



Changing materials regulatory landscape and impact on scrap tire markets

December 2019

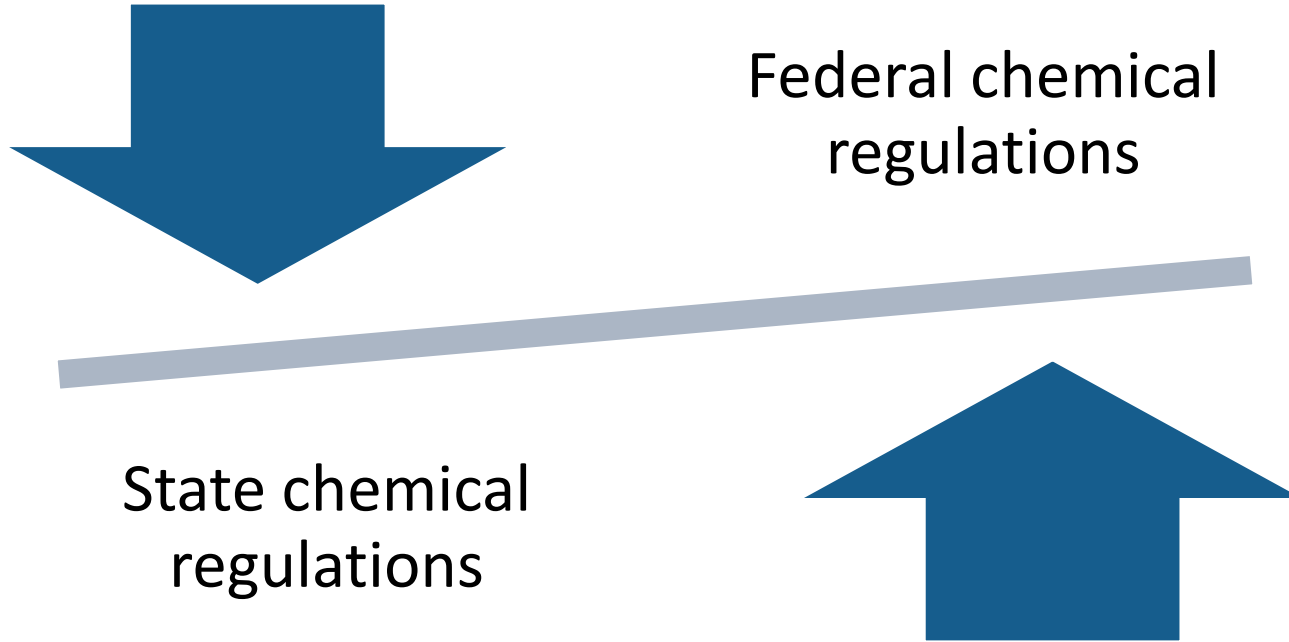
What we will review

- Federal materials regulations
- State materials regulations
- Insights on preparing for materials risk evaluations

If you don't remember anything, remember these few points...

- 1. Identify chemicals of interest**
- 2. Prepare early - gather information, assess risk,
fill data gaps**
- 3. Engage in the risk evaluation process**

Trump administration impact – what you may think is happening



Trump administration reality



Federal chemical
regulations



State chemical
regulations



FEDERAL CHEMICAL MANAGEMENT TOXIC SUBSTANCES CONTROL ACT (TSCA)

Toxic Substances Control Act (TSCA)

