

EH&S Roundtable

- Moderator: Howard Marks, NAPA
- Health & Safety: Scott Seamon, Ace-Saginaw
- Environmental: Jim Mertes, Payne and Dolan



EH&S Roundtable

- Perspectives on current EH&S landscape
- COVID-19: programs & vaccination mandates
- Yale and FSU studies: media hype
- Heat Illness / confined space
- The Road Forward / EPDs
- Silica Rule / Respiratory Protection
- Environmental Justice impacts on permitting



Perspectives on Current EH&S Landscape



- Admin. emboldened on Carbon Reduction and Social Equity



- EPA including Environmental Justice in just about everything
 - Federal 'policy' but many states implementing legis./reg.



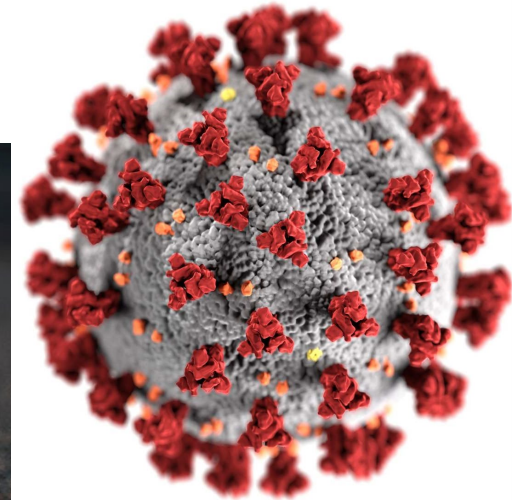
- OSHA methodically moving forward, albeit more 'prescriptive'
- Recent difficulty w/ their ETSs



- DOT focusing on carbon footprint and project (re)alignment
 - IIJA monies available for projects that reduce carbon / increase sustainability / federal "Buy Clean"

COVID-19: programs & vaccination mandates

- Current requirements: e.g., need COVID Response Plan (NAPA template)
- Ensure compliance with changing requirements (masking, etc.)
- Vax mandate update
 - OSHA – employer
 - Federal Contractor
- Focus for this season



Media Hype

Asphalt adds to air pollution, especially on hot, sunny days

sciencealert

Trending

SEPTEMBER 2, 2020



(Victor Lazarov/Unsplash)

ENVIRONMENT

The Glue That Holds Our Roads Together Could Become Toxic When Exposed to Sun And Rain

DAVID NIELD 19 JULY 2020



(© stock.adobe.com)

Media Hype

Asphalt adds to air pollution, especially on hot, sunny days

science



ENVIRONM

The Gl
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Coal Tar Ban

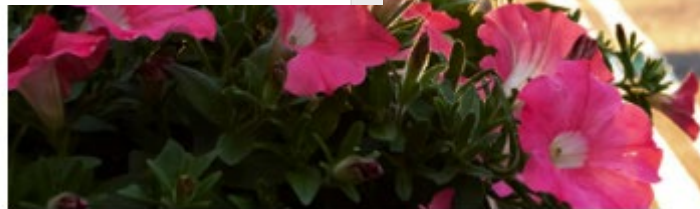
Trending

SEPTEMBER 2, 2020



(Victor Lazarov/Unsplash)

