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Feature Article

Amendments Announced by President Tsai for the Toxic Chemical Substances Control Act with Seven Focuses

The revisions of the *Toxic Chemical Substances Control Act* (毒性化學物質管理法) was brought up as a response to the government's five food source safeguard control strategies and chemical substances safety policy. After the revisions passed the third reading in the Legislative Yuan, the Act has been renamed "the *Toxic and Concerned Chemical Substances Control Act* (毒性及關注化學物質管理法)" and adopted after President Tsai Ing-wen's announcement on 16 January 2019. It will start a significant new era in chemical substance controls in Taiwan.

Inclusion of food safety to address major public concerns

The EPA stated that, since its promulgation, the *Toxic Chemical Substances Control Act* has been through six amendments. The latest amendment in 2013 added a chemical substance registration system, which gradually improved the relevant chemical substance control regulations in Taiwan. However, problems with food safety and source control of chemical substances surfaced, and incidents involving toxic chemicals occurred in recent

years. In response to public concern, the EPA began reviewing and revising the Act.

The EPA explained that the revisions took references from the concept of the UN's Strategic Approach to International Chemicals Management (SAICM). Any management loopholes have been closed by coordinating obligations and regulations of each of the responsible competent authorities. The seven highlights include adding "concerned chemical substances"; adding a separate chapter devoted to "accident prevention and emergency response";

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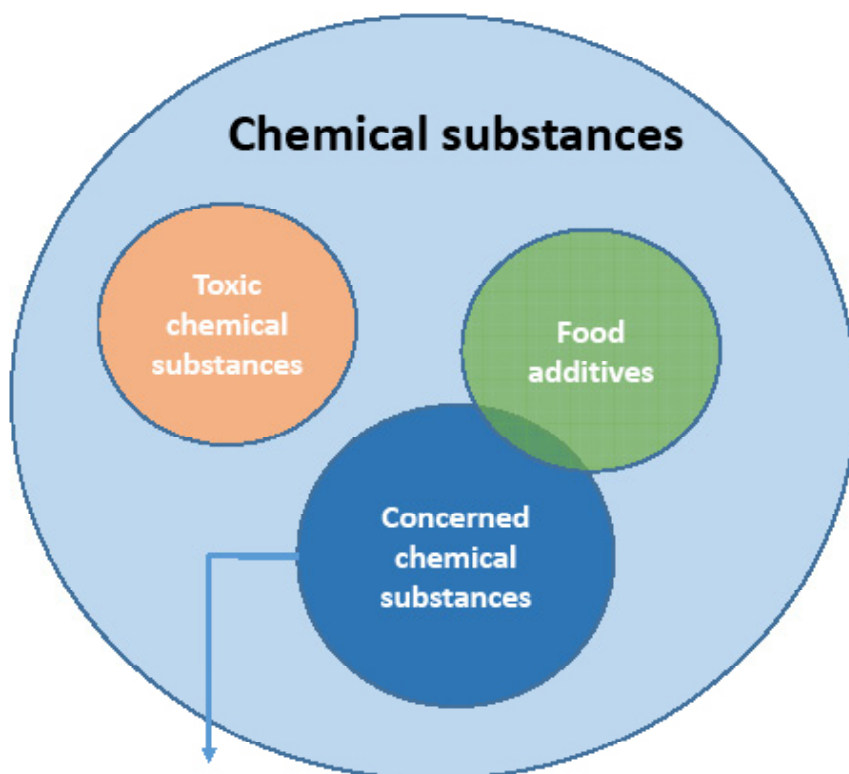
holding the “National Chemical Substances Control Meeting”; setting up specific funds; shortening the time required for enterprises to notify authorities of accidents; banning online purchase of toxic and concerned chemical substances listed for control; and adding clauses regarding whistleblowers and pursuit of illegal gains. Expansion of controlled substances, strengthening of accident management, improvement of coordinating mechanisms, long-term financial considerations, and other issues of public concern have all been thoroughly improved upon. The details are as follows:

Adding “concerned chemical substances” with more thorough evaluations and controls

1. “Concerned chemical substances” added: Chemical substances, besides toxic chemicals, are evaluated to see if they should be listed for further controls, as part of an effort to expand the scope of chemical substance source controls. Based on their different characteristics, chemical substances are also placed under tiered management, such as labeling for the

basic category, as well as mandatory application for approvals from competent authorities and mandatory registration of records of use. Concerning accident response, enterprises are required to submit risk prevention and response plans, have response equipment ready, and are also obligated to notify authorities and act in response when accidents occur.

