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International Cooperation

Promoting Cooperation in International Environmental Protection

The world is currently wrapped in anxiety over the COVID-19 pandemic, which knows no national borders. Likewise, environmental protection is an issue that knows no borders. Taiwan has to always hold itself to the standards of all international environmental protection conventions and protocols and has been actively forming bilateral or multilateral agreements with neighboring and developed countries. Taiwan will continue to deepen and expand its influence in international environmental cooperation into the future, so as to protect the sustainability of the planet and work with other countries towards improving human health and welfare.

The following are the EPA's continuous efforts in advancing international cooperation for environmental protection:

I. Signing memorandums of understanding (MOU) for environmental protection exchanges and cooperation between Taiwan and Japan

An MOU for environmental protection exchanges and cooperation was signed by representatives from both the Taiwan-Japan Relations Association and the Japan-Taiwan Exchange Association. It includes cooperation in fields such as environmental education, environmental impact assessment (EIA), air quality control and monitoring, marine pollution control, waste management (including recycling), climate change mitigation and adaptation, and so on. Also, Taiwan and Japan shall take turns holding the Taiwan-Japan Bilateral Environmental Meeting every one or two years.

II. Promoting International Environmental Partnership programs

The Taiwan EPA and USEPA have been promoting the International Environmental Partnership (IEP) program since 2014. The Taiwan EPA also cooperates with the Ministry of Foreign Affairs (MOFA) to expand environmental diplomacy and promote bilateral and multilateral cooperation. By conducting various seminars and exchanges under the IEP, Taiwan accumulates and builds experience and capabilities in regional environmental services and exchanges. The ongoing partnership programs focus on environmental issues that are of global interest and with which

In This Issue

- Promoting Cooperation in International Environmental Protection 1
- Taiwan's 2030 Environmental Protection Goals Set In Line with International Sustainable Development Goals 4
- Mercury-Containing Import Ban Planned for January 2021 5
- Taiwan Shares Expertise at COP25 6
- Results of Food Safety Policies Examined to Enhance Control 8
- Revisions to Allow Public Scrutiny in Operation Resumption Suspended Stationary Sources 9
- Supplemental Air Pollution Restrictions During Specified Deteriorated Air Quality Advisory Period Announced 9
- New Regulations, Major Policies, and Major Constructions to Be Completed or Commenced in 2020 10
- Illegal Gains from Violating the *Toxic and Concerned Chemical Substances Control Act* Now Collectible 11
- Principles for Screening and Classifying Toxic Chemical Substances Amended 12

The Taiwan EPA and the USEPA jointly held the 2019 Global Environmental Education Partnership (GEEP) Advisory Group Meeting in Kuala Lumpur, Malaysia on 25 and 26 July 2019

developing countries urgently need Taiwan's assistance. They include programs for air quality management, atmospheric mercury monitoring, e-waste recycling, environmental education, environmental law enforcement, and more.

(1) The EPA will continue to promote the Asia-Pacific Mercury Monitoring Network (APMMN) by planning mercury monitoring tasks in the Asia-Pacific region, and assisting countries with analyses of mercury wet deposition samples.

(2) The EPA will continue to promote global environmental education partnership programs by strengthening the environmental education networks in each country and in the region, establishing the Asian-Pacific Environmental Education Network and promoting regional cooperation. The purpose is to strengthen cooperative relations with other countries and carry out Taiwan's New Southbound Policy with respect to environmental education issues.

(3) With the 9th International E-waste Management Network Meeting held, the EPA will continue to promote the international e-waste recycling and management network, establish e-waste management partnerships, develop recycling and management systems, accumulate experience in developing innovative technologies and foster the exchange of international e-waste management information.

(4) The 2019 IEP-Vietnam Workshop was held to share practical experiences and deepen environmental law enforcement cooperation in the Asian region. The EPA also held the 2019 Taiwan-US Environmental Protection Technological Cooperation Agreement Workshop, during which practices in the US to enforce laws related to waste were elaborated. The participants also received hands-on experience with inspection and sampling equipment.

(5) The Annual New Southbound Countries Air Pollution Control Conference was held to discuss, exchange ideas and work out a mutually beneficial cooperation model to improve control of regional air pollution in Asia.

(6) The EPA organized the 2019 International Chemicals and Mercury Control Seminar, where participants discussed chemical management policies and their implementation, as well as exchanged ideas on future challenges and developments.