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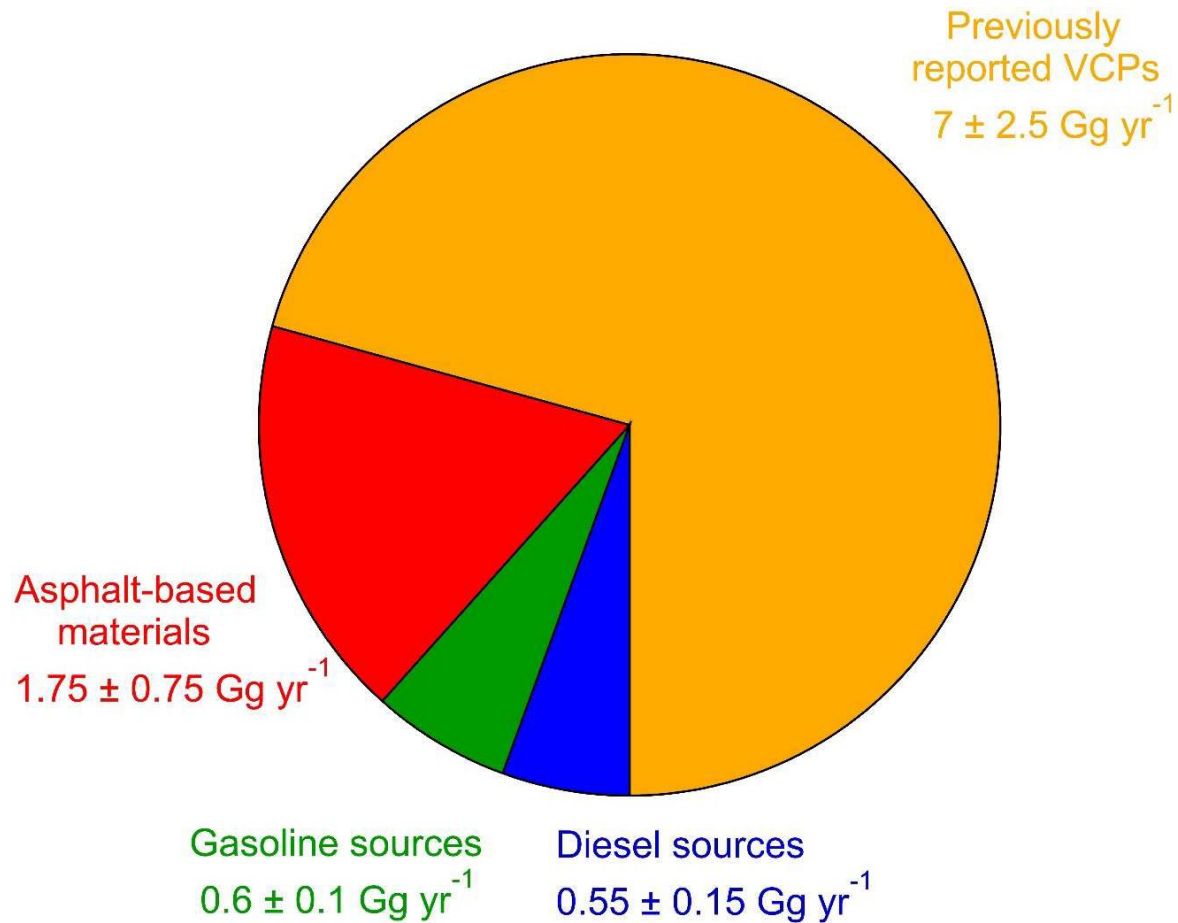


