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Feature Column

Public and Private Participation in Sustainable Development

Taiwan made significant advances toward sustainable development in the year 2004. The National Council for Sustainable Development (NCSD) completed the drafting of Taiwan Agenda 21 and successfully motivated county and city governments to take actions toward sustainable development. Private sustainable development resources have been further integrated with the NCSD through organizational adjustments and establishment of communication channels.

Drafting of Taiwan Agenda 21

The National Council for Sustainable Development, Executive Yuan, ratified the Taiwan Agenda 21 during the 18th NCSD assembly on 8 November 2004 in the interest of drawing up a concise blueprint for Taiwan's sustainable development. This document lays down the fundamental strategies and course of action for promoting sustainable development in Taiwan.

Taiwan Agenda 21 is divided into five chapters, including a preface, an outline of Taiwan's unique environment, a vision for sustainable development, principles and direction of Taiwan's sustainable development, and strategy guidelines for sustainable development in Taiwan. It is hoped that while fulfilling demands for basic living materials we can maintain Taiwan's biodiversity and restore the island to its original magnificence as described hundreds of years ago: "Formosa – the beautiful island." In terms of economic development, it is hoped that while working to maximize the net benefit of economic activities, we can also safeguard the artificial, natural and human capital that generates these benefits, thereby ensuring the livelihood of current and future generations. In terms of creating a sustainable society, the Agenda describes the image of a secure and harmonious society as having "security without fear," "livelihood without disquiet," "welfare without need," "health without anxiety," and "culture without boundaries."

In working toward the above vision for sustainability, "Sustainable Development Strategy Guidelines"

NCSD Chief Executive Officer Yeh Jiunn-rong（葉俊榮）

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have been drawn up to specify concrete implementation strategies and are divided into three aspects: sustainable environment, sustainable society, sustainable economy. In terms of a sustainable environment, the guidelines specify nature conservation policies that emphasize prevention measures, public nuisance control policies that emphasize effective controls, and environmental planning policies that emphasize sustainable use of resources.

In terms of sustainable economies, enhanced quality should take the place of increased quantity. Economic development should emphasize good quality and environmental integrity, and should work toward developing environmentally friendly industries and promoting green production and green consumption.

In terms of a sustainable society, the guidelines focus on four themes—equity and justice, public participation, community development, and overall health of population—in pursuit of a higher quality of life, equitable distribution of resources, a healthier populace, greater opportunity and desire among citizenry to participate in political affairs, and a more just and harmonious society.

Strengthening Local Sustainable Development

Expanding the work of sustainable development from the central government to the local level, the NCSD has worked through the "Public Construction Expansion Plan," which allocates NT$30 million to city and county governments to assist with drafting "Local Sustainable Development Strategy Plans." The NCSD also provides guidance and training for local government sustainable development personnel.

Numerous city and county governments submitted applications upon the announcement of this assistance plan. Proposals underwent review and selection and nine delegations representing eleven local governments (the Kaohsiung City—Kaohsiung County—Pingtung County collaborative partnership counts as one delegation) were chosen to receive assistance.

With a system in place to provide technology and funding assistance, local governments have noticeably quickened their pace toward sustainable development. The eleven subsidized cities and counties had all formulated visions for sustainable development by June 2004. Their sustainable development strategies not only link local blueprints for sustainability with the central government's overall plan, but also constitute a valuable reference for other cities and counties.

The successful results of Taiwan's sustainable campus program have been affirmed by international scholars and experts, and many countries' eco-schools have visited some of these schools of their own accord to learn from Taiwan's example.

Expanding the Sustainable Campus Movement

The "sustainable campus" concept was born in 1997 when environmental education gained a foothold in Taiwan. By 2002, the Executive Yuan allocated a budget of about NT$500 million to assist the sustainable campus promotion program. The number of schools to join the program has steadily increased over the years, attesting to overwhelming support of the sustainable campus concept from all levels of schools around the nation.

Schools participating in the program integrate township environmental attributes to create ecological campuses or bring into play each school's technical expertise and innovation. Working toward a marriage between education and environmental design, Taiwan's sustainable campus program goes beyond the conventional operating models of the global green campus concept. Through a combination of spontaneity and integration, Taiwan has established the online Green School Partnership Program. Successful results have been affirmed by international scholars and experts, and many countries' eco-schools have visited some of these schools of their own accord to learn from Taiwan's example. Taiwan currently leads the world in numbers of schools taking concrete action toward sustainability.