(7) The 2019 Asia-Pacific Seminar for Environmental Health for Children took place for medical, healthcare, public health, and environmental protection personnel to exchange ideas with each other. The goal was to raise public understanding and awareness of environmental health for children.

(8) With the EU, the EPA co-hosted the 2019 Taiwan-EU Circular Economy Seminar, sharing experiences and achievements in plastic recycling, solar panel design and recycling and circular construction.

III. Promoting environmental cooperation with countries targeted in the New Southbound Policy

Taiwan-Vietnam Environmental Education Youth Exchange activities were organized. Participants from different backgrounds exchanged their expectations and responses related to environmental issues, learned from each other, shared cross-country and cross-field knowledge, and created openings for future cooperation.

Courses on "Responding to Climate Change for Sustainable Development" were organized to promote the government's New Southbound Policy, strengthen exchanges on environmental protection between Taiwan and Vietnam, and improve regional environmental quality.

IV. Taiwan-Germany Environmental Forum

The second Taiwan-Germany Environmental Forum was held to discuss issues such as circular economy, energy conservation and carbon reduction, climate change and energy transformation, and source reduction for plastic wastes. The forum provided an opportunity for representatives from industry, government, academia and the research community to exchange ideas, and allowed Taiwan to learn from the experience of and approaches adopted by Germany. It also helped to strengthen cooperation between the two countries in the environmental field.

V. International Conference on Sustainable Development Goals (SDGs)

The International Conference on a Sustainable Taiwan: Accelerating the Localization of UNSDGs was held to address three main topics: SDG promotion, SDG promotion strategies and result assessment, and social consensus building. Via discussions and experience sharing, the international community, central and regional governments, industry, academia, the research community and civic organizations worked together to formulate a new vision for the new generation.

Outlook

As a member of the global village, Taiwan strives to play its part alongside all other countries to promote world peace, pursue sustainable development and contribute to maintaining the global ecological balance. With a total of 12 conferences and events organized under IEP in 2019, as well as events scheduled for the years to come, initial progress has been made in raising the level of Taiwan-US cooperation, solidifying cooperation objectives and expanding international participation. Not only will the EPA continue showcasing Taiwan's environmental protection achievements to the international community, it will strengthen relationships with other countries through assisting regional partners with improving environmental quality, gradually establishing positive interactions with high-level officials in partnering countries and building mutual trust.

2019 Asia-Pacific Children's Environmental Health Symposium held in Taiwan

General Policy

Taiwan's 2030 Environmental Protection Goals Set In Line with International Sustainable Development Goals

The *National Environmental Protection Plan* approved by the Executive Yuan on 14 February 2020 was formulated based on the structure and responsibilities of the Ministry of Environment and Resources. Echoing the UN Agenda 2030 for Sustainable Development, and considering the environmental protection trends and key issues both within and outside of Taiwan, the Plan sets out short, medium, and long-term implementation strategies and goals, aiming to achieve the visions of "reducing carbon and disasters", "relaxing and breathing well", "enjoying clear water", "transforming waste to resources", "zero forest loss", and "co-existing with wildlife" by 2030.

The *National Environmental Protection Plan* is based on the *Additional Articles of the Constitution of the Republic of China* (中華民國憲法增修條文) Article 10 paragraph 2, which states "environmental and ecological protection shall be given equal consideration with economic and technological development", and the strategies under the *Basic Environment Act* (環境基本法). The Plan was formulated first by bringing relevant departments together to come up with response strategies and mechanisms, with the main focus on the overall environment and ecosystem. Then these strategies were thoroughly discussed by scholars and experts, government agencies, regional governments and civic organizations to reach a consensus. The EPA noted that the Plan addresses 13 environmental issues under five areas, namely, climate action, environmental quality, nature conservation, green economy, and sustainable development partnerships. Key performance indicators (KPIs) were set for each environmental issue to track progress and results and to help with implementation of national environmental protection tasks. In the future, it is expected that the implementation results will be disclosed on an annual basis through environmental white papers or other suitable channels.

Setting 2030 goals

The *National Environmental Protection Plan* will be implemented towards achieving the 2030 goals and the visions of "reducing carbon and disasters", "relaxing and breathing well", "enjoying clean water", "transforming waste to resources", "zero forest loss", and "co-existing with wildlife" in Taiwan.

