



Feature Column

Cyber Environment Supports Barrier-Free Information Flow

While refining its management of the real environment, the EPA has also met equal success in its efforts to establish a virtual environment in recent years. The EPA provides open access to various environmental information closely linked to the public, and has taken the lead in meeting the Research, Development and Evaluation Commission's demands to reconstruct a comprehensive new website that will provide a completely barrier-free information flow by this November.

In June 1994, the EPA took the lead ahead of other government agencies by linking to the World Wide Web via Hinet service provided by the Ministry of Transportation and Communications. At the outset, basic systems like BBS, FTP, Email and Net News were

launched, and by June 1995 the EPA's global information network was fully in place. Keeping stride with the development of World Wide Web, the EPA's current website not only complies with environmental policy by providing open and unobstructed access to various environmental information on the Internet, but also aids internal communication via confidential, speedy Intranet links that connect all EPA personnel.

the EPA website is primarily the responsibility of the EPA Department of Environmental Monitoring and Information Management. The website was established with the following three objectives in mind: to establish a portal website for environmental information so that related information is more widespread and accessible; to draw a stronger consensus from the citizenry by strengthening dissemination and communication of environmental policies; and to provide more convenient services by making environment related application and report systems accessible online. EPA website services target the general public, businesses, environmental scholars, children and

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Portal Website Strengthens Dissemination and Communication

Establishment and maintenance of



The EPA's website maintains a fresh new appearance by undergoing a thorough "facelift" about once every two years.

English-speaking foreigners as the predominant users.

The EPA website serves the following functions:

Introduction to the EPA: Overview of the EPA organization, important historical events, names and positions of authorities, environmental policy and monthly achievements

Pollution Control and

Improvement: Introduces control policies for various forms of pollution (air, noise, water, soil, waste, and toxic chemical substances)

Environmental Management:

Introduces environmental impact assessment, environmental education, environmental monitoring, testing, and training

Public Service: Presents environmental regulations, latest announcements, online applications, secondhand markets, e-library, convenient services for citizens, and frequently asked questions

Public Opinion Exchange: Provides a forum for dialogue including a public opinion mailbox, an environmental forum, public nuisance complaint area, and a special place to report "squid vehicles" (local term for vehicles that produce unreasonable amounts of exhaust)

Environmental Classroom: Provides environmental living classroom and environmental encyclopedia

Environmental Protection

Topics: Includes specially designated environmental topics such as recycling, environmental quality, ecolabels (the Green Mark), creating the ideal "green office," environmental statistics, and environmental technology

Environmental Global Village:

Links to related environmental protection related organizations in

Taiwan and abroad

Downloads: Application forms, software, and e-greeting cards

Real-time News: Environmental news and reports on the latest activities

sion volumes, and soil and groundwater remediation fees directly via the EPA website. This service saves businesses' precious time, decreases the amount of work and time required to approve reports, and strengthens the capacity to

The EPA constructively uses the Internet to engage in two-way communication with the public, and extensively gather public opinions that help form ideal environmental policies. Each citizen complaint automatically enters a computerized check-point system to ensure a follow-up response.

Open Environmental Information and Convenient Online Services

In addition to providing space for each EPA department's own website, the EPA website also furthers the effectiveness of dissemination efforts through feature webpages focused on long-term policies such as the Three-Year Action Plan and the "Household Environmental Cleanup," as well as a forum on national affairs. Due to the extensiveness of the current website and the enormous amount of data, the website now encompasses over eight thousand pages. While one major focus is to provide vital information to the public concerning real-time air pollution quality, UV index reports, environmental news, recycling news, regular inspections of motorbikes, pest control, environmental regulations and how to put environmental practices in daily living, the website is also an important reference website for environmental enterprises, experts and scholars.

Online services make it convenient for environmental enterprises to report industrial waste, toxic chemical substances, recycling volumes, air pollution emis-

control environmental pollution information.

The EPA has spared no effort to install a professional database and respond to professionals' requests for information. One objective has been to provide scholars and experts with an environmental database, preliminarily focusing on data pertaining to controlled pollution sources and environmental quality. Another objective has been to ensure quality data by aiding the development of data management systems including data interpretation and quality control. Current achievements include the establishment of a dictionary of mental information and a metadata system. Already 6,500 sets of data have been entered, and the entire documents of EPA's past research results have been digitalized and put online.

The EPA has also established standards for environmental information management and has installed a comprehensive environmental database. Roughly 2.1 million sets of data concerning environmental quality related to air and water quality, waste, toxic chemical substances and controlled pollution sources have been entered into this database. The database integrates real locations with the geographi-

cal information system (GIS) and is open to the public for prompt retrieval, accelerating the flow and enhancing the applicability of environmental information.

The website also facilitates interaction with the public. For example, the online public opinion mailbox handles over a thousand emails per month on average. The "Online Public Nuisance Report System" now makes it easier for citizens to discreetly provide information regarding environmental pollution affecting the public. The website's environmental forum allows concerned environmentalists to express their views online regarding environmental issues. The EPA uses the Internet constructively to engage in two-way communication with the public, and extensively gather public opinions that help form ideal environmental policies. Each citizen complaint automatically enters a computerized check-point system to ensure a follow-up response. The EPA has received praise from all circles for its quick response to citizens' concerns.

