



NEWSLETTER

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April 2012

JAPAN SOCIETY OF MATERIAL CYCLES AND WASTE MANAGEMENT

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Sharing Japanese Experiences on Disaster Waste Management with International Society

1. One year after the disaster

As far as disaster waste management is concerned, 2011 was one of the worst years in Japan's history because of the March 11 earthquake and tsunami. More than one year has passed since the catastrophic disaster, and Japan is still faced with the daunting task of dealing with low-level radioactive waste from the Fukushima nuclear power plant accident. "NIMBY syndrome" against accepting disaster waste from affected areas is a serious social problem. Consequently, Japanese government made an official statement to citizens to be sympathetic to such areas and to accept waste if the radioactive level is below a certain level. Many experts of JSMCWM are still struggling with how to deal with disaster waste management issues including such sociological ones.

2. Necessity for sharing information

Japanese disaster waste management is still in a very difficult situation, as mentioned, however, international society also suffers similar problems to which Japanese experiences can greatly contribute. Last year, Thailand suffered from large scale flooding, which caused devastating damage to private property and industry and left huge disaster waste problems. Compared with earthquakes, flooding causes greater damage, and more frequently, in the Asian monsoon region. Disaster preparedness and waste management systems are of high priority in such areas. Japanese and Asian experiences should be compared and lessons learned from each other.

3. International conferences as a forum to share

information

International conferences play an important role in sharing information on disaster experiences. After the March 11 quake, several important international meetings were held regarding solid waste management. ISWA 2011 World Conference was held in Daegu, Republic of Korea from October 17 to 20, 2011 under the auspices of the International Solid Waste Association and Korea Society of Waste Management. The main theme of the conference was "Waste to Green: Waste Management for Low Carbon & Green Growth Society". It included four keynote speeches, eight special sessions, about 300 papers of academic presentations, exhibition of about 150 booths, and business tours etc. One of the special sessions involved discussions on experiences of waste management following natural disasters such as floods and earthquakes. Presentations were given by American, Korean, Japanese and New Zealand speakers. Such international forums will enhance information exchange in the Asia-Pacific region.

As for SWAPI, the 9th meeting was concurrently held with the ISWA 2011 meeting, and the 10th meeting was held in Tottori, Japan from 20th to 22nd, February 2012. Disaster waste management was discussed extensively in these SWAPI meetings. In the forthcoming 11th meeting, to be held in Beijing from 5th to 7th September 2012, there is expected to be an opportunity to share information on the disaster waste management manual developed by Japanese experts. I hope that JSMCWM can continue to contribute to other countries through various activities to enhance information exchange on disaster waste management.

(Hidetoshi Kitawaki)

NIES Support for Appropriate Management of Waste Generated in 2011 Thailand Floods

The flooding that devastated large areas of Thailand from October 2011 to February 2012 also severely

damaged the capital Bangkok. The National Institute for Environmental Studies (NIES) dispatched experts once the flood waters began to recede in central Bangkok in early December (namely, when waste from the flooding started to become more of a problem) in response to a request from counterpart University in Thailand for assistance to ensure public health and flood waste management.

At the time, infectious diseases and mold were a concern because of the length of time the houses had been inundated by flood waters. Therefore, house cleaning was a priority for most residents. The government did not secure enough space for the waste and designated roadsides for people to bring their flooded furniture and home appliances, which occurred on an ad hoc basis (see picture below). The amount of waste generated by the flood was greater than expected, and subsequently obstructed traffic and vehicles involved in the recovery efforts.



Not only flood waste, but municipal waste was a major problem during the flooding. The waste itself was collected by boat, although only one of three waste transfer stations in Bangkok was not flooded. As such, waste quickly overwhelmed this facility, meaning it temporarily could not accept any waste. Under these circumstances, we visited waste treatment facilities, and attended sanitary control and waste separation events for citizens in Bangkok and interviews with the media. We made efforts to raise awareness through these activities. We also made some recommendations to Bangkok council such as the need to locate waste accumulation points far from residential areas, and to reduce the burden on waste treatment facilities and landfills by promoting reuse of waste, and also to organize the waste accumulation points so that residents are able to dump their waste separately. We appealed for cooperation of residents not to discharge waste on roadsides and vacant lots without permission, rather to separately discharge waste at the designated time and place.