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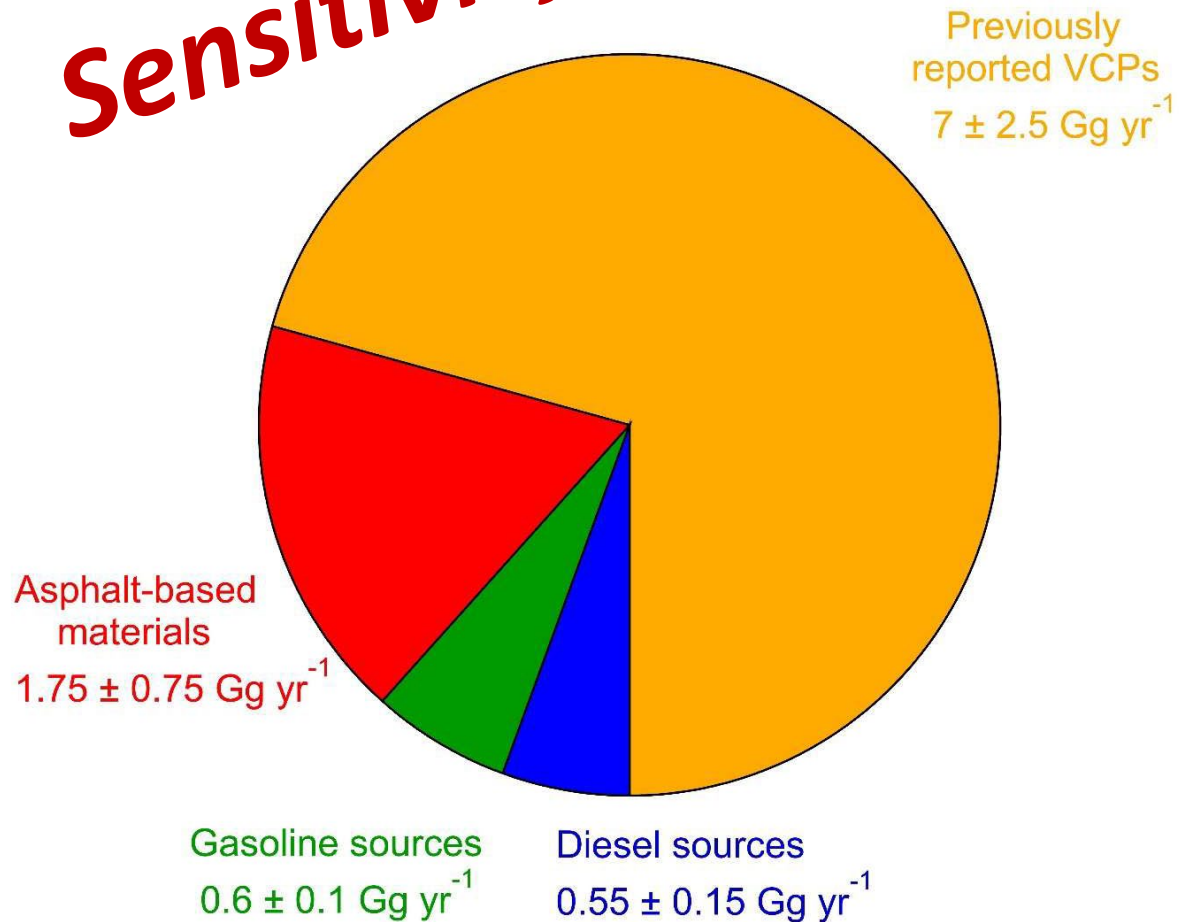
Asphalt adds to air pollution, especially on hot, sunny days

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Sensitivity Analysis

Asphalt adds to air pollution, especially on hot, sunny days



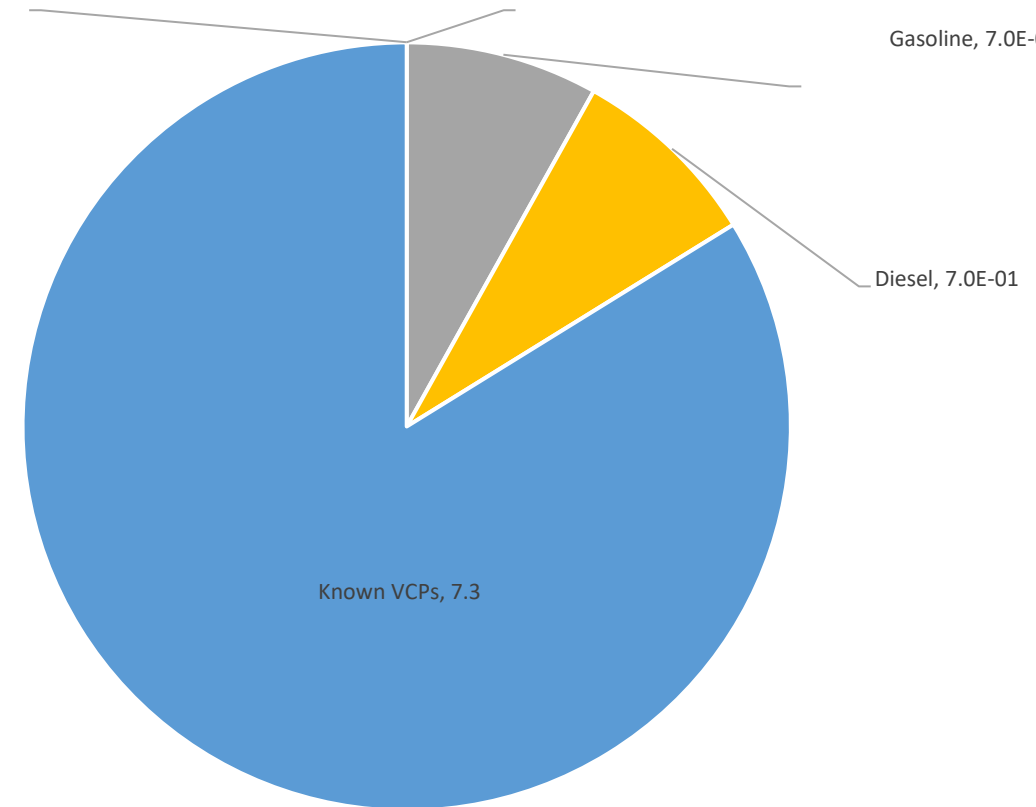
Best Available Estimate of SoCAB Annual Avg SOA (Gg/year)

