



# **New TSCA: UV/EB Coatings *And The* Changes Ahead**

**July 2016**

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- **Keller and Heckman** is a trusted TSCA outside counsel and developed comments and policy during the implementing provisions of the 1976 Act.
- We represent companies across the chemical supply chain spectrum, including consumer product companies, on compliance, enforcement, and implementation of the new law.
- Many of our attorneys have technical backgrounds and work side-by-side with in-house chemists and other scientists to support our clients in properly identifying chemical substances on the TSCA Chemical Substances Inventory.
- Martha has practiced TSCA law for 25 years, specializing in polymers, coatings, metals, and emerging technologies. She is a Past Chair, ABA SEER Pesticide, Chemical Regulation, Right –to-Know Committee. Through SEER, issued a series of [legal briefing papers on TSCA Reform](#).

# Preliminary word

- This presentation provides information about the law. It is not intended to provide legal advice.
- Legal information is not the same as legal advice, which involves the application of law to an individual's specific circumstances.
- The interpretation and application of the law to an individual's specific circumstance depends on many factors.
- The information provided in this presentation is drawn entirely from public information.
- The views expressed in this presentation are the authors' alone and not those of the authors' clients.

# OVERVIEW OF CHANGES



# Main Elements - New TSCA

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- Emphasis Lies in Existing Chemicals Reform.
- Identification of Substances Actively in Commerce.
- Prioritization of Active Substances into High and Low Priority.
- No Lock-step Information Requirements. EPA Can Order Testing. Alternative Testing to Play Central Role.

# Main Elements, cont.

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- Agency-Driven Process, Measured Pace.
- Risk-based Safety Standard Evaluated Under Conditions of Use Not Taking into Account Costs or Other Non-risk Factors
- Requires Consideration of Potentially Exposed or Susceptible Populations.
- Science-based Risk Assessments, Industry Pays a Portion of the Cost.
- Broad Authority to Regulate But Bans and Phase-Outs Must Offer Alternatives.

# Main Elements, cont.

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- Preservation of CBI But More Liberal Disclosure.
- PMN process now has early decision mechanism and agency must publish findings.
- Can regulate chemicals in “articles” only if EPA makes affirmative finding by rule that reasonable potential for exposure to chemical through article (or category of articles) justifies notification.



# What has NOT Changed?

- *Pre-existing* definitions
- §4 data compensation provisions for testing
- TSCA §8(b) Inventory
  - Retained, with confidential and “public” portions
- § 8(a) Chemical Data Reporting (CDR) for 2016
- § 8(c) Allegation recording
- § 8(e) Substantial risk notification
- §12 Export notification and export-only exemption
- §13 Import certification requirement

# NEW SAFETY STANDARD



# New Safety Standard



- For new and existing chemicals, **no “unreasonable risk of injury to health or the environment”** criterion is preserved.
- Adds the need to consider –
  - Conditions of use.
  - Volumes and exposure.
  - Consideration of susceptible populations.
  - Proximity to significant sources of drinking water in priority setting.
  - Persistence and bioaccumulation.
- No consideration of costs or other non-risk factors in prioritization or safety determinations. **“Least burdensome”** restriction requirement for risk management of existing chemicals **is gone.**

# NEW CHEMICALS



# PMN §5(a)(3) Determinations



- “(A)” Determination
  - Substance/SNU **presents** unreasonable risk
- “(B)” Determination
  - (i) **information insufficient** to permit reasoned evaluation of substance/SNU; **or**
  - (ii(I)) in absence of sufficient information and evaluation substance **may present** unreasonable risk; or
  - (ii(II)) substance is/will be substantial **quantities**, and enters or may enter environment in substantial quantities or is/may be significant or substantial human **exposure**
- “(C)” Determination
  - Substance/SNU is **not likely** to present an unreasonable risk