2. A separate chapter devoted to “accident prevention and emergency response” has been added: During the revision review, legislators specifically paid attention to accident prevention and emergency response. Therefore, a separate chapter was added to require enterprises to submit their risk prevention and response plans to regional governments for reference. These plans are to be put online for public inquiry. A certification system was put in place for professional responder training and responding units, which focuses on prevention and preparation during normal days and providing onsite disaster relief at times of accidents to prevent harm to people and the environment.



- Screening and evaluating chemical substances, placing under tiered management
- Enhancing the management intensity to control the flows of chemical substances

▶ *The revisions of the Toxic Chemical Substances Control Act include adding “concerned chemical substances”*

Holding the inter-ministerial “National Chemical Substances Control Meeting” convened by the Premier through evaluations and controls

3. Organizing the “National Chemical Substances Control Meeting”: Since responsibilities for chemical substances control in Taiwan are distributed among different ministries, the EPA has worked to expand source management while coordinating with all relevant ministries. Aligning with the newly added meeting system, the premier is to convene meetings to conduct interdepartmental coordination for risk assessment and control measures for chemical substances so as to produce better results.

Setting up funds to collect “chemical substances operation fees” from enterprises

4. Setting up funds: The EPA is to collect operation fees from those handling toxic and concerned chemical substances and use the fees to set up the toxic substance and chemical substance funds. The EPA specified that the establishment of the funds helps with source management of chemical substances and helps enterprises cut the costs of accident response.

5. Shortening the time required for enterprises to give notice of occurrence of accidents: The accident notification time required for enterprises is shortened from one hour to 30 minutes. Circumstances requiring notification have also been adjusted, since in the past enterprises were only required to provide notification after pollution caused by an accident had been confirmed to affect the environment outside a factory. Now, notification is mandatory if pollutants are likely to affect the environment outside a factory, which largely increases the responsibility of enterprises as well as the response time for regional governments to act. Moreover, regarding stipulations on informing firefighting units about the layouts of factory equipment, the EPA elevated these regulations from the level of enforcement rules to that of enabling statute.

6. Banning online sales of toxic and concerned chemical substances listed for control: Sales and transfers of toxic and concerned chemical substances that are listed for control are forbidden if conducted

by mail order, online purchase, or in any forms where those involved in the transaction cannot be identified. The EPA noted that there are existing penalties and regulations for sellers and buyers violating the ban, but the revisions specifically target online platforms. If not exercising due care and hence referring both sellers and buyers without permits to conduct sales, operators of said platforms will be fined between NT\$60,000 and NT\$300,000, with every lapse subject to separate penalties.

7. Adding clauses concerning pursuit of illegal gains and whistleblowers: Those violating regulations under the Act will be pursued to return illegal gains on top of the original fines. Also, the EPA set a system for reporting rewards and to encourage whistleblowers to report violations. Moreover, factories are to disclose data such as permits and registrations for public supervision.

Outlook

The EPA emphasized that the revisions include setting up funds to expand chemical substances control, helping enterprises lower operational risks, and ensuring environmental safety and sustainability. As for collecting chemical substances operation fees from enterprises, those characterized as potentially involving “high risks, large affected areas, and consistently in large quantity” will be the first group subject to fee collection. The EPA will formulate additional relevant laws in the future, and, before fee collection officially begins, there will be consistent and open communications with the public at each stage.

The EPA stated that it will start formulating or reviewing and amending more than 30 relevant laws. With implementation of the Act and further relevant laws, it aims to achieve the vision of effective chemical substances control and establishment of a healthy and sustainable environment.

