



Environmental Policy Monthly

Environmental Protection Administration, Taiwan, ROC

Feature Column

Minister Dang Leads Delegation to Promote International Cooperation

EPA Minister Winston Dang recently led a delegation to the US to participate in an annual environmental meeting, and visit the US EPA administrator and a Washington think tank. Dang spoke on Taiwan's plans to put forward a "Green APEC Opportunities Initiative" at the upcoming APEC meeting. This plan is expected to contribute toward reducing global greenhouse gases. Dang also put in a strong word of support for establishing a World Environment Organization.

On 11 August 2007, EPA Minister Dang (陳重信) led a delegation to Hawaii for the U.S.-Taiwan Annual Meeting on Environmental Issues of Common Concern to exchange views with the US EPA on the issues of air pollution and climate change. The two sides set the direction for future cooperation on the following items:

1. Climate change: Establish a cap and trade system and seek ways to reduce greenhouse gases (including PFCs used in semiconductors)
2. Multi-pollutant reduction: Survey emissions of all pollutants (SO_x, NO_x, GHGs, mercury, etc.) emitted by industries with heavy air pollution emissions including petrochemical plants and the steel industry. Seek reduction co-benefits so that reduction of one pollutant results in reduction of other pollutants.

3. Ports initiative: Establish partnerships between US and Taiwan ports and introduce US experience in integrating different government agencies in port



EPA Minister Winston Dang meets with US EPA Administrator Steve Johnson

In This Issue

Feature Column: Minister Dang Leads Delegation to Promote International Cooperation.....	1
Feature Column: Taiwan's Recycling Efforts Pay Off.....	3
Threshold Raised for Receiving Recycling, Clearance and Treatment Subsidies	5
EIA Cases Limited to Three Preliminary Investigation Meetings.....	6
Correction Deadline Set for Improperly Labeled Batteries.....	6
EPA Celebrates 20th Anniversary	7
99.77% of Garbage Undergoes Appropriate Treatment.....	8
End-of-Life Vehicle Recycling Standards Tightened.....	9
Toxic Chemical Substances Handling Application Fee Standards Revised.....	9
Wastewater Discharge Permit Exemption Announced.....	10
Green Design Criteria Incorporated into Recycling Fee Rate Standards.....	11
Briefs.....	11

pollution control. Assist Taiwan in establishing a similar cross-agency integration mechanism to reduce air pollution emissions.

4. Monitoring long-range transport of air pollutants: Utilize Taiwan's Mt. Lulin monitoring station to monitor background values of air pollutants. Join international monitoring network and work with the US to begin monitoring atmospheric mercury concentration.

After the bilateral meeting in Hawaii, Minister Dang headed to Washington D.C. to call on US EPA Administrator Steve Johnson. On behalf of Premier Chang, Minister Dang thanked the US for its long-term support of environmental cooperation between the US and Taiwan, and invited Johnson to visit Taiwan. Dang expressed hope that this year's APEC leaders meeting would support Taiwan's proposed Green APEC Opportunities Initiative. Johnson said the issues in Taiwan's proposal are highly appropriate topics for discussion during the APEC meeting. Expressing regret that he wouldn't be able to attend the APEC meeting himself, Johnson said that for his remaining 18 months in office, he will do his utmost to focus on the US EPA's four main priorities: Climate Change/Clean Energy, Sustainable Water, Homeland Security, and Building a Stronger EPA.

Also during this visit to the US, Dang gave a speech at a well-known think tank in Washington D.C., the Woodrow Wilson International Center for Scholars. Presiding over the event were Mark Mohr, Program Associate of the center's Asia Program, and Jennifer Turner, Director of the center's China Environment Forum. The lecture was attended by about 60 scholars, experts, environmentalists and media workers. In his talk, Dang described the results of Taiwan EPA's hard work over the past years in waste reduction, resource recycling, as well as recent efforts to establish a Greenhouse Gas Reduction Act (溫室氣體減量法). Dang denounced China for blocking Taiwan's participation in international environmental organizations' activities, also noting that China's emissions of mercury and other pollutants have already seriously affected air quality in Taiwan as well as impacted air quality in the US and other countries.

Taiwan Urges Establishment of World Environment Organization

Disasters stemming from climate change could seriously impact world food production, industry

structure, economic development and national security. While Taiwan has only 0.3% of the global population, it is responsible for nearly 1% of the world's carbon dioxide greenhouse gas emissions, ranking 22nd place globally. Taiwan is a small island nation with a burgeoning population -- factors that make it harder to adapt and respond to climate change. This makes it all the more important for Taiwan to actively join international actions that respond to climate change.