- **Reducing carbon and disasters**
  Working towards reducing greenhouse gas emissions by 20% compared to the baseline year 2005
- **Relaxing and breathing well**
  Increasing the ratio of days (from 84% to 93%) with air quality good enough for outdoor activities
- **Enjoying clean water**
  Lowering the ratio of seriously polluted sections of 50 rivers from 3.8% to 0%
- **Transforming waste to resources**
  Increasing the general waste recycling rate from 55.69% to 60%
- **Zero forest loss**
  Maintaining the forest coverage rate at 60.7% or higher
- **Coexisting with wildlife**
  Keeping the percentage of statutorily protected land area at 19.2% or higher of the total national land area, with the water quality compliance rate across all marine water quality monitoring stations at 99.7%

Planning for the 13 environmental issues under five areas

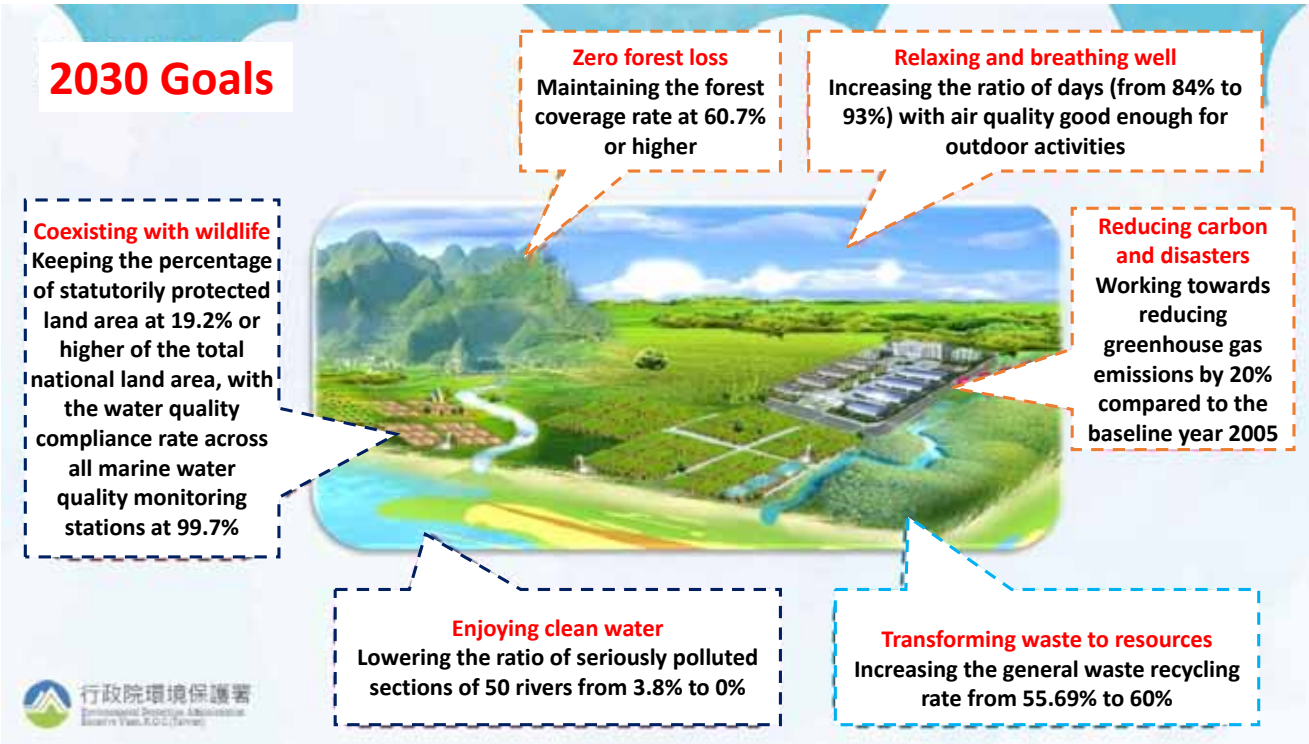
Planning for the short, medium, and long-term strategies and goals for the 13 environmental issues under five areas addressed by the Plan, and setting key performance indicators for tracking.

- **Climate action:** responses to climate change, mountain conservation and disaster prevention and management
- **Environmental quality:** EIAs, atmospheric environments, watershed management, chemical substance management
- **Green economy:** resource recycling, environmental technology
- **Nature conservation:** terrestrial ecosystem conservation, marine conservation, environmental resource investigation and monitoring
- **Sustainable development partnership:** environmental education, social participation

Follow-up tasks include inviting relevant ministries to hold meetings with local governments to explain what is approved under the Plan

and the actions to be taken in the future, and holding seminars in northern, central, southern, and eastern Taiwan to help local governments formulate localized environmental protection plans. The central government will join forces with local governments in implementing the environmental actions and regularly publish environmental white papers to disclose implementation progress and results in the future.

