JESC NEWS

No. 18 July 2017

I. Report of JESC Activities

3R Conferences for Asian Local Governments, organized by JESC

JESC has organized the 3R Conferences for Asian Local Governments since 2008, for purposes of information exchange and discussion for solving problems among Asian Local Governments taking charge of waste management. In the past conferences, various local governments from Asian countries have shared their 3R implementation progress and achievements.



[The 9th 3R Conference in FYJ^{*1} 2016] On 31st January 2017, the 9th 3R Conference was held at Hamamatsu City. The theme of the 8th and 9th Conferences was "3R Development by City-to-City Cooperation".

Four (4) Asian local governments, namely Bandung City (Indonesia), Kota Kinabalu City (Malaysia), Da Nang City (Vietnam), and Bangkok City (Thailand), and four (4) local governments from Japan, namely Hamamatsu City, Akita City, Osaka City, and Yokohama City, took part in the Conference. About one hundred thirty (130) people participated in the Conference as the audience. The result of the Conference was concluded as the "Hamamatsu Declaration".

[The 8th 3R Conference in FYJ 2015] The contents of the 8th 3R Conference in 2015 are as follows:

Date: 5th November 2015

Place: Yokkaichi City, Mie Prefecture

Participants: from six (6) Asian local governments and six (6) local governments in Japan



The 10th 3R Conference is currently being planned. Soon after deciding the details, we will publish them on our website. URL:

http://www.jesc.or.jp/activity/tabid/104/Default .aspx

(Makoto YAMAMOTO)

*1 "FYJ" is the abbreviation of "Fiscal Year of Japan"

Regional 3R Forums in Asia and the Pacific, entrusted by the Ministry of the Environment, Japan

The 6th and 7th Regional 3R Forums in Asia and the Pacific were conducted in FYJ 2015 and 2016.

The contents of each forum are summarized as follows:

[The 7th 3R Forum] Theme: "Advancing 3R and Resource Efficiency for the 2030 Agenda for Sustainable Development" Date: 4th to 6th November 2016 Place: Adelaide, Australia Organizers:

Australian Government Office of Green Industries SA Commonwealth Scientific and Industrial Research Organization (CSIRO) Ministry of the Environment, Japan United Nations Centre for Regional Development (UNCRD)

Audience: about 350 people from 41 countries



【The 6th 3R Forum】 Theme:

"3R as an Economic Industry

-Next Generation 3R Solutions for a Resource-Efficient Society and Sustainable Tourism Development in Asia and the Pacific-"

Date: 17th to 19th August 2015 Place: Male, Republic of Maldives Organizers: Ministry of Environment and Energy, Maldives

Ministry of Tourism, Maldives

Ministry of the Environment, Japan

United Nations Centre for Regional Development (UNCRD)

Pre-event: "MALDIVES 3R DAYS" Audience: about 300 people from 39 countries



You can see details of these forums on the website of UNCRD, shown as follows:

[The 7th 3R Forum] http://www.uncrd.or.jp/?page=view&nr=961&t ype=13&menu=198 [The 6th 3R Forum] http://www.uncrd.or.jp/index.php?page=view& nr=905&type=13&menu=375

(Makoto YAMAMOTO)

Expert Meetings on SWAPI, entrusted by the Ministry of the Environment, Japan

The 16th Expert Meetings on Solid Waste Management in Asia and Pacific Islands (SWAPI) was held as follows:

【The 16th Expert Meeting】 Date: 21st -23rd December 2016 Venue: HOTEL MIELPARQUE TOKYO



Number of Participants: 161 in total Program:

FYJ 2016	AM	РМ
Dec. 21 st	SWAPI Expert Meeting	Presentation of Research Projects - Projects for Establishing a Sound Material-Cycle Society -
Dec. 22 nd	Special Session I : Incineration as a Treatment of Waste	Special Session II : Segregation and 3R of Waste
Dec. 23 rd	Special Session III: Disaster Waste Management in Asia and Pacific Islands	SWAPI Expert Meeting

There were four (4) presentations in "Presentation of Research Projects" on 21st Dec. From 22nd Dec., there were three (3) sessions under the themes of "Incineration as a Treatment of Waste", "Segregation and 3R

of Waste" and "Disaster Waste Management in the Asia and Pacific Region".

