforces the ban on coal tar-based sealants in the District of Columbia. There are approximately 17,000 parking lots and driveways that potentially could be sealed with coal tar-based sealants in the District of Columbia. The DDE performs seventy-five inspections every year and has developed a field test to detect coal tar-based sealants during these inspections. First, an inspector removes a small piece of sealant with a razor blade and places it into a solvent. If the sealant does not dissolve after being placed in the solvent, that is an indication that the sealant could be coal tar-based. Second, a DDE official will talk to the owner of the parking lot or driveway and inspect contractor records. Finally, DDE sends a sample of the sealant to a lab in Texas for analysis that indicates with certainty whether the sealant is coal tar-based.

Kibler also described another innovative enforcement technique. The DDE uses aerial imagery (a GIS based model) that can help determine changes in parking lot color that could indicate the use of coal tar-based sealants. Pavements sealed with coal tar-based sealants do not oxidize like their asphalt-based counterparts, therefore they remain very dark-colored. The DDE can use GIS technology to find dark parking lots and driveways. After identifying dark parking lots and driveways, the DDE then performs a field test on the pavement and sends a sample to Texas.

Once the DDE identifies parking lots and driveways with coal tar-based sealant, it requires the owner to remove the product. If the owner fails to remediate the property, the DDE can issue a civil penalty, and requires the owner to provide them with a plan for removal within thirty days of notification. The DDE will provide extensions in exigent circumstances (if, for example, if the weather does not allow removal). Kibler explained that fall and spring are the best times to remove coal tarbased sealant.

#### 4. Suffolk County, New York

Suffolk County, New York, enacted a ban on coal tar-based sealants effective January 1, 2012.<sup>68</sup> "Violation of this law shall be subject to a civil fine of five hundred dollars (\$500.00) for an initial violation, with a penalty of seven hundred fifty dollars (\$750.00) for any subsequent violations."

#### **B.** State Bans

#### 1. Washington

Washington was the first state to ban the use of coal tar-based sealants on April 13, 2011. The statewide ban specifically prohibits the sale of coal tar in Washington after 2012 and prevents the application of coal tar after 2013.<sup>69</sup> Joan Crooks of the Washington Environmental Council remarked, "This bill is another big step forward to ensure we are protecting children's health and the environment from harmful water pollutants."<sup>70</sup> Rep. David Frockt, who sponsored the bill, said "I'm proud we passed the first statewide ban against this nasty toxic threat before it can further contaminate our waters and threaten the health of our people. We are the first, but we won't be the last, because we are leading the nation in the right direction."

Joshua Grice, Research Analyst for the Washington State Department of Ecology, was contacted about the Washington ban, and he explained, "The ban in Washington was aided by a general consensus that coal tar sealants were not in wide use here."<sup>71</sup> Moreover, the Department of Transportation had already moved away from using coal tar-based sealants. Holly Davies, who was involved in the legislative history of the ban at the Washington State Department of Ecology, added, "[I]t's hard to defend smelly, black, carcinogens."<sup>72</sup> Prior to the ban, the United States Geological Service had tested two lakes in the state, Lake Washington and Lake Ballinger, and found coal tar contamination in both. Davies revealed, "An environmental advocate gave the paper to a legislator whose district includes Lake Ballinger and he wrote up a bill to ban coal tar sealants."

#### 2. Minnesota

Minnesota was the second state to ban the use of coal tar-based sealants. Effective January 1, 2014, the Minnesota Legislature banned the sale and use of coal tar-based sealants.<sup>73</sup> Prior to this statewide ban, Minnesota had twenty-nine local bans,<sup>74</sup> and in 2009, Minnesota restricted state agencies from purchasing coal tar-based sealant effective July 1, 2010.<sup>75</sup> In addition, the Minnesota Legislature provided small grants to local governments for voluntarily treating or disposing of contaminated sediment

in stormwater ponds, provided that the governments restrict the use of undiluted coal tar-based sealant. This law is codified under *Minnesota Statutes* section 116.202, accessible at https://www.revisor.mn.gov.

Al Innes, Safer Product Chemistry Coordinator at the Minnesota Pollution Control Agency, worked on the Minnesota ban and was able to provide additional information about the ban.<sup>76</sup> Innes explained that the success with the local bans and the voluntary grant-based program was integral to the adoption of the statewide ban. The popularity of local bans demonstrated that cities were concerned about the use of coal tar-based sealants; there was a lot of support for a statewide ban in policy committees and cities. The restriction on government agencies in 2009 also served as a stepping-stone to the statewide ban. Moreover, PAHs attach to suspended particles in the water and settle at the bottom, and settlement contamination issues were becoming more apparent and more concerning in Minnesota. In 2012, the Minnesota Pollution Control Agency estimated that cleanup costs for stormwater ponds contaminated with PAH runoff could approach \$1 to \$5 billion in the Twin Cities area alone.

#### IV. Bans in Maryland, Virginia, and Pennsylvania

Maryland, Virginia, and Pennsylvania are the three keystone states of the Chesapeake Bay watershed. Out of the three, only Maryland has attempted to present legislation banning coal tar-based sealants. However, the Maryland legislation was ultimately unsuccessful. Since then, two counties in Maryland have successfully enacted countywide bans prohibiting the use of coal tar-based sealants.

