



Environmental Policy Monthly

Environmental Protection Administration, R.O.C. (Taiwan)

Feature Column

Managing Transboundary Movement of Waste

Taiwan follows the Basel Convention and sets strict standards for domestic management of transboundary waste. The EPA drafted revisions to the Waste Disposal Act in November 2008 in consideration of international trends and the needs of domestic industry development. This will steer the management of transboundary waste toward three general directions: "internationalized and classified waste management," "conditional opening of doors to imported hazardous waste," and "gradual restrictions on export of waste."

In earlier times some companies transported hazardous industrial waste from developed countries to less-developed countries with lax disposal regulations, often resulting in pollution. To put an end to this, the United Nations Environment Programme convened many countries to discuss the establishment of a management mechanism for the transboundary movement of hazardous waste. This resulted in the joint signing of the Basel Convention in March 1989. The Convention took effect in 1992 and now has 172 signatory nations including the EU.

end-of-pipe treatment or reuse are not sufficient responses to the rapid development of technology and ever-changing commercial activities. The Basel Convention thus began to consider management mechanisms for second-hand products. The Convention has also been influenced by OECD and EU environmental regulations including RoHS, WEEE and EuP. In recent years it has also gradually placed more focus on management at the source, such as extending producers' responsibility, environmental design of products and other issues.

Waste treatment shifts from end-of-pipe management to source management

After over a decade the Basel Convention discovered that merely regulating the flow of hazardous waste,

Working in tandem with the 2002 World Summit on Sustainable Development (WSSD), the Basel Convention is now working more aggressively toward Public-Private Partnerships. This has increased the involvement of private enterprises and NGOs.

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Appropriate treatment of electronics waste has become an important focus of the Convention in recent years. The Basel Convention Secretariat issued the Nairobi Statement at the 8th Conference of the Parties to the Basel Convention (COP8) in November 2006, officially declaring the focal mission of the Basel Convention to promote green design of electronic products, and recycling, reuse and transboundary movement of electronic waste. At the same time the Secretariat announced its planning of a Partnership for Action on Computing Equipment (PACE) plan, which was established during COP9 in June 2008 and took effect in January 2009.

Taiwan reflects Basel Convention through stricter treatment of transboundary waste

In the past, Taiwan adopted different control measures for managing transboundary movement of waste depending on the status and requirements of the times. For example, inappropriate treatment of imported scrap metal through open burning caused serious environmental pollution in 1980. This led to gradual restrictions on the import of certain types and amounts of waste. By 1993 it was prohibited to import scrap metal, and the *Hazardous Industrial Waste Import and Export Permit Regulations* (有害事業廢棄物輸入輸出許可辦法) was promulgated to manage the import and especially the export of hazardous industrial waste.

The October 2001 revision to the *Waste Disposal Act*

(廢棄物清理法) prevented the export of hazardous industrial waste falsely identified as non-hazardous waste and included general industrial waste in management regulations. Since then, Taiwan's management of transboundary waste has extended the breadth of controls placed down by the Basel Convention, and related management work has become quite sophisticated.

The EPA has been especially careful in handling the transboundary movement of waste by successively implementing various control measures, some of which are world firsts:

1. Strict review of applications for transboundary movement of waste to confirm the competent authority in the recipient country consents to import, and to ensure foreign handlers have adequate treatment or reuse capabilities and pollution prevention measures.
2. Request customs agencies to conduct border checks and hold seminars to raise customs personnel's ability to identify hazardous industrial waste and prevent illegal import activities.
3. Establish a transboundary waste transport information online report management system and request importers, exporters, and foreign recipient



▶ EPA officials visit waste treatment facility in Borneo

and treatment organizations to report the status of clearance, reception and treatment of waste.

4. Commission scholars and experts to visit recipient countries to check on the treatment status of waste exported from Taiwan. These delegations also visit the central and local environmental protection agencies in these countries to get a better understanding of management practices.