The Taiwan EPA appreciates the fact that climate change was chosen as the theme for this year's APEC economic leaders meeting. APEC leaders are preparing to issue the Sydney Declaration on climate change, attesting to their member economies' determination to cooperate on climate change related issues. Stressing the importance of efforts taken to address climate change, many nations have issued related proposals that are now pending acknowledgement by APEC leaders.



▶ EPA Minister Dang shown with US EPA Region 10 Administrator Elin Miller and California Environmental Protection Agency Undersecretary Cindy Tuck

Among the many initiatives proposed by various nations include Australia's Asia-Pacific Network for Energy Technology (APNet), Japan's plan to cut carbon emissions in half by the year 2050, as well as Taiwan's own "Green APEC Opportunity Initiative," which highlights the five areas of clean production, green consumption, green industry, nature conservation and pollution prevention.

Taiwan President Chen Shui-bian attended the international forum on Cultural Diversity and Sustainable Development on 26 May 2007, during which he called on all to confront the world's worsening environmental problems. Chen stressed the need for a global environmental management

organization to integrate international strengths and tackle all environmental problems in a comprehensive manner. Chen proposed that the time has come to establish a new World Environment Organization (WEO). During the 2007 summit meeting between Taiwan and its Central American allies, President Chen reiterated the importance of establishing such an organization. Taiwan is already a member of APEC and the WTO, and has been actively pursuing accession to the WHO. Taiwan is now willing to work with other nations to push for the creation of a WEO. Minister Dang pointed to the serious global challenges all nations currently face together, including climate change, global warming, and environmental pollution. The international community has already established the UN Framework Convention on Climate Change

and the Kyoto Protocol to implement strategies and measures for managing greenhouse gases. However, some of the world's largest greenhouse gas emitters -- including the US, Australia, China, and India -- have yet to reach consensus on Kyoto Protocol standards. Meanwhile, there is still no sign that the global greenhouse effect is diminishing. The EPA has thus advised Taiwan's representative APEC leader to take this rare opportunity by asking APEC leaders to address President Chen's concept of a World Environment Organization (WEO). The establishment of a specialized global environmental management organization is expected to facilitate more dynamic and more effective solutions to international environmental problems such as climate change and transboundary pollution.

Feature Column

Taiwan's Recycling Efforts Pay Off

Taiwan's resource recycling fund has been up and running for a decade. Aside from announcing new categories of mandatory recyclables and directing the takeoff of the domestic resource recycling industry, future plans call for a dual system in which enterprises may either voluntarily recycle waste materials from their products or pay recycling and treatment costs. This system will gradually reinforce industry responsibility and lead to greener product design and higher reuse rates.

In earlier years, refuse recycling was handled by small-scale recyclers that purchased valuable resources like paper, scrap steel and aluminum. By 1988, plastic bottles began to litter the environment and clog up urban sewer systems, prompting the EPA to revise the Waste Disposal Act (廢棄物清理法) and introduce the concept of producer responsibility. The revised Act required manufactures, importers and vendors of product packaging and containers to be responsible for recycling, clearance and treatment.

EPA's Recycling Fund Promoting Recycling for 10 Years

Taiwan's recycling system has followed three stages of evolution, each with different control methods and management organization:

1988~1997: Establishment of collective recycling organizations by manufacturers and importers

The Waste Disposal Act stipulates that the manufacturers, importers and vendors of products or their packaging or containers shall be responsible for recycling, clearance and treatment. The government shall set recycling rates and private enterprises shall establish foundations, unions or associations to handle recycling collectively.

1997~1998: Establishment of eight fund management committees

The Waste Disposal Act was revised again in March 1997 to address the problem of collective



► Four-in-One Resource Recycling Program

recycling organizations devolving into contracted recycling business monopolies and the difficulty of verifying the accuracy of recycling rates. The revised Act required manufacturers and importers to pay one hundred percent of recycling, clearance and treatment fees according to a stipulated fee rate. Penalties for not meeting the recycling rate were lifted and a fund for recycling resources was established. Eight resource fund management committees were also established for the main categories of general waste and containers, waste vehicles, waste tires, waste lubricants, waste lead acid batteries, waste pesticide containers, waste electric and electronic goods, and waste information technology products.

1998 to present: Establishment of the EPA Recycling Fund Management Board

From 1 July 1998, the eight separate resource fund management committees were incorporated into one Resource Recycling Management Fund (RFMB). Market mechanisms were used to integrate the product source manufacture system and the recycling system to ensure integrated use of recycling channels, to reduce operating costs and wield government authority to make recycling a mainstream activity throughout society.