The passing of the *National Environmental Protection Plan* allows government agencies to join forces with corporations, organizations, and the general public in carrying out environmental protection actions, so as to advance towards ensured environmental security, green lifestyles shaped through a circular economy model, and ultimately a harmonious coexistence between people and the environment.



Echoing the UN Agenda 2030 for Sustainable Development, the EPA set Taiwan's 2030 Environmental Protection Goals

Waste

Mercury-Containing Import Ban Planned for January 2021

Due to the harm caused by mercury to the environment and human health, along with the recent decrease in demand for mercury-containing products, the EPA preannounced that starting on 1 January 2021, the import of mercury-containing switches and relays, high-pressure mercury-vapor lamps for common lighting, and non-electronic measuring instruments will be banned.

The global trend in mercury control is to gradually limit and ultimately ban mercury-containing products. The UN's Minamata Convention on Mercury took effect on 16 August 2017, banning the manufacture, import and export of mercury-containing switches and relays, high-pressure mercury-vapor lamps for common lighting, and non-electronic measuring instruments such as barometers, hydrometers, pressure gauges, thermometers and sphygmomanometers by the end of 2020, as stipulated by Article 4 paragraph 1 and Attachment A.

The EPA announced the *Restrictions on the Import and Sale of Mercury Thermometers* in 2008. Based on the *Regulations Concerning Toxic Chemical Substances Listed for Control and Relevant Operations and Management* announced and revised by the Toxic and Chemical Substances Bureau on 5 July 2019,

mercury can no longer be used to manufacture switches, relays, high-pressure mercury-vapor lamps for common lighting, and non-electronic measuring instruments such as barometers, hydrometers, pressure gauges, thermometers, and sphygmomanometers, starting 1 January 2021. With the schedule for banning the manufacture of mercury-containing products already announced, further controls on imports are still required.

Due to the hazards mercury poses to the environment and human health, as well as the falling need for mercury-containing products owing to advances in electronic instruments and consumer electronics, the EPA preannounced the import ban of the aforementioned products so as to strengthen controls starting in 2021, in compliance with the Minamata Convention on Mercury.

Draft ban on mercury-containing products announced

1. Import of following mercury-containing products to be banned:
(1) Switches and relays, but not including ultra-high precision capacitors, loss-measuring bridge circuits, and high-radio frequency switches and relays used in surveillance instruments when each contains less than 20 mg of mercury. (2) High-pressure mercury-vapor lamps for common lighting. (3) The following non-electronic measuring instruments, but not including those installed in large equipment or for high-precision measuring: barometers, hydrometers, pressure gauges, thermometers (including clinical ones), sphygmomanometers
2. Import of the aforementioned mercury-containing products is not banned if one of the following criteria is met:
(1) It is necessary for civilian protection and military use. (2) It is used in research, instrument calibration, or for calibration standardization. (3) There is no suitable mercury-free alternative available.

Climate Change

Taiwan Shares Expertise at COP25

The 25th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP25) commenced on 2 December 2019 in Madrid, Spain and ended on 15 December with the last piece of the Paris Agreement Rulebook uncompleted. Key issues such as Article 4 (Response Measures), Article 6 (International Carbon Market Mechanisms), and Article 8 (the Warsaw International Mechanism for Loss and Damage) remained unresolved. They will continue to be negotiated at COP26 in Glasgow, Scotland, UK, in November 2020. With efforts from the Ministry of Foreign Affairs (MOFA) and the Taipei Economic and Cultural Office (TECO) in Spain, the EPA's 2019 delegation, led by Minister Tzi-Chin Chang, successfully promoted Taiwan's endeavors in climate change and energy transformation. Delegates from relevant departments, regional governments, and civil organizations also actively took part in several side events. Keeping their feet on the ground and doing their part, everyone eagerly participated in the climate change battle and made contributions to the world by offering their expertise.