Revising regulations and classifying waste management to keep up with international trends

Domestic environmental industries are gradually beginning to develop and prosper, and waste treatment and reuse technology has already matured. If Taiwan continues to ban the import of hazardous industrial waste and permit the export of waste for treatment abroad, related environmental industries would only be able to use domestically generated waste. Lack of supply would discourage development of treatment and reuse technology. As treatment costs continue to rise, this situation creates further economic burden at the source of waste generation.

In light of this the EPA has submitted revisions to the Waste Disposal Act to the Legislative Yuan for review. These revisions will steer domestic treatment in the following directions:

1. Keep up with international trends and classify waste management

Consideration will be given to international trends in implementing risk management. This means adopting not only Basel Convention trends but also the concept of classified management. In the future, industrial waste will be regulated as Class I or Class II industrial waste:

Class I industrial waste: This mainly includes hazardous waste controlled by the Basel Convention. Consideration will also be given to special domestic needs and export and import will coincide with existing management practices. Municipal and county competent authorities accept applications and submit to the EPA for review and approval. The import or export permit is then issued by the local Environmental Protection Bureau (EPB).

Class II industrial waste: This mainly includes

general industrial waste (and general waste). After reviewing and reporting specifications, the local EPB issues a statement of approval. This is much simpler than current management practices.

2. Conditionally open up to import of hazardous waste

Thanks to the implementation of a waste-to-resources policy and the advancement of waste resource recycling, reuse and treatment technology, Taiwan already has appropriate technology and equipment to recycle, reuse and treat most types of waste. Moreover, current environmental regulations are strict and contain penalties to prevent industries from inappropriately treating waste and causing environmental pollution. Backed by this existing framework, the EPA reevaluated and revised categories of waste banned from import to better put the spirit of regulations into practice. Most categories of waste now banned from import will gradually be opened for import, except for waste that seriously harms health or living environments, waste for which there is no appropriate domestic treatment technology or equipment, or waste that hinders domestic waste resource recycling, reuse or treatment. This will tie in with an import permit review system to check importers' treatment technology or reuse capacity.

3. Add restrictions on waste export

The Waste Disposal Act currently only has restrictions on the import of waste, keeping with the spirit of the Basel Convention, which states that waste should be treated locally whenever possible. Export restrictions will be added to the Act to prevent people from mistakenly thinking that Taiwan encourages the export of waste for treatment. Exportation of waste on a large scale is detrimental to the development of domestic environmental industries. Therefore in the future waste will be banned from export depending on the following factors: 1) domestic treatment or reuse technology is already mature but won't result in monopolization of the market; 2) conditions impeding domestic waste resource recycling, reuse or treatment; 3) import is banned due to the Basel Convention or regulations of other countries or areas; 4) import by less developed countries that may lack adequate waste treatment capacity.

The long-term goal in managing transboundary movement of waste is to gradually work toward putting the spirit of the Convention into practice. This includes reducing waste generation, adopting source management, and cultivating domestic environmental

industries. Taiwan can also assist neighboring countries that require treatment of industrial waste to ensure that all hazardous waste goes through appropriate treatment or reuse channels to protect the environment.

General Policy

Premier Liu Says Global Warming May Overshadow Current Financial Disaster, Highlights Need for Carbon Reduction

Premier Liu Chao-shiuan issued a word of warning during the 2009 Borough Chief Eco-Summit that global warming poses a far greater threat to humankind than the current global financial crisis. Liu advised people to take this issue seriously and put energy conservation and carbon reduction into practice in their daily lives.

Premier Liu pointed out that global warming is responsible for increasing the intensity of climate change. Taiwan is already feeling the effects, with a recent severe drought which may very well turn into severe flooding in the near future. Densely populated cities and intense development are accelerating the pace of global warming, moving this issue to the forefront of government agendas worldwide. Global warming was the reason why this year's Borough Chief Eco-Summit emphasized the theme of Energy Conservation and Carbon Reduction.