#### A. Maryland: Unsuccessful Legislation

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On February 1, 2012, Delegate Dana Stein sponsored legislation (HB 369) to ban coal tar-based sealants in Maryland, but he ultimately withdrew the bill. In a report on February 2, 2012, Del. Dana Stein said this about HB 369:

This bill seeks to prohibit the use of a pavement sealant applied to asphalt surfaces known as coal tar. Coal tar pitch has been classified as a "known carcinogen" by the U.S. Department of Health and Human Services. Along with being washed into our streams and waterways, coal tar residue can enter the home on the soles of shoes that have come into contact with a sealed surface, which leaves children especially susceptible to contamination. The alternative to coal tar sealants is comparably priced. Passage of this bill will make our environment cleaner and our neighborhoods healthier places to live.<sup>77</sup>

Some believe that this legislation failed to pass because of pressure from industry during a public hearing by the Environmental Subcommittee. According to Coal Tar Free America, industry representatives made "many exaggerations and false claims"<sup>78</sup> during the hearing. Some such claims include: "There is no link showing harm between coal tar and humans" and "3000 jobs would be lost if the ban were to take effect."<sup>79</sup>

#### B. Montgomery County, Maryland

As of December 18, 2012, Montgomery County, Maryland banned the use of coal tar-based sealant, the first ban of coal tar-based sealants in Maryland. According to Montgomery County, "The use of a coal-tar based sealant can subject the applicator

and the property owner to a fine of up to \$1,000."<sup>80</sup> The penalty provision of the bill is:

Any violation of this Chapter is a Class A violation. However, notwithstanding Section 1-19, the maximum penalty for a civil violation of Article I is \$1,000 for an initial or repeat offense. Each day a violation continues is a separate offense.<sup>81</sup>

#### C. Prince George's County, Maryland

Prince George's County, Maryland, enacted the second ban of coal tar-based sealants in Maryland. "Effective July 1, 2015, it is illegal to sell, use or permit the use of coal tar pavement products on property in Prince George's County. Contractors or property owners that use a coal tar pavement product are subject to a fine of up to \$1,000 per day for each violation."

The bans in the District of Columbia, Montgomery County, and Prince George's County have made the Anacostia Watershed the first multi-jurisdictional, coal tar-based sealant-free watershed in the United States.

#### **V. Conclusion**

The use of coal tar-based sealants is highly controversial. However, evidence suggests that the costs of use of coal tar-based sealants greatly outweigh the benefits of use. Although asphalt-based sealants are slightly more expensive, the environmental costs of coal tarbased sealants far outweigh the cheaper retail cost as the cleanup cost of coal tar-based sealants and PAHs is exorbitant. Moreover, the extent of the risk as well as cost of coal tar-based sealants and PAHs to human health is currently unknown.

One can conclude that the economic analysis actually favors banning coal tar-based sealants. It is arguable that a ban of coal tar-based sealants would not have a negative economic impact:

- The use of coal tar-based sealants hurts industries that rely on healthy populations of fish, crabs, and oyster.
- The continued use of coal tar-based sealants will increase the already high cost of cleanup.
- The cleanup and removal of coal tar-based sealants could create jobs in the region.
- Major retailers have already stopped selling the product, so consumers are already encouraged to purchase alternatives.

The Chesapeake Bay is a unique and precious resource. As the largest estuary in North America and the third largest in the world, one supporting more than 17 million people who live, work, and play within the watershed, 10 million of whom live along or near the Bay's shores, the use of coal tar-based sealants in Maryland, Virginia, and Pennsylvania does pose a threat to the Bay watershed's environment and the health of its residents. Statewide bans in Maryland, Virginia, and Pennsylvania would best serve the Chesapeake Bay and surrounding communities. Maryland, like Minnesota, has been very successful at enacting countywide bans, which could be indicative of a greater receptivity to a statewide ban in Maryland than in Virginia and Pennsylvania at this time. Without implementing statewide bans, the Chesapeake Bay remains unprotected from the pollution and risks associated with coal tar-based sealants.

#### **VI.** Attachments

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DISTRICT OF COLUMBIA Hiring a contractor? Do-it-yourself? BAN ON COAL TAR Don't use coal tar to seal your driveway or parking lot. It's the law, and it's for the PAVEMENT SEALANTS protection of our waterways and health.



#### DISTRICT OF COLUMBIA **BAN ON COAL TAR** PAVEMENT SEALANTS

DC LAW \$2,500 FINE PER DAY ENFORCEMENT IS UNDERWAY

Effective July 1, 2009, it is illegal to sell, use, or permit the use of coal tar pavement products on property in the District.

Coal far pavement products are used to seal driveways, parking lots, and playgrounds. They contain high concentrations of polycyclic aromatic hydrocarbons (PAHs), which are highly toxic chemicals that are suspected to cause cancer and are known to harm humans, animals, and aquatic ife. PAH-containing particles from seelants wear off paved surfaces and can be washed into local waterways by rainwater or tracked into homes.

Ask your contractor for less toxic asphalt-based sealants. GET MORE INFORMATION ddoe.dc.gov/CoalTarBan

REPORT SUSPECTED VIOLATIONS Tel: 202-407-1277



Washington, DC 20002

# NOTICE

#### Coal tar pavement sealants are now prohibited in Montgomery County.

#### Potential fines of up to \$1,000 for using coal tar.

Before using a paving sealant, check to make sure it does not contain: coal tar, coal tar pitch or RT-12.

#### Why:

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Coal tar, a byproduct of coal processing, contains high levels of chemicals called polycyclic aromatic hydrocarbons (PAHs).

coal tar-based sealants are applied on parking lots and driveways, PAHs can be released into nearby surface water. The chemicals can then accumulate in sediments to levels potentially harmful to aquatic wildlife.

#### Alternatives:

For those hiring a contractor to perform the job, make sure you specify a product without coal tar. Ask to see the ingredient list of the product they are using. For do-it-yourselfers, local home improvement stores carry <u>apphalt-based</u> or <u>later sealants</u>.

Use of a coal tar-based sealant can subject the applicator and the property owner to a fine of up to. \$1,000, effective December 18, 2012.

For a list of more alternative sealants and information on the County's ban on coal tar pavement sealants, visit www.montgomerycountymd.gov/coaltarban.



Montgomery County Department of Environmental Protection 255 Rockville Pike, Suite 120 Rockville, MD 20850

# **AVISO**

#### Ahora los selladores de alquitrán de carbón (Coal Tar) para pavimentos están prohibidos en el Condado de Montgomery.