Enhancing Diversity Through Multimedia

The EPA's global information network was first established on a Unix system in 1995. At the time

the administration lacked refined webpage editing tools, but by sharing the workload among departments, the content of the website has multiplied. The structure of the website has been modified many times over the years and now adopts a Windows system. It has already been over two years since the current version was last altered (in 2002). This year the EPA is substantially updating its website in response to the Research, Development and Evaluation Commission's (RDEC, Executive Yuan) request for each government department to create a standard and unobstructed website. A comprehensive updated version is expected to be out in November this year (2004), featuring a uniform design to tie together all the webpages of various EPA departments. Readers will find the content fresh and new, and each level of webpages allows the user to conveniently navigate back through previous levels.

Currently the home page receives around five thousand hits per day. This year's goal is to reach two million hits. Attesting to its outstanding design, in 2003 the EPA website received an award for one of the best administrative organization websites and the renovated English version received affirmation from the RDEC's bilingual

website review committee. The children's website also received an award for one of the finest non-profit organization websites in the "Fifth Golden Finger Internet Awards" making the EPA the only government organization to win an award.

In the effort to construct a barrier-free Internet space, the EPA's website had already received Grade A status this year on May 28, 2004. The EPA expects to receive Grade AA status when the updated version comes out at the end of November this year.

The EPA has endeavored to fulfill the demands of a wide range of Internet users by developing exclusive websites for children and foreigners. However, still more work needs to be done to design a framework from the general public's point of view and to make the website more convenient for users in the general public. This calls for assimilating information from all EPA departments. Thus, in the future a user looking for information concerning water bodies need only search once to find data from the Department of Water Quality Protection, groundwater data from the Soil and Groundwater Remediation Fund Management Board, information on drinking water from the Department of Environmental Sanitation and Toxic Management, water quality monitoring data from the Department of Environmental Monitoring and Information Management, and water quality testing methods from the Environmental Analysis Laboratory. This approach will be more user friendly than the usual method of scattering data among each individual department's webpages just for the sake of maintaining websites. As for multimedia, the gradual maturation of the broadband environment now facilitates greater use of audio and video applications on the Internet. For example, the EPA's



The straightforward layout of the English website accommodates western reading habits.

conferences on national environmental affairs have already been recorded in entirety for online viewing.

The operation and development of the website is a long-term task in the interest of sustainability. In

Air Quality

Ore-Sintering Plants Adopt Two-Tiered Dioxin Controls

Augmenting previous dioxin emission standards for incinerators and steel-making electric arc furnaces, a new standard, *Dioxin Control and Emission Standards for Steel Industry Ore-Sintering Plants*, was released on June 16 to comprehensively and effectively control dioxin emissions. The standards will be put into force in two stages for existing plants from January 1, 2006.

The Taiwan Area dioxin emissions inventory and emissions database shows that dioxin emission concentrations from domestic ore-sintering factories are no higher than similar plants in other countries. However, the combined volume of emissions from Taiwan's numerous steel plants is quite large, resulting in a greater volume of overall dioxin emissions. This sparked an urgent need for legislation of further controls to broaden the range of pollution sources subject to dioxin emission controls and lower the risk of harm due to dioxin in the environment.

In accordance with stipulations in the *Air Pollution Control Act* (空氣污染防治法), the EPA promulgated the *Dioxin Control and Emission Standards for Steel In-*

the future, the EPA will integrate environmental protection resources from all fields, and get more actively involved in website operations in hopes that the EPA's website gains high standing in the public eye as Taiwan's most professional environmental portal site.

dustry Ore-Sintering Plants (鋼鐵業燒結工場戴奧辛管制及排放標準) on June 16, 2004, containing a total of nine articles.

Different control and emission standard values have been made for newly built ore-sintering plants and existing ones. The emission standard value for new plants is 0.5ng-TEQ/Nm³, effective as of the date of promulgation. Control standards for existing ore-sintering plants, however, have been augmented by dividing controls into two stages with an emission standard value of 2.0ng-TEQ/Nm³ for the first stage, effective as of January 1, 2006. The second stage demands an emission standard value of 1.0ng-TEQ/Nm³, effective from January 1, 2008.

Rules regarding sampling and

analysis of dioxin emissions for ore-sintering plants are as follows:

1. Regularly scheduled tests shall be administered twice annually, once during the January-June timeframe and a gain during the July-December timeframe. The interval between the two tests shall not be under three months and shall not exceed nine months. The enterprise must submit its testing plan to the special municipality, county or city competent authority seven days before the scheduled test date. Test and analysis results shall be reported to the competent authority within sixty days.
2. If a plant's dioxin concentrations are in compliance with emission standard values stated in Article 5 of the Standards for two consecutive tests, the enterprise may apply to adjust testing frequency to only once per year by submitting the relevant permit documents to the special municipality, county or city competent authority. However, if upon inspection or during regularly scheduled tests, the competent authority finds the enterprise to be in violation of regulations in Article 5, the testing frequency shall return to twice per year.