Liu said that although global warming is an issue of foremost importance, putting solutions into practice on the local level will be heavily dependent on the efforts of borough chiefs. Liu expressed confidence in imminent success as long as borough chiefs place importance on the issue and are willing and enthusiastic to extend effort; otherwise no amount of emphasis by the president or the premier will help. Liu reminded borough chiefs that a few years ago there were many unkempt public spaces throughout Taiwan's counties and cities. Public toilets were odorous eyesores that brought in many complaints. All this has greatly improved in recent years so much that even foreign tourists are impressed. Liu stated that the reason why government policy was so successful in this case was because of the dedicated involvement

of village and borough chiefs.

The Premier pointed out that last year's financial tsunami engulfed the whole world leaving no country untouched by its effects. But economies can always recover and sooner or later economic hardship becomes a thing of the past. Global warming however has much farther-reaching effects and will only continue to get worse, affecting many generations into the future. The impact of global warming will be much greater than any financial crisis and in fact will be the overriding factor that drives economic development even farther off course. Liu urged people to take a long-term perspective and become an example for others to follow by implementing energy conservation and carbon reduction practices in their daily lives.

Liu stated that the Energy Conservation and Carbon Reduction theme of this summit is also one of the main hubs of current central government policy. Liu expressed hope that borough chiefs are able to help mobilize people on the ground level to implement the "Energy Conservation and Carbon Reduction to Cool Down the Earth" plan. This plan calls for a shift in people's lifestyles and attitudes, and encourages people to take actions in everyday life that will improve environmental quality and mitigate global warming.

General Policy

Ten Environmental Recommendations Reflect Diversity of Issues

Over one hundred local borough chiefs and representatives from the environmental field engaged in enthusiastic discussion during the 2009 Borough Chief Eco-Summit. At the end, the summit produced "Ten Environmental Recommendations," touching on common environmental issues as well as urban planning, telecommunications, and urban landscaping. The extensive content of these recommendations sheds light on the multifaceted nature and sophistication of contemporary socio-environmental issues.

The following list of Ten Environmental Recommendations was developed after discussing over 200 recommendations submitted by summit participants from all of Taiwan's 25 counties and municipalities:

1. The central government should proactively compile an annual budget to support the front line of Taiwan's 7,832 borough chief offices, which orchestrate the efforts of about one million volunteers nationwide. This funding will double the results of efforts that people are already making to cooperate with environmental policies.
2. Let Taiwan's environment shine! A full-scale clampdown on unkempt roadsides and vacant lots should be enacted and accompanied by greening and beautification plans. Legislation should be drawn up and measures should be implemented to improve Taiwan's environmental image on the international stage.
3. A clampdown should be enacted on illegal advertisements and the government should immediately cut off illegally advertised phone numbers painted or affixed in public spaces; otherwise any clampdown efforts will not be efficient. County and municipality environmental protection bureaus should establish "Instant Service Windows" to enforce prompt penalization of illegal advertisements and improve the quality and cleanliness of urban environments.
4. Overhead utility lines and poles along roadways should be replaced by underground networks, and obstructions should be removed along sidewalks and building overhangs where people walk. Pedestrians should have a safe space to walk and everyone should be able to enjoy a higher quality living environment.
5. Sewer system construction should be actively reassessed and well-planned. Household wastewater should be directed to appropriate treatment facilities. Environmental policy should prioritize counties and municipalities in terms of the most important areas for sewer construction.
6. Promote the "Beautify Taiwan" movement on a national scale to raise Taiwan's international image. Subsidies can be given on a case-by-case basis to borough offices requiring funding for environmental beautification plans. Environmental volunteers can be enlisted to provide labor to improve the quality of living environments.
7. National environmental policies regarding air purification, energy conservation and carbon reduction should start at government offices and schools so that the entire populace has exposure to environmental concepts such as reducing greenhouse gases.
8. Borough Chief Eco-Summits should be held regularly to understand local perspectives. A presidential award should be given as the highest honor to organizations and personnel for outstanding efforts in solving environmental issues. This nationwide contest will encourage more people to place importance on environmental issues.
9. A national Dengue Fever Prevention Month should be established to promote effective prevention during the height of the dengue fever season from June to August. This month would focus on eradicating vectors and cleaning up hotspots in residential areas to raise citizen awareness of ways to prevent this disease. Fire lanes should be the focus of cleaning and pesticide spraying efforts.
10. Clampdowns on dog feces and cigarette butts are not going smoothly. The government should draft regulations and control mechanisms created