Through efforts contributed by all circles, sustainable campuses can have wide-ranging effects. The only shortcoming at the current stage is that most schools have only undertaken independent local reforms; there is still a long road ahead of us in getting sustainable campuses to integrate forces and foster harmony between communities and the ecological environment. This will become the focal work in the future. The Ministry of Education and the Tourism Bureau joined forces in 2004 to map out four ecotour routes in northern, central, southern and eastern Taiwan along which tourists can conveniently visit several sustainable campuses in one trip. This is one way for schools to lead the way in teaching the populace to care for the environment.

Strengthening Links with Private Resources

Working to expand citizen participation in sustainable development policy making processes and strengthen channels for participation, the NCSD jointly sponsored the "Ocean and Coastal Sustainable Development Forum" on 3 June 2004, with the Council of Marine Affairs, Executive Yuan, inviting related experts and officials to exchange views on protection and sustainable use of maritime and coastal environmental resources, and development of related industries. On Environment Day, 5 June 2004, the NCSD invited civil organizations to exchange views on sustainable development policies during the "NCSD and NGO Forum."

Encouraging the private sector to jointly participate in sustainable development work, and localize sustainable development efforts, former Premier and NCSD Chairman Yu Hsyi-kun granted the "First National Sustainable Development Awards" to commend 20 communities, enterprises, schools, civic groups and "Sustainable Development Action Plan" projects carried out by public agencies, for their outstanding contributions toward sustainable development.

To include the views of the civil sector in the NCSD's decision making process, the NCSD has once again revised the NCSD installation guidelines to increase the ratio of NCSD members from the civil sector. In addition to previously designated work areas, civilian members drew up five focal areas, including: 1) control and education on the practice of releasing captured animals into the wild; 2) implementation of environmental impact assessments of major policies; 3) strengthening citizen participation in planning sustainable development policies; 4) assisting county/city governments in promoting local sustainable development; and 5) advancing environmental diplomacy. These focal areas will be carried out by related departments to expedite the promotion of sustainable development.

Focus of NCSD's Future Efforts

Among the five focal work areas laid down by the private NCSD members, NCSD CEO Yeh Jiunn-rong（葉俊榮）believes that control over releasing captured animals in the wild is of great importance. Yeh hopes that control and education on this practice through government guidance will gradually change this outdated tradition and get citizens to understand the importance of biodiversity. Education will concentrate on fostering respect for animal rights and recognizing the threats of exotic invasive species on the local ecology.

Education to stop the practice of releasing captured animals in the wild emphasizes the environment as a whole. Likewise, development policies must also view the environment as a whole. Development is never isolated, and must include management and integration of water, soil, and forest resources. Much care must be taken to formulate a holistic policy that considers the sensitive issue of national land development, and strives for harmony between different groups of people. In the past, Taiwan's development policy has lacked holistic thinking. After the occurrence of several disasters, the Premier instructed the NCSD to develop response measures and policy. In the future, no matter whether planning for the short-term, such as adjusting supply and demand of water resources, or emergency response to natural disasters; or planning for the long-term, such as formulating national land resource action plans or managing the development of mountain and forest resources; all of these concerns are the focal tasks for future environmental policy.

The global greenhouse effect is another focal issue for the NCSD, especially now as the Kyoto Protocol takes effect this year. The Premier has taken personal responsibility to convene the Climate Change and *Kyoto Protocol* Response Taskforce, asserting the NCSD's leading role in addressing this issue. NCSD CEO Yeh emphasizes the close relationship between the greenhouse effect and the national energy policy. In planning a new energy policy, the NCSD will work toward the fol-

Taiwan Sustainable Campus Expo

lowing four core objectives to: actualize the Nuclear-Free Homeland Policy, conserve energy, increase the ratio of renewable energy, and make structural adjustments to industry. Framework for this policy is nearly in place and the next step is to integrate resources of related government departments and put the policy into practice.

Taiwan's response to the global greenhouse effect shows that even when diplomacy is unfavorable, Taiwan can still uphold its responsibility to the citizens of this planet. This is the drive behind Taiwan's dedication to active participation in international sustainable development activities. Apart from the major policies mentioned above, active participation in international organizations is one of the important goals in promoting sustainable development.

Soil & Groundwater

Tracking and Monitoring of 1,375 Polluted Farmlands

The EPA has carried out prompt investigation of sites suspected or reported to have soil and groundwater pollution. So far 25 industrial sites and 1,375 farmlands have been listed as control sites. To safeguard citizens' health, the EPA will continue to track and monitor soil pollution sites and expedite improvement work.