Four-in-One Recycling Plan Integrates Resources for Optimal Results

Reusable resources make up at least 40% of refuse thrown out by citizens every day. Upon its establishment in 1997, the RFMB began actively promoting the Four-in-One Resource Recycling Program to integrate its work with community residents, recycling businesses, and local government sanitation crews. Rewards and market mechanisms were adopted to raise citizens' awareness of recycling and expand the scale and effectiveness of recycling. According to statistics, Taiwan recycled 554,200 tonnes of materials in 1998. This has gradually increased to 2,160,000 tonnes in 2006. The recycling rate increased from 5.87% to 27.72% during this period. The EPA has also been promoting other waste reduction plans including mandatory garbage sorting and restrictions on use of plastic bags and disposable tableware. With these plans in place, the daily per capita garbage clearance volume has dropped from 1.143 kg in 1997 to 0.605 kg in 2006. These results attest that promotion of garbage reduction, resource recycling and other efforts are paying off.

A comprehensive resource recycling management system needs to not only continually add new categories of mandatory recyclables, but also to subsidize recycling businesses that comply with implementation standards and relevant regulations. There are currently 33 subcategories under 14 categories of mandatory recyclables including steel containers, aluminum containers, glass containers, paper containers, plastic containers, pesticide containers, dry cell batteries, motorcycles, tires, lead acid batteries, lubricants, electronic IT products, electric appliances and lamps.

There are now 274 domestic recycling enterprises and 116 treatment enterprises that receive assistance, and a total of 10,604 manufacturers and importers are responsible for paying recycling fees. A total of 288,430 tonnes of recycled material was inspected and verified in 1998. By 2006, this volume increased threefold to 876,451 tonnes. Recycling and waste treatment enterprises in Taiwan use systemized operations and handling of materials with specialized reuse processing technology to literally "turn waste into gold."

Creating a Green Miracle

The Earth's limited resources will ultimately be used up if modern technological society and economic forces continue to follow current development trends. Only by reusing our resources can humankind avoid running into an energy crisis. Energy can be conserved by properly recycling the waste we generate in our daily lives into reusable resources through treatment technology. Waste products can therefore be regarded as an abundant store of material resources just waiting to be developed and utilized.

The EPA aims to continue promotion of strategies such as green production, green consumption, source reduction, recycling and reuse so that resources are effectively cycled and used. Another important strategy is to attain the goal of zero waste. Waste reduction targets have been set at 25%, 40%, and 75% the baseline volume of waste in 2001 (8.31 million tonnes) for the years 2007, 2011, and 2020, respectively. The first target for 2007 was already achieved by the end of 2006.

In terms of extending the responsibility of product manufacturers, a dual system is planned to get enterprises to either voluntarily recycle their products or pay recycling fees. This is hoped to gradually reinforce manufacturers' responsibility, advance

product green design and raise reuse rates. Environmental concepts can be considered into new product design to further reduce the environmental impact of products throughout their lifecycle. Guidance will be provided to recyclers and waste treatment enterprises to strengthen resource recycling and reuse efficiency and expand and raise resource recycling industry. This is expected to strengthen competitiveness of Taiwan's industry and create new opportunities in the future.

 2006 Recycling Rate

Recycling items	2006 Recycling Rate
Containers	79.88%
General batteries	47.81%
Automobiles/Motorcycles	41.73%
Car batteries	77.36%
Tires	61.26%
Lubricants	8.10%
Household appliances	48.84%
Electronics, IT objects	48.01%
Fluorescent lamps	62.51%

Recycling

Threshold Raised for Receiving Recycling, Clearance and Treatment Subsidies

To enhance the effectiveness of enterprises engaging in recycling, clearance and treatment of waste resources, the EPA will revise related regulations and require enterprises to reach stipulated treatment outcomes before they may receive subsidies.

The EPA is revising regulations on applications for subsidization of waste recycling, clearance and treatment. The draft revision tightens the criteria for receiving subsidies to ensure enterprises engaged in treatment of mandatory recyclables raise their resource recycling and reuse rates, increase the elimination rate of hazardous waste, and attain recycling goals. In the future when treatment enterprises apply for subsidies they must first show their treatment performance meets stipulated restrictions. For example, they must attain certain reuse rates or show that they can effectively recycle or extract hazardous substances.