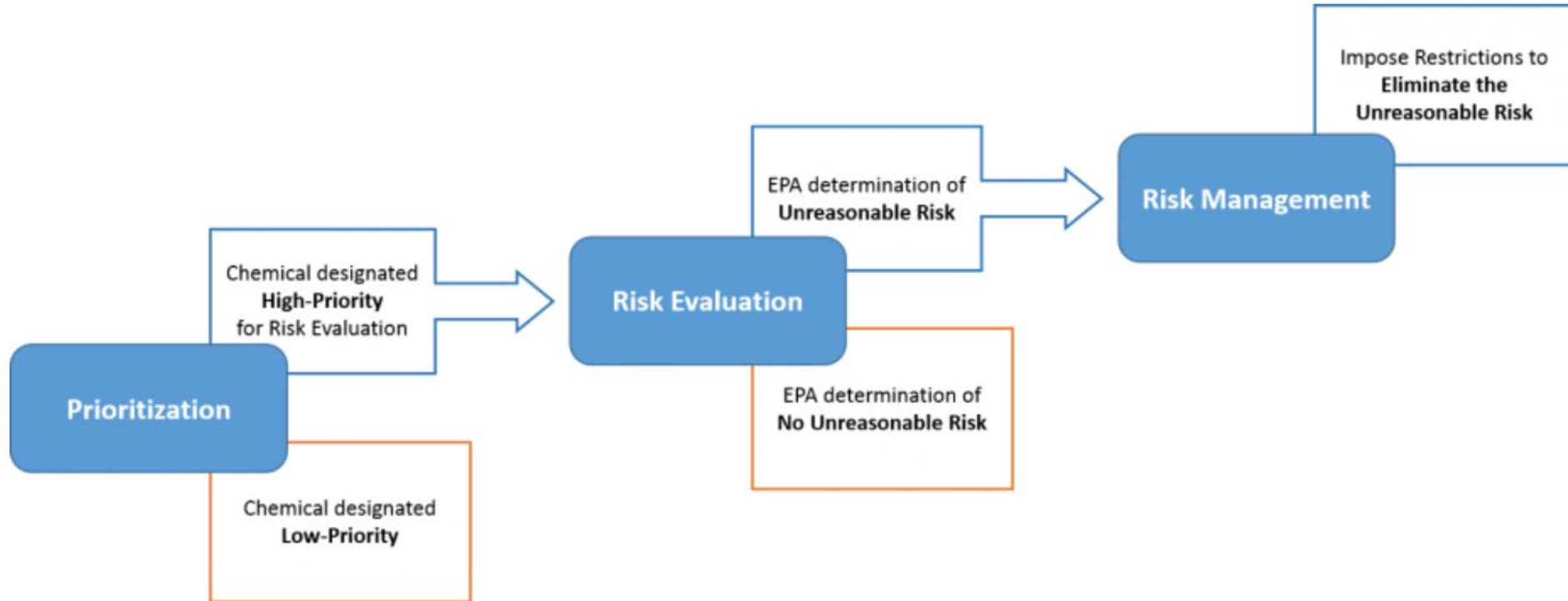
Primary federal
chemical
management law
in the U.S.

