

# Significance Amendment of Toxic and Concerned Chemical Substances Control Act, Taiwan

TCSB, EPA
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### **Taiwan**



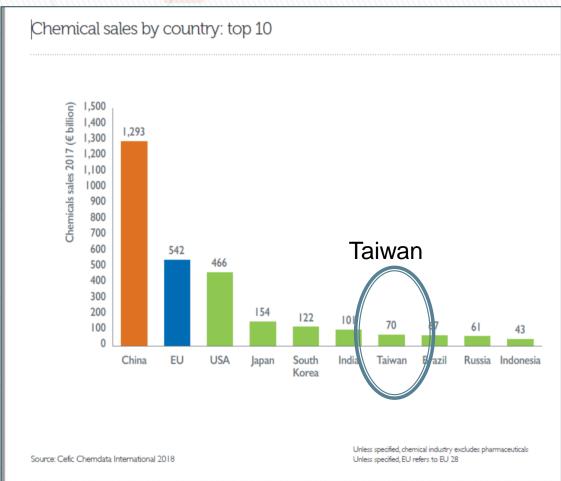
Capital: Taipei

Area: 35,980 km<sup>2</sup>

Population: 23,590,744



## Taiwan Got Seventh in Chemical Industry Producer Prices Rankings (2018)







Cefic Chemdata International 2018 Chemical Sales by Country: Top 10



## Chemical industry Producer Prices (2017)

Manufacture of Chemical Material, Fertilizers and Nitrogen Compounds, Plastic and Rubber Materials, Man-made Fibers

**UNIT: US dollars** 

\$64,596M

Manufacture of Petroleum and Coal Products \$31,953M

Manufacture of Plastics Products \$9,597M

Manufacture of Paper and Paper Products \$5,853M

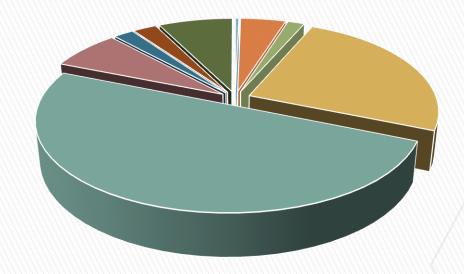
Manufacture of Other Chemical Products \$9,168M

Printing and Reproduction of Recorded Media \$2,151M

Manufacture of Pharmaceuticals and Medicinal Chemical Products \$2,599M

Manufacture of Rubber Products \$3,053M

Manufacture of Leather, Fur and Related Products \$429M

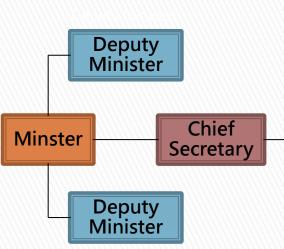




Source: Ministry of Economic Affairs, Taiwan 4

## **Organizational Chart**

Environmental Protection Administration, Executive Yuan, R.O.C. (Taiwan)



Office of Sustainable Development

- Department of Comprehensive Planning
- Department of Air Quality Protection & Noise Control
- Department of Water Quality Protection
- · Department of Waste Management
- Department of Environmental Sanitation & Toxic Substance Management
- Department of Supervision Evaluation & Dispute Resolution
- Department of Environmental Monitoring & Information Management
- Bureau of Environmental Inspection
- Air pollution Control Fund Management Board
- Recycling Fund Management Board
- Soil and Groundwater Remediation Fund Management Board
- Environmental Analysis Laboratory
- ioxic and Chemical Substances Bureau

Northern Branch BEI Central Branch BEI Southern Branch BEI

- Offices of Personnel, Accounting, Civil Service Ethics, Statistics, and the Secretariat
- Committees for Legal Affairs, Petitions and Appeals, Public Nuisance Arbitration
- Environmental Police Unit
- Local Environmental Departments





Toxic and Chemical Substances Bureau, TCSB

Strengthening the management sources and prevention of food safety, tracking hazardous substances, and implementing the "policy for promoting food safety".