Se pueden imponer multas de hasta \$1,000 por usar alquitrán de carbón.

Antes de usar un sellador para pavimento, verifique el producto para asegurar que no contenga: alquitrán de carbón, alquitrán de hulla o RT-12.

#### Por qué:

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El alguitrán de carbón, un producto derivado del procesamiento de carbón, contiene altos niveles de productos guímicos denominados hidrocarburos aromáticos policicíticos (HAP).

PARA LA SALUD HUMANA: Algunos HAP son carcinogenos conocidos.



PARA PROTEGER LA FLORA Y LA FAUNA: Estudios han demostrado que cuando se aplican selladores que contienen alquitrán de carbón en los estacionamientos y entradas para automóvilles, los HAP se pueden liberar en el agua superficial cercana. Los productos químicos se pueden acumular en los sedimentos a niveles potencialmente dañinos para la flora y la fauna.

PARA ATLORBAR DINERO: Es posible que la presencia de los HAP en los sedimentos incremente potencialmente los costos para el gobierno del Condado, negocios y asociaciones de propietarios de viviendas a los que se les cobra por el mantenimiento de instalaciones de escurrimiento de agua pluvial.

#### Alternativas:

Las alternativas aprobadas para los selladores de alquitrán de carbón incluyen: + Selladores a base de asfalto - Selladores de látes

Está prohibido sualquier material que contenga alquitrán de carbón, alquitrán de carbón refinado, alquitrán de bulla o BT-12.

Para aquellas personas que utilizan un contratista para ejecutar el trabajo, no deje de especificar que se use un producto sin contenido de alquitrán de carbón. Solicite ver la lista de ingredientes del producto que se va a utilizar. Para las personas que se ocupan ellas mismas de hacer estos trabajos, las tiendas locales de mejoras para el hogar cuentan con <u>selladores a base de asfalto o de látes</u>.

El uso de un sellador a base de alquitrán de carbón puede causar que se imponga una multa a la persona que aplica el material y al dueño de la propiedad de hasta \$1,000, con vigencia el 18 de diciembre de 2012.

Para obtener una lista de selladores alternativos e información sobre la prohibición del Condado en cuanto a selladores de alquitrán de carbón, visite www.montgomerycountymd.gov/coaltarban.



Condado de Montgomery Departamento de Protección del Medio Ambiente 255 Rockville Pike, Suite 120 Rockville, MD 20850

Fotografia de: Justin McAnnis/ U.S. Geological Survey



#### COUNTY BAN

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Prince George's County has banned the use of coal tar pavement products used on parking lots, driveways, playgrounds, airport runways and other surfaces. These products contain extremely high levels of PAHs (polycyclic aromatic hydrocarbons) that find their way into our local stream sediments during rain events and pose a significant threat to our waterways. Sediment PAHs are known to harm aquatic life and contain cancer causing carcinogens.

#### WHAT TO DO

Use asphalt-based or latex sealants that are less toxic.
 Some products that do not contain coal tar include:

#### RETAIL

-Henry PM2000 Premium Driveway Sealer/Filler -Henry Elastomeric Emulsion Crack Filler

#### COMMERCIAL/WHOLESALE -Paveshield

-Jennite Asphalt Emulsion Pavement Sealer -Gilsonite Asphalt Driveway Sealant

\*There are other sealare products available that do not contain coal tar, so please read labels carefully. Listing of specific product trade name does not constitute an endorsement of its use.

 Construct parking lots with pervious pavement or concrete to avoid the need for sealants

If purchasing a pavement product/sealant from a retailer or hiring a contractor/sealant applicator, ask for a Materials Safety Data Sheet (MSDS) that can help you identify coal tar-containing products before you purchase them. Use of a coal tar pavement product can subject the applicator and the property owner to a fine of up to **\$1,000**.

Disposal of any unwanted product can be made at the **Prince George's County Household Hazardous Waste Acceptance Site** located at the Brown Station Road Sanitary Landfill, 11611 White House Road in Upper Marlboro. For information, contact 3-1-1.

To report a potential violation of the ban, contact George Nicol at (301) 883 -5976.



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### News Release: Elevated Polycyclic Aromatic Hydrocarbons Noted in the Des Plaines River Watershed

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### Elevated Polycyclic Aromatic Hydrocarbons Noted in the Des Plaines River Watershed

The <u>Des Plaines River Watershed Workgroup (DRWW)</u> is a volunteer organization that brings together diverse stakeholders who have a vested interest to improve water quality in the Des Plaines River watershed. The DRWW performs annual water quality monitoring within the Des Plaines River watershed in Lake County, and they have detected elevated concentrations of Polycyclic Aromatic Hydrocarbons (PAHs) within the sediments of the Des Plaines River and its urban tributaries.

PAHs are a class of chemicals commonly found in coal-tar sealants used to protect and enhance the appearance of the underlying asphalt of driveways, parking lots and playgrounds. Stormwater runoff carries these chemicals into waterways, which causes detrimental effects to human and aquatic life (<u>USGS Coal-Tar-Based</u> <u>Pavement Sealcoat—Potential Concerns for Human Health and Aquatic Life</u>, <u>2016</u>). Additionally, as a coal-tar-based sealcoat ages, it wears into small particles that can be tracked into homes and mix with house dust.

PAHs are a major concern for public health because they have also been known to cause skin irritation and inflammation in humans and animals. They are also classified as a carcinogen by the U.S. Environmental Protection Agency.

"If PAH levels continue to rise, they will have a significant impact on the Des Plaines River Watershed," said Michael Adam, Deputy Director of Environmental Health for the Lake County Health Department and DRWW Lakes Committee Chair. "Coal-tar sealants can be toxic to fish and other aquatic life, causing damage to their DNA and even death.