The EPA indicates that according to the Waste Disposal Act (廢棄物清理法), those wishing to apply for subsidization of recycling, clearance, or treatment of mandatory recyclables must first receive approval by the EPA. On 9 October 2002, the EPA promulgated the Mandatory Recyclable Waste Recycling, Clearance and Treatment Subsidy Application Review Management Regulations (應回收廢棄物回收清除處理補貼申請審核管理辦法), which can be used to review the qualifications of businesses applying for subsidies. Important items considered for review

include various treatment methods and equipment standard and inspection verification regulations. This is to ensure industries comply with all environmental regulations, appropriately treat mandatory recyclables, and enhance the effectiveness of resource recycling.

The EPA states that the main objective of this round of revisions is to strengthen management of enterprises that receive subsidies, and to increase recycling and reuse rates. The regulation treats an enterprise's treatment effectiveness as a requirement in applying for subsidies. This will effectively reach goals to cycle and reuse resources by guiding enterprises to enhance treatment technology and expand reuse channels. As for updating application procedures, the EPA has added a new online application service to provide greater convenience as enterprises are already required to report waste flow and other information online. The subsidy application procedure has been streamlined to reduce difficulties and enhance administrative efficiency.

The EPA has posted this draft revision on the preannouncement section of its website at <http://w3.epa.gov.tw/epalaw/index.aspx>.

EIA Cases Limited to Three Preliminary Investigation Meetings

The EPA Environmental Impact Assessment Commission convened days ago and decided to enhance quality and timeliness of EIA reviews by revising working guidelines. For example, in the future special working group preliminary meetings may not be convened more than three times for the same case.

The seventh term of the EPA Environmental Impact Assessment Commission (EIAC) held the 154th EIAC meeting on 10 August 2007. EPA Minister and EIAC Chairman Winston Dang welcomed the new commission members and expressed the need to apply greater effort toward a more professional, effective, simplified, and legally regulated EIA system. This effort combined with enhanced communication in the area of strategic environmental assessment is hoped to enhance the level of professionalism in the EIA system.

The August EIAC meeting primarily focused its discussion on the issues of environmental impact assessment review work related issues, revisions to the working guidelines concerning preliminary meetings of EIAC special working groups, and EIA cases that have not yet completed the review process.

During the meeting it was decided to revise the working guidelines concerning preliminary meetings of EIAC special working groups to enhance quality and

timeliness of EIA reviews. The focus of the revisions included limiting the number of preliminary meetings that special working groups may hold on one EIA case to no more than three. Another item of revision concerns cases in which developers' supplementary information is deemed non-compliant with regulations in both the preliminary review meeting and the EIAC review. In such cases, the EPA shall send a written request to the industry competent authority to overrule the developer permit's application, according to Article 13-1.1 of the Environmental Impact Assessment Act (環境影響評估法). The final item of discussion concerns cases in which a developer disagrees with conclusions reached in preliminary meetings. If this should occur, the developer should inform the EPA within three days of receiving records of the preliminary meeting. If they need time to provide additional information they should inform the EPA at this time, and will have 30 days in which to provide additional information.

Waste Management

Correction Deadline Set for Improperly Labeled Batteries

In March 2006, the EPA announced restrictions on the manufacture, import and sale of batteries containing over a certain standard level of mercury. Enterprises have found it difficult to control the flow of designated batteries sold prior to this announcement. The EPA has thus made revisions requiring competent authorities to ensure manufacturers and importers make labeling corrections before 1 September 2009. Failure to do so before this time will result in penalties according to regulations.

Restrictions on the manufacture, import and sale of dry cell batteries have recently taken effect. Some enterprises regulated by this policy have expressed that the long period of marketing designated batteries prior to this policy has made it difficult to keep track of the flow of these products. The EPA has weighed the pros and cons of policy requirements and the related problems posed on industry. Inspections were conducted by competent authorities at vending premises. It was stipulated that during this first round of inspections before 1 September 2009, if designated batteries were not correctly labeled, the competent authority shall

require the vendor to take the product off the shelf immediately and not allow it to be sold or included as a giveaway item until the problem has been corrected. Manufacturers and importers shall correct labeling of designated batteries within ten days of receiving notification from the competent authority. If corrections are not made within the allotted time, violators will be penalized according to relevant regulations in the Waste Disposal Act. The revision clearly places labeling responsibility on product manufacturers or post-import processors that include designated batteries in their products.