Climate Change

“Combating Climate Change, Taiwan Can Help” in COP24

On 15 December the two-week-long 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP24) concluded in Katowice, Poland. After many lengthy negotiations, over 18,000 attendees agreed upon a rulebook to implement the Paris Agreement. The Executive Yuan's delegation, led by then Acting EPA Minister Tsai Hung-Teh, held 38 bilateral meetings with diplomatic allies and nations friendly to Taiwan, in addition to sharing experiences on carbon reduction. This demonstrated Taiwan's determination to combat climate change alongside the international community.

With the efforts of the Ministry of Foreign Affairs (MOFA) and Ambassador Wen-Bin Shih of the Taipei Representative Office in Poland, Taiwan's delegation conducted 38 bilateral meetings with representatives of nations with diplomatic ties and nations friendly to Taiwan. Besides attending 20 of these meetings himself, Acting Minister Tsai had broad and in-depth conversations with the prime minister of Tuvalu, as well as environmental officials, legislators and UN ambassadors of numerous countries.

Moreover, many of Taiwan's legislators went to Poland for other diplomatic activities. Acting Minister Tsai conducted exclusive interviews with multiple international media outlets, including the Polish Press Agency, *Suddeutsche Zeitung*, the *Economic Times* (India), the *Voice of Warsaw*, and the *Solomon Star*.

He elaborated on Taiwan's carbon reduction work in the transition toward a low-carbon economy as well as Taiwan's resolve to contribute to the fight against climate change. Taiwan is also willing to share its experiences concerning global environmental issues.

During the convention, Taiwan gave special thanks to nine diplomatic allies--Eswatini, Haiti, Honduras, Kiribati, Nauru, Nicaragua, Paraguay, the Solomon Islands and Tuvalu--for speaking up for Taiwan in meetings of senior officials at COP24. Also, 15 countries with diplomatic ties with Taiwan wrote to the chairman of COP24 and the executive secretary of the UNFCCC to advocate that Taiwan should have concrete participation and not be excluded from UNFCCC events and conventions. In addition, MOFA



► Local trams displayed advertisements stating “Combating climate change, Taiwan can help” outside the COP24 venue in Katowice, Poland

purchased large advertisements saying “Combating climate change, Taiwan can help,” on local trams going around the city of Katowice. Working with the Voice of Warsaw, the MOFA presented a special feature and produced a short film, “A Promise to the Land,” which documented a micro solar grid project of the International Cooperation and Development Fund (ICDF) in rural Myanmar.

There were diverse voices from different corners of Taiwan inside the venue as well, expressing opinions on the forms of venue stands and in small speeches. They included the Industrial Technology Research Institute (ITRI), the Taiwan Research Institute (TRI),

the Taiwan Institute for Sustainable Energy (TAISE), the Environmental Quality Protection Foundation (EQPF), the Foundation of Taiwan Industry Service (FTIS), the Taiwan Carbon Capture Storage and Utilization Association (TCCSUA), Mom Loves Taiwan, the Taiwan Youth Climate Coalition (TWYCC), Delta Foundation, and the Taiwan Association of Sustainable Ecological Engineering Development (ASEED). Representatives from Taipei and Tainan also joined up with the above to answer the call of the UNFCCC, bringing the private and civil society sectors together with the central and regional governments in the effort against climate change.

Climate Change

Carbon Offset Regulations Amended to Encourage Medium and Small-Sized Businesses to Cut Emissions

On 27 December 2018, the EPA announced the revised *Greenhouse Gas Offset Program Management Regulations* (溫室氣體抵換專案管理辦法) (the Offset Regulations in brief). A category has been added for micro-scale businesses. Procedures have been simplified so that applicants can submit applications by merely documenting their own carbon reductions even though they are not legally required. The goal is to encourage participation of small emission sources such as medium and small-scale businesses, as well as to encourage transportation, residential and commercial sectors, in order to stimulate the development of reduction technology for all types of emission sources.

Fociuses of revisions of the *Offset Regulations* include:

1. With reference to international calculation methods for cap controls, circumstances not qualified for offset projects have been added in Article 4 in order to avoid duplication of other existing greenhouse gas reduction mechanisms.
2. Based on actual operations, requirements for applying to open holding accounts and required documents have been added in Article 5 for those promising to reduce emissions based on relevant laws.
3. For offset projects that qualify under micro-scale businesses – those with less than 5,000 kilowatts of renewable energy capacity, less than 20 million kWh/year of energy conservation, or less than 20,000 metric tons of CO₂e of annual greenhouse

gas reduction. The additive analysis of these above-mentioned projects can only include the additive nature of the regulation. It has been added in Article 7.