According to EPA statistics, 25 industrial sites and 1,375 farmlands throughout Taiwan currently exceed soil and groundwater pollution control standards. The EPA dispatches inspectors to make random patrols of these soil and groundwater pollution sites and ensure prompt improvements are made.

The *Soil and Groundwater Pollution Remediation Act*（土壤及地下水污染整治法） stipulates that once land is found to have exceeded soil and groundwater pollution control standards, the local environmental protection bureau (EPB) is required to announce the area as a pollution control site and proceed with follow-up pollution improvement work. This includes guaranteeing food safety for consumers by preventing the cultivation of food crops, raising livestock, and drinking or using groundwater from polluted farmlands where improvement measures have not been completed. So far no cases of inappropriate cultivation have been discovered.

Through joint monitoring by the EPA's Soil and Groundwater Remediation Fund Management Board and the Bureau of Environmental Inspection, already 931 parcels (approximately 219 hectares) of polluted farmland in Changhua County and Hsinchu City have completed improvement measures and controls have been lifted. Other areas including Taoyuan County, Taichung County, Kaohsiung County, Tainan County and Tainan City are actively carrying out pollution improvement work, and some farmlands have already completed examinations.

Apart from tracking and supervising polluted farmland sites, the EPA will also continue to oversee other cases involving gas filling stations, large scale petrochemical storage sites, and industrial pollution, ensuring that industry owners adopt the necessary response measures and follow through with pollution inspection and improvement work to prevent pollution from spreading. Currently only Taiwan Styrene Monomer Corporation's（台灣苯乙烯工業股份有限公司） Kaohsiung Plant and Changhua County's Simen （西門） Gas Station have already completed improvements and have been removed from the list of control sites.

Waste Management

All Waste Entering Incineration Plants to Be Sorted from January

To ensure the appropriate handling of waste, from 5 January 2005, hazardous industrial waste, non-combustible waste, waste inappropriate for combustion and sorted resources may not enter incineration plants.

To ensure proper upstream, midstream and downstream management of waste incineration plants and ensure appropriate handling of waste, the EPA announced the *Regulations Governing Waste Entering General Waste Incineration Plants*（一般廢棄物焚化廠廢棄物進場管理規範） on

News Brief

New Application Fee Standards for Environmental Agents

The EPA promulgated the *"Application and Inspection Fee Standards for Each Category of Environmental Agent"*（環境用藥各項許可申請及檢驗收費標準）on 17 January 2005, which took effect on 19 January 2005. The legislation includes several convenience measures such as charging only half the former application fee, and no fees for change of address.

5 January 2005. This regulation stipulates that from 5 January 2005, four types of materials—hazardous industrial waste, non-combustible waste, waste inappropriate for combustion, and sorted and collected resources—may not be put into incinerators. This rule is strictly enforced through visual inspection and onsite inspection.

Non-combustibles and materials inappropriate for combustion, and even hazardous waste if put into incinerators along with other waste, not only seriously hampers the lifetime of the furnace and incinerator structure but also has a detrimental impact on normal operations including storage safety, emissions management, and quality of ash and residue. Thus in addition to carrying through with waste management at the source where it is generated, random inspection controls should also be strengthened before waste enters incineration plants.

The new regulation was discussed during several meetings between related agencies and the EPA, and an onsite pilot run was first carried out at each incineration plant from 28 April to 6 July 2004 to understand potential implementation problems and to gather opinions. Content of the regulation was reviewed and revised based on these events. The regulation has 13 articles and applies to all operating incineration plants built or subsidized by the central government or municipal, county and city governments. This includes publicly owned and operated plants (such as the Beitou Incineration Plant in Taipei City and the Central District Incineration Plant in Kaohsiung City), publicly owned privately operated plants (such as the Bali Incineration Plant in Taipei County and the Lucao Incineration Plant in Jiayi County), and privately owned and operated plants (such as the Southern District Incineration Plant in Taoyuan County).

To minimize problems during inspections, the new regulations stipulate that general industrial waste may not enter incineration plants in non-transparent plastic bags or in bags inside other bags. In consideration of the need for business groups, clearance organizations and other related agencies to have a buffer period before mandatory compliance, local environmental protection bureaus are permitted to begin implementation of this regulation in July 2005.

Waste must be sorted before entering incineration plants.

Waste Management

Taichung County Launches Per-Bag Trash Fee Collection Program

Following the steps of Taipei City, Taichung County has become the second local government to launch a "per-bag trash fee collection program." Taichung County will receive funding of NT$15 million from the EPA to run a countywide pilot program for three months from February 2005.