Bipartisan
supported

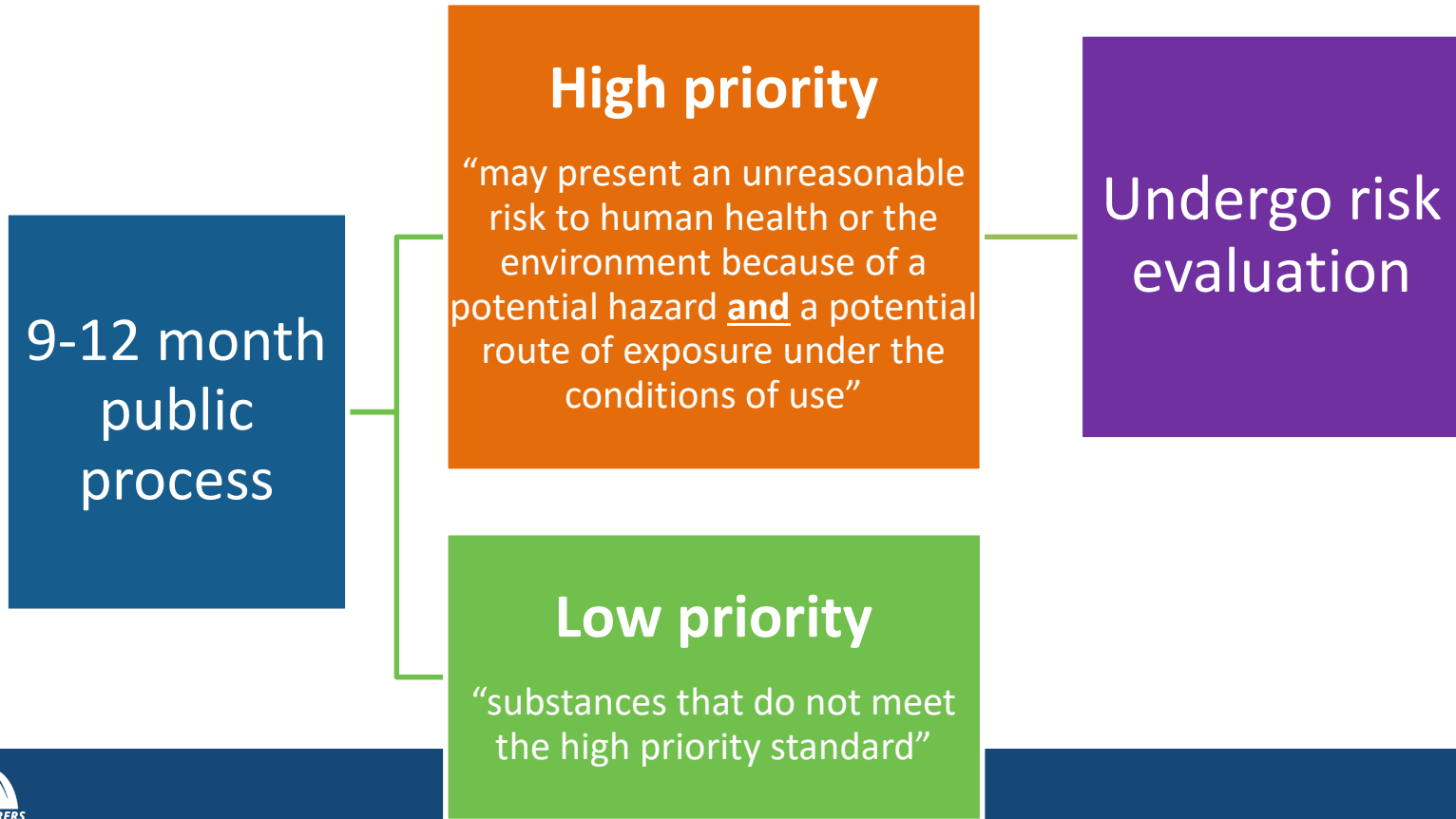
Signed into law
in 2016

EPA continues to
work on
implementation

TSCA – How it works



What is prioritization?



How does EPA prioritize chemicals for review?

- 20 High priority chemicals undergoing evaluation at all times
- 50% of all High priority designations must come from [2014 Update of the TSCA Work Plan](#)

U.S. Environmental Protection Agency

October 2014

TSCA Work Plan for Chemicals Assessments: 2014 Update

This document updates the June 2012 TSCA Work Plan for Chemical Assessment. The TSCA Work Plan Chemicals Methods Document explains the hazard, exposure, and persistence/bioaccumulation criteria, the data sources used, and how chemicals were scored. The 2014 Update describes why changes were made.

	Chemical Name	When was the chemical added?	Hazard Criteria Met	Hazard Score	Exposure Criteria Met	Exposure Score	Persistence & Bioaccumulation Criteria Met	Persistence & Bioaccumulation Score	Use	Risk Assessment Status and Other Actions	CASRN
1	Acetaldehyde	Added 2012	Possible human carcinogen	3	Used in consumer products Present in drinking water, indoor environments, ambient air, and groundwater High reported releases to the environment	3	Low environmental persistence Low bioaccumulation potential	1	Consumer Industrial	Not yet initiated	75-07-0
2	Acrylonitrile	Added 2012	Probable human carcinogen	3	Widely used in consumer products Present in indoor environments, surface water, ambient air, and groundwater High reported releases to the environment	3	Low environmental persistence Low bioaccumulation potential	1	Consumer Dispersive Industrial	Not yet initiated	107-13-1
3	tert-Amyl methyl ether	Added 2012	Chronic toxicity Central nervous system effects Potential carcinogenicity to specific target organs	2	Widely used in consumer products Present in drinking water, surface water, and ambient air Estimated to have moderate releases to the environment	3	Moderate environmental persistence Low bioaccumulation potential	2	Consumer Industrial	Not yet initiated	994-05-8