**Executive Yuan** 



EPA

Established on 2016.12.28



**TSCB** 

Position:150

### Comprehensive Planning Division

- Planning, implementation, and monitoring the regulation of toxic and chemical management policy
- Planning, promotion and coordinating international cooperation and technological development of toxic chemicals management

Evaluation Management Division

- Integration and analysis information of toxic chemicals; coordination and implementation of audits and inspection.
- Inter-ministerial coordination on national standards and the management of quantity and trace of toxic chemical substances
- Research and Development of the hazard evaluation method of toxic chemical substances in management

#### **Hazard Control Division**

- Development, implementation and supervision of disaster control policies and regulations for toxic chemical substances
- Planning, implementation and monitoring management policy and regulation related to environmental agents

Affiliate division (Personnel, Accounting, Secretary,...)

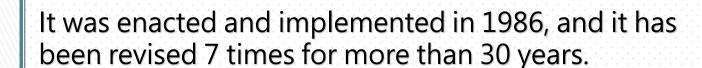




## The System of Toxic Chemical Substances Control Act







Amended and promulgated on Jan 16, 2019. New Title: Toxic and Concerned Chemical Substances Control Act

The Competent Authority: Environmental Protection Administration, Executive Yuan, R.O.C. (Taiwan)

Executive Department: Toxic and Chemical Substances Bureau, EPA



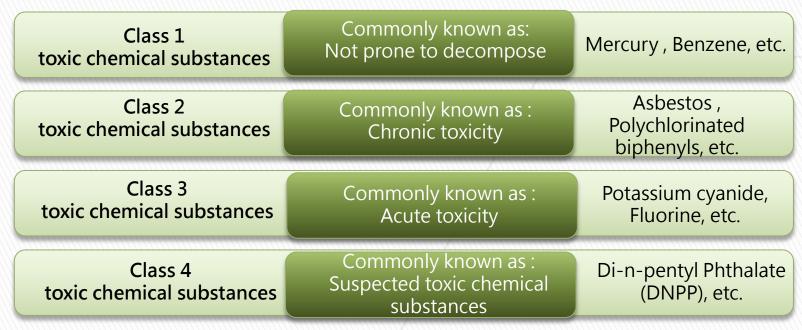






#### The control of announced toxic chemical substances

"Toxic chemical substances" refers to those chemical substances that are intentionally produced by human activity or unintentionally derived from production processes and that have been officially announced by the central competent authority as having toxicity subject to the following classification regulations.



The control of announced and classified, by July 2019, 340 toxic chemical substances, have been regulated under TCCSCA. Among these Toxic chemical substances, 59 were prohibited to be used, 162 were restricted by certain uses, and 119 substances can be used as usually but are subject to record keeping (class 4).

## Management system of the Toxic Chemical Substances Control Act

Management methods for

**Toxic Chemical Substances** 

Prohibition

Restriction

Risk-based management(officially announce graded handling quantity)







Discard

### Management of Toxic Chemical Substances

**Toxic And Concerned Chemical Substances Control Act** 

Chapter 2 Assessment, Prevention and Management of Toxic Chemical Substances

**Announcement** 

Control of

announced

chemical

substances

Handling approaches

Control Graded handling standards

Application

Handling

**Application** 

Permit /

Registration

document

/Approval

document

Marking

Reporting

Marking SDS Submission of records concerning the handling

Submit transport manifests

Installation with realtime tracking systems

Legend

**Class1-4 Toxic Chemical Substances** 

Class1-3 Toxic Chemical Substances reaching handling quantity

Response equipment and detection and alarm equipment

Risk

response

Risk response

plans

**Establishment** 

of mutual aid

group

Third party liability insurance

Assign or commission emergency responders or emergency response organizations certified by the central competent authority

Strengthening transportation management and risk response for Class1-3 Toxic Chemical Substances reaching handling quantity.

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#### Item Management of Toxic Chemical Substances

Permission before handling Permit/ Registration Document/ Approval Document

Chemical Substances Registration Liability insurance to cover handling risks

Marking of containers, packaging, handling sites, and facilities

Professional technical management personnel Class A/Class B/Class C

After the occurrence of an accident, submit a report to the competent authority for reference

**SDS** 

Regularly reporting records concerning the handling of toxic chemical substances and submitting their release quantities

Risk prevention and response plans

Transportation management and GPS for cars

**Notification of Accidents** 

Plans of response equipment and detection and alarm equipment



## Number of Business Entities and licensees for control of announced Toxic Chemical Substances

Type	Number of Business Entities	Number of licenses
Permit	391	753
Registration Document	733	1,327
Approval Document	2,847	13,832
Class 4 Approval Document	2,593	10,658

The deadline of data statistics is Aug 2<sup>nd</sup>, 2019 Number of Business Entities : 4,438





# Amended and promulgated on Jan 16, 2019. Toxic and Concerned Chemical Substances Control Act

The addition and revision of 35 sub-laws related to the TCCSCA





## Rationales for Amendment

In order to manage domestic toxicants and chemical substances from the source, and to construct a <u>safe and sustainable chemical environment</u>, while considering foodsafety issues at the same time, the original TCSCA was therefore amended.