In response to the increasing PAH concentrations in the Des Plaines River Watershed and concerns about the health of residents, communities are passing coal-tar-sealant bans. In Lake County, Highland Park, Deerfield, North Barrington, Third Lake and Vernon Hills have passed such bans. The Lake County Board's adopted Legislative Agenda for Fiscal Year 2020 supports state legislation that bans the use and sale of toxic pavement sealants.

In addition to enacting community bans, there is broad support among local governments for state legislation that bans the use and sale of toxic pavement sealants in support of safer, effective alternatives, like asphalt sealants, which have fewer toxic chemicals. On average, PAH concentrations in asphalt-based sealants are **1,000 times lower** than in coal-tar sealant.

"Progress is being made to protect our environment and our watershed," said Adam. "A number of stores now sell asphalt-based sealants instead of coal-tar sealants, but we still have a long way to go in ensuring coal-tar isn't used. Commercial application providers still routinely use coal-tar products. Community bans will help protect our communities and environment from toxic PAHs." The DRWW encourages community leaders to adopt a coal-tar-sealant ban and asks homeowners to consider choosing contractors that only use asphalt-based sealants on driveways, parking lots and playgrounds.



Contact Jacob Jozefowski, DRWW Coordinator/Water Resources Professional, if you have any questions.

Email: JJozefowski@lakecountyil.gov

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# Des Plaines River Watershed Workgroup Newsletter

May 2020



# **Annual Monitoring Updates**

### 2019 Annual Monitoring Report

The DRWW 2019 Annual Monitoring Report was submitted to the Illinois EPA on March 26, 2020 to meet the DRWW Member Agencies Publicly Owned Treatment Works (POTW) requirement for the National Pollutant Discharge Elimination System (NPDES) Permit Special Condition related to monitoring of receiving streams and to meet the monitoring component for its Member Agencies Municipal Separate Storm Sewer Systems (MS4) Permits. Midwest Biodiversity Institute (MBI), Suburban Laboratories and North Shore Water Reclamation District (NSWRD) have started the 2020 water quality monitoring efforts.

#### DRWW 2020 Monitoring Strategy

#### Water Column Sampling

- » 73 Monitoring locations x5 collections, x4 summer collections for nutrients
- » Add dissolved reactive phosphorus & ammonia nitrogen parameters
- » Remove metals & organics
- » Reduce *E.coli*, conductivity, chloride, sulfate to x2 collections
- Sediment Sampling (6-year rotation)
- » Tier 1 & 2 Sites focusing on metals and organic chemical analysis

#### Bioassessment Monitoring Program (6-year rotation)

» Starting in 2020 - Biannual collection on 14 core sites & 6 Des Plaines River main stem sites

#### Continuous Monitoring & Chlorophyll a Sampling

- » Data sondes at 3 sites (13-6, 13-1, 16-4) for year round collection of dissolved oxygen (DO), water temperature, total suspended solids (TSS), pH, chlorophyll *a* and conductivity
- » 14 core sites: annual collection of benthic chlorophyll *a*, and 4 summer samples of sestonic chlorophyll

### **IPS Model & NARP**

The Integrated Prioritization System (IPS) model version 1.2 was released by the Midwest Biodiversity Institute (MBI) in February 2020. IPS model future users (including the DRWW) are currently reviewing the model and user manual and providing feedback. MBI is currently compiling additional regional monitoring data to add into the model. The IPS model is anticipated to be released to the local workgroups in 2020.

In April 2020, Geosyntec completed a Preliminary Nutrient Assessment Reduction Plan (NARP) Workplan to assist the DRWW in identifying the scope, schedule and budget for the significant effort that will be required to develop the NARP. DRWW submitted a copy of the Preliminary NARP Workplan to the Illinois EPA, with a request to consider extending the NARP submittal by one year, to December 31, 2024, or alternately for the Illinois EPA to assist in defining methods and resulting products that could allow for a less costly approach to achieve the same result.

# Year 2 Biological & Water Quality Assessment of Upper Des Plaines River

In 2018, the DRWW contracted with the MBI to conduct chemical, physical and biological monitoring at 19 locations on the Des Plaines River and tributaries (Figure 1). This is part of an ongoing yearly monitoring effort which focuses on identifying the presence, extent and severity of aquatic life impairments, and identifying stressors for identified impairments and limitations to general use attainment. The report identified 13 causes of non-attainment; the most common causes were organic enrichment/low dissolved oxygen, siltation and embeddedness, macroinvertebrate habitat, and PAH/metals/toxicity. Five of



# the 19 sites were identified as fully supporting aquatic life. This is the first time full support of aquatic life has been observed in the Des Plaines River study area!

The monitoring data indicates that biological impairments in the upper 10 miles of the study area are primarily influenced by legacy hydraulic and habitat alterations from agricultural land uses causing slow flows, excessive siltation, and nuisance algal/aquatic plant growth. The four uppermost monitoring sites will likely never achieve attainment of the Aquatic Life General Use through water quality improvements alone; habitat improvements would also be needed. The effects of the hydraulic and habitat alterations in the upper main stem are mitigated by the addition of large volumes of treated wastewater downstream of Mill Creek, as shown by the attainment of the aquatic life general use for four consecutive sites downstream of the NSWRD Gurnee Water Reclamation Facility and the improvement of multiple chemical, habitat, and biological indicators. The biological impairments in the lower portions of the study area are primarily influenced by suburban and urban land uses resulting in high concentrations of PAHs/metals/toxicity in sediment . Water quality has substantially improved since the 1980's and the new attainment of aquatic life general use indicates conditions are continuing to improve.

# 2019 Lake Monitoring Summary

The DRWW contracted with the Lake County Health Department (LCHD) to conduct monitoring of the lakes and respective inlets/outlets to assess the current state of water quality and to determine inlet sources of nutrients and pollutants. This monitoring effort focused on man-made/impoundment lakes (Big Bear, Little Bear and Charles Lake) and was a continuation of the 2018 lake monitoring which focused on glacial stratified lakes (Gages, Druce and Third Lake). The two-year study provides a good representation of lakes within the Des Plaines River watershed.