COP25 was originally set to be hosted by Chile in Santiago, but the organizer made a sudden decision to change the convention location to Madrid, Spain in November 2019. Nonetheless, over 20,000 people from around the globe attended, and Taiwan governmental offices were also able to finish their preparation work on time. The representative Der-Li Liu and fellow colleagues from TECO in Spain launched a creative promotional campaign themed "Combating Climate Change, Taiwan Can Help" displaying trams and minibuses painted with Taiwan-relevant images, such as wind turbines, tung tree blossoms, and paper mulberry around the convention venues. The campaign attracted attention and was positively responded to by all.

Nations with diplomatic ties offer encouragement and support Taiwan to participate in UNFCCC events

Thirteen nations with diplomatic ties with Taiwan – Belize, Eswatini, Guatemala, Haiti, Honduras, Marshall Islands, Nauru, Palau, Paraguay, Saint Christopher and

Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Tuvalu – spoke up or issued statements during the convention, urging that Taiwan should not be excluded from the UNFCCC events. Moreover, legislators of 12 of these diplomatic allies expressed their support for Taiwan's participation by issuing statements to the UNFCCC Secretariat, questioning the UNFCCC administration, or by posting opinions on social media.
During the event, Taiwan legislators Yi-Jin Yeh (葉宜津), Wen-Ju Yu (余宛如), and Man-Li Chen (陳曼麗) attended relevant diplomatic activities on behalf of Taiwan's Legislative Yuan. The MOFA held more than 40 bilateral meetings with diplomatic allies and countries friendly with Taiwan, carrying out more intensive interactions with the international community. The prime ministers of Tuvalu and of Eswatini, as well as environmental ministers and legislators from many nations all took part as guests in these meetings. Several international media, such as Deutsche Welle and major Spanish newspapers ABC and La Razón, also exclusively interviewed EPA Minister Chang, who spoke about Taiwan's efforts in energy transformation and specific carbon reduction strategies. He expressed that, although not a signatory to UNFCCC agreements, Taiwan is willing to contribute to the battle against climate change. When asked about how to reduce marine waste, Minister Chang gave a detailed response about sharing Taiwan's experiences in global environmental issues with the international community.

At exhibition booths or side events at the venue, there were also experts in different fields from Taiwan who spoke about Taiwan's climate efforts. These included representatives from the Industrial Technology Research Institute, the Taiwan Research Institute, the Taiwan Institute for Sustainable Energy, the Environmental Quality Protection Foundation, the Foundation of Taiwan Industry Service, the Taiwan Carbon Capture Storage and Utilization Association, Mom Loves Taiwan, the Taiwan Youth Climate Coalition, Delta Electronics Foundation, and the Taiwan Association of Sustainable Ecological Engineering Development. There were also representatives from New Taipei City, Taoyuan City, and Tainan City. All answered the UNFCCC's call and strove together, combining efforts of the central government with those of the private and non-governmental sectors in response to climate change.

Energy transformation is making Taiwan a green energy country

Joining the global movement towards carbon reduction, Taiwan approved the *Greenhouse Gas Reduction Promotion Program* (溫室氣體減量推動方案) in 2018, specifying the reduction responsibilities shared by the energy, manufacturing, transportation, commercial and residential, agricultural, and environmental sectors. In September 2019, 22 municipalities, county and city governments submitted plans under the *Greenhouse Gas Control Implementation Plan* (溫室氣體管制執行方案), which were adopted for their own districts. These actions were in line with the UNFCCC's call to make clear and transparent national contributions.

Taiwan's policy on energy transformation is based on the principle of developing green energy, increasing the use of natural gas and reducing reliance on coal. The first commercial-scale offshore wind farm, located off the coast of Miaoli, officially started operation on 12 November 2019 and is able to generate power for 128,000 households annually. It shows that Taiwan has progressed from planning to gradually reaching its goal of increasing the renewable energy share to 20% by 2025. Furthermore, Taiwan has already begun to map out the 10-year-10-gigawatts renewable energy development policy for the decade between 2026 and 2035, to ultimately become a green-energy country.

Passed in 2015, the *Greenhouse Gas Reduction and Management Act* (溫室氣體減量及管理法), specifies the long-term national carbon reduction goal, which is to reduce emissions to at least 50% of the 2005 emission level by 2050. 2015 was also the year Taiwan declared its Nationally Determined Contribution (NDC), which requires Taiwan to reduce its emission level to 20% below that of 2005 by 2030. In fact, Taiwan is one of very few nations in the world that have legislated long-term reduction goals.