High priority chemicals

Frist 10

Asbestos
1-Bromopropane
Carbon Tetrachloride
1,4 Dioxane
Cyclic Aliphatic Bromide Cluster (HBCD)
Methylene Chloride
N-Methylpyrrolidone
Perchloroethylene
Pigment Violet 29
Trichloroethylene

20 proposed high priority

p-Dichlorobenzene
1,2-Dichloroethane
trans-1,2- Dichloroethylene
o-Dichlorobenzene
1,1,2-Trichloroethane
1,2-Dichloropropane
1,1-Dichloroethane
Dibutyl phthalate (DBP) (1,2-Benzene- dicarboxylic acid, 1,2- dibutyl ester)
Butyl benzyl phthalate (BBP) - 1,2-Benzene- dicarboxylic acid, 1- butyl 2(phenylmethyl) ester
Di-ethylhexyl phthalate (DEHP) - (1,2-Benzene- dicarboxylic acid, 1,2- bis(2-ethylhexyl) ester)
Di-isobutyl phthalate (DIBP) - (1,2-Benzene- dicarboxylic acid, 1,2- bis-(2methylpropyl) ester)
Dicyclohexyl phthalate
4,4'-(1-Methylethylidene)bis[2, 6-dibromophenol] (TBBPA)
Tris(2-chloroethyl) phosphate (TCEP)
Phosphoric acid, triphenyl ester (TPP)
Ethylene dibromide
1,3-Butadiene
1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylcyclopenta [g]-2-benzopyran (HHCB)
Formaldehyde
Phthalic anhydride

How does EPA conduct a risk evaluation?

High priority chemical designation

Scoping - "All reasonably known and foreseeable conditions of use"

