

Chemical Management in the US





Chemical Management in the US

TSCA (Toxic Substances Control Act)

Enacted: October 11, 1976 Effective: January 1, 1977

Administered: United States Environmental Protection Agency (EPA)



In 40 years..., amended on June 22, 2016

United States Code (U.S. Code): Title 15 - Commerce and Trade

Chapter 53 - Toxic Substances Control Act

The Code of Federal Regulations (CFR): Title 40 - Protection of Environment

TSCA - General Introduction



When you manufacture or import your chemical substance in the U.S. for commercial purposes,



TSCA Inventory

Public Part / Confidential Part (No. of the substance listed as of April, 2018: 85,000 --- from EPA site



Listed: Existing substance Can be used (still, refer to the identification) Not listed: New substance Needs to be notified



PMN / Pre-manufacture Notification

Exemption from PMN

- LVE / Low Volume Exemption
- Polymer Exemption

Notification Documents Data



CDX

(Central Data Exchange)



EPA Review



* No fixed data-set

* CBI claim

* Information supply from supplier

On-line submission Only the manufacturer and importer as business entity

in US can submit

After the completion of review, submitter notifies commencement of manufacture

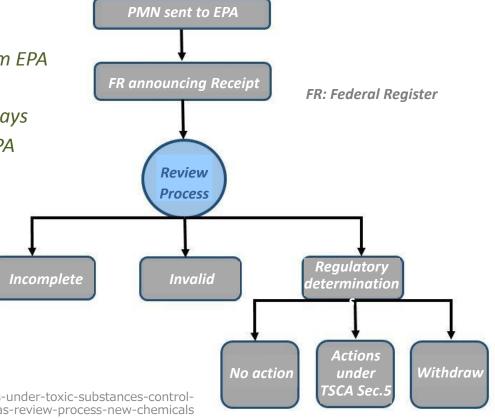
TSCA - General Introduction



PMN Flow

What happens to My PMN

- Submission of PMN to EPA
- Receipt and Quick review at EPA
- 3. Notice of commencing Evaluation from EPA
 - Evaluation Period: 90 days
 - Postpone (by EPA): maximum 90 days
 - Notice or inquires possible from EPA
 - → may cause delays in evaluation
- 5. Notice of evaluation results from EPA



https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/epas-review-process-new-chemicals



To make chemical management under TSCA more workable...

EPA is required to ...

- re-evaluate existing chemicals listed on the inventory
- promulgate a number of rules to set up the procedures EPA will use to implement, and otherwise align, EPA's chemical management program with the new requirements and responsibilities in the law.

Strengthened EPA's authority... (TSCA Sec. 4, 5 &6)

- Data and tests requirements...
- Regulations ...

Framework Rules

- Active/Inactive Inventory Notification Rule
- Prioritization Rule
- Risk Evaluation Rule
- Fee Rule

Other requirements

- Existing and New Chemicals
- CBI (Confidential Business Information)
- Mercury



Active / Inactive Inventory Reporting Rule

- Final Rule Signed: June 22, 2017
- Final Rule published: August 11, 2017
- Industry must report on the chemicals they manufactured, and may report on chemicals they processes, in previous 10 years
- Chemicals reported will be designated as active
- Chemicals not reported will be designated as inacive
- Industry must report on the chemicals designated as inactive when they restart or plan to restart commercial activities of that designated substance.

Reporting will help inform the chemicals EPA prioritizes for risk evaluation.



Active / Inactive Inventory Notification Rule

Retrospective Reporting - NOA Form A

Who reports?: Manufacturer / Importer (must), Processor (may)

What is reported: Chemical substance listed on TSCA inventory Chemical substances

on the TSCA inventory that were in U.S. commerce for non-exempt

purposes during 10 years before June 22, 2016

Reporting period: Manufacture / Importer Aug. 12, 2017 – Feb. 7, 2018

Processors who chooses to report Aug. 12, 2017 – Oct. 5, 2018

Future Reporting — NOA Form B

Who reports?: Manufacturer, importer and processors (must)

What is reported: Chemical substances designated as "inactive" on the TSCA

Inventory that are anticipated to be re-introduced into U.S.