Looking back at four years of implementing the *Greenhouse Gas Reduction and Management Act*, it is apparent that more control mechanisms and incentive systems are needed. The EPA will therefore initiate reviews and revisions of the Act and

focus on strengthening reduction management mechanisms for each sector, improving controls on large emission sources and reporting methods, putting the polluter-pays principle in practice, and reinforcing climate change adaptation actions. In the short term, reduction responsibilities for the second reduction stage (from 2021 to 2025) will be delegated to each sector, and public participation will be ensured throughout the process.

On the same trip, Minister Chang attended the EU-Taiwan Circular Economy Seminar, co-organized by the EPA and the EU, in Brussels, Belgium on 9 December 2019. Besides presiding over the opening with Mr. Timo Pesonen, EU Director-General for Internal Market, Industry, Entrepreneurship and SMEs, Minister Chang also visited Ms. Joanna Drake, Deputy Director-General of the European Commission's Directorate-General for the Environment. Both exchanged experiences and results regarding plastic recycling, design and recycling of solar panels, and circular economy construction.

Future outlook

The EPA plans to hold a series of events in 2020, such as EU Innovation Week and Circular Economy Week, and will invite top EU officials to Taiwan to participate. It will also promote cooperation between industries in Taiwan and the EU and work towards making Taiwan an island with a circular economy.

In the international community, Taiwan is a sincere and responsible friend that is eager to contribute. For years, Taiwan has been providing needed assistance to and exchanging experiences with others on public health, medicine and healthcare, agricultural technology, and pollution control. In the future, Taiwan will continue to actively contribute and participate on global issues such as climate change and environmental governance to fulfill its responsibility as a member of the international community. In this way, Taiwan will reach out towards the world while letting the world come to Taiwan.

Chemicals

Results of Food Safety Policies Examined to Enhance Control

On 10 December 2019, the Executive Yuan's Office of Food Safety held a meeting to review the results of five major food safety policies and enhance Taiwan's mechanisms for food safety management. Suggestions from all sides were collected in order to improve relevant policies and maintain food safety for the public.

Director General Yein-Rui Hsieh of the Toxic and Chemical Substances Bureau (TCSB) (second from the left) stated that the source control for chemical substances with potential risks is important for food safety and for preventing them from flowing into the food supply chain.

The meeting was also attended by the Ministry of Health and Welfare, the Council of Agriculture, the EPA, and the Ministry of Education. Other invitees included members of the Executive Yuan Food Safety Committee, experts, scholars, legislators, as well as representatives from civic and industry organizations.

Looking back on the 2018 meeting, policies concerning care and handling of eggs, ingredient control for liquid eggs, use of domestically produced, traceable produce and food for school lunch were all well recognized by the attendees. Many

suggestions as well as references for future policies were offered.

There were many exchanges in this year's meeting concerning the following: reviewing the five major food safety policies' implementation and results, sanitary control for the breakfast industry, and strengthening source control in agriculture. Other topics included pushing for expedited mass spectrometry, school lunch quality control measures and future improvement, source control and risk communication for chemical substances with potential risks on food safety. All participants showed determination to safeguard Taiwan's food safety.

Air

Revisions to Allow Public Scrutiny in Operation Resumption of Suspended Stationary Sources

On 31 January 2020, the EPA announced revisions to the *Management Regulations Concerning Operation Resumption and Trial Run Evaluation for Stationary Pollution Sources in Public and Private Premises* (hereinafter referred to as the Regulations). The revisions stipulate the guidelines the stationary pollution sources that have been suspended by competent authorities for major violations to the *Air Pollution Control Act* shall follow when resuming their operation. The revisions also include a new rule requiring public and private premises to make their trial run plans available online for public scrutiny.

In addition, the amended regulations also require city or county competent authorities to take opinions of interested parties and non-profit organizations into account while reviewing the trial run plans submitted by the public and private premises. The minutes of the meetings for the review of trial run plans shall also be made public on the website designated by the central competent authority.

Amendments to the *Air Pollution Control Act* announced on 1 August 2018 added stipulations concerning stationary sources with major violations. They authorize competent authorities to shorten the permit duration at permit renewal, to order the violators to cease operation or close down, to annul the operation permit, or to impose other severe penalties when necessary. In order to perfect the regulation and strengthen the enforcement, the Regulations were formulated with reference to the aforementioned amendments and suggestions brought up in the National Affairs Conference on Judicial Reform. They have increased information transparency and the public's right to know as suggested.