For more information, please contact the Department of Air Quality Protection and Noise Control at 02-23117722 ext. 2773.

Control and Emission Standards for Dioxin

Control Target	Emission Standard (ng-TEQ/Nm ³)	Effective Date
New ore-sintering plants	0.5	93/6/16
Existing ore-sintering plants	2.0	95/1/1
	1.0	97/1/1

General Policy**Typhoon Strikes Hard, EPA Helps With Disaster Recovery**

Typhoon Mindulle brought a southwest air current that unleashed incessant downpours, causing landslides and severe erosion in central and southern Taiwan. Assisting the nation with disaster recovery and drinking water supply in affected areas, the EPA Administrator and Deputy Administrator went to central and southern Taiwan, respectively, to see what could be done at the disaster areas and ensure that emergency response measures were put into effect.

Devastated areas in central and southern Taiwan where Typhoon Mindulle left its mark are in desperate need of recovery. Since the onslaught of the typhoon on June 30, the EPA has established an emergency response task force and dispatched personnel to the Central Disaster Response Center to provide appropriate response. County and city environmental protection bureaus (EPBs) were immediately told to await orders for dealing with local disaster conditions and follow through with preparatory work such as waste clean up and disposal, environmental sanitation, and random testing of drinking water quality.

Due to the copious amount of rain brought by this typhoon, many areas in western Taiwan experienced serious flooding. The EPA made an emergency announcement on July 3, informing local EPBs to continue to pay close attention to the effects of the downpour on the nation's incinerators and landfills. Upon investigation, one landfill in Hualien County was reported to have flooded and in Taichung County, the lower portion of a dike along the Dajia River (大甲溪) was torn away by rushing water just one kilometer upstream of the Houli Incinerator. The team of dispatched EPA personnel reported the condition of the broken dike to the Water Resources Agency and requested the Ministry of National Defense to mobi-

lize emergency repairs.

Typhoon Mindulle left central Taiwan in a grave state of disaster, EPA Administrator Chang Juu-en (張祖恩) went to Taichung on July 5 to inspect the Houli Incinerator. It turned out that the flooded Dajia River destroyed 300 meters of an old protecting embankment in front of the incineration plant, requiring emergency repair to ensure the safety of the plant. It is vital that the functioning of the Houli Incinerator is unimpeded as it is responsible for handling a large volume of disaster waste in the greater Taichung area. Upon inspection of the area on July 4, Premier Yu directed the Water Resources Agency (MOEA) to ensure the safety of the incineration plant by piling up breakwaters through the night.

Administrator Chang expressed his sympathy with the construction workers for their toil, and contacted the Central Emergency Response Center, requesting the Water Resources Agency to extend full support in blocking the flow. The first priority was to build an emergency breakwater where the roadway leading to the plant had washed out. The EPA then provided complete funding for emergency procurements to build a second road to enter the plant. Chang also indicated the need to pipe in tap water aboveground within two days and asked all personnel to continually

pay close attention to the status of the downpour. The EPA aided the Taichung County Government in leasing private trucks, cranes and manpower to expedite waste clearance work. In areas where waste cannot be cleared away due to damaged roadways, the EPA will provide assistance to construct temporary sanitary landfills depending on local needs.

Administrator Chang made an on-site inspection of the water purification plant in Fengyuan (豐原) to get an understanding of the status of drinking water supply for the Greater Taichung Area. Fengyuan's water supply plant reported unpredictable turbidity of its source water, ranging between 7000-8000NTU, due to the unceasing deluge of rain. The tap water company indicated that emergency response measures had caused a reduced water supply of 150 thousand tons per day on average about one quarter the level of normal operation. Turbidity levels must fall below 1000NTU before the company can consider resuming normal water supply.

Taiwan's First RDF Demonstration Plant Launched in Hualien

The Energy Commission (MOEA), the Hualien County Government and the Industrial Technology Research Institute's Energy and Resources Laboratory have cooperated to build the nation's first Renewable Fuel Demonstration Plant in Fengbin Township (豐濱鄉), which formally began operations on June 24. The plant is capable of handling the volume of daily household waste generated in Fengbin. The refuse derived fuel (RDF) can be used as a backup energy source for industrial boilers or cement kilns and facilitates the push to diversify the nation's energy sources. RDF is processed by first pulverizing, sorting, drying, and granulating waste to transform it into a fuel of uniform quality that is easy to transport and store. This is one way to integrate recycling and enhance energy recycling, making it an appropriate technology for sustainable development.

EPA Deputy Administrator Ting-Kuei Tsay (蔡丁貴) meanwhile went to southern Taiwan to check on the status of environmental clean up work. Tsay inspected flooded areas along the coast in Pingtung County on July 5 to ensure effective cleanup and recovery, commending Donggang Township (東港鎮) and Linbian Township (林邊鄉) for their rapid response in appropriately

handling disaster recovery. In response to the large amount of driftwood scattered all over the beach in front of the jetty in Chifeng Village (崎峰村), Linbian Township, Tsay promptly instructed the Pingtung County EPB to assist the Township government in appropriately handling cleanup and disposal, for which the EPA will provide financial assistance.

will be arrested and face a maximum three year prison sentence, penal labor, fines between NT\$300 thousand and NT\$1.5 million, or any combination of these three penalties.