through civil consensus to ensure broad-scale improvement of environmental quality.

EPA Minister Stephen Shu-hung Shen indicated that these Ten Environmental Recommendations have crystallized out of the hard work and wisdom learned

at the ground level by borough chiefs. The EPA will make these suggestions the focus of policy efforts, and deems them as being extremely helpful for improving the nation's environmental quality and creating a sustainable environment.



▶ Premier Liu (center) with borough chief representatives at this year's environmental summit

Air Quality

Diesel Fuel Sulfur Standards for Vehicles to Be Tightened to 10 ppmw

The EPA has already drafted stricter standards on the composition of diesel fuel for vehicle use. The standard for sulfur content of diesel and petroleum fuels has been tightened from 50 ppmw to 10 ppmw. The new standards will become effective in two stages on 1 July 2011 and 1 January 2012. This is one step closer to improving automobile emissions and air quality.

Reduced sulfur content in fuels can extend the lifetime of a vehicle while also satisfying the requirements of new engine technology to use lower sulfur content fuel. The EPA indicates that improvements in fuel quality not only complies with the requirements of new automobiles but also reduces the amount of pollution emitted by vehicles already in use. This is an important control measure for improving vehicle emissions. In recent years the EPA has actively worked with two domestic fuel producers to continually improve vehicle fuel quality, which will in turn improve environmental air quality.

The draft revisions to change diesel fuel standards call for a reduction of sulfur content from 50 ppmw to 10 ppmw. The revisions also set the standards

for diesel fuel 16-alkane index at 48 (minimum) and polycyclic aromatic hydrocarbons at 11%. Gasoline aromatics have been tightened to 35%. The revisions concerning diesel sulfur content, 16-alkane index, and gasoline aromatics will take effect from 1 July 2011, while the standards for sulfur content in gasoline will become effective on 1 January 2012.

The EPA announced the draft revision of vehicle diesel fuel composition standards on 11 June 2009 on its Web site (<http://w3.epa.gov.tw/epalaw>) under the regulation preannouncements section (法規命令草案預告區).

Waste Management

Steel Ash Storage Regulation Revised to Require Yearly Treatment Targets

To encourage the recycling and reuse of dust and ash generated by Taiwan's basic iron and steel industries, as well as enhance storage management and application review efficiency, on 30 June 2009, the EPA promulgated revisions to the *Iron and Steel Basic Industry Dust and Ash Storage Extension Application Review Working Guidelines*. The focus of revisions calls for yearly treatment targets. The revised guidelines are posted on the EPA's Web site for all to download at <http://w3.epa.gov.tw/epalaw/index.aspx>.

Working to strengthen management of dust and ash generated by domestic iron and steel industries, the EPA drafted the *Iron and Steel Basic Industry Dust and Ash Storage Extension Application Review Working Guidelines* (鋼鐵基本工業集塵灰貯存延長申請審查作業要點) in October 2007. This lays down stipulations on industry applications for extensions to store dust and ash.