The lakes monitored in 2019 are all hydrologically connected. Lake Charles is at the top of the watershed and flows into Big Bear, which subsequently flows into Little Bear. The water then flows into the Seavy Drainage Ditch – Indian Creek and ultimately the Des Plaines River. Monthly water samples (May – Sept.), and three additional storm event samples, were collected at each monitoring site during 2019. If feasible, flow rates were measured during sampling. Inlet/outlet samples were analyzed for 7 water quality parameters. Additionally, in-lake epilimnetic and when applicable hypolimnetic water samples

were collected, along with a depth profile analysis during each monthly visit which were then used to calculate anoxic volumes. Additional water chemistry parameters were analyzed for the in-lake samples. The complete dataset and full report for the lake monitoring will be available on DRWW's website in June 2020.

## Lake Charles

LCHD monitored 3 lake inlets on Lake Charles, one on north side and two on the central east and west boundary, as well as an south end outlet structure (Figure 2). Inlet 1 had the highest concentration of total suspended solids (TSS). During major precipitation events murky brown stormwater was observed entering the lake and carp found stirring up sediment in that inlet area. Inlet 2 had the highest total phosphorus (TP). Upstream of this inlet is an intermittent flashy stream, which flows through a golf course property prior to discharging into the inlet, which may be a major contributor of total phosphorus to this inlet.

# **Big Bear Lake**

LCHD monitored 7 inlets including Seavey Ditch (Inlet) on Big Bear Lake (Figure 3). The surrounding inlets in the Bear Lakes have an intermittent flow that can only be sampled after a significant rain event. Seavey Ditch (flows out of Lake Charles) sampling had the highest flow rate and largest range for pollutant concentrations. For example, TSS (4.7 mg/L) and TP (0.038 mg/L) concentrations were relatively low in the June samples; whereas, TSS (28 mg/L) and TP (0.148 mg/L) concentrations in the July post storm event samples were substantially higher. Comparatively, the Lake Charles outlet has a lower TP (.067 mg/L), TSS (9.0 mg/L), and chloride (CI<sup>-</sup>) (100.0 mg/L) than the concentrations at Big Bear Inlet. There are several detention basins that flow into Seavey Ditch before it reaches Big Bear Lake where there are slight increases in TP (0.072 mg/L), TSS (10.9 mg/L), and CI<sup>-</sup> (99.4 mg/L).

### Little Bear Lake

LCHD monitored 4 inlets on Little Bear Lake (Figure 3). Inlet 5 on the southeast side of the lake was only sampled twice after storm events but had the highest TSS concentration (avg. 19.3 mg/L) and TP concentration (avg. 0.109 mg/L). During major precipitation events murky brown stormwater was observed entering the lake in that inlet area. Since the focus of these lakes were on shallow impoundment lakes, the only lake that was stratified, and therefore was able to run a WiLMs model for TP loading was Little Bear Lake.





# **Education & Outreach**

### **Charles Brown Detention Basin Enhancements & Sediment Forebays**



The Village of Libertyville was awarded an Illinois EPA Section 319 project grant in January 2019 for Charles Brown Detention Basin Enhancements and Sediment Forebays. Prior to project implementation, the site conditions were extremely poor with sediment accumulation, degraded habitat, and deteriorated shoreline along the basin edges. Lake Charles is currently identified as an impaired water body on the Illinois EPA's 2018 303(d) list for TSS, TP and Aquatic Plants (Macrophytes).

The DRWW provided a letter of support with education and outreach cost-share match towards that grant, including newsletter project updates and providing project information at DRWW General Membership meetings. Currently, the earthwork has been completed, three

sediments forebays totaling 0.8 acres (2 at inlet points and 1 near the outlet) and storm sewers have been installed and the urban stormwater restoration (7.32 acres) is underway (See Figure 4). The wetland enhancement and sediment forebays will provide substantial water quality benefits to downstream waters such as: Lake Charles, Big Bear Lake, Little Bear lake, Indian Creek and the Des Plaines River. The estimated project completion is Summer 2020.

### DRWW Encourages Municipalities to Adopt Coal-Tar -Sealant Ban

The DRWW has found elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) within Des Plaines River and oth-

er tributary sediment samples. Concentrations of total PAH compounds up to 70,000 mg/kg (dry wt. basis) were found in both the highly populated Indian Creek and Bull Creek subwatersheds. Common sources of these chemical compounds are the use of coal-tar-sealants on driveways and parking lots, where precipitation runs off these surfaces carrying PAHs into the waterways. Studies conducted by the USGS indicate that PAH's found in coal-tar sealants increase the risk of multiple types of cancers (lung, skin, bladder, and respiratory) for humans and cause DNA damage or death to fish.

In response to the increasing PAH concentrations in the Des Plaines River, communities are passing coal-tar-sealant bans. In Lake County, Highland Park, Deerfield, North Barrington, Third Lake and Vernon Hills have passed such bans, joining other Illinois communities such as Glenview, Winnetka, Wilmette, Evanston, South Barrington, and Port Barrington. The Lake County Board's newly adopted Legislative Agenda for Fiscal Year 2020 supports state legislation that bans the use and sale of toxic pavement sealants. In addition to enacting community bans, there is broad support among local governments for state legislation that bans the use and sale of toxic pavement sealants in support of safer, effective alternatives, like asphalt, which have fewer toxic chemicals. On average, PAH levels in asphalt-based sealants are 1,000 times lower than in coal tar sealant.