4. For those purchasing renewable energy-generating facilities that qualify for the renewable electricity wholesale purchase rate, it has been specified in Article 9 that applicants should submit documents proving no duplicate calculations of participating offset projects.

5. In Article 10, a sunset clause has been added for the government-assisted offset projects before the *Offset Regulations* were implemented. As for those registering offset projects, limits for the inclusion periods are newly specified for emission sources under the cap-and-trade scheme.

6. Validation and verification for program-type offset projects should be carried out by different verification

agencies. For sub-projects that have registered as part of the program-type offset projects, limits for the

inclusion periods are newly specified for emission sources under the cap-and-trade scheme.

Air

Amendments to Automobile Gasoline and Diesel Composition Standards Preannounced

To implement environmental protection policies on mobile source pollution control and to protect public health, on 6 December 2018 the EPA amended the *Standards for the Compositions of Automobile Gasoline and Diesel Fuels* (車用汽柴油成分管制標準). The amendments were formulated in reference to the control standards for petroleum-based fuels used by other Asian and European countries and the US, and will tighten controls over the composition of fuels.

Burning gasoline and diesel fuels emits nitrogen oxides (NO_x), sulfur oxides (SO_x), hydrocarbons (HC) and other various toxic substances that can lead to environmental effects such as unpleasant odors, acid rain and smog. Many countries around the world are thus gradually adjusting their environmental laws towards stricter controls on mobile sources of pollution and fuel compositions. To keep in line with international standards and contribute to air quality improvement, Taiwan is also making several revisions to the nation's current control standards. Most equipment used for construction and agricultural purposes in Taiwan that runs on gasoline and diesel fuels already falls under the jurisdiction of the current standards and there is no need for revisions. However, the EPA is now including motor boats and aircraft as control

targets under the Standards so as to further reduce air pollution and its impacts on human health.

The main focus of the amendments include: renaming the original regulation to *Standards for Fuel Compositions of Mobile Sources*; adjusting the maximum benzene content in gasoline to 0.8% and the maximum polycyclic aromatic hydrocarbons (PAH) content in diesel fuels to 8%; and, limiting the maximum sulfur content in marine fuels to 0.5% and in aviation fuels to 0.2%.

The *Standards for Fuel Compositions of Mobile Sources* took effect on 1 January 2019. Hence, the EPA recommends early adaptations to be made in response to the amendments.

Air

Air Quality Red Alert Days Halved Ahead of Schedule

With the joint effort between central and local governments, air quality in Taiwan improved significantly in 2018. Statistics show a 35.8% decrease in red alert days from 2015 to 2018, meaning that the EPA has accomplished its phased target of halving the number of red alerts ahead of schedule.

According to the air quality monitoring results of 2018 based on the Air Quality Index (AQI), the number of red alerts set off over the years has gradually fallen from 997 in 2015, 898 in 2016, 483 in 2017 and 310 in 2018. Compared to red alerts in 2015 and 2017, the numbers have decreased by 68.8% and 35.8%, respectively.

The EPA points out that the cities/counties with the best reductions of red alerts are Taichung City, Nantou County, Kinmen County, Pingtung County and Yunlin County, with reduction rates ranging from 49% to 75%. Additionally, a total of 23 monitoring stations across Taiwan issued red alerts on 3 March 2018 because of poor diffusion of air pollutants due to the wind direction combined with fireworks launched

on Lantern Festival. Taipei City and New Taipei City alone registered 12 red alert readings on that day.