The EPA indicated that Taiwan currently has 14 electric arc steel smelting plants, which together generate a combined volume of 130,000 to 160,000 tonnes of steel dust and ash. This material contains not only large amounts of oxidized iron, but also oxidized heavy metals such as zinc, chromium and nickel. While these materials are considered hazardous waste, they also have reuse value. Taiwan's landfills have only a limited amount of space and recycling should be the first priority for this dust

and ash. Due to the capacity and time limitations of domestic treatment plants, this revision calls for yearly treatment targets and reinforces application review procedures and storage management mechanisms for more effective management and reduced pollution risks.

To prevent industries from mixing in other furnace debris or illegally dumping this waste, the EPA has strengthened its inspection and GPS instant tracking systems. The EPA calls on companies wishing to extend their storage period to apply according to the regulations. The EPA is also asking dust and ash recycling and treatment organizations to expedite the completion of treatment plants so that this material can be appropriately recycled so as to attain the objective of sustainable resource use and environmental protection.

Waste Management

Farms with Over 2,000 Pigs Must Report Waste Flow Online

To keep track of the flow of diseased carcasses and remains from slaughter operations, the EPA is extending regulations to require farms with over 2,000 pigs to submit industrial waste clearance and disposal plans and report waste flow online. Related transport vehicles are required to install GPS tracking equipment.

Recent years have seen several instances of pig slaughtering operations illegally sending off diseased carcasses or waste remains to unknown locations. In some cases, these waste products have ended up on the market causing alarm among consumers. From 1 October 2009, the EPA has requested pig farms with over 2,000 pigs to submit industrial waste clearance and disposal plans and report their waste flow online. This measure is expected to place another 300 pig farms under

regulatory control. These farms will be required to install GPS tracking systems on vehicles transporting diseased carcasses or waste remains. The new system will be able to keep accurate tabs on the flow of about 7,000 tonnes of diseased carcass and waste remains per year, and prevent these materials from entering the human food chain.

The EPA indicates that in order to ensure appropriate treatment and recycling of industrial waste generated

by these industries, from 1998 it has required successive batches of industries likely to generate large volumes of hazardous industrial waste to report waste clearance and reuse status online. In October 2000 the EPA established the Industrial Waste Control Center to implement industrial waste control work and over the years expand the number of regulated industries that must report industrial waste clearance plans and report waste flow online. Currently, pig farms with over 3,000 pigs are required to report industrial waste flow online. This information helps the

EPA account for the remains of around 20,000 tonnes of diseased pig carcasses per year.

The EPA indicated that in order to let newly regulated businesses smoothly report their industrial waste clearance and disposal plans and industrial waste flow online, it first held a briefing to explain the changes made as well as produced an educational CD and slideshow. This and other information are provided to companies along with a toll-free number (0800-059-777) to inquire about report procedures.

Sustainable Development

Jane Goodall Speaks at 2009 International Forum on Sustainable Development

The National Council for Sustainable Development (NCSD) held the 2009 International Forum on Sustainable Development on 9~10 June 2009 in Taipei. Dr. Jane Goodall made a keynote speech at the opening.

This forum invited UN peace ambassador and world renowned conservationist Dr. Jane Goodall and NCSD council member Chen Manli to give keynote speeches. Sustainable development officials and representatives from Germany and Japan were invited to talk about their national sustainable development strategies. Also invited were Peter Lance from the US, and sustainable development officials from Malaysia and Taipei City to share the results and experience in promoting sustainable cities.

Jane Goodall imparted her personal hope for sustainable development during her speech: "If we are thinking about a sustainable future, it's quite clear that three things have to happen. We have to

improve the lives of the poor, we have to decrease the expectations and introduce new values among the wealthy, and at the same time we have to somehow have sustainable populations that can live in harmony with the area where they are living. That's the biggest problem of all, and these three are completely interconnected."

Around 300 people attended the forum including representatives from government agencies, county and municipal sustainable development councils, and civil organizations. National representatives exchanged experiences in promoting sustainable development and this information was made available to all levels of government and citizens in



▶ National Council for Sustainable Development CEO Tsai Hsung-hsiung and Dr. Jane Goodall (right)

Taiwan. Students ranging from elementary schools to universities were also invited to attend and issue their views on sustainable development, adding an intergenerational element to the forum.