The EPA and the Taichung County government have joined efforts to launch the "Taichung County Per-Bag Trash Fee Collection Program" and expect to set a model for other county and city administrations to follow.

"Per-bag trash fee collection" is one of the strategies being adopted locally in Taiwan to reduce garbage. It is an economic incentive for the public to begin waste reduction and sorting of garbage through adoption of the user-pays and polluter-pays principles. EPA officials said that a nationwide study on feasibility of the pay-per-bag policy was concluded in 2004. The EPA will work with the Taichung County government in 2005 and allocate NT$15 million to help implement the per bag trash fee collection program. It is hoped that Taichung County will be a second model after Taipei for other counties and cities to follow.

The EPA emphasizes that successful promotion of trash fee collection programs hinges on whether the county (city) has already enforced a garbage-off-the-ground policy, whether the boundaries of adjacent jurisdictions are

clearly defined, manpower and equipment is sufficient, and existing garbage clearance and disposal systems are well operated, as well as factors such as project area size, commitment of local communities, and readiness of supporting measures. The EPA indicates that Taichung County government had started a number of projects since 2000. For example, Shihgang Township（石岡鄉）launched a per-bag trash fee collection initiative from 1 November 2000, which is still running successfully. Pay-per-bag pilot projects were started in Dongshih（東勢鎮）and seven other townships in October 2001. Preliminary planning and opinion polls for comprehensive surveys and implementation of per-bag trash fee collection systems have been carried out, and local opinion polls have showed public willingness to cooperate.

In the future the EPA will continue to support and provide assistance to counties (cities) willing and capable of launching similar garbage fee collection programs. Ten to twelve counties (cities) are expected to join by 2007. The EPA emphasizes that the per-bag trash fee collection strategy is one of the best incentives to reduce garbage at its source, and promises to help local governments achieve garbage reduction and zero waste goals.

Waste Management

Waste Import/Export Regulations Revised to Promote Environmental Service Industry

The EPA promulgated revised articles in the *Regulations Governing Import, Export, Transit and Transshipment of Waste,* relaxing its policy on import/export controls of waste not listed by the *Basel Convention* and other countries. The revision is expected to facilitate development of the domestic environmental service industry while synchronizing with the world in terms of waste disposal.

Given the fact that an insufficient volume of domestic waste has failed to create economies of scale or foster Taiwan's environmental service industry, the EPA, committed to the idea that "waste put in the right place is a resource," has promulgated revisions to the *"Regulations Governing Import, Export, Transit and Transshipment of Waste"*（廢棄物輸入輸出過境轉口管理辦法）. Import and export management measures have been modified regarding substances unregulated by the Basel Convention or major countries and eases application procedures for import of waste resources.

The EPA points out that once recyclable waste materials are allowed in the environmental service industry, it will draw interested parties from home and abroad to invest and set up plants in Taiwan's Environmental Science and Technology Parks (ESTP). ESTPs will see the emergence of environmental service industries that recover waste resources, and recover and convert resources into new products. Meanwhile, those environmental service industries already existing in ESTPs will benefit from the overall growth.

Main points of the latest modification are indicated as follows:

1. Some hazardous waste materials under regulatory control in Taiwan are not necessarily listed or controlled as such by exporting (or recipient) countries. To facilitate the application process for export/import of waste resources, applicants may present documents issued by the competent authorities of the subject country verifying that there are no restrictions on the import/export of the said substance. This is an alternative to obtaining permit documents from the subject country.
2. Since most waste resource deals are made in market auctions overseas, Taiwanese dealers are unable to acquire business contracts prior to auction, and thus are unable to apply for import permits. To ensure domestic businesses compete with international counterparts on an equal basis, the stipulation requiring a business contract between importer and exporter has been canceled. According to the EPA, existing regulations already screen importers qualifications, and therefore there should be no doubt as to their capability of handling and recycling waste resources. Hence authorities are only responsible for managing import/export of waste according to relevant regulations without having to reconfirm importer's qualifications of handling waste.
3. Stipulate procedures and methods of notarization and authentication of foreign documents attached with application. Exceptions are also specified that when authorities of a recipient country notify their Taiwanese counterpart with duplicate import permission, such documents are exempt from notarization or authentication during validity period.

The EPA indicated that future management of waste import/export

will take advantage of a new policy combining the *Waste Disposal Act* and the *Resource Recycling and Reuse Act*, restricting or banning export of domestic waste if Taiwan is capable of managing such waste and resources on its own. Domestic industries capable of recycling more than what is generated in Taiwan will be permitted to import waste resources from overseas for recycling and reuse. In the event that domestic industries are unable to dispose of waste in Taiwan, and export is deemed necessary, export is restricted to developed nations only. Such measures are adopted to sustain the environmental service industry in Taiwan, to avoid international disputes, and ultimately establish an environmentally friendly image for Taiwan.