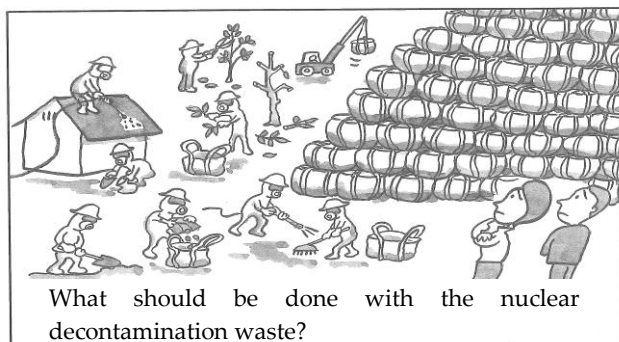
Despite having been afflicted by serious flooding five times over the last 100 years, Bangkok had not implemented flood countermeasures, further prolonging and complicating matters. We recommended taking actions for the flood disaster waste management plan to improve this situation, and held a workshop for experts and administrators (see picture below). At the workshop, we gained shared understanding of the issues such as the need for forward planning to ensure the waste management system has reserve capacity under normal conditions so that it can handle higher loads (both flood and regular municipal waste) in an emergency, and to come up with contingency plans for such situations. We also made draft countermeasure guidelines covering each stage from initial response to flooding waste through to its final disposal. All of the issues to be considered by the municipality were verified, such as evaluation of the situation of waste generated by the flooding, selection of candidate temporal waste accumulation points and storage facilities, and formulation of "emergency agreements" between the public and private sectors. Outside of Japan such emergency activated contracts, or standing agreement to be activated in case of an emergency, are still relatively uncommon, however, they can play a vital role in involving the private sector in disaster preparedness. The draft guideline organized the various issues, which need to be considered, particularly by the public sector, to contribute towards preparedness for flood waste, into: preparedness, initial response, and mid-to-long-term treatment.



At the workshop, there were comments such as “during the next flood” or “flood waste of next year”; however, such large scale flooding is highly unlikely to occur again in the next few years. Rather, it is essential to conduct fundamental countermeasure to mitigate the devastating consequences of future floods. Mega-scale typhoons, on the other hand, regularly strike Thailand, and may be affected by climate change. Building on its involvement in dealing with flood waste issues this time in Thailand, NIES will keep investigating

countermeasures in other areas and cities, and will work proactively to disseminate relevant information and best practices.

(Tomonori Ishigaki)



Ministry of Environment has estimated that decontamination activities will generate about 40,000,000m³ of waste.

10th SWAPI conference

The 10th SWAPI (Society of Solid Waste Management Experts in Asia and Pacific Islands) conference was held in Tottori, western Japan, and was hosted by JSMSWM and the Tottori Environmental University, from 20 to 22 Feb., 2012. The conference program consisted of: experts' meeting (1) and open lecture on Feb. 20th, research presentation and workshop (1) on 21st, and experts' meeting (2) and workshop (2) on 22nd. There were 18 experts participating in the experts' meeting from 11 countries, two from China, Korea (1), Thailand (2), Philippines (1), Vietnam (1), Cambodia (1), Indonesia (2), Malaysia (1), Nepal (1), India (1) and Japan (5). About 200 participated in the open lecture, 60 participated in the research presentations, and 50 joined the workshops.

In the experts' meeting, experts gave updates on their activities to build a network of solid waste management experts in their respective countries; with many reporting significant progress over this past year.

In the open lecture, there were speeches from Dr. Furusawa, President of Tottori Environmental Univ., Mr. Hirai, Governor of Tottori, Dr. Tanaka, SWAPI chairman, and four presentations each from both Asia-Pacific region and Tottori. Various local 3R activities were presented under the theme "3Rs in our town". More than 300 public participants eagerly listened as this kind of international conference is

unusual in Tottori. An exchange of opinions, facilitated by Dr. Magalang and Dr. Enri Damanhuri, was held after each presentation.

There were two workshop sessions. Workshop (1), about marine litter, consisted of six presentations, including two from Japan. After the presentations, Dr. Agamuthu (Malaysia) and Dr. Saito (Japan) facilitated discussions to promote research on this issue. Workshop (2) was about utilization of waste biomass. Both workshops confirmed the importance of information exchange through the expert networks in each field.