The Designation of Marine Disposal Zones is not to be misinterpreted as legislation that authorizes marine waste disposal. The EPA clearly specifies that applications for marine waste disposal must first be submitted to the EPA, and then be put through a series of strict evaluation and examination procedures to determine whether permission shall be granted. After receiving permission, the disposal of waste must comply with designated disposal zones, times, and volumes, and undergo close monitoring according to regulations to avoid any potential mishaps. Those who do not comply with regulations by applying for a permit and dispose of waste in the ocean will be arrested and face a maximum prison sentence of three years, penal labor, fines between NT\$300 thousand and NT\$1.5 million, or any combination of these three penalties.

In regards to substances to be disposed at sea, the EPA states that in compliance with the Classification of Substances Permitted for Marine Disposal, marine disposal of Class A substances are strictly prohibited because they do not readily decompose and have a serious impact on marine ecology. Enterprises must obtain a permit each time they wish to dispose of Class B substances at sea. Class C substances have a less serious impact on the marine ecology and thus marine disposal of these substances is permitted so long as they comply with the permissible volume and time.

Enterprises that have applied and obtained permission to dispose of waste at sea must report their intent, document and monitor their disposal activities, and specify the season prior to disposal. Failure to

Water Quality

Heavy Penalties for Illegal Ocean Dumping

The designation of marine zone boundaries in recently promulgated marine disposal regulations is based on international treaty standards and is the result of extensive research and thorough consideration of all relevant factors. Enterprises that fail to follow regulations when applying for permits or engage in marine disposal without heed to approved disposal zones, times and volume limits will be subject to heavy penalties.

Following the prohibition and permission regulations and principles stipulated in the London Convention, which are designed to prevent pollution arising from marine waste disposal, each signatory nation must delineate marine waste disposal zones and implement a permit system that will eradicate illegal waste disposal. Taiwan has recently promulgated regulations regarding marine waste disposal in accordance with Articles 21 and 22 of the *Marine Pollution Control Act* (海洋污染防制法)

The EPA explains that the recent promulgation of the Designation of Marine Disposal Zones (海洋棄置指定海域) is in accordance with London Convention control standards. In 2001, consulting firms were commissioned to carry out research that would help determine the marine areas surrounding Taiwan's waters suitable for marine waste disposal. Local scholars and professionals specializing in marine ecology were also invited to discuss the results

of these findings. After a comprehensive evaluation involving physics, chemistry, and biology was conducted, it was determined that waste materials must be quickly diluted and diffused to minimize any harmful impacts. Location and timing of marine disposal must be chosen with respect to protected fishing zones and time restrictions. Details were drawn up in the Designation of Marine Disposal Zones and the Classification of Substances Permitted for Marine Disposal (海洋棄置物質之分類), which were jointly promulgated on May 4 this year.

According to the Classification of Substances Permitted for Marine Disposal, persons responsible for illegal marine disposal of Class A materials that seriously pollute the marine environment face a maximum ten year prison sentence and a fine of between NT\$20 million and NT\$100 million. In addition, those who fail to apply for permission according to regulations and engage in marine waste disposal

meet these criteria will result in fines between NT\$200 thousand and NT\$1 million. The EPA hopes that comprehensive marine disposal site standards, restrictions on the types of waste materials allowed, the permit application system, disposal reporting system, and the ongoing monitoring program will prevent negative impact on marine ecology and preserve the sustainability of marine ecology.

Waste Management

Waste Export Applications Subject to Strict Verification

Taiwan recently experienced an incident in which a local company used a forged import permit from Malaysia to apply for a waste export permit in Taiwan. This oversight led to the illegal export of hazardous waste. After first requesting the Taipei City Government to revoke the enterprise's waste clearance permit and export license, the EPA then promptly established instant verification channels with import nations to prevent companies from circumventing the law.

Hongyou Environmental Technology Ltd (鴻佑環保科技股份有限公司) was reported in December 2003 to have used a forged official Malaysia import document to attain a Grade A Waste Clearance Permit and hazardous industrial waste permit documents in Taiwan. Upon cross-checking this case with the Malaysia Technology and Environmental Department, it was confirmed that the document from Malaysia was indeed forged. The EPA applied the *Regulations Governing the Import, Export,*

Transit, and Transshipment of Hazardous Industrial Wastes (廢棄物輸入輸出過境轉口管理辦法) and the *Regulations for Permitting Public/Private Waste Clearance and Treatment Organizations (公民營廢棄物清除處理機構許可管理辦法)* by requesting the Taipei City Government to revoke the exporters permit. After obtaining instructions from the EPA, the Taipei City Government (the permit issuing agency) revoked the enterprise's clearance permit and export license on May 28, 2004. In addition to prohibiting Hongyou from exporting waste, the Taipei City EPB required the company to promptly cancel all current waste shipments.