# §5 - Actions Required



- **“(A)” determination (“presents”):**
  - Must use § 5(f) and may issue order
- **“(B)” determination (“insufficient,” “may present,” or exposure-based):**
  - Must use § 5(e) and must issue order
- **“(C)” determination (“not likely”):**
  - May commence non-exempt production
    - Even before review period ends!
  - If workplace issues proposed to be regulated, Agency must first consult with OSHA “to the extent practicable”

# Failure to Make Determination

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- If EPA fails to make determination by end of review period, then EPA “shall” refund filing fee
  - No refund if EPA certifies that submitter has not provided all 5(b) information, or has “otherwise unduly delayed the process”
  - EPA, however, “shall not be relieved of any requirement to make such determination”

# EXISTING CHEMICALS





# Pace of new TSCA § 6(b)



Deadline	EPA Must -
Within 6 months	<ul style="list-style-type: none"><li>• Be conducting risk evaluations (and publish the list) for <b>at least 10 chemical substances drawn from the</b> 2014 TSCA Work Plan.</li></ul>
Within 1 year	<ul style="list-style-type: none"><li>• Promulgate a rule setting <b>risk based screening</b> process for prioritization.</li><li>• Promulgate a rule setting <b>risk evaluation process.</b></li></ul>
Within 2 years	<ul style="list-style-type: none"><li>• Issue <b>program guidance</b> on preparing risk evaluations, other aspects.</li></ul>
Within 3 years	<ul style="list-style-type: none"><li>• Propose risk management rules for PBT substances that are scored moderate to high which are not otherwise under review, to be finalized in 18 months.</li></ul>
Within 3.5 years	<ul style="list-style-type: none"><li>• Be in the process of working on at least 40 chemicals (20 low priority designations made/20 high priority evaluations underway).</li></ul>

# §8(b)(4)–(5) Inventory “Reset”



- Within 1 year EPA must issue rule requiring producers (and **“may” require processors**) to notify EPA within 180 days of each existing substance produced within 10 years prior to enactment.
  - Reported substances = “active”
  - Non-reported = “inactive”
    - EPA cannot delist, or require PMN for inactive upon change to active
- Most recent CDR-reported substances to comprise candidate list of actives
- Must assert CBI for chemical identity if on confidential Inventory or will be moved to public Inventory

# §8(b) “Reset” (cont.) - CBI

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- EPA will maintain public and confidential Inventories
- Within one year of initial “active” list compilation, EPA must publish rule to establish plan to review all Inventory chemical identity CBI claims
  - Can approve, deny, approve in part, etc.
  - If approved, EPA will protect for 10 years
- EPA has five years to complete

# “Inactive” Substances

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- Must notify EPA before manufacture, import, or processing
- If CBI status desired must submit/assert CBI claim within 30 days of notice
- EPA will move properly reported substances to “active” list
  - Then subject to review under 6(b)

# Agenda

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- EPA is required to make 20 **low** priority substance designations within 3.5 years.
- EPA also must be **conducting** risk evaluations on 20 **high** priority substances.
  - Only 50 percent of chemicals in risk evaluation have to be 2014 Work Plan chemicals.
- System designed to encourage voluntary nominations for risk evaluation.
  - At least 25 percent (and no more than 50 percent) of the risk evaluations must consist of **voluntary requests**.

# \* Opportunities To Participate



1. High priority designation\* to take **9 months – 1 year.**
2. EPA is expected to prioritize based on existing data and screening techniques.
  1. Can require development of new information but only upon a showing of need, the testing must be tailored to prioritization, and must complete prioritization decision within 90 days of receiving the information.
3. Scope of risk evaluation\* issued **6 months after that.**
4. Risk evaluations have to be proposed\* and **finished in 3 years.**
5. Risk management proposed\* within 1 year/ finalized within 2 years of completing risk evaluation. Extension of up to 2 years possible.
6. Management measures to become effective from “as soon as practicable” **up to 5 years.**