(Kana NAKAMURA)

Training courses in Japan within the framework of "The Project for Fostering Japan's Recycling Industries and Promoting Their Environmental Business Overseas", entrusted by the Ministry of the Environment, Japan

The implementation of training courses for fostering Japanese industries and promoting their environmental business overseas has been entrusted to JESC by the Ministry of the Environment, Japan since 2012.

In JFY 2015, JESC implemented six (6) courses and forty-two (42) participants from ten (10) countries took part in the program. (Bangladesh, Indonesia, Kenya, Malaysia, the Maldives, Nepal, the Philippines, Russia, South Africa and Thailand)



Themes of the courses (2015) are shown as follows:

Recycling of Industrial Waste, Waste to Energy, Comprehensive Solid Waste Management, Waste Management and Recycling.

In JFY 2016, JESC implemented six (6)

courses and fifty-two (52) participants from twelve (12) countries took part in the program. (Bangladesh, Indonesia, Kenya, Malaysia, the Maldives, the Philippines, Russia, Thailand, Myanmar, Vietnam, Mozambique and Brazil)

Themes of the courses (2016) are shown as below:

Recycling of Industrial and Hazardous Waste, Waste to Energy, Solid Waste Management, Comprehensive Solid Waste Management

Each training course consists of a one-week program. In principle, participants arrive in Japan on Sunday. They take part in the training program from Monday to Friday, and return to their country on Saturday. Participants learn about the history of Japanese waste management and the latest technology in a limited time period. They also share information through a discussion program.

(Makoto YAMAMOTO)

Original Training Course for Waste Management for the Maldives, organized by JESC

In the Maldives, Waste Management Corporation Limited (WAMCO) was established in accordance with the Waste Management Act in 2016. Therefore, capacity building for the staff in the Ministry of Environment and Energy and in WAMCO becomes imperative in the Maldives.

Under such situation, Hon. Deputy Minister Mr. Ali Amir, Ministry of Environment and Energy, the Maldives, had requested JESC to organize an original training course for them to learn about Japanese Waste Management.

In response to this request, JESC decided to accept the participants from the Maldives and implemented the training course for one (1) week in July 2016.

General information about the training course is as follows:

Date: 11th to 15th July 2016 Venue: JESC Tokyo Office, etc. Number of Participants: 10 in total

8 participants from WAMCO and 2

participants from the Ministry of Environment and Energy, the Maldives

In this training course, the participants attended lectures and visited facilities such as a waste transfer station, incineration plant, final disposal site and recycling plant to comprehensively learn about waste management.



(Kana NAKAMURA)

JICA Knowledge Co-Creation Programs, entrusted by JICA

JESC was entrusted with the implementation of Knowledge Co-Creation Programs by JICA in JFYs 2015 and 2016.

[JFY 2015]

1) Comprehensive Waste Management

Date: 3rd July -7th August 2015 Number of Participants: 11 from 7 countries (Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Panama)

2) Water Environment Monitoring

Date: 7th September -16th October 2015 Number of Participants: 11 from 4 countries (Mexico, Sri Lanka, Myanmar, Vietnam)

<u>3) Capacity Building towards Air Quality</u> <u>Management</u>

Date: 19th October - 18th November 2015 Number of Participants: 10 from 6 countries (China, Ecuador, Egypt, Mexico, Mongolia, Vietnam)

<u>4) Planning of Waste Incineration and</u> <u>Energy Recovery for Municipal Solid Waste</u> <u>Management for Iran</u>

Date: 24th September - 16th October 2015 Number of Participants: 10 from Iran



(JFY 2016) 1) Comprehensive Waste Management Date: 8th June - 8th July 2016 Number of Participants: 12 from 6 countries, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Panama) 2) Capacity Building towards Air Quality Management

Date: 7th July -10th August 2016 Number of Participants: 10 from 5 countries (China, Egypt, Mexico, Mongolia, Sudan)