The open lecture was composed of six sessions. Session (1) and (2) were about research and case studies. There were nine presentations from Asia-Pacific and two from Japan. Session (3) was about recycling technology, with six presentations from Asia-Pacific and one from Japan. Session (4) was about disaster waste, with two presentations each from Asia-Pacific and from Japan. Session (5) was about organic waste, also with two presentations from both Asia-Pacific and Japan. Finally, session (6) was about waste treatment and evaluation, and consisted of four presentations from Asia-Pacific and two from Japan.

(Takashi Miyagawa)

Announcement

Conference on Korean Society of Waste Management

Date : May 10-11, 2012

Venue : Yonsei University Wonju Campus

Details: <http://www.kswm.or.kr/index.asp>

SWAPI and ICEMT

Date : Sep.5-7, 2012

Venue : Beijing

Details: <http://conf.bcrc.cn/english/>

APLAS Bali 2012

Date : Oct.8-12, 2012

Venue : Sanur Beach Hotel, Sanur - Bali

Details and Application: <http://www.aplasbali2012.org/>

Ministry of Environment (MOE) Announcement

MOE gave information on determining whether used home appliances are "waste" or "re-usable (second hand)".

<http://www.env.go.jp/press/press.php?serial=14992>

Material Cycles and Waste Management Research
Vol. 23, No.1 (January, 2012)

Preface

A Year after the Great Earthquake: JSMCWM and International Cooperation

Hidetoshi Kitawaki

Special issues: Special Issue of the Disaster Waste Treatment (1)

Quantitative Estimation of Disaster Debris for Operational Management after the Great East Japan Earthquake

Nagahisa Hirayama, Yoshiaki Kawata and Yoshihiro Okumura

A Summary of Strategies for Separation and Treatment of Disaster Waste Manual and Future Directions

Misuzu Asari, Toshiaki Yoshioka and Shin-ichi Sakai

Human Waste and Sewage Disposal Following the Great East Japan Earthquake and Tsunami: A Case Study of Ishinomaki City

Tomoko Okayama and Yuki Kamimoto

Management of the Disaster Waste Treatment by Sendai City

Toshiaki Yoshioka and Moriya Endo

Disposal Plan of Disaster Waste in Iwate Prefecture

Hideyuki Sasaki, Naoya Satta, Yasumasa Tojo and Takuya Suzuki

The Great East Japan Earthquake and Asbestos Emission Prevention

Atsushi Terazono, Kazuto Endo and Takashi Yamamoto

Effective Use of Information regarding Land Use and Location Facilities for Investigating Chemical Pollution in Tsunami Deposit

Masahiro Oguchi, Masahiro Osako, Hidetaka Takigami, Hironori Higashi, Kazuto Endo and Chiaki Mizutani

Report on the 23rd Annual Conference of the JSMCWM

Overview

Reports from Special Program

Reports from International Session

Reports from Technical Tour

Reports from Citizens' Exhibition

Reports from Planning Session by EXCO

Activity Reports from the Regional Chapters

Report on the Technical Seminar of the Kansai Regional Chapter

Activity Report of the Tohoku Regional Chapter

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Original Articles

Comparative Study on the Residents' Acceptance to Incineration and its Impact Factors between Japan and Korea: Result of the Questionnaire survey in Nagoya and Seoul

Tami Moon, Hiroaki Shirakawa and Hidefumi Imura

Cultivation of Bunashimeji Mushroom (*Hypsizugus marmoreus*) using Food Waste

Toshie Takechi, Koshiro Miura, Shinichi Furukawa and Akira Kitamura

Using Supercritical Water for the Recovery of Iron Oxides from Oil Mill Sludge Emitted by the Steel Industry

Makoto Akizuki and Yoshito Oshima

Functional Assessment of Waste Molten Slag as a Water Preservative

Ryuta Nakamura, Saku Kijima, Shiro Kiyoyama and Koyotaka Tokuraku

Ecotoxicological Assessment of Catalytic Heavy Metals Leaching from Waste Fuel Cells

Naoto Ota, Hidenobu shiroishi and Ryo Shoji

Note

Steel Pipe Sheet Pile Cutoff Walls with Leachate Collection System at Coastal Waste Landfill Sites

Shinya Inazumi, Makoto Kimura, Takuzo Kuzu and Masakatsu Kobayashi

Current Members of JSMCWM as of April 10, 2012	
Regular Members	2,324
Fellow	26
Senior	7
Honorary member	7
Students	180
Public Institutions	89
Supporting companies	122
NPOs	5
Individual	6
Regular member	25
Discount member	24
Total	2,820

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