# Statute's Priorities



- **2014 Work Plan Chemical List of 89 Substances**
- **Preferred High Priority: § 6(b)(2)(D)**
  - (1) score 3 for persistence and bioaccumulation; (2) known human carcinogen; and (3) high acute and chronic toxicity.
- **PBTs Scoring High/moderate: § 6(h)(1)**
  - EPA must conduct exposure and use assessment but not a risk evaluation.
- **Mercury: § 8(b)(10)**
  - No later than April 2017 and every three years thereafter, EPA must publish in FR inventory of Hg supply, use, and trade.
  - Must recommend actions to further reduce use, EPA has two years to develop reporting rule.
  - 12(c) amended to include Hg compounds.
  - Hg export ban beginning 1/1/2020 for:
    - Hg(I) chloride, Hg(II) oxide, Hg(II) sulfate, Hg(II) nitrate, Cinnabar, or Hg sulphide.

# Risk Management Exemptions

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- **Replacement parts** for designated complex durable goods and complex consumer goods exempt.
- Other conditional exemptions may be granted, subject to notice and comment, for which time limits and other conditions may apply:
  - **Critical or essential uses** with no feasible safer alternative.
  - **Disruption to national economy**, security, or critical infrastructure.
  - A condition of use that compared to alternatives provides a **substantial benefit** to health, environment or public safety.



# PREEMPTION



# New TSCA Preemption



- **Except As Otherwise Provided, New And Existing State Laws Cannot –**
  - Collect information (e.g. testing) already required by EPA.
  - Prohibit/restrict a high priority substance once a final section 6(a) rule is promulgated.
  - Duplicate notification for a use already subject to EPA notification.
- **Grandfathers Other Existing State Laws**
  - State laws enacted by April 22, 2016 remain in effect (even where there may be potential conflict in the future with EPA actions?).

# New State Laws § 18(b)

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- “Preemption Pause” on new state laws so EPA has time to act -
  - Starts when scope of risk evaluation is defined.
  - Ends when risk evaluation is published or 3.5 years passes after risk evaluation is initiated.
  - States have an additional 18 months after scope of risk evaluation is defined to propose/finalize new action.

# New State Laws, cont.

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- Also preempted by final EPA action.
  - No Unreasonable Risk: When EPA finds that a high priority chemical **meets** the safety standard.
  - Unreasonable Risk And Adoption Of 6(a) Measures: When EPA enacts a rule to regulate a chemical that **does not** meet the safety standard.

# States May Continue To -



- Regulate substances EPA designates as low priority although likelihood of this assumed to be low.
- Adopt laws authorized by another federal law. §18(d)(1)(A)(i).
- Impose reporting, monitoring, or “other information obligation” not otherwise required by TSCA or another federal law. §18(d)(1)(A)(ii).
  - Does this apply to labeling, warnings, and use instructions?
- Enact air, water, hazardous waste, and disposal laws. §18(d)(1)(A)(iii).
  - May restrict a chemical.
  - But cannot directly conflict with action taken by EPA under TSCA.
- Enact requirements equivalent to EPA’s and co-enforce. §18(d)(1)(B).

# State Waiver Process § 18(f)



- Discretionary:
  - Applies where EPA has taken final action on chemical.
    - Compelling conditions;
    - No undue burden on interstate commerce;
    - Does not cause violation of federal law; and
    - Based on best available science/weight of scientific evidence.
- Mandatory:
  - Applies during “preemption pause”.
    - No undue burden on interstate commerce;
    - Does not cause violation of federal law; and
    - Based on peer-reviewed science **OR**
    - State takes action within 18 months of prioritization initiation.
      - Enacts statute or proposes/finalizes administrative rule.