Recycling

Changes Made to Steel Container Recycling Channels

Difficulties have arisen with the recycling of waste steel containers and so far results are not up to expectations. In April 2005 the EPA will set up channels to handle pretreatment procedures, which will reduce pollution from adhesives and printing materials on steel containers, and effectively increase the economic value of reused steel.

Due to the inherent difficulties of recycling waste steel containers, the EPA has coordinated with vehicle wrecking yards to modify machinery originally used for broken down vehicle parts so that it can also be used to crush waste steel containers into bricks as a pretreatment measure. The process not only eliminates adhesives and printed material, but the crushed steel material is also optimally sized for use in steel factories. This is one successful way to integrate different treatment channels and effectively reduce dioxin emission concentrations from steel factories.

The EPA has designated waste steel containers as mandatory recyclables. However, as adhesives are used to affix labels to such items and as steel containers include such a wide variety of materials (gas cans, paint, steel tanks and cartridges, etc.), without first undergoing appropriate treatment, such materials used in steel smelting factories as raw materials are likely to result in explosive combustion and increased air pollution. Moreover, steel smelted from recycled steel containers can only be used in low grade products, and therefore each year fewer steel factories are interested in recycling steel containers. Around 55,000 tonnes of steel containers were processed in 2002, dropping down to 19,000 tonnes in 2004. So far around 23,000 tonnes of waste steel containers have been rejected by steel smelting factories, and no other channels exist for recycling this resource.

The EPA indicates that currently there are three car wrecking companies in Taiwan that have already successfully trialed shredding methods and have already processed shredded recycled steel into fine quality, effectively reducing 80% of mixed materials contained in waste steel containers. The production rate of reused material has reached over 85%, and this increases the added value of reusable steel material after processing. This can nearly double the selling price from NT$4/kg to around NT$8/kg, which is quite acceptable for domestic steel factories.

A reform measure to process waste steel containers using methods for scrap automobiles will be officially implemented in April 2005. The EPA indicates that this pretreatment process for waste steel containers can effectively resolve air pollution problems associated with direct processing of waste steel containers for steel factories, as well as storage problems for recycling companies. It also clears up the processing channel for waste steel containers, enhances existing waste vehicle processing equipment, and raises the economic value of recycling waste steel containers. The measure is deemed as an effective and sustainable way to recycle and reuse resources.

Waste Management

Subsidies Increased for Localities to Reuse Incinerator Bottom Ash

Tying in with the zero waste policy, starting this year (2005) the EPA will extend subsidies to local governments for reusing bottom ash from waste incinerators. This will help reach the 80% bottom ash reuse rate target set for 2009.

Due to the difficulties involved with establishing landfills in Taiwan, added to the fact that international waste incinerator bottom ash reuse technology is already mature, this year the EPA will tie in with the Zero Waste policy by increasing subsidies to local governments promoting reuse of bottom ash from waste

incinerators. Subsidy amounts are based on a certain ratio, so for example if the disposal fee for one ton of waste is NT$1,400, the subsidy will be NT$700, with a maximum subsidy of NT$800 per ton of waste.

From May 2001, the EPA will comply with the Executive Yuan's "Plan to Encourage Privately Built and Operated Final Disposal Sites for General Industrial Waste (Including Ash and Residue from Waste Incineration)"（鼓勵公民營興建營運一般事業廢棄物（含垃圾焚化灰渣）最終處置場設置計畫）. Local governments will be subsidized to cooperate with private companies based on the *Law for Promotion of Private Participation in Infrastructure Projects*（促進民間參與公共建設法）in building and operating landfills for bottom ash of incinerated waste. The plan also doubles the capacity for non-combustible general industrial waste and at the same time solves domestic industrial waste problems. Previous plans called for the construction of ten to twelve landfills in Taiwan. However, implementation was unsuccessful. The Taipei County Ankeng Landfill and the Hsinchu County Hengshan Landfill have been met with serious opposition by local residents, forcing construction to be postponed.

From July 2002 the EPA has included ash and residue reuse in the scope of plans, subsidizing local governments planning to establish landfills and finding firms to reuse bottom ash. Taipei County government was the first and most successful local government to begin this plan and since January 2003, already 280,000 tonnes of incinerator bottom ash have been successfully reused and turned into construction material such as road construction grade and pipeline trench backfill. Currently all bottom ash generated by Taipei County's three waste incineration plants is reused, and the county's bottom ash disposal problems have been solved for the most part.

