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April 2010

JAPAN SOCIETY OF MATERIAL CYCLE AND WASTE MANAGEMENT

Dear Experts

We are entering an era of dealing with waste beyond borders, joining with others in Asia to expand areas to target wastes and waste material recycling.

In doing so, our Society has been the International Committee Secretariat since 2005, hosting the Society of Solid Waste Management in Asia and Pacific Islands (SWAPI), which will hold its seventh meeting this year.

The activities of individual member countries are highly valued, and at present there are 7 department working groups which have been established and planning to fulfil their activities.

Unfortunately, the activities of SWAPI have not received the attention they deserve and the organization is suffering from low membership numbers. Therefore, we have dedicated a place in this newsletter called the "SWAPI Special Corner" to highlight their activities to our members and encourage an increase in their membership.

The SWAPI Special Corner is a place for SWAPI members to report their activities and we hope it will serve as a place for those interested in SWAPI to exchange ideas. We look forward to hearing from our members.

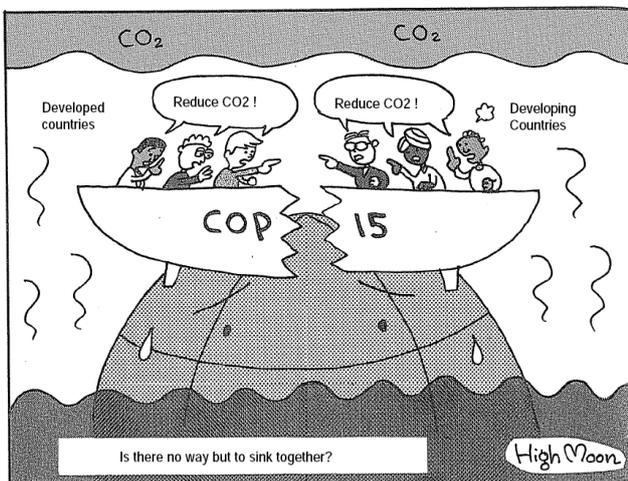
The 7th Meeting of the Society of Solid Waste Management Experts in Asia & Pacific Islands (SWAPI) will be held in Taipei

As we face an increase in the generation of solid waste on one hand, and the shortage of resources on the other hand, it has become inevitable to promote the 3Rs (Reduce, Reuse and Recycles) in Asia and Pacific Islands. To address this issue, the Society of Solid Waste Management Experts in Asia and Pacific Islands, SWAPI, was established in 2005 in Japan as an important network of the experts. Fruitful results through presentations and opinions exchanges were achieved in the previous meetings.

The 7th Experts Meeting will be held on September 15-17, 2010 in Taipei. The organizers are SWAPI, Taiwan Environmental Protection Administration¹, Institute of Environment and Resources (IER) and National Taiwan University. The preliminary program is shown in the following table:

【The 7th Expert Meeting】

About 35 experts from 13 countries from the Asia Pacific region are expected for the 7th Experts Meeting. The objectives of this meeting are; 1) to discuss the theme and modalities of SWAPI activities, and 2) to share knowledge and promote enhancement of the level of waste management and international cooperation in research and development in solid waste management.



¹ The English web site of Taiwan EPA is <http://www.epa.gov.tw/en/index.aspx>

	September 15 (Wed.)	September 16 (Thu.)	September 17 (Fri)
Morning	Expert Meeting (1 st Part)	International Conference • Management and technology for recycling, • Recycled material application and its management, • Waste management for low carbon Society (GHGs Reduction) • Success story of 3R and waste disposal	Expert Meeting (2 nd Part)
Afternoon	1 st Technical Tour • collector with chain-stores in urban area		2 nd Technical Tour • e-waste related treatment plants
Evening	Welcome Party	Banquet	Dinner

【The International Conference including Technical tours】

To enrich the outcome of SWAPI, an international conference on waste management including technical tours is scheduled during the meeting. Besides the SWAPI experts from Asia Pacific region, the key stakeholders from Taiwan such as governmental officials, representatives from industry with successful experiences and research institutes will be invited.

Four main issues planned for the mentioned conference are 1) Management and technology for recycling, 2) Recycled material application and its management, 3) Waste management for low carbon society (GHGs reduction) and 4) Success story of 3R and waste disposal.

Twenty oral presentations with discussions are expected. Regarding the visit tour, a well-known collector with chain-stores in an urban area and e-waste related treatment plants are being arranged. For promotion networking, social programs will be arranged in the evening.

