

# TRAINING AND DIALOGUE PROGRAMS

#### **GENERAL INFORMATION ON**

Waste Management Technique (B) 集団研修「廃棄物管理技術(B)」 JFY 2013

<Type: Solution Creation / 類型:課題解決促進型>

NO. J1300750 / ID. 1380120 From August 2013 to March 2014

Phases in Japan: From October 20, 2013 to December 21, 2013

This information pertains to one of the Training and Dialogue Programs of the Japan International Cooperation Agency (JICA), which shall be implemented as part of the Official Development Assistance of the Government of Japan based on bilateral agreement between both Governments.

## I. Concept

#### Background

Due to rapid population growth and expansion of residential area in urban areas, developing economies are facing issues in waste management: collection and transportation services are not able to cover all of the residential areas, and capacity of landfill sites are not enough to deal with increased / diversified wastes. Appropriate waste collection and transportation systems and landfill techniques are vital factors of waste management, and awareness of communities is indispensable for the systems and techniques to function. Therefore, to deal with waste management issues, improvement of systems / techniques and awareness raising should be done simultaneously.

Kitakyushu City, one of the largest industrial cities in Japan, has developed unique systems and techniques for waste management through its effort to dovetail economic development and pollution control. After introducing a new charge system for waste collection in 2006, the city has successfully reduced total amount of waste by 25% in a year. The result was fairly supported by the fact that the city has been promoted environmental education through programs and facilities to students, and conducted PR activities with communities upon introduction of the system.

Utilizing the experience of Kitakyushu City, this training program intends to provide participants practical waste management techniques, along with know-how of raising environmental consciousness of communities.

#### For what?

This program is designed to improve waste management technique from various points of views like landfill technology, waste reducing technology, recycling technology, citizens' awareness and legal system in participating countries and regions.

#### For whom?

This program is offered to engineers and governmental or municipal officers in charge of waste management processes (discharge/storage, collection, intermediate treatment and final disposal) and waste management system (administration, education, health and sanitation affairs etc.).

#### How?

Participants will learn techniques and know-how in the field through lectures, observations, practices, and discussions. At the end of the program, participants will be requested present an Action Plan, utilizing contents of the program.

# II. Description

#### 1. Title (J-No.)

Waste Management Technique (B) (J1300750)

#### 2. Period of program

**Duration of whole program:** August 2013 to March 2014 **Preliminary Phase:** August 2013 to October 2013

(in a participant's home country)

Core Phase in Japan: October 20, 2013 to December 21, 2013

Finalization Phase: December 2013 to March 2014

(in a participant's home country)

#### 3. Target Regions or Countries

Bosnia and Herzegovina, Jamaica, Kenya, Kosovo, Malawi, Maldives, Montenegro, Panama, Serbia, South Sudan, Sri Lanka, and Sudan

#### 4. Eligible / Target Organization

This program is designed for Governmental or Municipal organization engaged in waste management.

#### 5. Total Number of Participants

12 participants

#### 6. Language to be used in this program

English. All participants are requested to communicate and discuss in English.

#### 7. Program Objective

Participants will be able to formulate and propose action plans to improve waste management processes (discharge/storage, collection, intermediate treatment and final disposal) and waste management system (administration, education, health & sanitation affairs etc.), utilizing the program.

Needless to say, participants shall acquire knowledge and skills about the waste management system through the program arranged in the course.

#### 8. Overall Goal

Formulated action plans are implemented in each country and knowledge or skills gained through the course are introduced to the organization that participant belongs to.

#### 9. Expected Module Output and Contents

This program consists of the following components. Details on each component are given below:

# (1) Preliminary Phase in a participant's home country (August 2013 to October 2013)

Applying organizations are required to submit the Job Report, the Issue Analysis Sheet and the Special Report together with the application form for selection in Japan.

Objectives	Activities
Job Report,	Formulation and submission of the Job Report, the Issue
Questionnaire, IAS and	Analysis Sheet (IAS) and the Special Report in PPT format
Special Report	

## (2) Core Phase in Japan (October 20, 2013 to December 21, 2013)

Participants dispatched by the organizations attend the Program implemented in Japan.