With the maturation of domestic and foreign incinerator bottom ash reuse technology, the EPA has decided to revise the abovementioned plan to expand the scale of reuse plans starting from this year and assist county and city governments responsible for the production of waste incineration ash and residue to reuse this material. The EPA has set an intermediate range objective to increase the reuse of ash and residue from the 2003 level of 100,000 tonnes (12% reuse rate) to a projected 720,000 tonnes by 2009 (80% reuse rate).

Water Quality

Domestic Wastewater Killing Rivers, EPA Steps Up Enforcement

Statistics show that 55% of Taiwan's river pollution is caused by domestic wastewater. The EPA announced the enforcement of regulations calling for sharp reductions and source reductions of domestic wastewater nationwide. Violators could face a maximum fine of NT$600,000.

EPA statistics show that domestic wastewater generated by the average household is the main source of pollution in Taiwan's rivers, accounting for 50% of all pollution, followed by industrial wastewater at 24% and livestock effluent at 26%. Although the nation's domestic wastewater treatment facilities have a normal operation rate of 83%, still nearly 20% are unable to effectively treat wastewater.

The EPA states that public sewers currently reach less than 12% of residencies in Taiwan, and thus domestic wastewater treatment primarily relies on individual community wastewater treatment facilities. While sound construction and management of such facilities are compatible with public wastewater sewer systems, improper operation and management could be even less effective than conventional septic tanks.

As for those communities not currently up to standard in domestic wastewater treatment, the EPA stresses that reinforced control and

Activity

Battery Recycling Art Contest Winners Announced

Building on efforts to promote recycling of spent dry cell batteries, the EPA launched a kids' drawing and coloring contest in December 2004. Entries were accepted until 12 December and a total of 26,642 pieces of artwork were received, from which 119 outstanding pieces were selected. The EPA held an awarding event on 25 January and EPA Minister Chang Juu-en conferred honors and awards to the winning children. The EPA expressed that while the government holds many educational activities, citizen cooperation is still a vital factor. Spent batteries can be given to sanitation crew recycling trucks or community centers, schools, supermarkets, vendors, pharmaceutical and cosmetics chain stores, wireless communication equipment vendors, video equipment stores and other recycling points. Citizens can direct questions to the toll-free recycling hotline: 0800-085-717.

inspection at the current stage is primarily focused on those communities that already possess facilities, yet are unwilling to engage in normal operations.

The EPA said for instance that for a community with one hundred households, monthly operation fees of domestic wastewater treatment facilities would cost each owner only NT$42—cheaper than a bowl of beef noodles. However, once a community's wastewater does not conform to effluent standards, they are subject to fines from NT$60,000 to 600,000 according to the *Water Pollution Control Act*（水污染防治法）. It is thus in the best interest of citizens to pay minimal maintenance fees rather than risk heavy fines.

Waste Management

Yilan Lize Incinerator to Commence in June

The Lize Incineration Plant in Yilan County was operated for the first time on 20 January, underwent a trial run in February and officially began operations in June. As Yilan County alone does not generate enough waste to keep the incinerator in operation, the EPA will coordinate plans for nearby Hualien County to send its waste to Yilan for incineration.

The construction of the Lize（利澤）waste incineration plant has been in the works for nine years. First contracted in 1996, the initial contractor pulled out during the construction period and broke the contract. The project went up for bid again in February 2002 and was won by Japanese company Mitsubishi Heavy Industries for over NT$2.276 billion. Construction was originally slated for completion in August this year (2005). However, progress has been good, and the plant is already 98% completed. The plant is therefore likely to be ready in advance this June. The Yilan County Environmental Protection Bureau will entrust a public or private organization to run the plant.

The central waste storage facility of this incinerator can hold just over 3,000 tonnes of waste and is capable of handling 600 tonnes of waste per day. During construction Yilan County generated just over 600 tonnes of waste per day, yet due to successful promotion of waste reduction in recent years the current daily waste volume is now just over 200 tonnes. To cut operating costs and prevent premature aging of machinery, the EPA plans to send waste from the northern townships of Hualien County to Yilan for incineration.

The original contract for construction of the Lize Incineration Plant was based on a daily waste treatment volume of 600 tonnes. Yet after successful promotion of waste reduction in Yilan County, daily waste generation has dropped to 260 tonnes, which is far less than half the volume required for operating the incineration plant. Subject to the pressure of waste landfills in nearby townships successively closing up, the EPA opted to carry through with the original plan to prevent a garbage crisis.