The forum received tribute from all circles and all seats were completely booked. The organizers of the forum posted related meeting information and recordings from the forum on the NCSD Web site for all to peruse: <http://sta.epa.gov.tw/NSDN/>.

Climate Change

Green Car E-Guide Helps Consumers Make Better Choices

As part of promoting energy conservation and carbon reduction, the EPA is encouraging citizens to choose low-emission, low-noise and fuel efficient cars by establishing a Green Car E-Guide. This service helps people search online for environmentally friendly cars to purchase according to test ratings of emissions, noise and fuel efficiency.

To promote energy conservation, the EPA encourages citizens to choose non-polluting means of transportation including walking and biking. Citizens are also called on to take heed of the Energy Conservation and Carbon Reduction Top Ten Actions especially when choosing vehicles. Preference should be given to green vehicles such as hybrid cars, electric scooters and electric assist bicycles. For those who still feel the need to buy a conventional automobile, citizens are advised to consider not only appearance, price and functions but also environmental factors such as pollution emissions, noise, and fuel consumption.

To make it easier for people to look up related information, the EPA officially launched the Green Car E-Guide on 9 June 2009. Internet users are welcome to enter the system through the EPA Web site by clicking on the Department of Air Quality Protection under the section on mobile pollution source controls (移動污染源管制), or directly accessing the Web site at <https://car.itri.org.tw/GreenCar/GreenCar.aspx>.

The guide displays car models based on ratings for pollution emissions, noise, and fuel consumption, making it easy for consumers to choose the most environmentally preferable vehicle.

The Green Car E-Guide provides not only information on conventional automobiles but also on electric bicycles, electric assist bicycles, electric scooters and hybrid cars. The site also has sections on "advanced environmental technology" and "automobile pollution prevention tips." Visitors can browse for information on the latest technical developments of green cars, and introduce in-depth content regarding electric cars, alternative fuel cars, fuel cell cars, electric and mechanical cars, and advanced diesel and petrol engine technology.

The EPA's Green Car E-Guide also provides links for those wishing to know more about similar green car guides in other countries, such as the US Green Vehicle Guide, the UK Vehicle Certification Agency's Web site, and Australia's Green Vehicle Guide.

Recycling

Industry Shifting to PET Bottles with Easy-to-Remove Labels

PET bottles with tightly affixed labels present high labor and electricity costs during recycling and treatment processes. To reduce costs, the EPA is encouraging industry to use container product labels designed with pull-strips for easy removal. Industries have expressed high interest and already 49 products have adopted this labeling design.

Looking for ways to get container manufacturers to consider environmental design and increase the reuse value of plastic containers, the EPA launched a project in 2009 to promote voluntary use of container labels with pull-strips to make removal easier. So far seven manufacturers have joined the project, including AGV, Uni-President, Chen-Kou-Wei, Vitalon, Tait, T. Grand International, and Youxin Corporation. These manufacturers are voluntarily producing PET containers with easy-removal pull-strips on the labels. Already 49 products have adopted this environmental label design including Uni-President's Chaliwang product line, AGV's Red Bean Oatmeal, and Vitalon's Yuchayuan Japanese green tea.

Every year Taiwan recycles about 90,000 tonnes of PET bottles, equivalent to 4.5 billion 600 ml PET bottles. The recycled materials can be used to make shopping bags, clothing, wigs, carpets, and a variety of other products. Results of recycling efforts have proven very successful.

The EPA indicates that some beverage products require large labels for displaying information, or for preservation or aesthetic purposes. Over 50% of products have labels that cover the entire bottle. It is

harder to remove larger labels during recycling and treatment processes, and frequently such containers need to be picked out and thrown back into the label-removal process again. If the labels still do not come off, they have to be removed by hand, greatly increasing the costs of labor and electricity. The EPA's project to promote voluntary use of container labels with pull-strips is expected to raise the efficiency of label removal from the current 85% to 95%. Not only will this save energy and labor costs but it also increases the purity of recycled PET material.