Roofing Solar, $3.3\text{E-}04$

Paving Solar, $2.1\text{E-}04$

Gasoline, $7.0\text{E-}01$

Diesel, $7.0\text{E-}01$



■ Roofing Solar ■ Paving Solar ■ Gasoline ■ Diesel ■ Known VCPs

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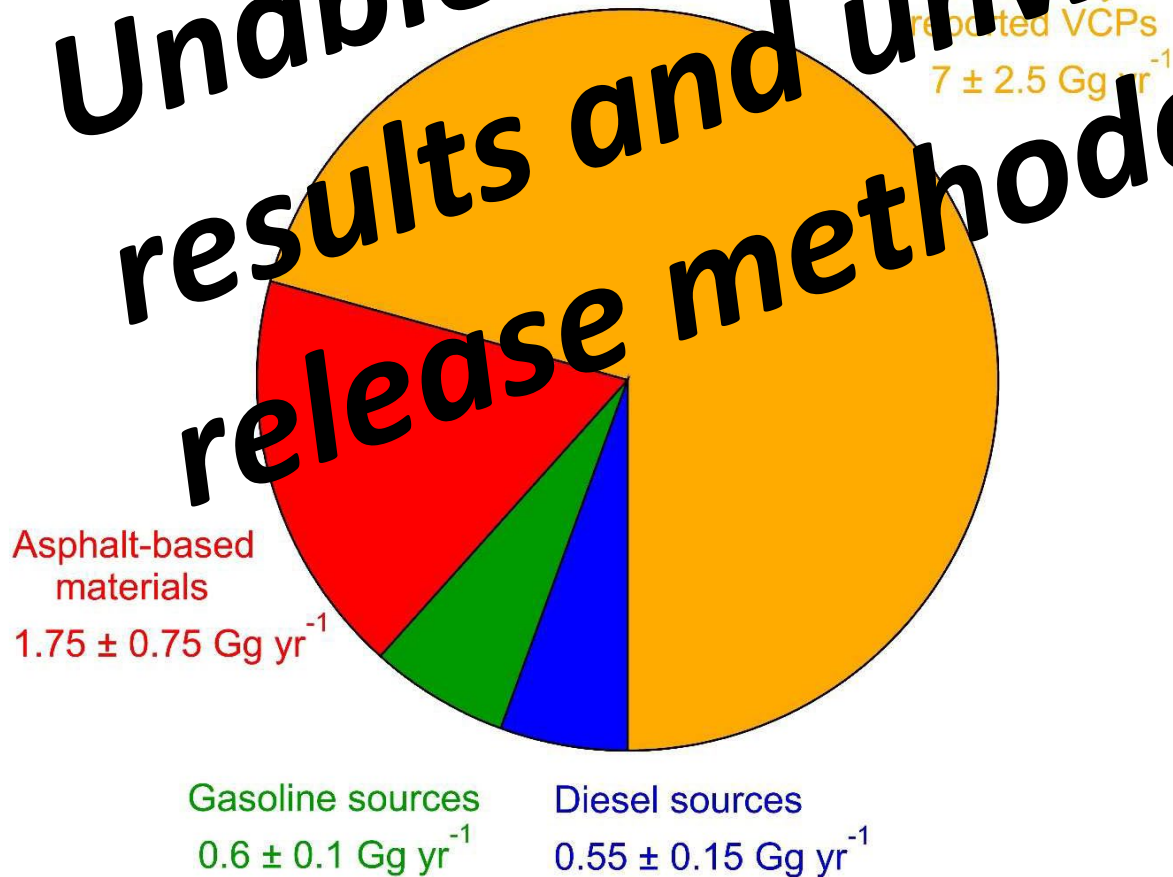
Gasoline, 7.0E-01