According to information from the EPA, Hongyou Environmental Technology Ltd. exported hazardous waste to a resource reuse brickmaking factory in Johor Bahru, Malaysia owned by SynEnviro Sdn. Bhd. Hongyou used a forged official document from Malaysia to obtain a Grade A Waste Clearance Permit from the Taipei City Government on October 29, 2002.

The Regulations for Permitting Public/Private Waste Clearance and Treatment Organizations stipulate that an organization's permit can be revoked if it submits permit application documents or report documents that it knows to be fraudulent, or otherwise falsifies information on business transaction documents. Hongyou was formerly contracted for waste clearance and disposal work throughout the nation, so when the Taipei City Government revoked their permit, all county and city EPBs were notified and requested to inform all factories within their jurisdiction to cancel waste management contracts with Hongyou.

As for follow-up measures to this incident, Director Chen Hsiung-

wen (陳雄文) of the Department of Waste Management stated on June 7 that to prevent waste export enterprises from applying for export permits with forged documents from other countries, the EPA and local environmental protection agencies will immediately correspond via fax and email to jointly investigate all cases involving related organizations in recipient countries.

Chen Hsiung-wen pointed out that cases involving hazardous waste export permit applications should include foreign import documents notarized by competent authorities in the recipient country, as well as relevant documents from the recipient country's government that authorize the waste treatment organization to import the waste. In the past, notarization or certification of documents was the only step required to determine authenticity. It is now apparent that the former verification system was insufficient so far as to allow forged import permit documents from a Malaysian public notary agency endorse the illegal export of waste to Malaysia by Hongyou in care of SynEnviro.

Kid's Environmental Education Website Awarded

The EPA's 'Children's Environmental Education Website' (<http://cemnt.epa.gov.tw/kids>) was recently selected as the best non-profit organization website in the 'Fifth Golden Finger Internet Awards.' The EPA stood out as the only government organization to receive an award in this event, which aims to encourage creative marketing online. The children's environmental protection website was established as part of the Nine-Year Joint Curricula Plan (九年一貫課程), with an emphasis on putting environmental concepts into daily life. The website provides school children with an unparalleled online learning space. Since its launch last year, the website has received enthusiastic response and schools have frequently requested downloads for use as teaching material to assist in imparting environmental knowledge.

In light of this, upon review of management mechanisms, the EPA has firmly established that in the future, the EPA and local environmental protection agencies will immediately enhance mutual correspondence via facsimile, email or other means to look into other cases involving disposal organizations and waste recipient countries in order to prevent similar cases of forgery. Chen Hsiung-wen indicated that since the incident with Hongyou, the EPA has already

firmly established verification channels with other export countries including the US, Belgium, Germany, France, and South Africa. The incident also provided impetus to develop a sound channel for verification of documents between Taiwan and Malaysia. These measures should minimize the potential for similar incidents to occur in the future.

For more information, please call the Department of Waste Management at 02-23117722 ext. 2655.

Green Consumerism

Government Makes Record Amount of Green Procurements

The EPA has announced performance results in terms of green procurements made by government organizations in 2003. Spending on green procurements increased by 115 percent compared to 2002, and 73.8 percent of all government spending within the designated product categories was toward environmentally friendly products, far exceeding the Executive Yuan's initial goal of 50 percent.

Taiwan has been promoting the Green Mark ecolabel system for twelve years. Tying in with this system, the *Government Procurement Act* (政府採購法) sets up the legal basis to encourage government organizations to make green procurements. Currently Taiwan's government organizations have shown excellent performance in this area with continual record high rates of green spending. On June 29, the EPA announced the statistics on green procurements made by government organizations in 2003, recording a total annual spending of NT\$5.6 billion on green products. This is NT\$3 billion more than last year's level of NT\$2.6 billion, for an increase of 115 percent. Of all government spending in the designated product categories 73.8 percent was toward environmentally friendly products, far exceeding the originally forecasted goal of 50 percent.

Those government organizations selected for outstanding performance in terms of green procurements made during 2003 comprised thirteen central government organizations under the Executive Yuan including the Ministry of the Interior, the Ministry of National Defense, and the Ministry of Finances, as well as thirteen local government organizations including Taipei City, Kaohsiung City, and Hsinchu County. The Consumer Protection Commission (CPC) was the only organization under the Executive Yuan that did not meet the anticipated 50 percent. The EPA explained that this is mainly because its annual procurement budget was only between NT\$500,000 and NT\$600,000. Another reason for their lower performance score was that they purchased a brand of computers that did not possess the Green Mark. The CPC explained that

the staff responsible for procurements had just been transferred from a different department and was not familiar with green procurement procedures. The CPC is confident that this year's performance will improve greatly on last year's performance. As for local government agencies, not one failed to meet the anticipated level of green procurements.