【Important dates】

- Announcement of preliminary program: March. 2010
- Abstract submission deadline: May. 31, 2010

- Registration deadline: June. 31, 2010
- Full manuscript (i.e. presentation files) submission deadline: July. 31, 2010
- Announcement of final program: Aug. 2010

(Dr.-Ing Wen-Ling CHIU)

Outcome of the Inaugural Meeting of the Regional 3R Forum in Asia

The Inaugural Meeting of the Regional 3R Forum in Asia was held at Meguro Gajoen in Tokyo, Japan on November 11-12, 2009. The meeting was attended by government representatives of 15 Asian countries, international organizations and aid agencies, and various 3R experts.

The 15 Participating Countries (those underlined designate attendance by the Minister):

Japan, People's Republic of Bangladesh, Brunei Darussalam, Kingdom of Cambodia, People's Republic of China, Republic of Indonesia, Lao People's Democratic Republic, Malaysia, Mongolia, Union of Myanmar, Republic of the Philippines, Republic of Korea, Republic of Singapore, the Kingdom of Thailand, Socialist Republic of Viet Nam

Participating International Organizations

Asian Development Bank (ADB), Asian Institute of Technology (AIT), Asian Pacific Forum for Environment and Development (APFED), Asian Productivity Organization (APO), Basel Convention Coordinating Centre for Asia and the Pacific, China (BCRC China), German Technical Cooperation Agency (GTZ), Institute for Global Environmental Strategies (IGES), International Labour Organization (ILO), Japan International Cooperation Agency (JICA), Organization for Economic Co-operation and Development (OECD), Secretariat of the Basel Convention (SBC), United Nations Centre for Regional Development (UNCRD), United Nations Department of Economic and Social Affairs (UNDESA), United Nations Environment Programme (UNEP), United Nations Economic and Social

Commission for Asia and the Pacific (UNESCAP), United Nations Industrial Development Organization (UNIDO)

The Regional 3R Forum in Asia was suggested by Japan at the Inaugural East Asia Summit Environment Ministers Meeting held in Ha Noi, Viet Nam in October 2008 as a forum for various stakeholders such as governments, international organizations and donor organizations to participate and promote 3R in the developing countries of Asia, and subsequently approved by those countries.

The Inaugural Meeting of the Regional 3R Forum in Asia was hosted jointly by the Ministry of Environment-Japan and United Nations Centre for Regional Development (UNCRD).

At the meeting, participants engaged in stirring discussions on 3R issues and efforts in Asia, issues and aspects of different types of waste management, the status of countries' promotion to formulate national 3R strategies, international organizations' efforts in developing countries, and efforts by researchers, industry, local governments, NGOs and others.

Led by Nobumori Otani, Parliamentary Secretary of the Environment for Japan and Chairperson of the Meeting, consensus was reached among the participants concerning the adoption of the Tokyo 3R Statement - Towards the Establishment of the Regional 3R (Reduce, Reuse and Recycle) Forum in Asia.

Minister Kong of the Malaysian Ministry of Housing and Local Government proposed that his country be the host of the next meeting, which was welcomed by the participants.

Tokyo 3R Statement Highlights

Overriding Objectives of the Regional 3R Forum in Asia

- Facilitate high-level policy dialogues on 3R
- Facilitate cooperation with international organizations for implementing 3R projects in

various countries

- Share best practices, tools, technologies and policy instruments to promote the 3Rs
- Develop a multilayered network of stakeholders
- Proliferation of national 3R strategies

Long- and Short-term Priorities of the Regional 3R Forum in Asia

- Mainstreaming the 3Rs in the national development agenda
- Mobilizing financial resources in cooperation with bilateral and multilateral aid agencies for the implementation of 3R activities
- Developing human resources for waste management
- Promoting better understanding of the overall benefits of the 3Rs, including co-benefits
- Develop and implement effective policy mechanisms such as EPR (Extended Producer Responsibility)
- Develop industrial capacity for sound recycling, including the formation of eco-industrial zones
- Developing and transferring environmentally sound technologies for waste management and the 3Rs
- Information sharing and research networking focusing on the 3Rs

Initial Activities to be Implemented Under the Regional 3R Forum in Asia

- Hold high-level policy dialogue on a regular basis
- Facilitate implementation of 3R-related projects in close collaboration with donor agencies
- Collaborate with the existing 3R information/research networks
- Promote 3R business feasibility studies

involving both public and private sector financing and participation

- Conduct international collaborative, advanced policy-relevant scientific research on sound material cycles in Asia
- Capacity building through means such as international training programmes focusing on the 3Rs

Other

- Welcome other countries and organizations to join the Regional 3R Forum in Asia
- Establish a Subsidiary Expert Group under the Forum and provide with policy advice

For more detailed information on the meeting, please visit the website:

http://www.env.go.jp/recycle/3r/en/forum_asia/index.html



(Akira Nitta)

**Japan's ODA on Solid Waste Management:
The Project for Improvement of Solid Waste
Management for
the Municipality of Panama in the Republic of
Panama**

Project Background

This article introduces the technical cooperation project given in the title. The project was conducted by JICA (Japan International Cooperation Agency), an

institution responsible for implementing the policies of Overseas Development Aid of the Japanese Government.