Referring to the EU's directives on batteries and Article

21 of the Waste Disposal Act, on 27 March 2006 the EPA announced restrictions on the manufacture, import and sale of batteries containing over a certain standard level of mercury. By 28 August 2007, the EPA had issued verification statements of dry cell battery mercury content for 1,160 kinds of designated batteries manufactured and sold by 149 enterprises. Since implementation of this policy, as of July 2007, county and city environmental protection bureaus had conducted inspections at premises selling designated batteries and products containing designated batteries. Findings showed that the percentage of illegal products is gradually declining. To date, no products have been found in violation of labeling regulations. This shows that the policy has already effectively steered the design and manufacture of low-

mercury and low-polluting batteries. It has also helped control the flow of smuggled or illegally imported substandard batteries into domestic markets. Despite these successes, enterprises have expressed their inability to completely control the flow and labeling of existing products already sold to marketing channels before this measure was implemented. This is the reason for this round of revisions.

According to the revised regulations, manufacturers and importers should have completely updated labeling of designated batteries by 1 September 2009. In the meantime, the EPA will follow up with stronger efforts to educate consumers. While this revision allows additional time for correcting labels, manufacturers and importers are asked to complete changes to product labeling as soon as possible.

General Policy

EPA Celebrates 20th Anniversary

The EPA publicly celebrated its 20th anniversary on 22 August 2007. The theme for this event was "building on past efforts to advance toward sustainability." A series of activities was held to encourage and thank the public for cherishing Taiwan and being passionate about environmental protection. The event provided a glance at Taiwan's environmental protection track record, with a view to build on past efforts and forge toward the future sustainable development of the environment.

Established on 22 August 1987, the EPA has shouldered heavy responsibility in protecting Taiwan's environment for the last 20 years. Plaques of honor were bestowed to colleagues who have served 20 consecutive years on the EPA, thanking them for their effort and dedication to environmental protection work. Then former EPA ministers and distinguished guests unveiled an exhibit on the EPA's administrative feats over the past years, taking visitors through a time tunnel that accentuated the past 20 years of accomplishments in environmental policy and administration.

Other highlights in the series of activities to commemorate the EPA's 20th birthday included a press conference on 20 years of administrative accomplishments, a mountain hike and cleanup event, a tour of environmental protection facilities, and an environmental protection workshop for elementary and junior high schoolteachers.

Citizens were invited to take an "environmental tour" of various environmental protection facilities throughout Taiwan from 13~22 August 2007. Nearly 4,500 people attended these tours to some of the most important environmental protection facilities in different counties and cities, including incineration plants, landfills, furniture restoration centers,

constructed wetlands and communities that have made outstanding efforts toward environmental protection. People had a chance to see firsthand environmental protection facilities and communities to better appreciate the EPA's efforts toward enhancing environmental quality.

Elementary and junior high schoolteacher environmental protection workshops were held in northern and southern Taiwan on 17 August 2007 and 20 August 2007, respectively. Schoolteachers were invited to visit environmental protection facilities to help plant a firm foundation in environmental education. Related activities and information can be found at the "20th Anniversary" section on the EPA's website (<http://ivy3.epa.gov.tw/20/index.html>).

Taiwan's population has mushroomed over the past 20 years leading to rapid growth in factory density and the number of motor vehicles. Through the collective efforts of former EPA ministers and staff, the EPA has integrated the strengths and resources of civil and government sectors to actively promote environmental protection services. During this period, environmental quality has not declined and is actually improving daily. For example, the percentage of poor air quality days (PSI>100) has decreased from 17.4% in 1988 to 4.16% in 2006. Looking at the 50 largest rivers,

the percentage of seriously polluted river-segments (total combined length) has dropped from 11.03% in 1988 to 5.93% in 1996. These striking results can

be attributed to dedicated efforts in environmental protection.

The EPA extended special thanks to all circles of society for their support. Striving to live up to citizens' continually rising expectations for better environmental quality, the EPA maintains its vision of "azure skies, verdant earth, blue mountains and clean waters, building an environmental citizenry and a sustainable homeland." The EPA strives for comprehensive protection of the environment, conservation of the natural environment and protection of the global environment by ensuring sustainable development of our living environment.



▶ *First place winner from a Tainan City kindergarten participating in the "Citizens' Neighborhood Cleanup - Children's Drawing Contest"*

Photo: Han Jhieh-ying (韓智穎)

Waste Management

99.77% of Garbage Undergoes Appropriate Treatment

From the early stages of waste landfills to today's employment of 26 refuse incineration plants, now 82.74% of all domestic garbage undergoes incineration. The percentage of garbage considered to undergo appropriate treatment has increased to 99.77%, higher than that of the US or South Korea.