### **DRWW Executive Board Members**

- President: Al Giertych, LCDOT
- Vice President: Vacant
- Treasurer: Michael Talbett, Village of Kildeer
- Secretary: Paul Kendzior, Village of Libertyville
- Member at Large: Jim Anderson, LCFPD
- Member at Large: Dave Miller, NSWRD

The DRWW urges municipalities to adopt a coal-tar-sealant ban! To see a sample of what other communities have implemented, the Deerfield ordinance, a vendor license application, and supplemental information can be found on the website of The Village of Deerfield here: <u>https://www.deerfield.</u> <u>il.us/708/Coal-Tar-Sealant-Ban</u>.



Figure 5: USGS Coal-Tar-Based Pavement Sealcoat and PAHs (2012)

- Monitoring/Water Quality Improvements
  Committee Chair: Joe Robinson, NSWRD
- · Lakes Committee Chair: Mike Adam, LCHD

# **Coal Tar-Based Sealants**

# www.CityofLakeForest.com



Public Works Department

- Building Maintenance
- Engineering
- Fleet Maintenance
- Sanitation
- Streets
- Water Plant
- Water & Sewer

Contact Public Works for more information 847-810-3542

# *Guidelines for Sealing Your Driveway or Other Paved Surfaces in Lake Forest*

### Understanding Health Risks & Proper Sealing Procedures

If it is necessary to seal the surface of a driveway, parking lot, or playground, it is important to understand both the health risks associated with coal tar-based sealants as well as safer alternative products before the sealing process begins. Coal tar-based products are hazardous due to the high amount of polycyclic aromatic hydrocarbons (or PAHs) that it contains. PAHs are classified as a human carcinogen and are toxic to people and wildlife.

Potential harm from coal tar-based sealant is highest during the first two weeks after application due to the prolonged evaporation of PAHS. The PAHs in coal tar can be inhaled or ingested, and are often carried indoors through shoes and pets. Children are at higher risk since they often play on or near driveways and playgrounds sealed with coal tar.



#### VILLAGE OF DEERFIELD LAKE AND COOK COUNTIES, ILLINOIS

#### **ORDINANCE NO.** <u>O-18-07</u>

#### AN ORDINANCE ADDING CHAPTER 12 ("HEALTH"), ARTICLE 8 ("PAVEMENT SEALANTS"), AS AMENDED, TO THE MUNICIPAL CODE OF THE VILLAGE OF DEERFIELD TO REGULATE THE USE AND SALE OF COAL TAR PAVEMENT SEALANTS AND LICENSING OF PAVEMENT SEALANT PROFESSIONALS

#### PASSED AND APPROVED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF DEERFIELD, LAKE AND COOK COUNTIES, ILLINOIS, this

\_\_\_\_\_2nd\_\_\_day of \_\_\_\_\_April \_\_\_\_, 2018.

Published in pamphlet form by authority of the President and Board of Trustees of the Village of Deerfield, Lake and Cook Counties, Illinois, this 2nd day of April, 2018.

#### VILLAGE OF DEERFIELD LAKE AND COOK COUNTIES, ILLINOIS

#### ORDINANCE NO. 0-18-07

#### AN ORDINANCE ADDING CHAPTER 12 ("HEALTH"), ARTICLE 8 ("PAVEMENT SEALANTS"), AS AMENDED, TO THE MUNICIPAL CODE OF THE VILLAGE OF DEERFIELD TO REGULATE THE USE AND SALE OF COAL TAR PAVEMENT SEALANTS AND LICENSING OF PAVEMENT SEALANT PROFESSIONALS

WHEREAS, the Village of Deerfield is a home rule unit of local government under the provisions of Article VII, Section 6 of the Illinois Constitution that may exercise any power and perform any function pertaining to its government and affairs including, but not limited to, the power to regulate for the protection of the public health, safety, morals and welfare; and

WHEREAS, the corporate authorities of the Village of Deerfield find that numerous academic and government studies have found that coal tar pavement sealants contain significantly higher concentrations of polycyclic aromatic hydrocarbons which may damage human health and the environment; and

WHEREAS, the corporate authorities of the Village of Deerfield find that there are readily available alternatives to coal tar pavement sealants which are commonly used by individuals and pavement sealant professionals in the Village of Deerfield; and

WHEREAS, the corporate authorities of the Village of Deerfield have determined that the regulations provided herein are in the best interests of the public health, safety and welfare of the Village of Deerfield;

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF DEERFIELD, LAKE AND COOK COUNTIES, ILLINOIS, in the exercise of its home rule powers, as follows: SECTION 1: The recitals to this Ordinance are incorporated into and made a part of this

Ordinance as if fully set forth herein.

SECTION 2: Chapter 12 ("Health") of the Municipal Code of the Village of Deerfield

shall be amended to add the following as Article 8, which shall be entitled "Pavement Sealants";

and which shall read as follows:

#### Article 8. Pavement Sealants

#### Sec. 12-53. Definitions.

For the purposes of this Article, the following words and phrases shall have the meanings respectively ascribed to them by this Section:

*Coal tar products* means pavement sealant or sealcoat products that contain coal tar, coal tar pitch, coal tar derivatives, coal tar pitch volatiles, coal tar mixtures or any variation assigned the Chemical Abstracts Service (CAS) numbers 65996-93-2, 65996-89-6, or 8007-45-2.

*Licensee* means a holder of a pavement sealant professional's license issued by the Village of Deerfield, as well as the agents, employees and independent contractors of the licensee.

Pavement sealant professional means any person that employs one or more individuals for the purpose of providing pavement sealing for clients including, but not limited to, pavement sealing of any driveway, driveway approach, on or off-street parking area, playground, sidewalk, bike trail, patio, sports facility, loading area or facility, or roadway.

*Pavement sealing* means the application of sealant or sealcoat product to maintain any surface, including but not limited to, a driveway, driveway approach, on or off-street parking area, playground, sidewalk, bike trail, patio, sports facility, loading area or facility, street, highway, or roadway.

*Person* means any individual, association, partnership, firm, trust, corporation or limited liability company.