Legislative Yuan, Republic of China (Taiwan) decided in November 2016: The Environmental Protection Administration of the Executive Yuan, should propose a revised draft of the Toxic Chemical Substances Control Act to the Executive Yuan, which should be amended to include the management for general chemical substances, and the approaches to manage chemical substances with food-safety concerns should also be added.





### TCSCA- before and after Jan 16th 2019

## Toxic Chemicals Substances Control Act

#### Toxic and Concerned Chemical Substances Control Act

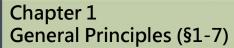
Chapter 1
General Principles (§1-6)

Chapter 2
Hazard Assessment and Prevention(§7-10)

Chapter 3 Management (§11-28)

Chapter 4
Penal Provisions(§29-37)

Chapter 5
Supplementary Provisions (§38-44)



Chapter 2 TCS Assessment, Prevention, and Management (§8-23)

Chapter 3
Assessment, Prevention, and Management of Concerned Substances (§24-29)

Chapter 4
Substance registration and reporting (§30-34)

Chapter 5
Accident prevention and emergency responses (§35-43)

Chapter 6 Inspection and finance (§44-49)

Chapter 7 Penal Provisions (§50-67)

**Chapter 8 Supplementary Provisions (§68-75)** 



## 7 Highlights of amendment of Toxic and Concerned Chemical Substances Control Act



Concerned Chemical Substance





Accident Prevention and Emergency Responses





The National Chemical Substance Management Board





Establishment of the Fund

Notification in 30 Minutes

Prohibition of Online Shopping

Seeking of Illegal Gains and Whistleblower Protection





### Concerned Chemical Substances Expanding risk-based management



IED precursors



Food safety related substances

Chemical factories

**Concerned Chemical Substances** 

Hazardous chemical substances

Precursors of illicit drugs



**Corrosive toxicants** 



## 1.

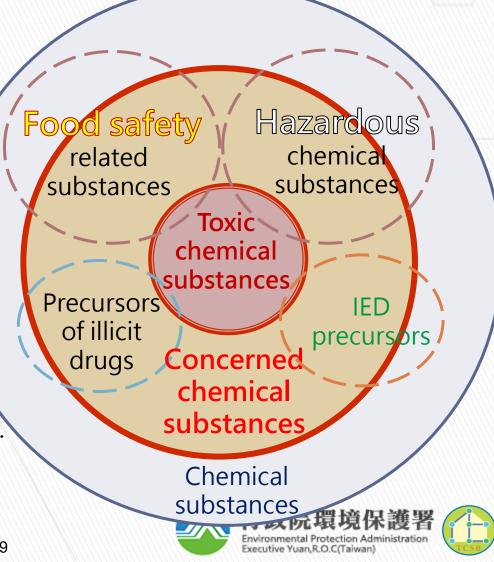
### Management of Concerned Chemical Substances

#### **Concerned Chemical Substances:**

Refers to chemical substances aside from toxic chemical substances, that have been officially announced by the central competent authority based on substance characteristics or public consumer issues of domestic or foreign concern and are controlled by the central competent authority.

Priority is given to the assessment of substances such as "high level of hazard", "High handling quantity", "risk of food safety or people 's livelihood consumption", "risk of disaster" and domestic or international "high level of concerned "substances.

Screening and assessment, risk-based management. Enhancing control of management and collecting flows of substances.



#### Management of Concerned Chemical Substances

**Toxic And Concerned Chemical Substances Control Act** 

Chapter 3 Assessment, Prevention and Management of Concerned Chemical Substances

Announcement

Control of

announced

chemical

substances

Handling approaches

Control Graded handling standards

**Application** 

Approval applications for specified handling

Marking

Marking SDS Reporting

Submission of records concerning specified handling

manifests
Installation
with real-

**Submit** 

transport

Installation with realtime tracking systems

Legend

Concerned chemical substances

Concerned chemical substances as being hazardous reaching handling quantity

Strengthening transportation management and risk response for concerned chemical substances as being hazardous.