Hazard and exposure assessment

Risk characterization

Risk determination

3 – 3.5 year
process

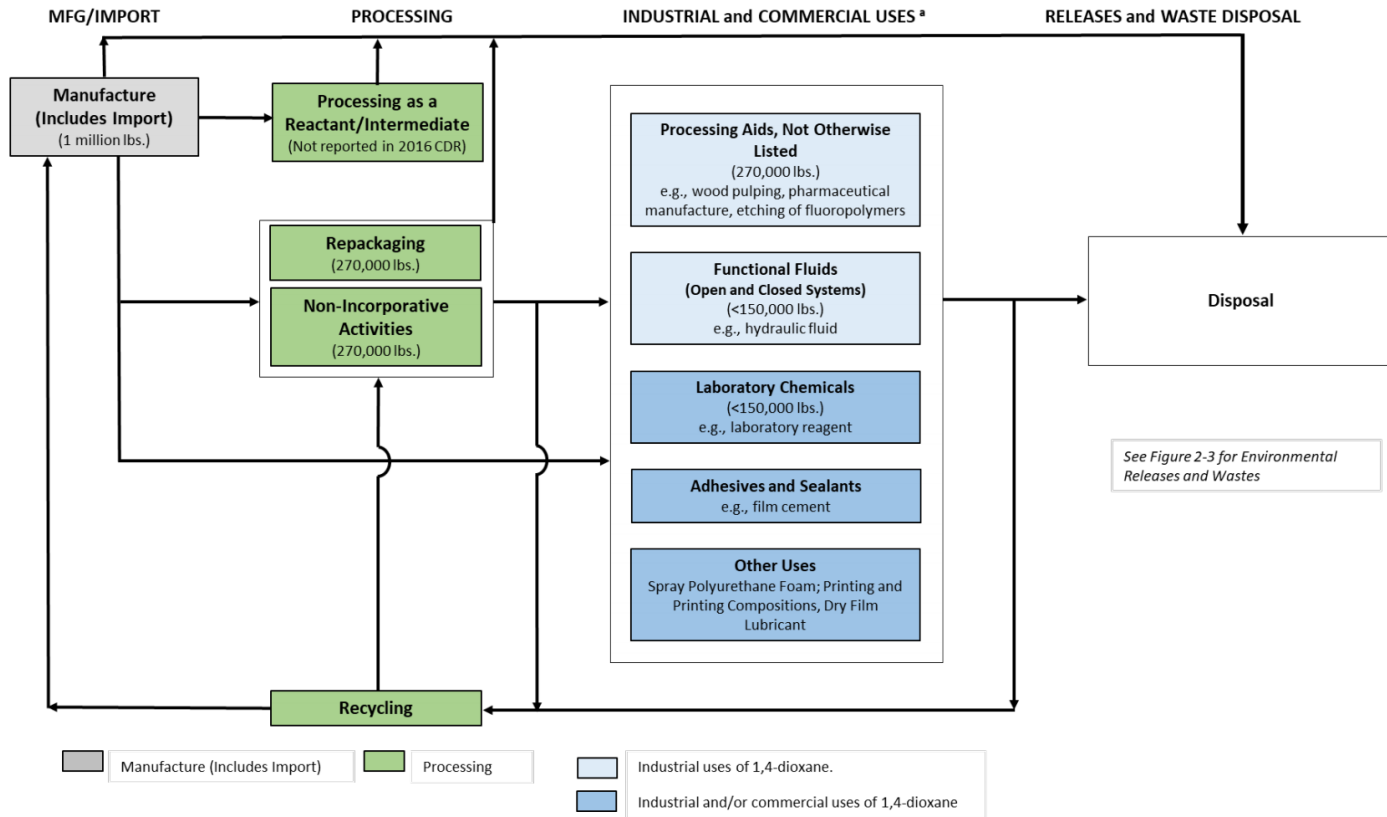


Figure 2-1. 1,4-Dioxane Life Cycle Diagram

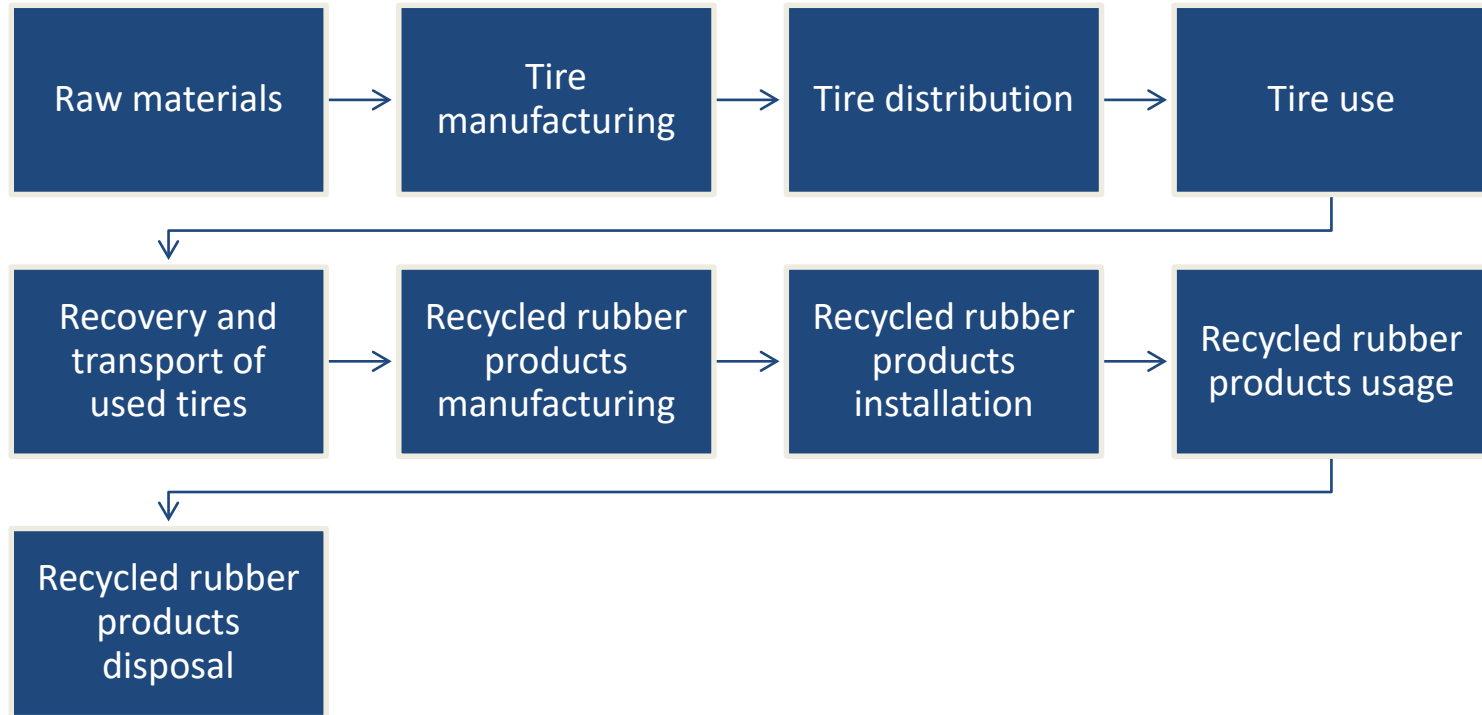
The life cycle diagram depicts the conditions of use that are within the scope of the risk evaluation during various life cycle stages including manufacturing, processing, use (industrial or commercial) and disposal. The production volumes shown are for reporting year 2015 from the 2016 CDR reporting period (U.S. EPA, 2016a).