Expected Module Output	Subjects	Methodology
1) Understanding sufficiently then being able to explain the historical process of environmental policy and waste management system, 3R (Reduce, reuse and recycle) in Japan.	<ol> <li>Sound material cycle society         (General concept and law system)</li> <li>Policies on domestic waste         management,</li> <li>Policies on industrial waste         management</li> <li>Visit to Minamata Disease Museum,         and Minamata city municipality</li> <li>Visit to illegal dumping site of         industrial waste and learn its         recovery procedure.</li> </ol>	Lecture and discussion
2) Understanding sufficiently then being able to explain waste treatment processes (recycling, composting and detoxifying) in Japan.	<ol> <li>Experience of collection and transportation of domestic waste</li> <li>Utilization of various kinds of industrial waste as recyclables</li> <li>Visit to business model "Eco Town" (industrial park for recycling business)</li> <li>Experience of compost making technology from domestic waste,</li> <li>Composting process from other waste like livestock dung and debris of food industries.</li> <li>Detoxifing technology of special industrial waste. Management and treatment of medical waste</li> </ol>	Lecture, observation and practice

3)	Understanding sufficiently then being able to explain the techniques and measures of final processing as incineration and disposal site in Japan.	<ol> <li>Visit to final disposal site</li> <li>Visit to incineration facility</li> <li>Technologies used in the leachate treatment</li> <li>Structure of final disposal site</li> <li>Maintenance and management of Fukuoka method final disposal site</li> </ol>	Lecture, observation and practice
4)	Understanding sufficiently then being able to explain concrete methods of environmental education, awareness raising and NGOs' activities in Japan.	<ol> <li>International cooperation by         Kitakyushu city in environmental         field</li> <li>Environmental education in         Kitakyushu city</li> <li>Visit some NGO who are working for         environmental education and         enhancement of citizens'         awareness</li> <li>Visit to disaster reduction and         human renovation institution</li> </ol>	Lecture, observation and practice
5)	Formulate and present the Action Plan to be executed in the organization the participant belongs to.	1. Workshop regarding IAS and Special Report 2. Mid-term discussion (among participants), guide to action plan report 3. Check and review of action plan 4. Presentation of action plan.	Discussion, report writing, and presentation

# (3) Finalization Phase in a participant's home country (December 2013 to March 2014)

Participating organizations produce final outputs by making use of results brought back by participants. This phase marks the end of the Program.

Modules	Activities
Implementation of the Action Plan will be recognized through final report	Proposals (Action Plans) formulated by participants are shared within their organizations, and discussed towards implementation.

<sup>\*</sup> Please refer to the attached schedule (Annex IV). The schedule is subject to minor changes.

#### **Conceptual Framework of the Program**

Referring to "Expected Module Output and Contents" of section **9**, Conceptual Framework of the Program is summarized and shown hereunder.

# Preliminary Phase Work to be done in a participant's home country

- 1. Job report preparation
- 2. Questionnaire reply
- 3. IAS preparation
- 4. Special report preparation

#### **Core Phase**

#### Study and work to be done in the training course in Japan

- 1. Job report presentation
- 2. Main training with different subjects programmed in the course
  - Module Output 1) History and present policy of waste management system in Japan
  - Module Output 2) Waste treatment and recycle technology.
  - Module Output 3) Landfill technology
  - Module Output 4) Environmental education and awareness.
- 3. Discussion and information sharing among participants
- 4. Completion of IAS and Special Report at the end of course.
- 5. Action Plan presentation

#### **Program Objective**

Participants will be able to formulate and propose action plans to improve waste management processes and system

#### **Overall Goal**

Formulated action plans are implemented in each country

#### **Finalization Phase**

#### Work to be done in a participant's home country

Action Plan formulated by participant and knowledge & skills gained in the course are shared within his/her organization toward implementation.

#### **Key Functions to Achieve**

- 1. Five Module Outputs in the course of training program (according to IAS)
  Participants shall try to understand all of the arranged program which are categorized into five module outputs as the achievement. Fulfill in IAS both at Preliminary Phase in a participant's home country and at Core Phase in Japan)
- 2. Specific issue that you are facing now, and expectation on this training course. (as Special Report)
  - (1) Report about Specific Issue during daily job and task in home country. (as the work of Preliminary Phase in a participant's home country) Keep in your mind that issue shall be those you strongly feel in the organization with your daily routine work, and not a kind fundamental issue like lack of fund, human resource or technology. Even a minor but serious issue that each participant tries to improve or wishes to improve is preferable.
  - (2) Show your idea that how to improve such issue or how to take actions for correct direction at this moment in your mind. (as the work of Preliminary Phase in a participant's home country) The idea might not be of pragmatic sense or not feasible, but we would like to know your idea before the training execution in Japan.
  - (3) Note the expected subject in the course which each participant feels referable for betterment of above issue. (as the work of Preliminary Phase in a participant's home country)
  - (4) Information and referable hints getting through the training course. (as the work of Core Phase in Japan) Even if prepared program does not directly contribute for issue resolution, some of program must give you referable hints or suggestion for issue resolution. Participants are requested to show it specifically in detail which subjects, what points and how to make it use for Action Plan etc.