Taiwan began building sanitary landfills for garbage in 1984. Due in part to the "not-in-my-backyard" attitude and in part to poor maintenance of landfill facilities, many people protested landfilling of waste. This led to accelerated construction of incineration plants since 1991, reaching today's current number of 26 municipal waste incineration plants. Now 82.74% of domestic refuse is treated through incineration, and the percentage of garbage considered to undergo appropriate treatment has risen to 99.77%.

From 1991, the EPA has been introducing advanced refuse incineration technology from abroad and drew up a two-phase waste incineration plant construction plan. Now 26 incineration plants are almost completely constructed and distributed throughout 19 counties and cities, capable of treating 20,000 tonnes of garbage per day. Counties and cities without incineration plants are given assistance to transport their garbage for treatment in adjacent jurisdictions' incineration plants. Already 82.74% of Taiwan's

waste is treated through incineration. Comparatively speaking, apart from Japan, which has a similar garbage incineration rate as Taiwan, other nations including South Korea and the US have much lower incineration rates.

Starting in 2005, ten counties and cities took the lead in promoting mandatory sorting of garbage. People were required to sort their waste into the three categories of resource materials, food waste, and refuse. This policy went nationwide from 2006, and by the end of 2006, 27.72% of resources were recycled, 7.32% of food waste was recycled, and 0.37% of bulk waste was recycled, marking a total waste volume reduction of 35.41%. This is equivalent to the amount of waste that would require three incinerators with treatment capacity of 900 tonnes per day, thus saving NT\$10.8 billion in construction costs and NT\$2.1 billion in operating costs. After adding in NT\$600 million generated in sales of recycled materials, these waste reduction measures have brought about an

economic gain of NT\$13.5 billion.

The EPA emphasizes that "zero waste" measures are the new direction for the future. Except for remote areas, raw waste materials will not be landfilled after 2007. The EPA will promote the adoption of economic

tools such as regional alliances in waste clearance and disposal, collection of garbage clearance fees, and privatization of clearance and disposal services. A new goal has been made to cut waste by 40% by the year 2011.

Recycling

End-of-Life Vehicle Recycling Standards Tightened

The EPA is revising the End-of-Life Vehicle Recycling, Storage, Clearance and Treatment Methods and Facility Standards to prevent waste vehicle recycling and treatment related industries from generating pollution. The revisions focus on avoiding occupational safety hazards by adding stipulations on the storage of materials that could pose occupational safety hazards.

Recycling, clearance and treatment of end-of-life vehicles has already evolved from mere disassembly of scrap metal to specialized division of labor and sophisticated enterprise management. To effectively strengthen pollution management and control, and prevent end-of-life vehicle recycling enterprises from generating pollution or otherwise reducing the quality of people's living environments, the EPA is revising the End-of-Life Vehicle Recycling, Storage, Clearance and Treatment Methods and Facility Standards (廢機動車輛回收貯存清除處理方法及設施標準).

This revision primarily targets enterprises engaged in recycling, storage, clearance and treatment of end-of-life vehicles. This includes over 200 registered recycling enterprises, materials treatment enterprises and other related enterprises that receive subsidies from the EPA.

The preannouncement of this revision was posted on 22 August 2007. The revisions have added stipulations on the storage of materials that could pose occupational safety hazards. Additionally, to prevent rainwater from flushing pollutants into the

environment, enterprises must take appropriate measures to shield out the rain. Another step to strengthen on-site pollution regulations and enhance the economic effects of recycling and reusing resources was to add rules on the recycling and treatment of coolants, which could exacerbate the greenhouse effect.

The EPA calls on related industries to take heed of this announcement and scrupulously adhere to regulations on recycling, storage, clearance and treatment. Violations of the Standards are subject to fines ranging from NT\$60,000 to NT\$300,000. If corrections are not completed before the given deadline, violators will be subject to consecutive daily fines. For serious violations, the enterprise will be required to suspend or terminate business operations. Enterprises already engaged in recycling, disassembly, shredding or sorting of end-of-life vehicles will be required to make the appropriate adjustments called for in the new Standards by 31 December 2007.

The draft revisions of the Standards are posted on the preannouncement section of the EPA website at <http://w3.epa.gov.tw/epalaw>.

Toxic Substance Management

Toxic Chemical Substances Handling Application Fee Standards Revised

The EPA has set new maximum and minimum standards for application fees in its revisions to the renamed Toxic Chemical Substances Handling Application Fee Standards, promulgated on 22 August 2007.