In the future, major violators applying for resumption of business shall make legally designated documents accessible for the public to view and provide opinions. To increase review credibility, city or county competent authorities are also required to provide on-site supervision in relevant processes. The Regulations were developed after comprehensive reviews and adjustments and are an important puzzle piece for completing the guidelines for stationary pollution sources with major violations to follow when applying for operation or business resumption.

Air

Supplemental Air Pollution Restrictions During Specified Deteriorated Air Quality Advisory Period Announced

On 6 February 2020, the EPA announced the *Air Polluting Acts During the Specified Deteriorated Air Quality Advisory Period*, which stipulates that during specified deteriorated air quality advisory periods, when particulate matter or fine particulate matter concentration reaches the criteria for Level 1 Alert for two consecutive days or longer, controls on seven potentially air-polluting activities will be intensified.

The EPA pointed out that air quality monitoring data over the years shows $PM_{2.5}$ as one of the major causes of poor air quality index (AQI) readings in Taiwan. Besides particulate pollutants, VOCs are

also precursors and sources of $PM_{2.5}$. To take preventive actions ahead of issuing alerts for deteriorated air quality, several air-polluting acts are announced as subjects for control. These include using leaf blowers at roadsides and parks, mixing asphaltic concrete, scraping and paving roads, demolishing buildings, loading and unloading concrete materials in a non-closed manner at ports, open-air spray (or sand) painting at construction projects, and cleaning boilers and the petrochemical industry's organic liquid storage tanks.

In Taiwan, from approximately 1 October to 31 March the following year, due to meteorological and geographic factors, air pollutants tend to accumulate in the atmosphere and deteriorate air quality. According to the control principles specified in the *Regulations Governing Emergency Measures to Prevent Serious Worsening of Air Quality* (空氣品質嚴重惡化緊急防制辦法), to ameliorate conditions when air quality reaches critically poor levels, air pollution-reducing measures shall be implemented. Hence, suspension of the aforementioned air polluting activities during specified periods were announced.

Using Taiwan Air Quality Monitoring Network (https://taqm.epa.gov.tw/taqm/tw/AqiForecast.aspx) reports given daily at 10:30 AM, the EPA continually monitors the three-day outlook for air quality factors. If the forecast is determined to meet certain conditions, alerts will be issued on the Air Quality Improvement and Maintenance Information Website (https://air.epa.gov.tw/). City and county environmental bureaus are then asked to issue alerts on their official websites by the end of the same day, notifying those in their jurisdictions that engage in the seven air-polluting acts to suspend such acts during the control periods.

Those notified but failing to comply will be fined between NT$1,200 and NT$100,000. If the violator is at an industrial or commercial site, the fine may range from NT$100,000 to NT$5 million. If air quality improves and no longer meets the alert conditions, alerts will be withdrawn and notifications sent in the same way they are issued.

Mixing asphaltic concrete is a major air-polluting act.

General Policy

New Regulations, Major Policies, and Major Construction to Be Completed or Commenced in 2020

To simplify administration for the public's convenience, the EPA announced a raft of new environmental measures that entered into effect on 1 January 2020. These include (shown in the table below):

Table: New regulations, major policies, and major construction to be completed or commenced in 2020

Items	Contents
1.Onsite collection will be fully implemented by the Recycling Care Program in 2020	・To lessen individual businesses' burdens and expedite cleaning speed, the EPA has asked all county and city environmental bureaus to provide onsite collection at individual businesses' storage sites that need assistance. ・The measure above will take effect starting 1 January 2020.
2.The Subsidization Method for Replacing Old Motorcycles With New Ones (機車汰舊換新補助辦法) will be implemented.	・Subsidies will be expanded for replacing old motorcycles (manufactured before 30 June 2007) with electric motorcycles or fuel-burning motorcycles that comply with the seventh emission standards. ・NT$1 billion is expected to be set aside to reduce air pollution generated by old vehicles. Purchase of large heavy electric motorcycles or fuel-burning motorcycles that comply with the seventh emission standards to phase out old motorcycles will be subsidized with NT$5,000 in 2020 and NT$3,000 in 2021. Purchase of electric motorcycles or electric-power auxiliary bicycles, except for large heavy types, is subsidized with NT$3,000 in 2020 and NT$1,000 in 2021 ・Subsidization will be available between 1 January 2020 and 31 December 2021.
3.Sales of toxic and concerned chemical substances are banned from online stores	・It is prohibited to sell or transfer announced toxic or concerned chemical substances via online shopping or trading platforms that do not show client identification. Liabilities are added for platform businesses that violate the rules. ・The ban will take effect on 16 January 2020.