#### 3. Action Plan Formation

Combined above two Key Functions, namely IAS and Special Report, Action Plan shall be made. Action Plan must be of pragmatic one and participant him/herself shall be concerned / involved and play a main role for execution.

## III. Conditions and Procedures for Application

#### 1. Expectations for the Participating Organizations

- (1) This program is designed primarily for organizations that intend to address specific issues or problems identified in their operation. Participating organizations are expected to use the project for those specific purposes.
- (2) This program is enriched with contents and facilitation schemes specially developed in collaboration with relevant prominent organizations in Japan. These special features enable the project to meet specific requirements of applying organizations and effectively facilitate them toward solutions for the issues and problems.
- (3) As this program is designed to facilitate organizations to come up with concrete solutions for their issues, participating organizations are expected to make due preparation before dispatching their participants to Japan by carrying out the activities of the Preliminary Phase described in section II.
- (4) Participating organizations are also expected to make the best use of the results achieved by their participants in Japan by carrying out the activities of the Finalization Phase described in section II.

#### 2. Nominee Qualifications

Applying Organizations are expected to select nominees who meet the following qualifications.

#### (1) Essential Qualifications

- Current Duties: Engineers in charge of waste management processes (discharge/storage, collection, intermediate treatment and final disposal) and officers related to the system of waste management (administration, education and health & sanitation affairs etc.)
- 2) Experience in the relevant field: have more than 3 years' experience in the field mentioned above (1).
- 3) Educational Background: be a graduate of university or equivalent level.
- 4) Language: have a competent command of spoken and written English which is equal to TOEFL CBT 250 or more (This workshop includes active participation in discussions, action plan (interim report) development, thus requires high competence of English ability. Please attach an official certificate for English ability such as TOEFL, TOEIC etc, if possible).
- 5) Age: be under 45 years of age.
- 6) Health: must be in good health, both physically and mentally, to participate in the Program in Japan.
  - \*Please note that this training course includes site visits and practices, therefore, a lot of physical exercises will be required.
- 7) Must not be serving any form of military service.

#### (2) Recommendable Qualifications

- 1) Expectations for the Participants: preferably be in relation with past or on-going JICA projects focusing on waste management.
- 2) Educational background: since majority of the curriculums are based on engineering or environmental subject, participants with engineering or

- environmental concerned backgrounds will be preferred.
- 3) Others: Participants are expected to be familiar with PC operation, as there will be many chances for report writing and presentations.

#### 3. Required Documents for Application

(1) **Application Form**: The Application Form is available at the respective country's JICA office or the Embassy of Japan.

#### \*Pregnancy

Pregnant participants are strictly requested to attach the following documents in order to minimize the risk for their health.

- letter of the participant's consent to bear economic and physical risks
- letter of consent from the participant's supervisor
- doctor's letter with agreement of his/her training participation.

Please ask National Staffs in JICA office for the details.

#### (2) Job Report, Questionnaire, Issue Analysis Sheet (IAS) and Special Report:

to be submitted with the application form. Fill in Annex I, II, III and IV of this General Information, and submit it along with the application form. Job Report, Questionnaire, IAS and Special Report are necessary documents for screening of an applicant. Each participant will be required to present his/her Job Report, IAS and Special Report in approx. 10 minutes in an early stage of the course. Visual materials such as PowerPoint and pictures may be helpful for your presentation if you bring them. When you use PowerPoint, it is preferable to use letters more than 24-point and not to use pictures on the background. An applicant should submit his/her those 4 documents with approval of his/her supervisor and those without approval of an applicant's supervisor is not Especially the purpose of an IAS is to logically organize accepted. relationships between challenges of an applicant's organization contents of fields to be covered in a training course. The sheet is to be utilized as a logical process control sheet to draw on improvement plans for challenges by filling out the sheet in phases from prior to a participant's arrival in Japan through the end of training. Participants accepted to the Course are requested to bring her/his IAS in electronic file when coming to Japan.