Monitoring data also shows that air quality is often affected by wind factors, such as diminished wind speed for a long period and weakened wind strength. For instance, multiple occurrences of changes in wind direction severely worsened the air pollution in 2018 due to air pollutants that can be carried along air currents from other cities, especially when the wind starts blowing in an easterly direction. The EPA states that Taiwan's air quality usually worsens during fall and winter months because of prevailing weather conditions. Therefore, to prevent further air quality deterioration, both central and local governments are required to participate in and take contingency measures based on the *Regulations Governing Emergency Measures*

to Prevent Severely Deteriorated Air Quality (空氣品質嚴重惡化緊急防制辦法). When an air pollution episode is predicted, depending on the pollution level, an alert must be released and preventive actions are to be implemented, such as cutting down pollutant emissions from factories, upwind sources and local power plants. If air quality continues to degrade, different levels of emergency response and safety measures are required to be carried out depending on the pollution concentration levels. As the pollution concentrations worsen, the extent of controlled targets and measures also widen, to include both public and private premises.

As for long-term air quality control, the EPA will continue implementing the Executive Yuan's Air Pollution Control Action Plan and other relevant measures.

► Table: Monitoring results of 2018 based on the Air Quality Index (AQI)

City/County	2018			2017		2016	
	Reduced Red Alert Days (%)	Average	PM _{2.5} >=54	Average	PM _{2.5} >=54	Average	PM _{2.5} >=54
01 Keelung City		13.0	0	15.2	0	14.7	1
02 New Taipei City		15.3	7	17.1	1	17.3	22
03 Taipei City		14.4	5	15.4	0	16.3	17
04 Taoyuan City		17.9	11	17.7	2	19.7	36
05 Hsinchu County		17.3	1	18.8	0	20.9	8
06 Hsinchu City		19.7	1	16.4	0	16.5	3
07 Miaoli County		19.5	1	18.8	1	18.6	14
08 Taichung City	-75.0%	18.8	4	20.2	16	22.8	71
09 Chunghua County	-50.0%	21.6	9	22.8	18	24.2	42
10 Nantou County	-63.6%	23.0	16	26.5	44	24.5	23
11 Yunlin County	-49.1%	23.8	27	26.8	53	26.6	80
12 Chiayi County	9.1%	23.5	12	23.2	11	26.0	39
13 Chiayi City	-27.8%	23.7	13	27.2	18	27.2	32
14 Tainan City	-16.3%	23.8	36	24.9	43	26.4	110
15 Kaohsiung City	-36.0%	24.5	137	27.6	214	25.8	279
16 Pingtung County	-53.8%	19.6	18	21.8	39	21.1	59
17 Yilan County		11.3	0	12.3	0	10.5	0
18 Hualien County		6.8	0	11.6	0	13.0	0
19 Taitung County		9.1	0	9.0	0	9.0	0
20 Lianjiang County	-25.0%	20.7	3	20.6	4	22.4	14
21 Kinmen County	-57.9%	23.7	8	27.3	19	23.4	23
22 Penghu County		14.0	1	15.6	0	16.7	1
Total	-35.8%	19.0	310	20.7	483	20.9	874

Regulations Regarding Collection of Water Pollution Control Fees from Households Amended

Amendments to the *Regulations Governing the Collection of Water Pollution Control Fees from Enterprises and Sewage Systems* (事業及污水下水道系統水污染防治費收費辦法) took effect on 1 January 2019. The amendments mainly focus on the elimination of all regulations related to the collection of water pollution control fees from households, in order to differentiate the law from self-governance regulations.

Amendments to the *Water Pollution Control Act* were announced on 13 June 2018, which include: revising the list of fee collection targets; and authorizing local governments to collect control fees from households and to formulate localized regulations. In response to the revisions to the *Water Pollution Control Act*, the *Regulations Governing the Collection of Water Pollution Control Fees from Enterprises and Sewage System Operators* were also amended to adjust the list of targeted entities for the third stage of fee collection. The amendments also stipulate the start date for the collection of water pollution control fees from other targeted regions and entities, and add conditions in which fee collection may be waived and subsequently on how wastewater volumes are calculated in such situations.

To clarify the calculation of water pollution control fees, the EPA has updated the calculation methods and fee rates which vary based

on pollutant types and discharge weight.

The control fees will now be calculated based on the formulas stipulated in Article 5, and collected based on the percentages and stages listed below:

1. 2015: only 50% of the calculated amount will be collected.
2. 2016: only 60% of the calculated amount will be collected.
3. 2017: only 70% of the calculated amount will be collected.
4. 2018: only 80% of the calculated amount will be collected.
5. 2019: only 90% of the calculated amount will be collected.