The EPA went through with original plans for the Lize Incineration Plant to hold a trial incineration in February and begin operations in June. The central government will extend all efforts to coordinate the transport of garbage from Hualien County to the Yilan incinerator. If successful, the nearly 200 tonnes of garbage per day from Hualien County added to the 260 tonnes of garbage per day generated in Yilan County as well as combustible industrial waste will reach the optimal incineration requirement of 600 tonnes.

The EPA has adopted ecological engineering methods in landscaping areas adjacent to the Lize Incineration Plant. Local plant species have been planted to clearly show the changes across the four seasons. Landscaping within the plant includes an ecological pond and rainwater harvesting design, which provides enough water for onsite vegetation and irrigation purposes and reduces use of tap water. In addition, mechanical facilities effectively minimize secondary pollution. Waste heat generated from incineration is used to produce enough electricity to power the plant and excess power that can be sold to Taipower Company.

Yearend National Clean-up Week

Environmental clean-up has become a necessary routine during the last days of each lunar year. During the last week of the lunar year (1 to 7 February 2005), the EPA promoted "National Clean-up Week" during which bulk general waste items such as furniture and mattresses were collected free of charge by environmental protection agencies. All the nation's counties and cities held activities to clean up the streets and neighborhood environs or eliminate sources of Dengue Fever mosquito vectors. EPA Minister Chang personally took part in street cleaning efforts. The EPA reminded citizens that public alleys, street surfaces and gutters within four meters of residences should be cleaned and the work should be shared equally among neighbors. Management agencies of public areas should strengthen environmental cleaning work or get volunteers and environmental groups to team up in cleaning unkempt areas. Environmental protection agencies will penalize those who fail to abide by regulations to tidy up unkempt areas.

General Policy

Results of Satisfaction Poll on Public Nuisance Reports Announced

According to a recently released poll result of public satisfaction with government response to public nuisance reports in 2004, 87% of interviewees expressed satisfaction at the good manners of service staff while only 57% were satisfied with the speed of processing and promptness in reply of environmental protection agencies. The EPA explains that the tracking of a public nuisance case usually takes a long time.

Results of the EPA's survey on public satisfaction with environmental protection agencies' response to public nuisance reports in 2004 indicates that people are showing higher satisfaction than in 2003 at environmental protection agencies' handling of public nuisance complaints. Respondents are particularly satisfied with the good manners of EPA service staff over the telephone. This shows that service quality in handling such cases has indeed improved.

The poll shows 86.5% of respondents expressed satisfaction at operators' phone manners upon receiving complaints of public nuisances, while 12.4% disagree. Compared with the same statistics taken in 2003, the former value has increased 10.4%, and the latter has decreased 6.5%. As for speed of processing complaints, 57.8% were satisfied and 36.9% were not satisfied. Regarding staff attitude while replying, 77.7% expressed satisfaction and 16.1% were not satisfied.

Although the majority responded positively, the EPA is concerned about the negative responses, and will review and improve performance in these areas. A high percentage (58.9%) of respondents were dissatisfied with inspection results, and 52.4% said that they had repeatedly registered complaints on the same case. While this reveals the complicated and difficult nature of improving the sources of public nuisance, the EPA will continue to seek all possible ways to improve.

Regarding the types of complaints, the poll reveals the top complaint being malodor (28.1%), followed by noise (25.2%), and environmental sanitation (18.7%). Among repeated complaints, the top two were malodor and noise, indicating that the public has learnt over the years to demand quality living. However, it is not easy to entirely remove the sources of some types of sensory pollution, which have greater impact on living quality, and this explains why there are repeated complaints.

The EPA expresses its commitment towards better performance and will ask local environmental protection bureaus to reinforce follow-up inspection and professional training of inspectors. The EPA Bureau of Environmental Inspection will also assist inspectors to remove sources of pollution and maintain a quality environment. For air pollution (odor) and noise, it is often the case that inspections reveal pollution levels do not exceed control standards, which as a result, brings dissatisfaction to those who

EPA's Public Nuisance Reporting System Webpage

complain. The agency will review current policy and try to make proper adjustments to narrow the gap between regulations and public tolerance.

To better understand people's opinions on government performance of handling public nuisances at all levels, a private organization was assigned by the EPA to conduct a survey from January until September 2004. A total of 3,082 valid samples were collected from random telephone sampling among a population that registered complaints with a 95% confidence level and ± 1.77% sampling error.