Chemicals Illegal Gains from Violating the *Toxic and Concerned Chemical Substances Control Act* Now Collectible

The newly added regulation in the revised *Toxic and Concerned Chemical Substances Control Act* (毒性及關注化學物質管理法), announced on 16 January 2019, sets in place the appropriation of illegal gains obtained from violating the Act, on top of fines. Hence, the EPA accordingly has formulated the *Regulations Concerning Calculation and Estimation of Illegal Gains from Violating the Toxic and Concerned Chemical Substances Control Act* (違反毒性及關注化學物質管理法所得利益核算及推估辦法). It will serve as a calculating and estimating reference for competent authorities, to help uphold justice and confiscate illegal gains.

The EPA explained that fines have been the most commonly applied penalty for past violations of environmental regulations. Fine amounts are based on Article 18 paragraph 2 of the *Administrative Penalty Act* (行政罰法). Illegal gains could be considered fines if they exceed the maximum fine. Yet this method lessens or spares penalties for the violators, even though the illegal gains are in fact confiscated. Not only is it in no way environmental justice, but it also does not lead to fair corporate competition. For cases involving long-term or major violations, there may be conspicuous benefits in terms of assets (such as profiting from the use of toxic chemical substances whose use is restricted or banned pursuant to the Act) as well as inconspicuous benefits, or the costs that should have been incurred but were avoided. If these gains are not confiscated, there would be loopholes when penalties are imposed. Enterprises would then calculate the act of violating regulations to be more profitable, further leading to repeated offenses that can not be deterred.

The EPA went on to elaborate on the contents of the Regulations, which include reminding competent authorities of violations for illegal gains are to be confiscated; and the types, calculation, and estimation of conspicuous, inconspicuous, and total profits. Other than data for references, information sources, and confiscation periods, the Regulations also concern the burden of proof, relevant

authorities' responsibilities to assist in investigations, experts as assistant auditors, coordination mechanisms, and more. All of the above can serve as bases for competent authorities to confiscate illegal gains and make calculations based on the actual circumstances of individual cases.

Chemicals

Principles for Screening and Classifying Toxic Chemical Substances Amended

The *Toxic and Concerned Chemical Substances Control Act* (hereinafter referred to as the Act) (毒性及關注化學物質管理法) amended on 16 January 2019 added concerned chemical substances as a new category of substances to be regulated. Accordingly, the *Principles for Screening and Classifying Toxic Chemical Substances* have been revised and renamed as the *Principles for Screening and Classifying Toxic and Concerned Chemical Substances* (hereinafter the Principles).

The purpose of the revision was to expand the source control of chemical substances. Conforming to the definition of Class 4 toxic chemical substances, the Principles add concerned chemical substances as a new category, expand the data sources of chemical substance lists and stipulate relevant classification principles. In addition, the Principles stipulate that a chemical substance reaching a certain risk level based on the hazard classification in CNS 15030 can be classified as a hazardous concerned chemical substance.

The EPA stresses that the process of screening, classifying, and announcing a toxic and concerned chemical substance to regulate can be very time-consuming. It involves consulting experts and scholars, industry competent authorities and stakeholders while taking the substance's characteristics and its international and domestic control status into account. Hence, to increase control efficiency, stipulations have been added to the Principles that allow the assessment procedure to be simplified when the control status of the substance is clear both internationally and domestically or when different industries have reached a consensus on the classification of the substance.

The screening and classifying procedures for toxic and concerned substances are as follows:

1. Establishing a list of data sources for chemical substances by referring to domestic and international regulations and scientific articles.
2. Creating a watch list of chemical substances based on chemical and physical characteristics, toxicity, environmental impacts and consumption issues.
3. Listing substances as prospective toxic and concerned substances based on the classification principles of each category, consultation meetings with experts and scholars, and opinions of industry competent authorities, relevant industry associations, or stakeholders.
4. Recommending a list of substances to be regulated after evaluating the current handling and regulating plans for prospective substances.

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For inquiries or subscriptions, please contact:
Environmental Policy Quarterly
Office of Sustainable Development
Environmental Protection Administration
83, Sec. 1, Zhonghua Rd., Taipei 100, R.O.C. (Taiwan)
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