

Challenges and Proposed Solutions to the District's Coal Tar Pavement Sealant Ban

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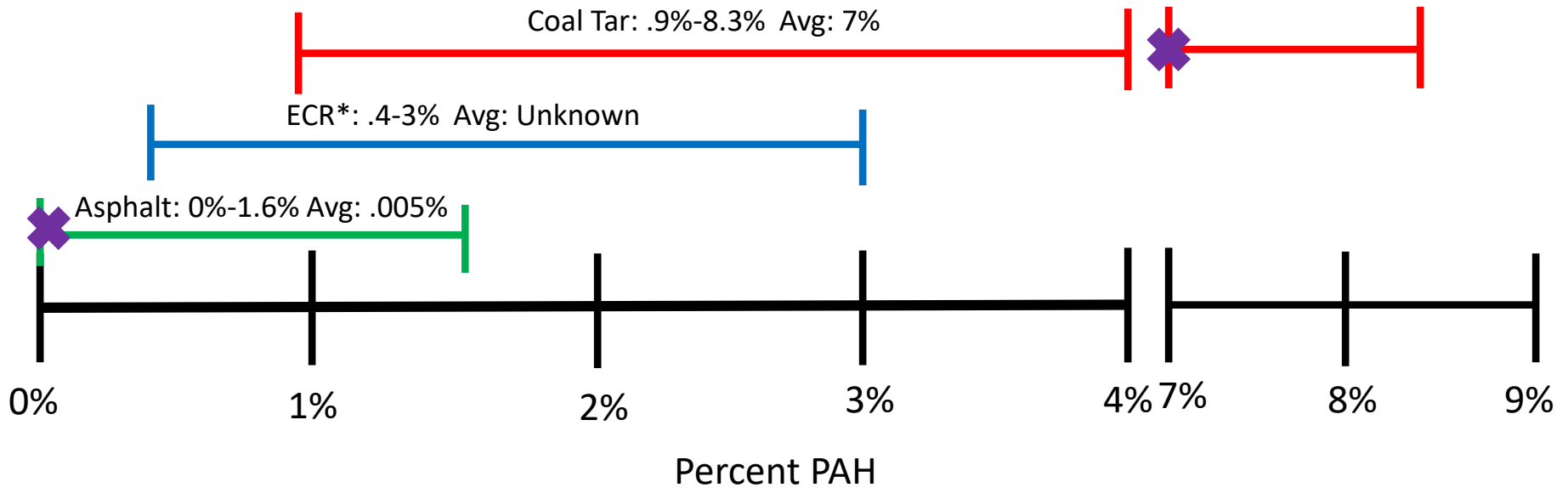
Background

DOEE inspects at least 60 properties per year for compliance with the coal tar ban

- 11 of the 66 lots inspected between October 2016 and December 2017 were sealed
- 6 indicated high PAH levels during field inspections test
- All 6 were found to be new, non-coal tar products containing ethylene cracker residue (ECR)