The EPA indicated that the range of certified environmental products purchased by Executive Yuan organizations was quite broad including the categories of office equipment paper, stationary, paper in publications, computer equipment, toner cartridges for printers, refrigerators, air conditioners, and dual flush water conserving toilets. Government organizations' success in reaching the predetermined goal for green procurements in 2003 can be attributed to each agency's initiatives to hold workshops on green procurements to promote the concept of green spending. Another key element responsible for major advances in this area is active cooperation by Central Trust China to set up contracts with companies that provide green products, making it easier for government procurement personnel to choose such products. Also, the EPA has made it more convenient for procurement personnel to compile and report statistics through the "Government Green Procurement Statistics Compilation System," which lightens the burden for all levels of government when reporting procedures and controlling procurements.

The EPA emphasizes that in order to expand the effects of government green procurements, it will forge ahead to increase the target ratio of green procurements to 75% for next year (2005). With the *Resource Recycling Act* (資源回收再利用法) in effect since July 2003, there is now even stronger

legal backing to encourage government green spending. In the future, those government organizations that will be asked to make green procurements will include not only agencies under the Executive Yuan and local governments, but also the Presidential Office, the Legislative Yuan, the Judicial Yuan, the Examination Yuan and the Control Yuan. It is hoped that the example set by these public organizations will accelerate the movement toward a more environmentally friendly society.

General Policy

Second World Water Monitoring Day Activity Kicks Off

Last year over 1,600 citizens eagerly participated in the first national water monitoring day activity. This year the EPA will expand this activity, inviting more teachers, students, and the general public to register in groups to do their part for the environment by working together to monitor water quality near residential areas.

October 18 has been designated as World Water Monitoring Day. Last year (2003) the EPA invited junior high and elementary schoolchildren and teachers to join in the First World Water Monitoring Day activities, jointly promoted by the International Water Association, America's Clean Water Foundation and the USEPA. Over 1,600 people in Taiwan participated by taking 165 measurements of water quality at 113 monitoring stations on 61 major waterways. Taiwan stuck out as one of the leading nations among the 24 countries around the world to participate in this

program, with enthusiastic response from both teachers and students. This year's World Water Monitoring Day activities will be expanded by encouraging more people from all walks of life to participate.

Making room for more exchanges between Taiwan and the international environmental protection community, the EPA has invited elementary, junior high and high school students and teachers as well as citizen groups and anyone concerned about water body environmental quality to jointly participate in the Second World Water Monitoring Day activities. Participants will be joining with others around the world on this day to monitor the water quality of water bodies such as rivers and reservoirs. The purpose of the activity is to increase the public's understanding of the status of water quality in water bodies near living environments, and to arouse citizens' enthusiasm for jointly protecting water resources. All citizens interested in forming a water monitoring team are welcome to sign up.

To ensure that water quality monitoring activities are carried out successfully and safely, monitoring will be done in small

groups. Each group will assign a leader who is responsible for selecting one day between August 5 and 13 to attend a teacher training workshop to get an understanding of water quality testing methods, proper methods for compiling and submitting data, and on-site testing safety precautions. The actual monitoring should be carried out between September 18 and October 18. The group leader shall choose one day in this time period to lead group participants to a natural water body near their neighborhood such as a stream or reservoir to undertake water quality tests and record test results. After the activity, the leader is asked to collect and compile all test results and submit them to a designated website along with pictures taken during the activity.

The EPA has prepared enough openings for 800 groups to sign up. The sign up deadline is July 23 or until all available openings are taken. Group leaders can provide registration information via facsimile or email. Questions concerning registration can be addressed over the phone by the Chinese Environmental Education Association (Ms. Huang: 0928634394 or Mr. Yo: 02-29338276) and activity related news and registration forms can be found at the EPA's website: www.epa.gov.tw/monitoring/wmd/0615.html.



World Water Monitoring Day activities encourage children worldwide to take water samples and test water quality by themselves.

Recycling

Seven Cities Begin Pilot Recycling of CDs and Mobile Phones

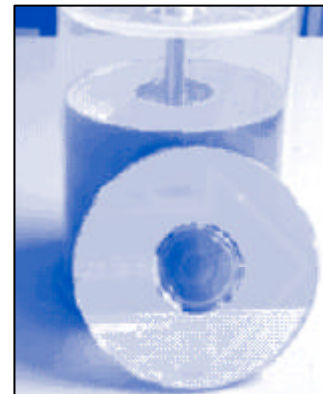
From July 1, two special municipalities and five major cities around the country will run a six-month pilot project to recycle discarded CDs and mobile phones. People need only sort these two items and bring them to resource recycling trucks. The EPA will decide whether to announce these two items as mandatory recyclables based on performance results.

The use of high-tech products like CDs and mobile phones has become widespread in recent years. With new versions continuously being introduced, the numbers of outdated versions are adding up. According to the EPA, most CDs are either data storage devices or audio entertainment products, which usually have a longer life cycle than other wastes. Moreover, they are made of costly plastics that still possess market value and people tend not to throw them away. Smaller-sized new generation cell phones are more attractive to consumers and used ones are either sold on the secondhand market or stowed away in home closets. So far, neither of these items are found in significant quantities in either the garbage or the market.