The EPA indicates that currently there are seven manufacturers that have voluntarily switched to using the pull-strip labels on a total of 49 products, representing 40% of container products with large-sized labels. The future calls for plans to deduct recycling, clearance and treatment costs to encourage manufacturers to expand the use of easy-to-remove labels. This will raise the overall PET recycling rate and generate value for materials that can be continually recycled.

For more information about container recycling, please visit the EPA's Web site (<http://recycle.epa.gov.tw/>) or call 0800-085717.

Climate Change

Shade Cloth Idea Wins Energy Conservation and Carbon Reduction Gold Medal

The EPA held the "Danshui-Cool Summer – Environmental Carbon Reduction Music Festival" at dusk on 27 June 2009 at the Danshui MRT Station park. The event included a prize drawing and drew much attention as the first "Energy Conservation and Carbon Reduction Creativity Contest." The gold medal was given to an idea to cool down homes using shade cloth from farms.

The "Energy Conservation and Carbon Reduction Creativity Contest" is a part of the EPA's "Energy Conservation No Regrets – Hand-in-hand Carbon Reduction" activity. People can post their innovative energy conservation and carbon reduction ideas online at the EPA's "Green Web." The EPA convened a group of experts to form an evaluation committee that selects the best ideas and posts them on the Web site. In the end, the top five winners will be chosen to receive gold, silver and bronze awards.

Ms. Hsu of Hualien County received the gold medal for her idea to collect used shade cloth from farms and sew them together to fit the shapes of rooftops.

Suspended one meter above a roof, shade cloth is a very effective way to keep the heat out. Ms. Hsu said that some farmers use black shade cloth to grow bird's nest ferns and other shade-loving plants. By using shade cloth on rooftops the only electricity required is a fan at night to ensure airflow through the building. The result is a cheap and environmental way of keeping cool in summer.

The silver medal went to Mr. Guo of Taipei City who installed movement-sensor switches and independent switches for the lights in his building's stairwell. The bronze award went to Mr. Liu of Taoyuan County who suggested painting building exteriors white or light

colors to reflect sunlight, reduce indoor temperatures, and curb the need for air conditioning.

The "Energy Conservation and Carbon Reduction Creativity Contest" is ongoing and creative ideas are still welcome. People who send in one idea every two weeks to the "Green Web" will receive a lottery ticket for the "Energy Conservation No Regrets – Hand-in-

hand Carbon Reduction" prize drawing.

The "Energy Conservation No Regrets – Hand-in-hand Carbon Reduction" prize drawing will last throughout the year with a total of four drawings. The first drawing was on 27 June 2009, and 1,052 prizes were given away. The list of prize winners is posted on the EPA's "Green Web" at <http://ecolife.epa.gov.tw>.



▶ Dressed as an "Environmental Doctor," EPA Minister Shen interprets the effects of global warming

Waste Management

Standards for Defining Hazardous Industrial Waste Revised

In response to the deadline of the industry unified certification system, the EPA revised Article 5 of the *Standards for Defining Hazardous Industrial Waste* on 5 June 2009. In the future, when industries apply with local competent authorities to reclassify their waste as general industrial waste, they should report their company registration certificate or commercial registration certificate.

The EPA stated that this revision to Article 5 of the *Standards for Defining Hazardous Industrial Waste* (有害事業廢棄物認定標準) reflects the Executive Yuan's approval of the deadline for implementing the for-profit industry unified certification system on 12 April 2009. From 13 April 2009, corporations are to follow procedures according to corporate registration, while companies with independent assets and partners follow procedures for commercial registration. The former "for-profit industry registration system" and "for-profit industry registration certificate" no longer exist and businesses

need only register taxes with the tax authority.