▶ Table: newly added collection targets, substances and fee rates

Collection target	Targeted substance	Fee rate (NT dollar/kg)
Other targeted regions and entities	Chemical Oxygen Demand (COD)	12.5
	Suspended Solids (SS)	0.62
	Lead	625
	Nickel	
	Copper	
	Total mercury	31,250
	Total chromium	1,250
	Cadmium	6,250
	Arsenic	1,250
	Cyanide compounds	6,250

6. Starting from 2020: the full amount will be collected.

Collection of control fees from other targeted regions and entities has been included in the regulations and has been in force since 1 January 2019. The calculation rates are shown in the above table.

Water

Stricter Controls for Groundwater Injection List 61 Harmful Substances as Undetectable

On 22 December 2018, the EPA announced revisions to the *Water Quality Standards for Groundwater Body Injection and Types and Limits of Harmful Substances* (注入地下水體水質標準及有害健康物質之種類、限值), which was renamed to the *Types and Limits of Harmful Substances Prohibited from Being Injected into Groundwater* (禁止注入地下水體之有害健康物質種類、限值). The revisions made were largely in response to the *Water Pollution Control Act's* (水污染防治法) full ban on wastewater (sludge) being injected into groundwater. Furthermore, the EPA announced 61 harmful substances to be restricted because they are “undetectable” through environmental assessments.

The EPA noted that amendments to water pollution regulations placed prohibitions on any wastewater from being discharged into groundwater, and deleting the regulations that wastewater is permitted being discharged into groundwater according to environmental risk assessment results regulated standards. These changes are done through revisions to the *Water Pollution Control Act* that fully prohibit the injection of wastewater (sludge) into groundwater. Article 36 Paragraph 2 has been added to increase the severity of punishments for enterprises that inject wastewater containing harmful substances into groundwater. Subsequently, the types of harmful substances and their respective limitations for groundwater injection were also changed to conform with the amendments.

The amendments primarily focus on types and limits of harmful substances injected into groundwater as listed in the table of announced Item 1 as well as Item 2. A total of 61 harmful substances cannot be detected.

The EPA emphasized that the *Water Pollution Control Act* already prohibits wastewater (sludge) from being injected into groundwater, for which Article 32 Paragraph 1 stipulates that violators will be fined between NT\$60,000- NT\$6,000,000 . As for those who inject harmful substances into groundwater, Article 36 Paragraph 2 states that they can be penalized with one to seven years of imprisonment, detention and/or a fine between NT\$200,000 and NT\$20 million.

- ▶ For stricter controls of the wastewater flow, the EPA encourages the industry to install an automated water quality and quantity monitoring system



USEPA Representatives Attend 2018 Eco-Campus Award Ceremony

The US-Taiwan Eco-Campus Partnership Program 2018 Award Ceremony was held on 11 December at Wufeng Elementary School in Wufeng District, Taichung. In attendance were guests from the USEPA, along with representatives from eco-campuses and the environmental protection bureaus from counties around Taiwan. Schools were awarded certifications during the ceremony, including green flags for seven schools, silver medals for 26, and bronze medals for 53. The number of schools awarded a green flag at a single ceremony was the highest in the history of the program in Taiwan.

Schools created booths and displayed posters showing the results of their respective environmental projects. During the afternoon program, school representatives shared their thoughts and experiences of promoting environmentalism with one another. This year marked a new high for Taiwan with seven schools receiving a green flag award. Among the schools that received certificates, New Taipei City's Jian-An Elementary School and Tainan City's Hushan Experimental Elementary School received certifications again, marking their continued successes. Among the schools that received the green flag were Wanli Elementary School, Taoyuan City's Da-An Elementary School, Dashan Elementary School in Miaoli County, and Huashan Junior High School and Jiu-Guan Elementary School in Changhua

County. Taiwan has had a total of nine schools that received a green flag certification so far.

This year's event recognized schools and planned for inter-school promotion of environmental education and exchanges among eco-campuses. The award ceremony particularly invited eco-campuses in central Taiwan to set up exhibition booths to share their processes of promoting an eco-campus. During the program, specific implementation challenges for eco-campuses at different schools were also on display. This event not only facilitated inter-school dialogue but also displayed the wide variety of eco-campuses, along with evolving environmental issues and learning methods.