A study conducted by the EPA indicates a great difference between the estimated numbers and the ac-

tual surveyed numbers of discarded CDs and mobile phones. In consideration of the costs of recycling these two items it has been deemed inappropriate to announce them as mandatory recyclables right away. The study recommends considering the approach used for recycling paper and clothes, that is, allowing the recycling market to develop recycling and processing channels on its own. However, the exclusive properties and low recycling volume of CDs and mobile phones may not satisfy the recycling market. Therefore the EPA is launching a pilot project to verify the authenticity of estimated and actual volumes. Based on cost analysis after the project, the EPA will decide whether to announce these two items as recyclables or allow enterprises take recycling initiatives on their own.

Seven of the most densely populated municipalities and cities (Taipei, Kaohsiung, Keelung, Hsinchu, Taichung, Chiayi, and Tainan) have been designated by the EPA to run a six-month pilot project to recycle discarded CDs and mobile phones from July 1. The recorded volumes of these discarded items as well as observations on the status of the recycling system will be of good reference for follow-up planning of resource recycling management. From July 1, old CDs, VCDs, DVDs and mobile phones should not be treated as general waste, and should be sorted and collected by resource recycling trucks. For more information on recycling, citizens can contact the environmental protection bureaus of the abovementioned cities, or call the toll-free recycling hotline at 0800-085-717.



Widespread use of CDs behooves us to find ways to recycle them.

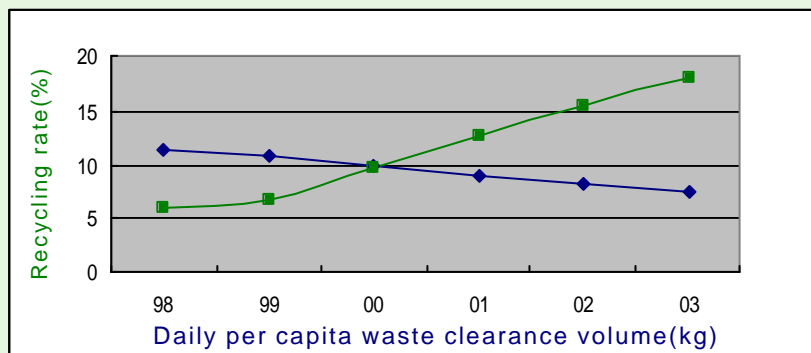
News Brief

Record Low Daily Per Capita Waste Volume of 0.752 kg in 2003

According to EPA statistics, the volume of waste collected in the Taiwan Area dropped by 580,000 tons from 2002 to 2003. The overall national recycling volume reached over 1.37 million tons in 2003 and waste disposal costs averaged at about NT\$1,500 per ton; waste disposal costs decreased by NT\$2.1 billion due to the amount of materials recycled in 2003. At the same time, the daily per capita waste volume reached a record low of 0.752 kg, and the recycling rate reached a record high of

17.89%. The EPA indicated that the recycling system has already been initially established and there are further plans to enhance the recycling system and incrementally promote the

"Compulsory Waste Sorting" policy. Given these measures, Taiwan should be able to reach the 2020 goal of "Complete Sorting for Zero Waste."



Waste Management

EPA Promotes Contracting of Garbage Clearance Service

Tackling the problem of insufficient manpower in local sanitation crews, the EPA will subsidize county and city governments to entrust private companies with household garbage collection. In the future other related tasks will be commissioned out to private industry as a means of integrating the private sector to help improve environmental quality.

For some time now, county and city sanitation crews have been faced with an enormous workload, often with insufficient manpower. The EPA hopes to encourage counties and cities to entrust this extra workload to private garbage clearance organizations. The EPA Bureau of Environmental Inspection (BEI) indicates that sanitation crews are responsible not only for the collection, clearance and disposal of household waste, but also for street sweeping, clearing out gutters and culverts, environmental cleanup and sanitization, tearing down illegal flyers, and catching and killing stray dogs. Currently, there is a widespread deficiency in manpower and equipment for han-

dling such a broad range of tasks.

To help out with this lack of manpower, the BEI has expressly formulated a plan to promote the commissioning of private organizations to handle garbage clearance. Subsidies will help to lighten the load for sanitation crews and any surplus manpower or equipment can be transferred to other environmental sanitation tasks to raise overall environmental quality. The BEI hopes that cities and counties will be able to entrust a portion of garbage clearance work to the private sector and will gradually require these contracted organizations to install GPS and surveillance cameras on their vehicles. The first stage fo-

cuses on getting local governments to contract waste clearance out to private organizations; future consideration will be given to entrust other related tasks to the private sector as well.

Despite the EPA's push for county and city governments to contract garbage clearance to private companies, so far only Taichung City and Kaohsiung City have already done so, each city entrusting about half of waste clearance operations to private companies. So far, no other local governments have followed their example. The BEI indicated that from 2004 to 2006 local governments will be able to apply for assistance for planning costs and contracted garbage clearance costs. As for subsidy amounts, special municipalities and provincial municipalities can receive a maximum of NT\$800 per ton, counties and cities can receive a maximum of NT\$900 per ton, townships can receive up to NT\$1,000 per ton, and special regions such as islands and remote areas will be compensated for actual costs.