Article 5 of the *Standards for Defining Hazardous Industrial Waste* formerly stated that when applying to reclassify waste as general industrial waste, businesses should submit copies of their "for-profit industry registration certificate" and "factory registration," or "government approved registration documents." As these related systems no longer exist, the article has been revised to require only company or commercial registration documents.

The EPA has posted details of this revision to Article 5 of the Standards for Defining Hazardous Industrial Waste on its Web site for all to view (<http://w3.epa.gov.tw/epalaw/index.aspx>).

News Briefs

July Clampdown on Pollution Sources Lacking Air Pollution Prevention Facilities

The main factors causing poor air quality are ozone and suspended particulates. Suspended particulates account for 34% of poor air quality with the main pollution sources being seaports, gravel stockpiles and processors, steel smelting factories, cement manufacturers, concrete mixing industries, asphalt mixing industries, and building clay manufacturers due to fugitive particulate matter from piling, manufacture, movement, transport and extraction processes. The EPA drafted the *Stationary Pollution Source Fugitive Particulate Matter Air Pollution Prevention Equipment Regulations* (固定污染源逸散性粒狀污染物空氣污染防治設施管理辦法) on 8 January 2009. This regulation requires related premises to install or adopt specified air pollution prevention equipment. Existing pollution sources are required to complete improvements by 1 July 2009. The EPA is now reminding related industries and government agencies that the deadline has passed and pollution prevention equipment should already be in place to reduce particulate matter emissions. Severe penalties will be issued if such premises are found noncompliant with this regulation.

Hazard Prevention Regulations for Transporting Toxics Under Revision

Transport activities are currently not required to apply for a permit or submit a hazard prevention and response plan. However there is a risk of accidents occurring during transport processes. The EPA is therefore revising certain articles of the *Toxic Chemical Substances Hazard Prevention and Response Plan Regulations* (毒性化學物質危害預防及應變計畫作業辦法) adding to articles concerning transport operations to ensure more comprehensive toxic chemical accident prevention procedures. The EPA indicates that this revision specifies that hazard prevention and response plans should be submitted prior to the transport of Class I through Class III toxic chemicals, including conditions, time of transport, and content and duration of implementation. The revision will reflect digital mapping trends by specifying that a

complete map of the premises of related operations and GIS coordinates should be provided.

The revision of this regulation is a step in a positive direction to minimize risks during transport of toxic chemicals. A preannouncement of the draft revision can be found on the EPA's Web site (<http://ivy3.epa.gov.tw/epalaw/index.aspx>).

Septic Sludge Trucks Required to Install GPS by July 2009

Septic sludge trucks were required to install GPS instant tracking equipment by 1 July 2009. In order to ensure septic sludge trucks are transporting their contents to appropriate treatment facilities, the EPA is treating these trucks like other industrial waste transport vehicles by requiring them to install GPS tracking equipment. About 500 septic sludge trucks are affected by this measure and should already have GPS installed. The equipment will transmit the location of the truck to the EPA every 30 seconds. The EPA also requires the septic sludge clearance industry to report clearance and disposal amounts.

NCSD Holds 4 Regional Sustainable Development Forums

The National Council for Sustainable Development (NCSD) held the "National Sustainable Development Regional Forums" from 15~18 June 2009 in the four locations of Taipei, Taichung, Kaohsiung, and Hualien representing northern, central, southern and eastern regions of Taiwan. The main topics discussed at each regional forum included "Coastal Restoration and Conservation Program," the "National Land Security and Restoration Plan," and "Sustainable Development Policy Guidelines." Views were exchanged and collected using bottom-up discussion methods. This information will be analyzed and presented before the NCSD for further discussion to serve as the basis for drafting the above three plans. The NCSD invited government agencies, scholars, experts, and civil organizations to the forums. Related news is posted on the NCSD's Web site at <http://sta.epa.gov.tw/NSDN/>.

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