Risk response

Risk response plans

Establishment of mutual aid group

Response equipment and detection and alarm equipment

Third party liability insurance

Assign or commission emergency responders or emergency response organizations certified by the central competent authority



## 2

## Accident Prevention and Emergency Responses

The Regulations of Accident Prevention and Emergency Responses for Toxic Chemical Substances and Concerned Chemical Substances as being hazardous

#### Capable of Emergency Responses and Self-rescue

Article	Content	
§35	Submission of risk prevention and response plans for public review	
§36	Liability insurance	
§37	Fees from emergency responders training	
§38	Mutual aid group	
§39	Response equipment and detection and alarm equipment, the connection of automatic monitoring facilities	
§40	Transport manifest and real-time tracking systems	
§41	Emergency Responses Reducing the accident notification time (from 1hr to 30mins)	
§42	All costs incurred in the course of handling accidents	
§43	Management of emergency response vehicles	
	Environmental Protection Administration	

## Accident Prevention and Emergency Responses

New: Accident
Prevention and
Emergency
Responses

Strengthening the management

Response equipment and detection and alarm equipment

Costs of handling accidents

Transport manifest and real-time tracking systems

Emergency
responders or
emergency response
organizations



## **Emergency Responders Training**

Handlers must assign or commission emergency responders or emergency response organizations certified by central competent authority to bear responsibility for adoption of necessary protective, emergency response, and clean-up operations in the event of an accident.



Grades, number of people



Institutionalization of Group



Training and retraining



Professional Training

### Capable of Emergency Responses and Self-rescue



#### **Emergency Responders**

Professional Technical

Smanagement personnel

(Specialists)



Adoption of necessary protective, emergency response, and clean-up operations in the event of an accident.



The performance of toxic chemical substance pollution control and risk prevention.

## Take measures for accidents

### Before

**Emergency** control measures + Notification

Handlers

measures/ Suspension of handling

Take

The Competent Authority

#### After

Authority and process of environmental accident handling

**Notification** time 0.5hr

+ Handling accidents



Fees may be paid from the fund in Article 47, the handler or owner.



- The Competent **Authority**
- Fund claims





## The National Chemical Substance Management Board

Rationales for the creation of The National Chemical Substance Management Board (2019.6.17)

#### Convener

The Premier of the Executive Yuan

#### **Board members**

Relevant government departments, experts, scholars, and group representatives

#### **Assignments**

- To coordinate inter-department chemical substances risk assessment and management measures.
- Oversight of relevant ministries implementing National Chemical Substance Management.
- Coordination of other relevant National Chemical Substance Management



## The National Chemical Substance Management Board

Regular tracking to show the results of the administration

Strengthening the horizontal communication system

Executive Yuan, R.O.C. (Taiwan)

- Coordinating the management of chemical substances
- The creation of The National Chemical Substance Management Board

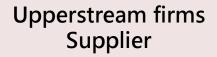
Enhancing the system of inter-ministerial Coordinating and integrating the relevant authority and regulations

Improving overall chemical substance management



#### Establishment of The Fund for Toxicants and **Chemical Substances**

#### Objects of the collection





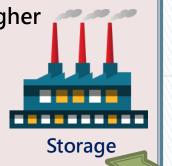
Middlestream firms **Downstream firms** 



Specified handling The intensity of disasters of toxic chemicals are higher



**Transport** 



Training course fees

Usage of the fund

Risk communication

Research and development

**Concerned Chemical Substances** Management

The chemical cloud

Response System

**International Cooperation** 

**TCS Management** 

**Chemical Substances Registration** 

checking, verifying

**Training** 

Other

Funding for the expansion of management for chemical substances, strengthening of the system for environmental accident response consultation, and environmental flow investigation.