Diesel, 7.0E-01

Known VCPs, 7.3

■ Roofing Solar ■ Paving Solar ■ Gasoline ■ Diesel ■ Known VCPs

Unable to reproduce results and unwilling to release methodology



Heat Illness – upcoming national OSHA Standard

- Mostly agricultural concern but OSHA focused on all outdoor workers
- OSHA starting rulemaking process – one size doesn't fit all / state Stds.
- Regardless of implementation, OSHA can still cite under General Duty
- Components of an appropriate program



Confined Space guidance

- General requirements
- Gray areas for facility compliance
- Written program is imperative





The Road Forward

A Vision for Net Zero Carbon Emissions
for the Asphalt Pavement Industry

Learn more at
asphaltpavement.org/climate



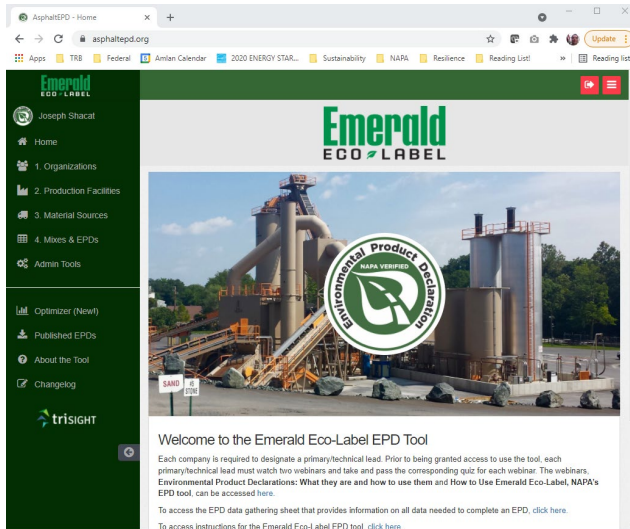
Vision: Sustainable communities and commerce, connected by net zero carbon emission asphalt pavements

Mission: Engage, educate, and empower the U.S. asphalt community to produce and construct net zero carbon emission asphalt pavements



Environmental Product Declarations (EPDs)

- EPDs quantify GHG emissions (and other env. impacts) associated with asphalt mix production
- Federal, State, Local Agencies are developing “Buy Clean” policies
- Version 2 of Emerald Eco-Label software launches April 1