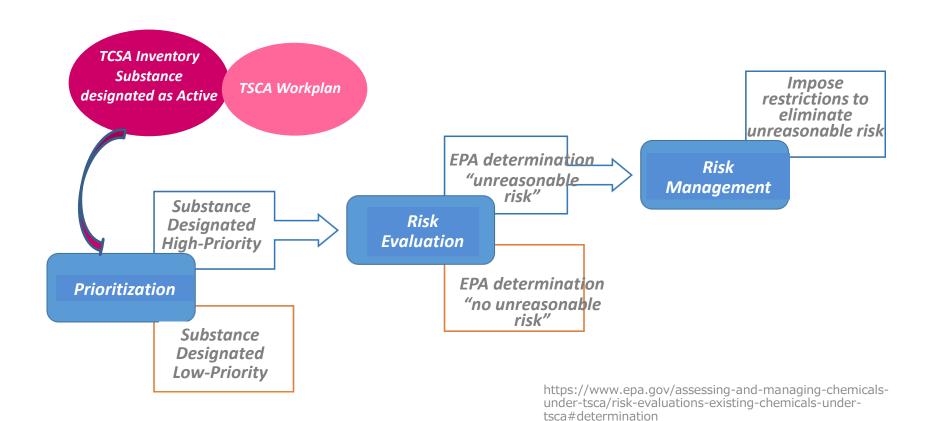
commerce for non-exempt purpose.

Reporting period: prior to re-introduction into U.S. commerce, but not more than 90

days



Prioritization and Risk Evaluation Rules





Prioritization Rule

Final Rule Singed: June 22, 2017

High-priority substance: may present an unreasonable risk of injury to health

or the environment due to potential hazard and potential route of exposure under the conditions of use (including

an unreasonable risk to a "potentially exposed or

susceptible subpopulation)

Low-priority substance: does not meet the standard for high-priority, based on

information sufficient to establish

Preference: TSCA Work Plan chemicals (2014 issue, 90 substances)

(List of the substances to be further assessed EPA identified as a part of enhancement of managing

existing chemicals)

Screening criteria: Hazard, Exposure, Persistence, Bioaccumulation, Toxicity,

Cancer, etc.



Risk Evaluation Rule (Existing substance)

- Determine if a chemical presents an unreasonable risk of injury to health or the environment under condition of use
- Without consideration of cost or other non-risk factors
- Including unreasonable risk of potentially exposed or susceptible subpopulation determined to be relevant to the evaluation

Final Rule Signed: June 22, 2017 Substance to be evaluated:

- *High-priority substance*
- Work plan Initial 10 substances
- Manufacture Request

Evaluation Period:

 $3\sim3.5$ years / substance

- 1,4 Dioxane

- Methylene Chloride

- 1-Bromopropane

- N-Methylphrolidone - Pigment Violet 29

 Ashestos - Carbon Tetrachloride

- Trichloroethylene

- Cyclic Aliphatic Bromide - Tetrachloroethylene

Cluster (HBCD)

5 substances getting expedited action

- Decabromodiphenyl ether (DecaBDE) - Hexachlorobutadine (HCBD)

- Pentachlorothiophenol (PCTP)

- 2,4,6-Tris(tert-butyl) phenol

- Phenol, isopropylated, phosphate (3:1)

PBT substances on TSCA work plan: Fast-track process, use and exposure assessment required and no formal risk evaluation (unless manufacture requested)



Condition of Use

The circumstances, as determined by the Administrator, under which a chemical substance is intended, known, or reasonably foreseen to be manufacturered, processed, distributed in commerce, used, or disposed of.

- Generally uses that are legacy uses and intentional misuse are not included in the conditions of use
- Statutory language for scope "the Administrator expects to consider"
- → EPA may exclude from an individual risk evaluation some activities that are conditions of use (e.g. deminimis use that presents low risk)

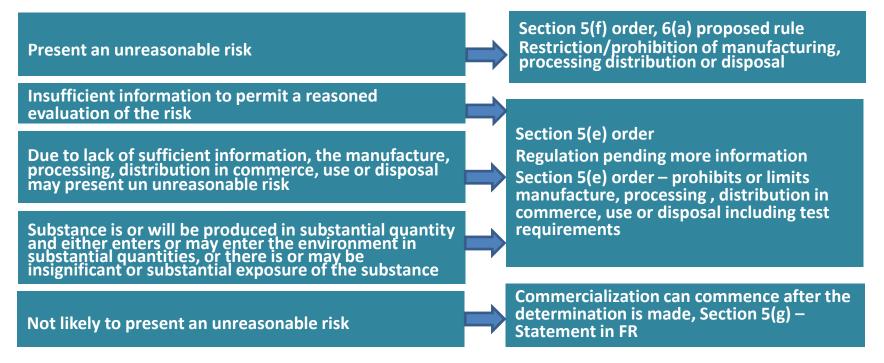
A risk determination will be made for each EPA includes in the risk evaluation



Evaluation of New Chemical Substance

EPA

- is required to make an <u>affirmative findings</u> on new chemicals or significant new uses of existing chemicals before those chemicals being launched in the market
- to decide either of the followings by statute after 90 days evaluation period