<u>3) Planning of Waste Incineration and</u> Energy Recovery for Municipal Solid Waste Management for Iran

Date: 20th October - 11th November 2016 Number of Participants: 11 from Iran

4) Water Environmental Management

Date: 20th February -1st March 2017 Number of Participants: 9 from China



5) Collection, Analysis and Dissemination of Data Regarding Solid Waste Management Date: 20th February - 3rd March 2017 Number of Participants: 12 from 7 countries (Indonesia, Mozambique, Nigeria, Palau, Papua New Guinea, the Philippines, Sudan)

(Makoto YAMAMOTO)

Activities of Japan Sanitation Consortium (JSC)

Project Formulation Survey for the promulgation of soil absorption system for toilets in India

In India, wastewater treatment facilities are not promulgated sufficiently and wastewater cannot be treated adequately. Therefore, raw water is contaminated rapidly and this causes diarrhea and other infectious diseases. In addition, the distinctive social class system, called the "Caste System", prevents public hygiene from being improved in India.

The Project aims to study the feasibility of the development of business for a soil absorption system for toilets and to contribute to the improvement of the public hygiene situation through the introduction of the TSS system, which is a Japanese individual waste water treatment system, to Rajasthan and Madhya Pradesh in India. In these administrative subdivisions, the improvement of the public hygiene situation is making extremely slow progress. The maintenance cost of the TSS system, which adopts stable treatment technology, is quite low and the introduction of this system is expected to improve the situation.



For the Project, four (4) organizations, including JESC, formed a Joint Venture. The Project Formulation Survey was implemented from 2016 in collaboration with a local NGO through the counterparts of the general governments with the support of JICA, and it is expected to be developed into an empirical survey in 2017.

(Akira MORITA)

II. Writing Contribution by Participants in JESC Activities

Odor Problem Management in Thailand

The subjectivity of the human response to odor problems means that it is often not easy objective to establish odor exposure standards. However, these difficulties must not preclude the use of objective measurements in assessing potential identifying nuisances and in control measures, where these can be justified and are appropriate. In addition, complaints about odor problems from industrial facilities, agricultural practices, wastewater treatment, solid waste disposal sites, household activities and commercial premises are all common. In the case of Thailand, the number of odor complaints is increasing year by year

Pollution according the Control to Department (PCD), Ministry of Natural Resources and Environment, which indicated that about 39% of complaints in 2014 (629 cases) were odor problems, followed by dust/smoke in an ambient environment (25%) and noise level nuisances in communities (17%), respectively. In fact, 56% of odor complaints were about the industrial sector. To investigate and control the offensive odor problem in Thailand, a sensory test method has been regulated under 2 main laws: the Industrial Law of 2005 and the National Environmental Quality Law of 2010, and about 100 panelists have been selected and

registered by the Air Quality and Noise Management Bureau, PCD. In 2012, PCD's Odor Laboratory was established and 2 mainly international standard methods have been applied: the Japanese Industrial Standards (JIS) and the American Society for Testing and Materials (ASTM). In addition, the Triangular Odor Bag method (TOB) is



Panelist Screening Test in PCD (1)



Odor Laboratory in PCD Triangular Odor

Editor's Comment

We have issued this JESC NEWS two (2) years after the previous issue.

Nowadays, solid waste management is a common and crucial issue among National/Local governments in the Asia-Pacific Region. JESC has organized/conducted International Conferences at the National, Local and Academic Society level.

In this JESC NEWS, we have JESC activities

commonly used to test odorants in PCD's laboratory.

(Ittipol Pawarmart / Kanjana Souysom - Air Quality and Noise Management Bureau, Pollution Control Department (PCD), Ministry of Natural Resources and Environment, Thailand)



Panelist Screening Test in PCD (2)



Bag Method testing

for these past two (2) years as well as a contribution written by past trainees of the JICA training program. We hope you can understand our activities through JESC NEWS and we would be very happy if you would comment on the contents of JESC NEWS or would like to make a contribution to JESC NEWS.

(Shigenobu OBAYASHI)

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