Activity

EPA Helps Industry Popularize Low-Polluting Fuel Injection Motorbikes

Aiming to improve Taiwan's air quality, the EPA joined with five major motorbike manufacturers including SYM (三陽), KYMCO (光陽), Yamaha (山葉), Suzuki (台鈴) and Motive Power Industry Co. (摩托動力) to hold the first "Low-Polluting Fuel Injection Motorbike Promotion Plan" activity on June 25. In addition to inviting the top mechanics from each manufacturer to compete in repair skills, the activity also featured an auction of six fuel injection motorbikes, starting the bidding at NT\$1. The public participated with great enthusiasm and EPA Deputy Administrator Lin Da-hsiung made a special appearance to demonstrate how motorbike exhaust tests are carried out. As fuel-injection engines in

motorbikes are still in the early promotional stages, such bikes are a bit pricier than traditional motorbikes. To encourage citizens to turn in their old high-polluting motorbikes in exchange for low-polluting high-efficiency fuel injection motorbikes, the EPA has drawn from the Air Pollution Control Fund to

provide subsidies of NT\$3,000 for each new motorbike, and from the Resource Recycling Fund to provide a NT\$1,000 payback for each old vehicle turned in, for a total of NT\$4,000. Those looking to turn in their old motorbikes shouldn't miss this opportunity.



Deputy Administrator Lin demonstrates motorbike exhaust inspections.

News Briefs

EPA Assumes Control Over Sanitation Service Industry

Following the request of the R.O.C. Sanitation Service Trade Union (中華民國清潔服務商業同業公會), the Executive Yuan has recently appointed the EPA as the competent authority for the sanitation service industry. After convening experts for discussion, the EPA has made special considerations for sanitation workers in light of their predominant characteristics, being from the middle- to old-age group, with a low level of education and often with physical disabilities. It was decided to suspend the drafting of *Regulations Concerning the Sanitation Service Industry* (清潔服務業法) and not require all sanitation workers to undergo examinations to obtain a license that allows them to continue in the sanitation profession. Instead, the EPA will offer guidance and encouragement, first assisting sanitation workers to receive professional training and then establishing related controls. Currently there are around 800 thousand people working in the sanitation service industry in Taiwan.

EPA Treats Environmental Volunteers to the Movies

Dedicated to increasing the public's understanding of the impacts of the greenhouse effect, EPA Administrator Chang Juu-en invited Legislative Yuan staff concerned with Taiwan's sustainable development, scholars and media related to air pollution control, and 100 environmental volunteers to see

The Day After Tomorrow a movie that depicts worldwide catastrophe induced by the greenhouse effect. The EPA also handed out the manual "Help Cool Down a Roasting Earth," which states how developments of international conventions and climate change affect Taiwan and offers practical ways for citizens to mitigate the greenhouse effect by conserving energy in their daily lives. It is hoped that aside from enjoying this motion picture, viewers will help spread the word about the importance of reducing greenhouse gas emissions and paint a better picture of the real "day after tomorrow."

Three Counties/Cities Awarded for Best Recycling Performance

The results are out for the recycling performance of administrative orga-

nizations in 2003. The EPA has selected the top performing organizations among Taiwan's 25 county and city governments, which were divided into three groups based on population and unique local characteristics. The winning candidates were the environmental protection bureaus (EPBs) of Taichung City, Taichung County and Penghu County. Another ten county/city EPBs and forty-seven townships also received awards for outstanding performance. This year's evaluation results will be the primary basis upon which next year's recycling funds will be awarded. Award recipients also received from NT\$200,000 to NT\$1 million as group incentive awards, providing substantial encouragement to local administrative organizations for promoting recycling work.

Group 1		Group 2		Group 3	
County/City	Rank	County/City	Rank	County/City	Rank
Taichung City	1	Taichung County	1	Penghu County	1
Taipei City	2	Kaohsiung County	2	Hualien County	2
Tainan City	3	Taoyuan County	3	Yilan County	3
Kaohsiung City	Best Improvement Award	Yunlin County	Best Improvement Award	Nantou County	4
				Kinmen County	Best Improvement Award

Ranking of local administrative organizations on evaluation of recycling performance

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Publisher

Dr. Chang Juu-en, Administrator

Publishing Directors

Tsay Ting-Kuei, Lin Ta-hsiung
Ni Shih-piao

Advisors

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Editor-in-Chief

Roam Gw-o-dong

Executive Editors

Y.F. Liang, Chang Shiuan-wu,
Hsiao Lee-kuo, Lin Char-hung,
Chang Shao-wen, Peter Morehead

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For inquiries or subscriptions to the printed version, please contact:

Environmental Policy Monthly
Environmental Protection Administration
Office of Science and Technology
Advisors

41, Sec. 1, Jhonghua Rd.,
Taipei, Taiwan, R.O.C.
tel: 886-2-2311-7722, ext. 2207.
fax: 886-2-2311-5486
e-mail: umail@sun.epa.gov.tw

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