*Vehicle* means any motor-driven vehicle used by the licensee to transport employees or agents who work on pavement sealing, equipment, and/or debris.

#### Sec. 12-54. Sale of coal tar products prohibited.

No person may sell, offer or display for sale within the Village, at wholesale or retail, coal tar products of any kind.

#### Sec. 12-55. Use of coal tar products prohibited.

On public and private property, no coal tar products of any kind shall be applied or used on the surface of any a driveway, driveway approach, on or off-street parking area, playground, sidewalk, bike trail, patio, sports facility, loading area or facility, street, highway, roadway, or paved surface within the Village.

#### Sec. 12-56. Pavement sealant professional license required.

- (a) No pavement sealant professional shall perform any pavement sealing without first securing an annual license therefor from the Village. The failure to comply with this license requirement shall be deemed a violation of this Article.
- (b) Except as otherwise provided by an annual fee resolution, the annual pavement sealant professional license fee shall be One Hundred Dollars (\$100.00). All applicable license fees and any other required fees shall be paid prior to the issuance of any license.
- (c) The license term shall expire on December 31 of the calendar year for which it is issued unless sooner revoked as provided in this Article.
- (d) A license shall be a purely personal privilege, effective for a period not to exceed one (1) year after issuance unless sooner revoked as provided in this Article, and shall not constitute property. No license is transferable, separate or divisible, and such authority as a license confers shall be conferred only on the licensee named therein.

#### Sec. 12-57. Application for pavement sealant professional license.

- (a) An application for a pavement sealant professional license shall be made to the Village Manager on forms provided by the Village. The application shall be completed in full and signed by the applicant, if an individual, or by a duly authorized agent thereof, if not an individual, verified by oath or affidavit, and shall set forth the following information:
- 1. Name and address of the applicant; if the applicant is a partnership, the application shall show for each partner his name and address and interest, and all information required by paragraphs (2) through (6) of this Section, and if the applicant is a corporation, the application shall state the name and address of the registered agent, and with respect to each director, and each shareholder owning ten percent (10%) or more of the corporation's shares, (i) his or her name and address, together with (ii) the information required by paragraphs (2) through (6) of this Section.
- 2. Whether the applicant has ever been convicted of the commission of a felony under the laws of this State, or any other state, or under the laws of the United States.
- 3. Whether applicant ever made an application for a license under this Article, or a

pavement sealant professional business license or similar license to a state or county, city, village or other unit of local government, and if so, where and when, and if such application was granted or denied, and if such application was denied, the reasons for the denial.

- 4. Whether a license was ever issued to the applicant under this Article or a pavement sealant professional license or similar license was ever issued by any state or county, city, village or other unit of local government, and if so, where and when, and if such license has ever been suspended or revoked and the reasons for the suspension or revocation.
- 5. Whether the applicant has ever been convicted of a violation of any of the provisions of this Article or any ordinance of any other Illinois municipality which regulates pavement sealant professionals, or any Illinois statute regulating pavement sealant professionals.
- 6. A statement that the applicant has received copies of, reviewed and understands the applicable ordinances of the Village including, but not limited to, the prohibition on the use and sale of coal tar products in the Village, and will promulgate same and educate its employees thereof.
- 7. The number and kind of vehicles owned and controlled by the applicant.
- 8. The location of the applicant's office and garage.
- 9. The color scheme, insignia, trade name, and telephone number located upon and used to designate the vehicles of the applicant.
- 10. A complete description of each vehicle including the year, make, model and motor or factory number ("VIN") of the vehicle.
- 11. Evidence that the applicant is covered by policies of: comprehensive general liability insurance, including bodily injury and property damage; and adequate workers' compensation and vehicle insurance unless the Village Manager, in his or her sole discretion, waives any or all of these insurance requirements.
- 12. Payment of the annual license fee.
- (b) The applicant shall submit a written authorization for the Village, its agents and employees to seek information and conduct an investigation into the truth of the statements set forth in the application and the qualifications of the applicant for a license.
- (c) The applicant shall submit such other information, documentation, and identification as the Village Manager may deem necessary to determine the identity of the applicant or to process the application.

# Sec. 12-58. Issuance, denial, suspension, renewal, and revocation of pavement sealant professional's license.

- (a) In addition to the provisions under Section 1-26 ("Suspension Or Revocation Of Licenses Or Permits; Refusal To Issue Licenses Or Permits") of this Code, the Village Manager may deny, suspend, revoke, or refuse to issue or renew, a pavement sealant professional's license for any of the following reasons:
- 1. The use or sale of coal tar products by the licensee within the Village;
- 2. The applicant or licensee, if an individual; or any of the officers, directors, any person owning directly or beneficially more than ten percent (10%) of the stock of the corporation, if the applicant or licensee is a corporation; or any of the partners, including limited partners, if the applicant or licensee is a partnership; and the manager, assistant manager or any other person principally in charge of the operation of the business, has been:
- (i) convicted of a felony under the laws of the State of Illinois or any other state, or under the Federal laws of the United States, within ten (10) years of the date of the application; or
- (ii) convicted of any other criminal offense involving dishonesty, fraud, deceit or moral turpitude within ten (10) years of the date of the application; or
- (iii) convicted of a violation of any provision of this Article or any applicable provision of this Code including, but not limited to, Chapter 14 ("Licenses"), Article 1 ("In General") of this Code; or
- (iv) convicted of a violation of an ordinance of any other unit of local government regulating pavement sealant professionals; or
- (v) denied, suspended or revoked of a pavement sealant professional license or similar license by the Village or any other jurisdiction; or
- (vi) subject to pending proceedings to suspend or revoke a pavement sealant professional license or similar license issued by the Village or any other jurisdiction; or
- (vii) overdue on payment to the Village of fees, fines, or penalties assessed against the licensee or imposed upon the licensee in relation to the sale or use of pavement sealants; or
- (viii) providing false, misleading or fraudulent statements of fact in the license application or in any document required by the Village in conjunction with the license application; or
- (ix) failing to provide information required by the Village in conjunction with the

license application.