CBI (Confidential Business Information)

New requirement: Greater public access to critical chemical information EPA is required to review CBI claim if it is appropriate or not EPA is requested to make new CBI rule

All CBI claims must be substantiated at the time the information claimed as CBI is submitted to EPA --- See CBI Substantiation Template by EPA

☐ Sunset time: 10 years (can be extended)

☐ Review: New CBI claim – Chemical identity 100%

Other information 25%



Unique Identifier is assigned to the chemical identity

→ Unique Identifier is applied to other information or submission

→ Ensure non-confidential information received by EPA identifies the chemical substance using unique identifier while protecting specific chemical identity information



Fee Rule

Note: Small Business – Revenue \$91MM as average annual value over 3 years preceding the date of submission.

Category	Fee (\$US)	Fee(\$US) Small Business
SECTION 4		
Test Order	9,800.00	1,950.00
Test Rule	29,500.00	5,900.00
Enforceable Constant Agreement	22,800.00	4,600.00
SECTION 5		
PMN, SNUN, MACA	16,000.00	2,800.00
LoREX, LVE, TME etc.	4,700.00	940.00
SECTION 6		
EPA-initiated	1,350,000.00	27,000.00
Manufacture-related (Work Plan)	1,300,000.00	1,300,000.00
Manufacture-related (non Work Plan)	2,600,000.00	2,600,000

Prepublication Proposed Rule: From fiscal year 2019 (October 1, 2018)

After publication on Federal Register, collection under new rule will commence Fees will be adjusted every three years if the amount received would be sufficient to cover 25% of the costs for TSCA 4,5 and 6.

Amended TSCA & Current Status knoell



Evaluation at EPA --- PMN, MCANS, SNUNs, LVE & Other exemeptions

Total Cases	1,894	Period: June 22, 2016 –
Total Review Completed	1,351	April 10, 2018
Cases Determined to be Invalid or Incomplete	91	Αριίι 10, 2010
Cases Under review as of April 10, 2018	452	

PMN/MCAN/SNUM Review Completed		
Allowed to commercialize with out restrictions – Not likely to present unreasonable risk, TSCA 5(g) notice	122 (≒20%)	
 Allowed to commercialize with restrictions Insufficient information – TSCA 5(e) order & SNUR May present unreasonable risk –Exposure-based guidelines apply for production greater than 10t/year – TSCA 5(e) order & test at certain production volume 	341 (≒.54%)	
 Not allowed to commercialize pending development of information May present unreasonable risk – TSCA5(e), test required before commercialization Insufficient information – TSCA 5(e) order, test before commercialization 	3	
Banned - Will present unreasonable risk — TSCA 5(f), 5(f) order or 6)a rule & SNUR	0	
Case withdrawn	170	
Total	636	

LVE& LoREX Completed		
Exemption Granted	562 (≒ 80%)	
Exemption Denied	120	
Withdrown	33	
Total	715	
NOC		
No received	455	

https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/statistics-new-chemicals-review

Amended TSCA & Current Status knoell



SNUR

One type of safety determination is that a chemical can be used safely for uses listed in the PMN but that this may not be true for other uses

→ EPA can allow that new chemical to become and existing chemical with limitations

A significant new use rule is a regulation that describes allowed uses of a new chemical and restrictions that manufactures, importer or processors must follow as well as the reporting procedures they have to follow in case of using that chemical substance

→ Under New TSCA, understanding "SNUR" is extremely important

EPA review of new chemical substance = Affirmatively determine safety \rightarrow EPA liable in the event that a chemical if found to be unsafe \rightarrow EPA is being more cautious and only allowing uses and practices where they are comfortable safety can be assured \rightarrow **SNUR more common**



Significant impact on business

Amended TSCA & Current Status knoell



How to face PMN review & SNUR

- Ensure all available information on a chemical (tests, literature, models, etc) and include it in a PMN and subsequent SNUN's if any
- Be aware of EPA's concerns about classes of chemicals
- Confirm your chemical does not included addressed concern in the initial PMN
- Consider available literature that addresses concerns and provide references to EPA as part of PMN
- Be aware what SNUR are and estimate potential impact on business
- Information sharing within supply chain and positive information supply to EPA
- Pre-submission consultation with EPA

Call us immediately!

We, Knoell Group will assist you on every TSCA notifications in perfect manner, from consultation, dossier preparation, submission to inventory listing of your substances.





Thank you so much to be with us today!!

Contact: Knoell Japan K.K.

+81 (3) 5544 8521

K. Maehara (Kmaeahra@knoell.com)