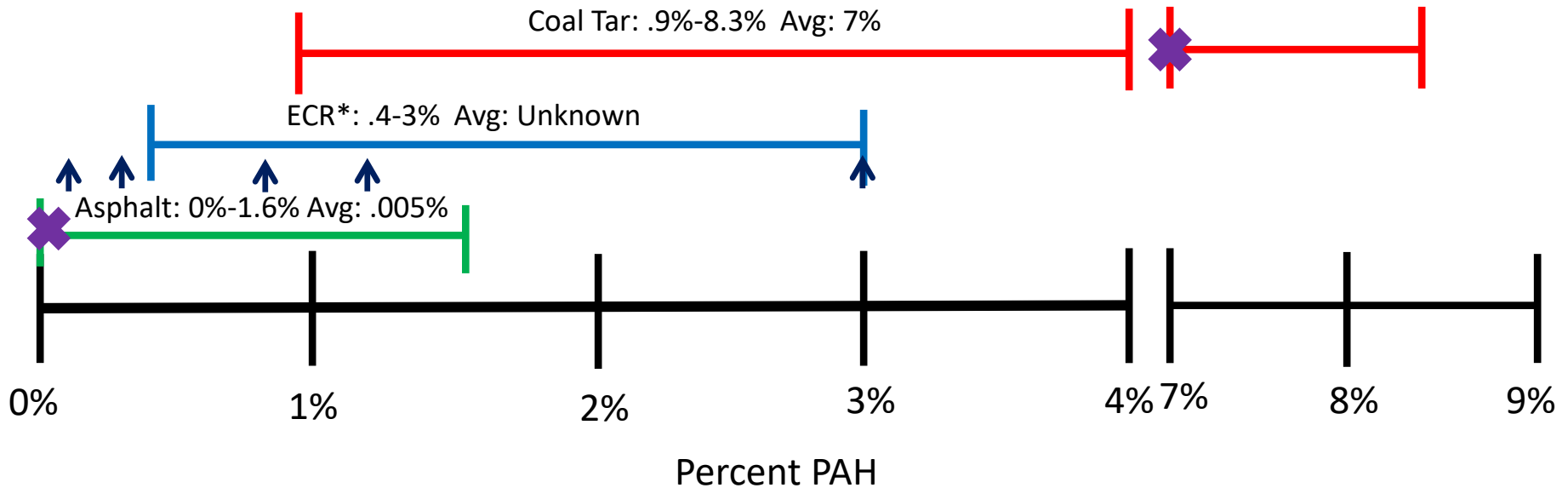
PAH Concentrations by Sealant Type



*concentration range is an estimate from Minnesota Pollution Control Agency

✖ Average PAH concentration

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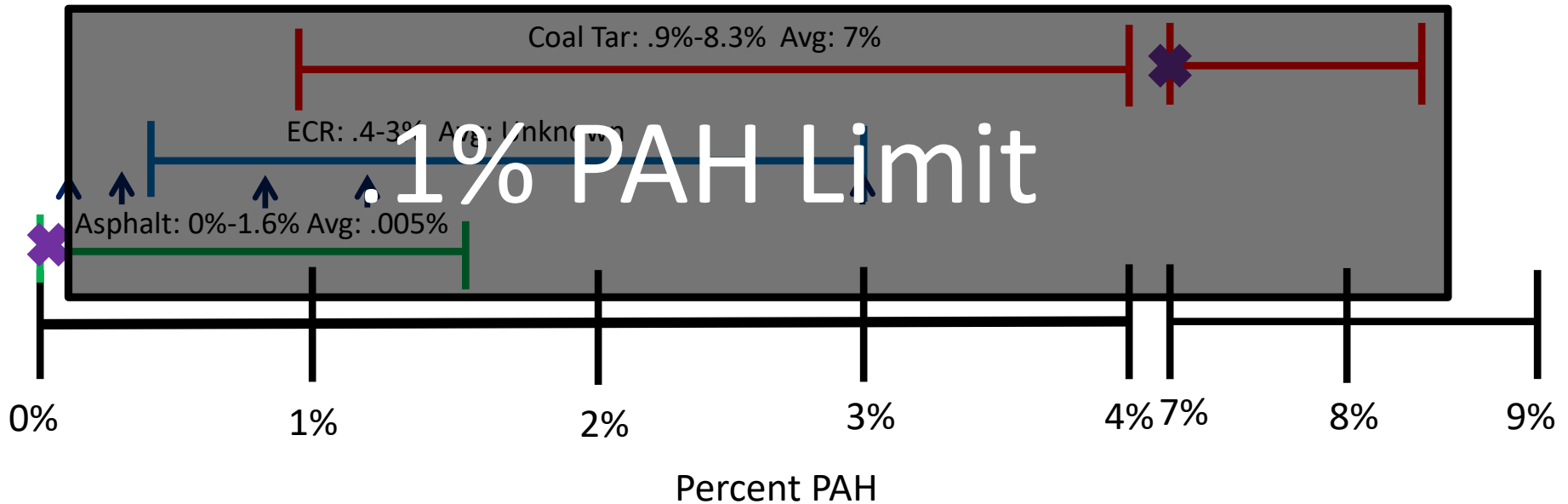


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↑ Lab analysis results from DOEE inspections on District lots using new products

✕ Average PAH concentration

Proposed Solutions: Introduce .1% PAH Limit to Law



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✕ Average PAH concentration



Proposed Legislative Language

DOEE proposes amending the District's legislation from 2008 with the following:

(a) For the purposes of this section, the term "high PAH **sealant** product" means:

(1) a material that contains:

(A) coal tar; **or**

(B) coal tar pitch, coal tar pitch volatiles, RT-12, refined tar, or a variation of those substances assigned the chemical abstracts service (CAS) numbers 65996-92-1, 65996-93-2, 65996-89-6, or 8007-45-2; **or**

(C) a surface-applied product containing steam-cracked petroleum residues, steam-cracked asphalt, pyrolysis fuel oil, heavy fuel oil, ethylene tar, ethylene cracker residue, or a variation of those substances assigned the chemical abstracts service (CAS) numbers 64742-90-1 or 69013-21-4; **or**

(D) substances containing more than 0.1% (1000 ppm) polycyclic aromatic hydrocarbons (PAHs), by weight; **and**

(2) **is used on, or is for use on, an impermeable surface, including bricks, block, metal, roofing material, asphalt, or concrete.**

(b) No person shall sell, offer for sale, use, or permit to be used on property he or she owns, **a high PAH sealant product. ...**

(2) The Mayor may publish a list of sealant products that are not high PAH sealant products and may establish criteria for demonstrating that a product is not a high PAH sealant product.

Proposed Solutions: Introduce .1% PAH Limit to Law



13 ordinances in southern Michigan regulate to .1% PAH level

DOEE, in partnership with Huron River Watershed Council, currently discussing certification program through National Sanitary Foundation

Proposed Legislation in Other Jurisdictions

State	Year Proposed	PAH Threshold
Illinois	2017	0.1%
Michigan	2017	0.1%
Massachusetts	2015	1%
New York	2017	1%
Maine	2017	1%
Indiana	2018	1%
Virginia	2018	1%

For Discussion:

- Prevalence of new products in other jurisdictions—have you encountered them?
- Feedback on proposed solutions:
 - .1% PAH threshold amendment
 - Independent/3rd party product certification for manufacturers
- Feasibility and interest from jurisdictions to join the District in amending/creating legislation
- Next steps
 - Continuing conversations with interested jurisdictions
 - Development of certification method/process with NSF