Panama City is the capital of the Republic of Panama, located in Central America. The city has a population of around 900,000 and is located 9° north of the equator with tropical humidity and temperatures. The famous Panama Canal lies to the west of the city.

The Government of Panama appealed to the Government of Japan for assistance in the field of solid waste management (SWM) of Panama City. Responding to the request, JICA conducted a development study between November 2001 and March 2003 and formulated a master plan with the target year of 2015 aimed at improving SWM of Panama City. After the study, the Municipal Government of Panama City had been able to implement the master plan by themselves; however, they were behind schedule due to several obstacles. Therefore, the Government of Panama again requested Japanese assistance in implementing the master plan. Subsequently, this project was carried out over a 3-year period between January 2007 and December 2009. The author worked as a consultant involved in both the study and the project. This article is written from the author's point of view.

Project Design

The project was designed as follows:

1. Overall Goal

Sustainable solid waste management in the municipality of Panama is achieved.

2. Project Purpose

Solid waste services in the municipality of Panama are improved.

3. Expected Outputs

- 1) Collection service is improved.
- 2) Transfer and transport system is improved.
- 3) Collection vehicle management is improved.
- 4) Management of the final disposal system is strengthened.

5) Organizational operation is improved.

Results

The project schedule was heavily affected by political matters as it overlapped the general elections of Panama. In a politically charged environment, some of expected outputs were sufficiently achieved while others were partially achieved. As a whole, however, it could be said that the project purpose was accomplished to a certain extent. The following briefly explains the results.

- 1) Collection routes were redesigned for 14 *corregimientos*, small administrative units under the municipality of which there are 21. A system for recording waste collection operational data was established and operated.
- 2) Some activities regarding the transfer and transport system were cancelled because a construction site for the transfer station could not be obtained during the project term.
- 3) A computer system for recording vehicle maintenance was established and operated.
- 4) The operation of the final disposal site was contracted out to the private sector and improved.
- 5) Various meetings, workshops, seminars and trainings were held. Also, various manuals were prepared in order to improve the organizational operation of the Cleansing Department of the Municipality.

In the Future

At the final stage of the Project, in July 2009, the elections brought in a new municipal administration. The new administration also committed to tackling the remaining problems such as improvement of the collection service and construction of a transfer station. If such steps are achieved, the current situation in which waste is scattered at various areas in the city will soon be improved.

The new administration is considering bringing in the private sector to provide solid waste services; however,

the Municipality still has little capacity to control a contract with the private sector. It is expected that the municipality will obtain such capacity and make best use of the private sector in SWM.

Once the current problems are resolved, the next challenge will be to minimize waste. At the first stage in introducing minimization, the main obstacles will be establishing policies and preparing laws. Furthermore, concrete activities such as recycling and environmental education in communities in cooperation with NGOs and the private sector will be effective measures to increase citizens' consciousness of waste minimization.

Final Comments

With the assistance of Japan, the Municipality of Panama has prepared several materials that will improve SWM such as a general law and several specific laws, the master plan, various guides and manuals, and a number of computer systems. Furthermore, many officials have had opportunities to improve their know-how through the project activities, seminars, and training in Japan, Chile and the Dominican Republic.

The new municipal administration is, at present, headed towards the achievement of sustainable SWM, making use of the outcomes of Japanese assistance. The author believes that some concrete improvements in solid waste services of Panama City will be apparent in the near future.

(Ikuo Mori)

<p><Serial column> Starting Out with Lessons in Material Recovery</p>
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Five months have passed since I traveled to the other side of the world, from Japan to Argentina, as a senior overseas volunteer for JICA, the Japan International Cooperation Agency.

First, if you will excuse my amateur Argentinean

Spanish, allow me to say *Buen día*, which means “good morning”. People use this phrase to greet each other here until the lunch break, around 2 or 3 o’clock.

The photo is of wastebaskets located at rest points along the footpath at the Iguazu Falls, a World Natural Heritage Site. The national park has many monitors on patrol, so there is no litter in sight. I’ve been quite busy since my arrival, but I was finally able to take some time off and fulfill my dream to visit Iguazu Falls for one night.

My purpose here in Argentina is to promote the 3Rs—to reduce, reuse and recycle.