- (b) In the event that the application is denied for failure to comply with the requirements of this Article, the Village Manager shall immediately notify the applicant in writing of the reasons for the denial. If the failure is not cured within ten (10) days after the date on which the Village Manager denies the issuance of said license, the application shall be null and void.
- (c) No person whose license has been revoked may apply for a license for a period of one (1) year following the date of such revocation.
- (d) The renewal of a license shall follow the same provisions required for the issuance of a license under this Article.
- (e) Except as otherwise provided by this Section, the provisions of Section 1-26 of this Code shall govern the issuance, denial, suspension or revocation of this license.
- (f) The Village Manager shall have the discretion to deny, suspend or revoke a license for a single violation of this Article.

#### Sec. 12-59. Display of pavement sealant professional's license.

- (a) All vehicles operated by the licensee must at all times display:
- 1. The information required by Section 12-59(a)(9) of this Article; and
- 2. The pavement sealant professional's vehicle sticker issued by the Village upon issuance of a license in an open and conspicuous place in the front driver's side window of the vehicle.
- (b) The failure to comply with the provisions of this Section shall be deemed a violation of this Article.

#### Sec. 12-60. Penalty.

- (a) Any person found guilty of violating any provisions of this Article shall be fined in an amount not less than Fifty Dollars (\$50.00) nor more than One Thousand Dollars (\$1,000.00) for each offense. Every day that a violation exists constitutes a separate offense.
- (b) Any owner or occupant of property who permits a violation of Section 12-55 of this Article to exist or continue upon the property shall be fined in an amount not less than Fifty Dollars (\$50.00) nor more than Five Hundred Dollars (\$500.00) for each offense. Every day that such violation is permitted to exist, or is maintained by the owner of occupant, shall be considered a separate offense.

Sec. 12-61. **Effective Date.** 

The effective date of this Ordinance shall be May 1, 2018.

SECTION 3: If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this Ordinance.

SECTION 4: This Ordinance, and each of its terms, shall be the effective legislative act of a home rule municipality without regard to whether such Ordinance should: (a) contain terms contrary to the provisions of current or subsequent non-preemptive state law; or, (b) legislate in a manner or regarding a matter not delegated to municipalities by state law. It is the intent of the corporate authorities of the Village of Deerfield that to the extent that the terms of this Ordinance should be inconsistent with any non-preemptive state law, this Ordinance shall supersede state law in that regard within its jurisdiction.

SECTION 5: This Ordinance shall be in full force and effect upon its passage and approval and shall subsequently be published in pamphlet form as provided by law, except as otherwise provided herein.

PASSED this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

AYES: Benton, Oppenheim, Seiden, Shapiro, Struthers

NAYS: Jester

ABSENT: None

ABSTAIN: None

APPROVED this <u>2nd</u> day of <u>April</u>, 2018.

Ruff Ander Village President Pro Tem

ATTEST:

Village Clerk

# The Ecological Impacts of Coal Tar-Based Sealant

- The PAHs from coal tar products often runoff through storm water systems and ultimately reside in the sediment of rivers, streams, ponds and lakes.
- As PAHs are eroded from the surface over time, it damages ecosystems that it contacts (which includes nearby lawns, ravines, and the lakefront). They are especially toxic to fish and other aquatic life, and should be avoided where possible.



# Alternatives Options for Coal Tar-Based Sealant

- If you choose to seal your driveway or other surface, use asphalt-based sealants as opposed to coal tar-based sealants.
- The United States Geological Survey found that asphalt-based sealants contain 1/1000<sup>th</sup> the amount of PAHS that exist in coal tar-based sealants.
- If you are not interested in using asphalt sealants as an alternative, many paving businesses offer a variety of other products (including acrylic and latex-based sealants).

# What Residents Can Do

- Consider sealing your driveway less often.
- Use an asphalt-based sealant.
- Educate your neighbors about the risks associated with coal tar-based sealants.





# Village of Winnetka Coal Tar Ban Information Guide

### What is Coal Tar?

- Coal tar is a waste material generated during coal processing (the conversion of coal to coke).
- It is often a component of certain types of sealants used to protect and beautify asphalt pavement such as residential driveways and parking lots.

# Why did the Village ban it?

- Coal tar contains high levels of a class of chemical compounds known as polycyclic aromatic hydro carbons (PAH). Studies show that PAHs are harmful to fish and, with prolonged exposure, pose a risk of cancer in humans.
- Sunlight and vehicle traffic wears down sealants over time and sealcoat flakes are washed away by rain into bodies of water or carried away by wind into homes.
- Research conducted by the City of Austin and the U.S. Geological Survey found that PAH levels were significantly higher in water runoffs from coal tar sealed driveways.

## What does the ban mean?

- As of August 19, 2014, the use of coal tar-based sealing agents is prohibited on all public and private driveways, parking lots and other roadway surfaces in the Village of Winnetka. Asphalt-based sealant products are still acceptable.
- All contractors and commercial/multi-family property owners applying pavement sealants must obtain a Pavement Sealant Applicators License through the Village (renewed annually) and confirm they do not use products that contain coal tar.
- Property owners of single family lots applying sealant themselves <u>do not</u> need a Pavement Sealant Applicators License.

### What are my options?

• Use asphalt-based sealants.

Significantly lower PAH level Sold in most home improvement stores More common sealant used in the western United States

- Replace asphalt with concrete driveways.
- Leave driveways unsealed.



### Where can I learn more?

- Contact the Village of Winnetka Public Works Department at (847) 716-3568.
- Prior to the ban, the Winnetka Environmental and Forestry Commission researched the subject and presented findings to the Village Council. To view the EFC's report on coal tar, visit

http://www.villageofwinnetka.org/government/boards-and-commissions/environmental-and-forestry-commission/water