The Toxic Chemical Substances Handling Permit Application Fee Standards (毒性化學物質運作許可申請收費標準) were promulgated and announced on 5 February 1997. Since revisions to these Standards were promulgated on 24 June 1998, no further revisions have been made. To wield full command

over the fee collection system and ensure the user pays principle, the current round of revisions has not only changed the name of the Standards to the Toxic Chemical Substances Handling Application Fee Standards (毒性化學物質運作申請收費標準) but has also stipulated that the competent authority may

collect review fees and certification fees for issuing, extending or altering permits, registration documents, verification documents, or for removing restrictions or prohibitions of Class I-III toxic chemical substances according to the Standards. The Standards are posted in detail on the EPA's website at <http://www.epa.gov.tw/main/index.asp>.

According to the EPA, this fee collection standard has given consideration to the required costs of procedures, manpower, and equipment incurred by competent authorities when conducting reviews of handlers actions according the Toxic Chemical Substances Control Act (毒性化學物質管理法). The Standards cover the following stipulations:

1. Reviews of handlers' actions are classified as either general reviews or detailed reviews. Fees are not collected for general reviews. For detailed reviews, apart from collecting the same review fees for new applications and changes made to handling
- premises, all others costs incurred for procedures, manpower or equipment for extensions or changes to other content shall be reduced at the competent authority's discretion.
2. Applications for removing restrictions or prohibitions of Class I-III toxic chemical substances are regarded as one-time applications and do not involve extensions or alterations. Therefore a new review fee has been set for these applications.
3. Applications for extensions or alterations to a handler's permit, registration documents, or verification documents, for applications that involve changing several areas of content, the review fee will be calculated according to the maximum fee standards for extensions or alterations.
4. Document certification fees will not be collected for document changes required by competent authorities.

Water Quality

Wastewater Discharge Permit Exemption Announced

The EPA recently announced that certain enterprises may be exempt from applying for waste treatment permits provided that they comply with water pollution regulations. This measure targets enterprises that use containers, tankers, or other methods that do not utilize pipes or culverts to discharge untreated wastewater away from the working environment. This is an exception for those discharging wastewater that does not comply to the Effluent Standards provided that their treatment methods conform to related stipulations.

On 15 August 2007, the EPA issued the following announcement:

1. The following pertains to enterprises contracted to treat wastewater from industries that is stored in containers, tankers, or other non-pipeline or non-ditch-like using these ways to transport wastewater away from the working environment. If such contracted enterprises' treatment methods do not conform to the Effluent Standards, but do conform to the following conditions, they are exempt from applying for waste treatment permits according to the Public and Private Waste Clearance and Treatment Organization Management Regulations (公民營廢棄物清除處理機構管理辦法). The overriding condition is that they must accord with related regulations in the Water Pollution Control Act (水污染防治法):
 - a. Classification as regulated industrial or wastewater sewer systems, as per the Water Pollution Control Act.
 - b. The enterprise must apply to obtain as per the Water Pollution Control Act either 1) a permit to discharge wastewater (effluent) into surface water bodies, 2) a soil treatment permit, or 3) approved water pollution control measure plans (restricted to those with wastewater sewer systems and not discharging into surface water bodies). The enterprise must also possess registration of (pre)treatment facilities that have excess wastewater (effluent) treatment capacity. If an enterprise complies with these criteria, they may contract their treatment services out to other companies and use containers, tankers or other non-pipeline or non-ditch-like methods to transport other enterprises' wastewater (effluent), as an exemption from the Effluent Standards.
2. These new standards will be effective upon date of promulgation.

Recycling

Green Design Criteria Incorporated into Recycling Fee Rate Standards

The EPA has announced draft fee rates for recycling, clearance and treatment of products from motor vehicles to encourage industry to work toward greener design that can reduce waste during production. In the future, lower fee rates will be offered for cars that meet green design standards.

On 7 August 2007, the EPA announced draft fee rates for the recycling, clearance and treatment of products from motor vehicles. Focus was placed on setting different fee rates for products incorporating green design principles. Lower fee rates will be offered for cars that meet certain standards. This measure will reduce the generation of waste by guiding manufacturers to incorporate green design principles and increase the ratio of resources that undergo recycling and treatment.

The revised recycling, clearance and treatment fee rates in this draft announcement are slated to take effect from 1 January 2008.