A round-the-clock toll-free hotline (0800-066666) is set up to effectively process public nuisance cases as a means to minimize disputes and provide multiple service channels. All complaints will be entered into a digitalized database and followed up case by case. For prompt and convenient service, citizens are welcome to file complaints on EPA's user-friendly website (http://www.epa.gov.tw) and jointly safeguard the nation's environment.

News Briefs

More Hazardous Waste Vehicles Under GPS Control

At the end of last year the EPA announced the third group of industrial waste clearance vehicles required to install instant tracking systems, a measure that will take effect on 1 April 2005 and is estimated to subject 498 more clearance vehicles to tracking controls. The EPA indicates that this tracking system makes use of graphic interface systems using the Internet, integrated with GIS graphic layering capabilities, to provide real-time trajectory monitoring and history inquiry. The tracking system coordinates with the EPA's manifest report system by comparing clearance report manifests against moving vehicle trajectory records, and calling for investigations if necessary. Integration with PDA positioning lets inspectors track designated vehicles during roadside testing or onsite inspections and obtain information on legitimate vehicles and their manifests (see photo). Vehicles that are found carrying hazardous industrial waste, yet are not listed as regulated vehicles, are regarded as illegitimate and required to undergo further examination or are reported to law enforcement agencies. This measure thus helps protect legal operators and eliminates illegitimate ones.

Inspectors can instantly track designated vehicles and obtain related information via GPS.

Bilingual Labels Required for Toxic Chemical Substances

In late 2004 the EPA announced that labeling of substance names and main ingredients on containers, packaging, operation site facilities and substance safety data charts of toxic chemical substances should be in bilingual format by 31 December 2005. In the interest of fully implementing the government plan to create an English living environment in Taiwan, inspections will be carried out from January 2006 to check implementation results. Owing to frequent international use of toxic chemical substances, adding English labels and Chinese-English format on substance containers and operation sites will help guarantee the safe and convenient usage of such substances by foreigners living in Taiwan. To lighten the burden for enterprises, the EPA has already compiled a bilingual list of 252 toxic chemical substances with both Chinese and English index formats as well as substance safety information in English. This information is made available on the EPA website:(http://61.30.108.131/Chm_/Chm_index.aspx?viewPage=MSDS_ALL&type=MSDS&year=93) Frequently used Chinese-English translations of toxic chemical substance usage and disaster prevention and rescue information will continually be made available so enterprises can opt to either create an English label in addition to the existing Chinese label or make new labels with English listed alongside Chinese. It is hoped that the international trend toward bilingual labels on all toxic chemical substances is eventually realized.

Activities

Minister Chang Goes South to Commend Frontline Environmental Staff

EPA Minister Chang Juu-en（張祖恩） visited southern Taiwan on January 14 to commend the Southern Bureau of Environmental Inspection (BEI) and the third central team of the Environmental Protection Police Force. Chang invited the directors of seven city and county environmental protection bureaus in southern Taiwan to exchange views on how to best implement environmental initiatives and encourage action. Chang expressed strong approval of the work of the Southern BEI results last year, and noted great achievements whether in serious pollution source inspection and assessment; integrating with the Environmental Protection Police Force to strengthen inspection of sites where there is potential for violations of environmental protection regulations to occur, and to intimidate people from incurring environmental violations; or random inspections on the implementation of the restricted use policy for plastic bags and disposable tableware. Upon discovery of confirmed Dengue fever outbreaks in the Kaohsiung-Pingtung area in mid-2004, the Southern BEI immediately mobilized a large manpower force to assist county and city governments with inspections. The team eradicated breeding pools for disease vector mosquito larvae and unkempt areas, and by the end of the year the disease was effectively kept from spreading. EPA Minister Chang expressed hope that all agencies could continue to join forces during the Year of Environmental Protection Action and together create an optimal living environment in Taiwan.

Spring Getaways Posted on EPA Website

All those planning for spring break vacation are welcome to visit the EPA website at http://www.epa.gov.tw/main/index.asp, where you will find a list of clean tourism hot spots, including maps and tour routes, around the island's 25 counties and cities. These environmentally pleasant and clean tourism destinations were first recommended by county and city governments and the list was narrowed down further after the EPA carried out onsite surveys. All scenic sites are sure to have a tidy environment, clean toilets and regular upkeep. The EPA has also posted information on 110 additional clean scenic areas recommended by each county and city to help people decide on the best recreation plans this spring break.


http://www.epa.gov.tw/b/b0100.asp?Ct_Code=03X0000113X0006295

編號	說明	格式	點閱次數
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