Learn more at asphaltpavement.org/epd

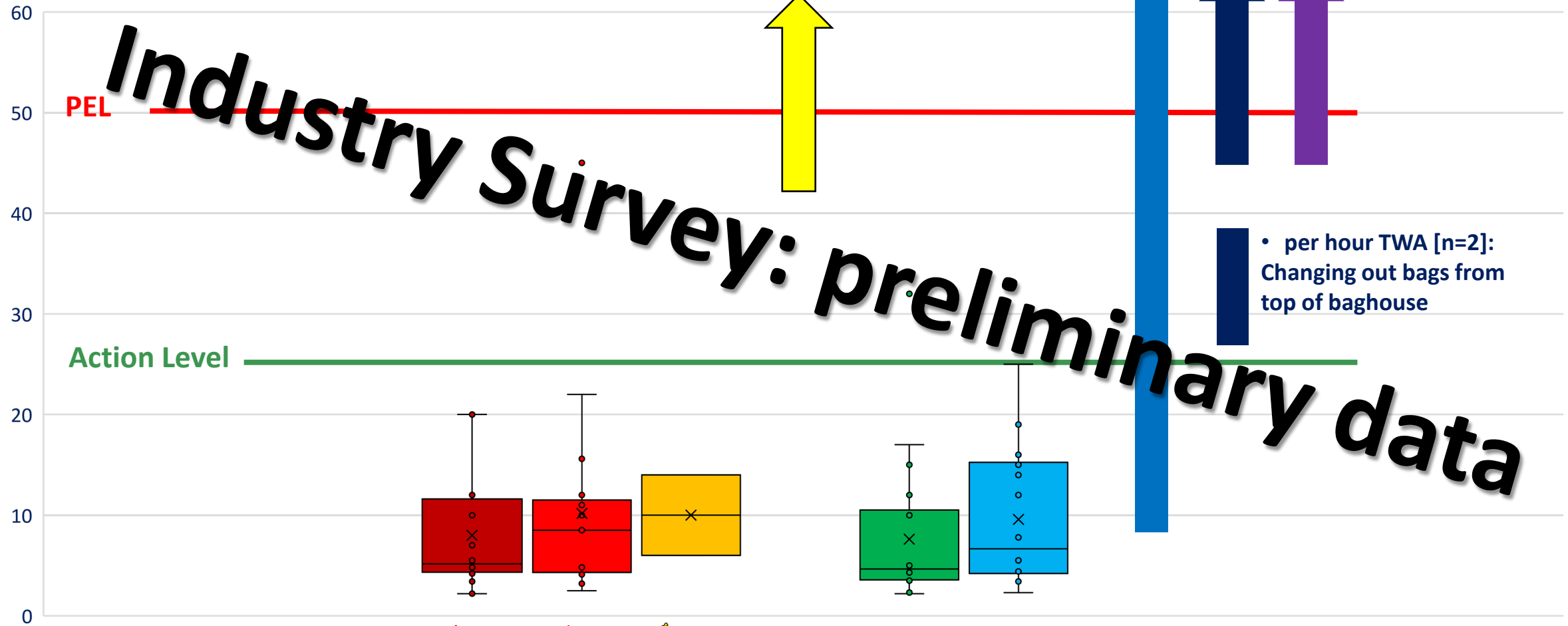
Silica Rule Compliance: a quick review

- **‘Construction’ industry uses ‘Table 1’ controls; e.g., mill vacuum, broom water suppression, etc**
- **‘General’ industry can rely on some Table 1 activities but if not applicable, exposure assessment required**
 - **Determine/understand activity-based actual or potential exposure**
 - **If exposure exceeds PEL, try engineering or admin. controls first**
- **Implement a ‘Respiratory Protection Plan/Program’ as last resort**



Exposure Assessment for Asphalt Pavement Mix Production Facility Activities

Silica Exposure as 8-hr TWA ($\mu\text{g}/\text{m}^3$)



- Values for non-detected exposure were entered at one-half LOD
- Standard Microsoft box-whisker plot identifies all datapoints with outliers / local max / 75th percentile / mean / median / 25th percentile / minimum

Components of a Respiratory Protection Program

- Exposure assessment determines respirator 'protection factor' needed
- Respirator type based on activity, comfort, and PF
 - Air-purifying respirator v. N95 types
 - Appropriate filters
- Fit testing and medical evaluation
- Training and documentation
- Voluntary respirator use
- NAPA to publish guidance with templates



Environmental Justice impacts on facility permitting & operations

- **Odor as a driver for complaints – manage even if not required**
- **Toxic Air Contaminants**
- **Use of Recycled Fuel Oil (RFO) as burner fuel**
- **Michigan and beyond**
 - **Industry Amicus Brief**
- **EPA Region 5 request for permit writer ‘training’**
- **Stack test data collection – focus on ‘risk drivers’**
- **Communication efforts: what works?**



Bonus: Work Zone Safety Contingency Fund

- **NAPA successfully advocated: State DOT road projects can access 100% federal-share payable as ‘contingency fund’ set-aside to enhance WZS**
- **NAPA and partners, including AASHTO and others, will be providing model guidance to illustrate how DOTs can access funds**
- **We encourage DOTs to take advantage of this important flexibility**

Bonus: RAP Stockpile Leachate

- **Municipal and public uncertainty continues**
- **Rely and promote the ‘science’ / recent Univ. of Fla study results**