I’m affiliated with a foundation called *Generación Par*, which is run by a young man named Juan. The group receives funding from the Buenos Aires state and municipal governments to carry out projects such as consumer group assistance, and exploring sustainable tourism; seeking out volunteers in each case.

The group became involved with 3R after Juan returned from JICA training on waste and recycling in Japan. He wanted to spread the idea of 3R in Argentina as well and requested JICA to dispatch a senior volunteer—which is what brings me to Buenos Aires.

I am still at the research stage and have been going to the National Waste Division and Buenos Aires City Environment Department, talking with people there. Although I can not yet say I have complete and exact data, in my case, to do the work within this 2-year assignment, I feel I will have to start on things as I learn my way around and will correct any mistakes along the way.

Waste recycling in Buenos Aires is divided at the collection stage into two major categories. The first is recycling waste collected by private companies under contract by the city. The other is collection of materials by a network of individuals.

Material collection by these individuals can be characterized three ways. The first is a group that separates paper from garbage people put out in the

evening at collection points. The paper is stuffed in large, white bags and sold as they go along. The second is a group that takes the large, white bags full of used paper and puts them on a government subsidized train to be taken back and sold. The third group is part of the NGO *El Ceibo* supported by the city to collect materials door-to-door in a prescribed area where residents have agreed to cooperate.



(The majestic Iguazu Falls and wastebaskets to separate organic waste and glass, cans and paper)

The individuals who collect these materials are said to be a common sight in Buenos Aires, and are colloquially referred to as a “white train” picking up materials in the evening from collection points. However, the starting point is an area considered unsafe for most people as evening approaches, so I have never seen it with my own eyes.

Thus, I hoped to try the collection work for myself, and with the help of the NGO, I was able to do so. I spent half a day with a woman named Maria Julia (pictured), pushing the large, white bag on a cart through town; we went to each apartment and collected materials.

Maria collects materials in her own town, and has the job of managing other young material collectors and assigns collection areas to them.

About 10% of the apartments cooperate with the material collection, so it is not the entire neighborhood.

The residents are not charged anything to throw out their waste, so there is no benefit for them in cooperating; however, many do so simply out of recognition that they are supporting the livelihood of these individuals.



(Everyone in town knows Maria)

The city's dry waste and materials collected by an NGO participating with municipal authorities are taken to the Green Center (pictured) for separation, which is a city facility run by the same NGO.

Upon observance of the materials taken there, it should probably be counted as recyclable waste, but there are two types and the work area is in a separate building. One is the materials collected by individuals, as explained above. This waste is a jumble of paper, bottles, cans and so forth, and is good quality for recycling so it is relatively easily sorted there.

The other type is recyclable waste brought in by the company contracted by Buenos Aires City. This is a real problem as it requires paper, glass bottles, cans, PET bottles, plastics, etc. to be separated by hand. Unexpectedly, though, since it is not mixed with organic waste, there is hardly any odor.

At this point in my research of waste reduction and recycling in the City of Buenos Aires, my impression is that, historically, waste collection is seen as another countermeasure to unemployment by supporting those who are out of work, and recycling as a business

model is still yet underdeveloped. The state government has made a bold statement to follow a "zero waste" policy, so if municipal authorities are to take decisive steps toward waste reduction and recycling efforts as part of their disposal project, they will have to completely redirect their efforts. However, doing so does not necessarily steal away the jobs of those currently working.



(Green Center, managed by the NGO El Ceibo)

(Hisakazu Hirai)

**Material Cycles and Waste Management Research
Vol. 20, No.6 (November, 2009)**

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**Journal of the Japan Society of
Material Cycles and Waste Management
Vol. 20, No.6 (November, 2009)**

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Study on Medium and Low Volatile Organic halogens (MLVOX) for Operation Management at Municipal Waste Incinerators

Akito Takakura and Nobuhisa Watanabe

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Toru Nakajima, Seishu Tojo, Hitoraka Saito and Makoto Kato

Current Members of JSMCWM
as of February 28, 2010
(The figures in parenthesis indicate the difference
from January, 2010)

Regular Members	2,746	(0)
Students	252	(1)
Non-Japanese Member	86	(0)
Public Institutions	99	(0)
Supporting Members	126	(0)
Individuals of NPOs	6	(0)
Total	3,315	(1)

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Edited by: Prof. Yasushi Matsufuji, Chairman,
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Edited by: Tsunako Matsumoto, Yuko Aoki
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Buzen-ya Bldg. Shiba 5-1-9, Minato-Ku,
Tokyo 108-0014, Japan

Phone: (+81) 3-3769-5099

Fax: (+81) 3-3769-1492

<http://jsmcwm.or.jp/international/>

e-mail: international@jswme.gr.jp

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