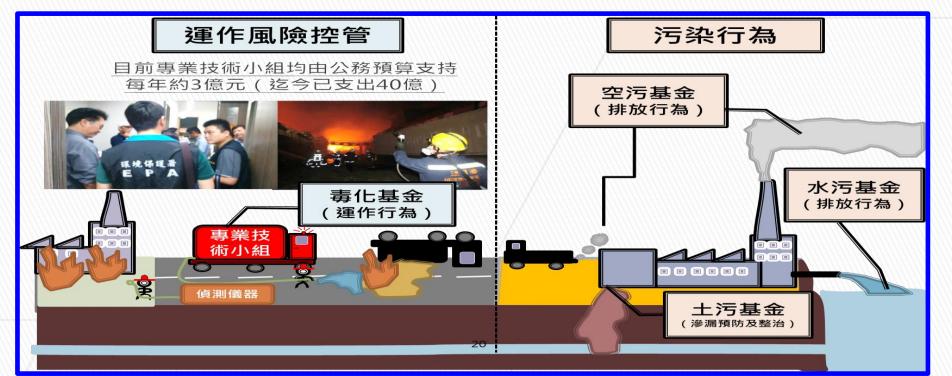
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## No Duplicate charges with other environmental funds

#### **Risk Management:**

Toxicants and Chemical Substances Fund Management Board Improvement of pollution:

Air pollution Control Fund Management Board Soil and Groundwater Remediation Fund Management Board



## Accident Notification time Reducing from 1hr to 30mins

For those toxic chemical substances and concerned chemical substances that have been specified and announced as being hazardous by the central competent authority for which one of the following circumstances applies, the handler shall promptly adopt emergency control measures and, within no longer than 30 minutes, notify the competent authority for the area where the accident occurred.

- Those circumstances in which the environment surrounding the handling site for which there is concern of suffers pollution due to leakage, chemical reaction or other unexpected accident.
- Those circumstances in which an unexpected accident occurs during transport and for which there is concern of pollution of the environment or the endangerment of human health.
- The reporting method for Paragraph 1 shall be announced by the central competent authority.
- Tel: 119, 110, Channel for citizens to voice complaints 0800-066666, etc.

- Area:
   35,980 km²
- Population : 23,591,03
- Population Density: 651.74人/km<sup>2</sup> (By 2019.6.30)



## Accident Notification time Reducing from 1hr to 30mins

Reducing the Accident
Notification time from 1hr to
30mins

To improve notification timeliness

To reduce the impact of accidents

**Accident of Leakage** 

Handlers shall notify the competent authority for the area where the accident occurred within no longer than 30 minutes.

To expand source management

To reduce accident risk



## Prohibition of Selling or Transferring Control of Announced Chemical Substances by Online Shopping

- \$\sum\_{21}\$ and \$\sum\_{28}\$
  The selling or transfer of Toxic and concerned chemical substances may not involve mail orders, online shopping or other transaction platform wherein the identities of the parties to the transaction cannot be established.
  - Article 30 of the Tobacco and Alcohol Administration Act and Article 5 of the Tobacco Hazards Prevention Act as reference.
- Those who operate mail order, online shopping or other platforms that provide transactions for selling or transfer in violation of regulations in Paragraph 2, Article 21 or Paragraph 2, Article 28 shall be fined NT\$60,000 to NT\$300,000, and may be fined per violation.



## Prohibition of Selling or Transferring the Control of Chemical Substances by Online Shopping

#### Shopping

Possession of permit, registrant document, approval document for TCS and concerned chemical substances.

Mail orders, online shopping or other transaction platform

Online Shopping
Shopping channels
Teleshopping







#### Selling

 Possession of permit, registrant document, approval document for TCS and concerned chemical substances.



## 7

## Seeking Illegal Gains Whistleblower Protection

Encourage employees to report wrongdoings and supervise them with citizen.

### §66 Seeking Illegal Gains

Those who violate their duties or actions as prescribed in this Act and obtain material gain, apart from being fined certain amounts pursuant to the regulations of this Act, payment of amounts within the scope of the material gain may also be sought. So-called "material gains" include active gains and passive gains in the form of reduced or waived payments.

#### §67 Whistleblower and reward.

People or groups may report actions violating the regulations of this Act through statements of facts or submissions of evidential information to the competent authority. A certain percentage of total collected fine amount shall be provided as a reward to the informant.



## The System of Supervision and Seeking



The System of Seeking

Illegal Gains

Expense claims for payment



Supervision by citizen



### Toxic and Concerned Chemical Substances Control Act

> Pursuant to the Provisions take effect Article 75:

Reporting, whistleblowing, and reward, etc.

Promulgated on 2019.01.18

The remaining 70 provisions(concerned chemical substances, notification, Online Shopping, etc.)

• Execute after one year: 2020.01.16

Implementing relevant regulations in accordance with the TSCA before 2020.01.16



## Thank You