▶ Former and present principals of New Taipei City's Jian-An Elementary School, Yu-Huan Ju and Jen-Li Hsu, were awarded with the school's second green flag

The event was led by an eco-team made up of teachers and students from Taichung's Wufeng Elementary School, who excitedly led a tour of the school, including gardens, butterfly trails, an eco-pool

full of surprises and the first inclusive playground. Green flag schools and silver medal schools shared their experiences in the presentations that followed.

Waste

Results from Assessment of Recycling and Circular Economy Announced

During 2018, the EPA conducted its first "Recycling and Circular Economy Assessment", which concluded with an end-of-year presentation and award ceremony on 26 December 2018. In order to encourage enterprises to actively promote a circular economy, the EPA has been facilitating related inter-industry observations and growth.

The assessment carried out this year aimed to encourage enterprises to adopt systematic designs for creating output values reflecting a circular economy, through improving energy efficiency and better collection, reuse and recycling of resources, waste products, and wastewater generated in production processes. The key target for the 2018 evaluation

was reuse organizations. The assessment comprised three categories, namely "core indicators", "industry-specific indicators" and "advanced indicators". After a preliminary review, a document review, and onsite inspections, nine enterprises were awarded an excellent rank of two stars. Fifteen other enterprises achieved a one-star rank.

Award winners of "Recycling and Circular Economy Assessment"

Company	Rank	Company	Rank
China Steel Corporation	**	Xinyi Premixed Concrete Corporation	*
Tayuan Plant, Cheng Loong Corporation	**	Pingtung-Tainan 1 st Plant, ENRESTEC	*
Houli Branch, Cheng Loong Corporation	**	Hueifong Chemical Industries Co. LTD.	
Chubei Plan, Cheng Loong Corporation	**	Acro Chemical Corporation LTD.	*
Heping Plant, Heping Branch, Taiwan Cement Corporation	**	Yucheng Corporation	*
Linhai Plant C. S. Aluminium Corporation	**	Guanyin Plant, China Activated Carbon Industries LTD.	*
Guanyin Plant Mechema Chemicals International Corp.	**	Wugu Plant, China Activated Carbon Industries LTD.	*
Yingge Plant, Kinik Company	**	Tonyi Corporation LTD.	*
Chansing Resource Renewables Co. LTD.	**	Chung Hwa Pulp Corporation	*
Houshen Industries LTD.		Chiayi Chemicals Corporation	*
Da-Lun Constructive Waste Treatment & Disposal Co. LTD.	*	Guantien Plant Taiwan Cogeneration Corporation	*
Sixth Plant, FGD	*	Tonli Company LTD.	*

Chemicals

EPA and MOTC Jointly Announce Revised Toxic Chemical Substances Transportation Management Regulations

On 18 December 2018, the EPA and the Ministry of Transportation and Communications (MOTC) announced revisions to the *Toxic Chemical Substances Transportation and Management Regulations* (毒性化學物質運送管理辦法). To improve the management and transportation of toxic chemical substances, the EPA simplified the registration form and increased the responsibility of shipping enterprises to prevent and respond to disasters.

The regulations first took effect on 8 February 1991. The latest revisions put shipments of small amounts of Classes 1 to 3 toxic chemical substances under control and make provisions for a simpler transportation registration form which also requires a safety information form and installment of software on mobile devices. The previously required six-copy shipment receipt has been modified to a single-copy form, and regulations have also been added clearly stipulating that shipping enterprises must abide by traffic safety rules regarding container installation and shipment. To strengthen the risk management involved with such shipments, the revisions also tightened standards for real-time tracking systems required to be installed in vehicles transporting toxic chemical substances. The tracking systems are to include a barcode for scanning records and information

regarding the start and end points of a shipment, emergency alert functions (e.g. an SOS button and inclinometer), and 4G or higher communication service.



▶ *To strengthen the risk management of toxic chemical substances transportation, the revisions also tightened standards in vehicles transporting toxic chemical substances.*

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