^a See Table 2-4 for additional uses not mentioned specifically in this diagram.

Draft Risk Evaluation for 1,4-Dioxane:

https://www.epa.gov/sites/production/files/2019-06/documents/1_14-dioxane_draft_risk_evaluation_06-27-2019.pdf

Conditions of use – tire industry



EPA's authority to manage risk

- EPA has up to 18 months after a risk determination to issue a risk management rule
- Managing risk:
 - Ban or restrict manufacture, processing, or distribution in commerce;
 - Ban or restrict for a particular use or above a set concentration;
 - Require warnings and instructions with respect to use, distribution in commerce, or disposal;
 - Require recordkeeping or testing;
 - Prohibit or regulate any manner or method of commercial use;
 - Prohibit or regulate any manner or method of disposal; and/or
 - Direct manufacturers or processors to give notice of the unreasonable risk to distributors and replace or repurchase products if required.

Preemption

Use included
in scope of risk
evaluation



Safety
determination



Preemption

STATE MATERIAL REGULATIONS

State trends in material regulations

Green chemistry programs – safer alternatives (CA, WA)

Ingredient disclosure

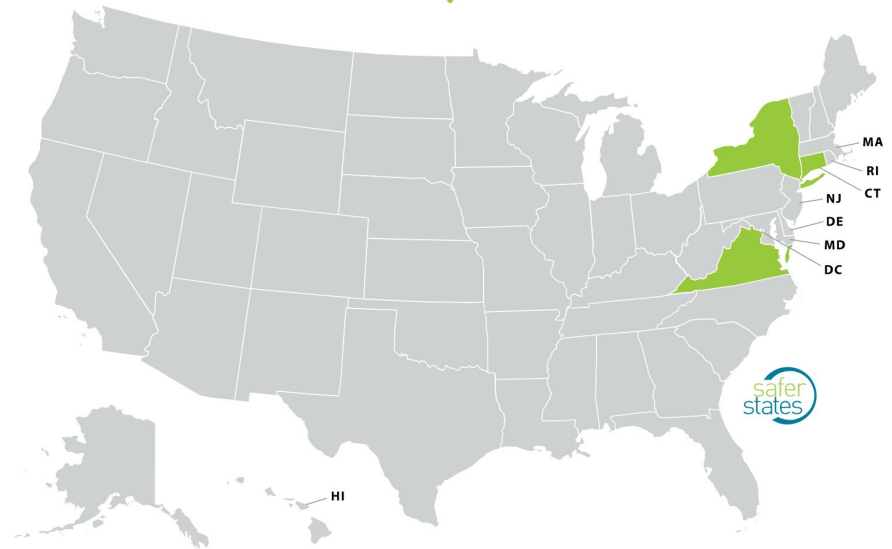
Chemical bans/ restrictions

Tracking chemical policies

<http://www.saferstates.org/bill-tracker/FilterBills>

Crumb Rubber

3 Current Policies in 3 States



Toxic/Issue: **Crumb Rubber**

PREPARING FOR RISK EVALUATIONS

Preparing for risk evaluations

Identify chemicals of interest



Collect existing data, identify gaps, generate new data



Engage value chain



Educate regulators



Stay engaged throughout regulatory process

THANK YOU

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