# OTHER CHANGES



## **NO required substantiation nor time limit for:**

- Specific production/import volumes
- Specific processes
- Specific uses
- Percentages of constituents in a mixture
- Marketing and sales information
- Supplier and customer identities

**§14(c)(2)**



## (Re)substantiation required for everything else, including chemical identity

- **When:**
  - Generally, submit CBI claim concurrent with info. and substantiate per rules EPA “has or may” promulgate
  - To maintain confidential Inventory listing, file CBI claim with notice of active manufacture/processing under § 8(b) (within 1.5 yrs.) and substantiate claim at a later date (within 5 yrs.)
  - After designation of substance as high-priority
  - If EPA determines info. important to § 6 actions or chemical presents unreasonable risk under § 6
  - If necessary in connection with FOIA request
  - If EPA has reasonable basis to believe info. Ineligible for protection
- **Duration: 10-years**, with opportunity for unlimited 10-year extensions

§§ 14(c), (e) and (f)

- **Health and safety studies**
  - Except:
    - Process information, explicitly including molecular formulas and structures (NEW)
    - Concentrations of individual chemicals in mixtures
- **General manufacturing, processing and use information**
  - e.g., Volume aggregates (or ranges if authorized by EPA)
- **Information related to ban or phase-out chemicals**
  - Rebuttable presumption
  - Limited exceptions (e.g., critical uses)

## ***General Caveat:***

- Confidential information “mixed” with non-confidential information does not lose its protection

## **§14(b)**

# §15/16 - Prohibited Acts and Penalties



- No change to prohibited acts, or inspection/subpoena authority
- Penalties Increased:
  - **Civil:** Maximum penalty \$25,000 → \$37,500
  - **Criminal:** Maximum penalty \$25,000 → \$50,000
    - Persons that know that violation places individual in imminent danger of death or serious bodily injury subject to fine of \$250,000, imprisonment not more than 15 years, or both
    - Organizations – also subject to fine not more than \$1 million

# §26 Fees, Funding

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- Congress must maintain 2014 funding levels for fees to be assessed
- Consultation process anticipated prior to rulemaking - no deadlines
  - Funds adjusted every 3 years
- Lower fees for small businesses in consultation with SBA
- Fees to defray 25% of costs (or \$25 million, whichever lower) of administering §§4,5,6 and CBI under §14 except –
  - No specified limit on defraying the cost of risk evaluations under § 6(b)
  - Voluntary requests must be fully funded by requesters, or up to 50% for Work Plan chemicals
  - Balancing costs among manufacturers, processors, consortia

# WHAT TO EXPECT

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# UV/EB

**Complex formulations, individual components must be on the TSCA Inventory or otherwise exempt –**

- E.g.,
  - Resin
  - Diluent
  - Solvent
  - Surfactant
  - Preservative
  - Photoinitiator (optional)

# Acrylate Chemistry

- In general, UV/EB curing acrylates have low systemic toxicity, but they can cause skin and eye irritation. Some individuals may also become sensitized to these chemicals.
- Most acrylate oligomers and monomers have a low vapor pressure, and inhalation of vapors is unlikely to occur at room temperatures. Some of these products may form stable aerosols which can be inhaled.
- Other human health and environmental considerations include positive carcinogenicity findings in NTP study of TMPTA, similar concerns for certain photoinitiators, and ecotoxicity concerns.
- The higher molecular weight and lower net acrylate functionality of acrylate oligomers result in a lower level of physiological activity than the acrylate monomers.

# Considerations for UV/EB

- Plan to participate in the Inventory Reset. Plan to pay higher fees.
- Assess effect of planned mercury regulations.
- Priority determinations ahead for coating chemistries.
  - Substance-by-substance approach preferred in light of TMPTA NTP study? Consider developing information on reproductive toxicity of acrylates; currently limited.
- Carefully prepare your PMNs
  - Key drivers are volume, uses, and ecotoxicology.
  - Greater emphasis on direct consumer uses and susceptible population exposures.
  - Address aquatic toxicity prior to filing to predict and plan for outcome.



- 40 or more regulatory actions on existing chemicals in next 3 ½ years. In addition:
  - *A plethora* of general rulemakings and guidelines development to establish new programs.
  - *An expansive* rulemaking to regulate a number of high/moderate PBTs.
  - *Multiple* deadlines embedded throughout the risk evaluation process may be litigated or replaced by court-ordered deadlines.



# Thank you

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