This draft stipulates that all motor vehicles that comply with the following are eligible for lower

recycling, clearance and treatment rates:

1. Cars that have received the EPA Green Mark
2. Motorbikes that comply with the following stipulations:
 - a. Have obtained the Bureau of Energy (MOEA) "Energy Label" (節能標章)
 - b. Plastic shells of components with mass exceeding 100 grams shall be clearly labeled with the recycling mark and type of plastic in accordance with ISO 11469
 - c. Design and manufacture processes comply with CNS14021 rules requiring easy disassembly

 Chart: Motor vehicle accessory recycling, clearance and treatment fee rates

	Fee Rate	
Vehicle type	Standard rate	Green design rate
Motorbike	NT\$1,045/bike	NT\$732/bike
Car	NT\$4,951/car	NT\$3,466/car

News Briefs

End-of-Life Vehicle Recycling Certificates Now Downloadable

Making it more convenient for citizens, the EPA has already completely established an end-of-life motor vehicle recycling certificate system. From 22 August 2007, citizens can log on to the system online (<http://recycle.epa.gov.tw>) to look up and print out certificates by entering their ID number and vehicle license number. The website provides information on end-of-life vehicle recycling and a function to allow citizens print out vehicle recycling certificates, which vehicle owners can retain or refer to when filing taxes. Control agencies are required to stop collection of license and fuel taxes as soon as vehicle owners turn in their old vehicles for recycling. Vehicle owners that have already turned in their vehicles

must apply with the EPA for this certificate in order to stop accrual of related taxes.

Neighborhood Cleanup Performance Best in Taichung City, Taichung County and Yilan County

Since the outset of the EPA's "Neighborhood Cleanup Mobilization Plan" in September 2006, local governments have been asked to carry out comprehensive neighborhood cleanup initiatives. To ensure this plan is being carried out, local governments are evaluated for not only tidying residential areas, but also clamping down on polluting activities, cleaning up unkempt spots, greening and beautification, and environmental education efforts. The EPA invited experts and scholars to evaluate progress over this past year and rank the performance

of all counties and cities. The top three performers were Taichung City, Taichung County and Yilan County.

Diversified Food Waste Recycling Proves Fruitful

Do you know how the food waste you recycle is being used? Among the various uses include food for pigs, which not only reduces the cost of raising pigs but also produces healthy and fat pigs. Food waste is also processed into chicken feed, which likewise produces healthy and tasty chickens. Other food waste can be made into organic compost, which is used with remarkable success in growing fruits and vegetables such as eggplants, gourds, pineapples, bananas, and guavas. The EPA underscores that strong efforts to promote food waste recycling have increased the daily volume of food waste collection from 80 tonnes in 2001 to 1,800 tonnes in 2007. The redirection of this waste is enough to cancel the operation of two incinerators with a treatment capacity of 900 tonnes per day. Moreover, turning food waste into a useful resource generates as much as NT\$2.9 billion annually in economic benefits.

Rehabilitated Landfill Site Takes on New Look

The landfill in Lugang Township, Changhua County started operation in 1987 and was closed off 16 years later in 1991, finally containing around 40,000 cubic meters of garbage. Lugang Township sought subsidization from the EPA to fund rehabilitation work on improving retaining walls and enhancing landscape greening and beautification as well as to provide opportunities for environmental education. The area now has pavilions, paths and observation platforms, providing a place for recreation activities and outdoor learning. An environmental classroom made of wood provides a hub to integrate leisure and learning opportunities for the local community. Another highlight of this park is a photovoltaic system, which has been installed next to the classroom to provide power for food waste processing machinery, as well as the classroom and office.



▶ Rehabilitation of this landfill site has transformed the site into a scenic area.

Rewards Offered for Online Reporting of "Squid Vehicles"

The EPA is holding an activity from 1 August 2007 to 30 September 2007 to encourage citizen reporting of vehicles emitting black exhaust (locally nicknamed "squid vehicles") and to spread awareness of mobile pollution source control policy. More information on this event is available online at <http://polcar.epa.gov.tw/public/96Activity/intro.html/>. A drawing will be held with 600 winning tickets in hopes of increasing the number of visitors to the EPA's "squid car report" website (<http://polcar.epa.gov.tw/>). The event will also help the EPA better understand citizen satisfaction with the online report system and handling of reported cases. Another purpose of the event is to raise the effectiveness and accuracy of reports of polluting cars. The EPA revealed that it has received 32,449 citizen reports of "squid vehicles" from the beginning of 2007 to 30 June 2007. This is nearly twice the amount compared to the same period last year (16,581), and is nearly 82% of the total number of reported vehicles for the entire year of 2006 (39,660). This attests to an increasing importance placed on environmental protection and willingness to help the EPA control polluting vehicles.

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