#### 4. Procedure for Application and Selection

#### (1) Submitting the Application Documents

Closing date for application to the JICA Center in JAPAN: <u>August 24, 2013</u>

Note: Please confirm the closing date set by the respective country's JICA office or <u>Embassy of Japan of your country to meet the final date in Japan.</u>

#### (2) Selection

After receiving the document(s) through due administrative procedures in the respective government, the respective country's JICA office (or Japanese Embassy) shall conduct screenings, and send the documents to the JICA Center in charge in Japan, which organizes this project. Selection shall be made by the JICA Center in consultation with the organizations concerned in Japan based on submitted documents according to qualifications. The organization with intention to utilize the opportunity of this program will be highly valued in the selection.

#### (3) Notice of Acceptance

Notification of results shall be made by the respective country's JICA office (or Embassy of Japan) to the respective Government by **not later than September 20**, **2013**.

#### 5. Conditions for Attendance

- (1) to follow the schedule of the program.
- (2) not to change the program subjects or extend the period of stay in Japan.
- (3) not to bring any members of their family.
- (4) to return to their home countries at the end of the program in accordance with the travel schedule designated by JICA.
- (5) to refrain from engaging in political activities, or any form of employment for profit or gain.
- (6) to observe Japanese laws and ordinances. If there is any violation of said laws and ordinances participants may be required to return part or all of the training expenditure depending on the severity of said violation.
- (7) to observe the rules and regulations of their place of accommodation and not to change the accommodation designated by JICA.
- (8) to participate in the whole program including a preparatory phase prior to arrival in Japan. Applying organizations, after receiving notice of acceptance for their nominees, are expected to carry out the actions described in the previous sections.

# IV. Administrative Arrangements

#### 1. Organizer

(1) Name: JICA Kyushu

(2) Contact: Training Program Division (kicttp@jica.go.jp)

#### 2. Implementing Partner

- (1) Name: Kitakyushu International Techno-cooperative Association (KITA)
- (2) URL: http://www.kita.or.jp/english/e index.html
- (3) Remark: KITA has carried out JICA training projects since 1980, and over the period from 1980 to 2011 has accepted a total of 6,207 participants. The courses cover environmental policies, promotion of a recycling-oriented society, production techniques and facility maintenance as well as projects related to the improvement of work training management ability, and in 2011 it offers a total of 39 courses.

#### 3. Travel to Japan

- (1) Air Ticket: The cost of a round-trip ticket between an international airport designated by JICA and Japan will be borne by JICA.
- (2) Travel Insurance: Term of Insurance: From arrival to departure in Japan. The traveling time outside Japan shall not be covered.

#### 4. Accommodation in Japan

JICA will arrange the following accommodations for the participants in Japan:

JICA Kyushu International Center (JICA KYUSHU)

Address: 2-1, Hirano 2-chome, Yahata Higashi-ku, Kitakyushu City, Fukuoka Prefecture 805-8505, Japan

TEL: +81-93-671-6311 FAX: +81-93-671-0979

(where "81" is the country code for Japan, and "93" is the local area code)

If there is no vacancy at JICA KYUSHU, JICA will arrange alternative accommodations for the participants. Please refer to facility guide of KIC at its URL, http://www.jica.go.jp/english/contact/domestic.html

#### 5. Expenses

The following expenses will be provided for the participants by JICA:

- (1) Allowances for accommodation, living expenses, outfit, and shipping
- (2) Expenses for study tours (basically in the form of train tickets.
- (3) Free medical care for participants who become ill after arriving in Japan (costs related to pre-existing illness, pregnancy, or dental treatment are <u>not</u> included)
- (4) Expenses for program implementation, including materials
  For more details, please see the brochure for participants titled "KENSHU-IN GUIDE
  BOOK," which will be given to the selected participants before (or at the time of) the
  pre-departure orientation.

#### 6. Pre-departure Orientation

A pre-departure orientation will be held at the respective country's JICA office (or Japanese Embassy), to provide participants with details on travel to Japan, conditions of the workshop, and other matters.

## V. Other Information

#### 1. Reports and Presentation

#### (1) Job Report, Issue Analysis Sheet (IAS) and Special Report

As written in the previous page, each nominee is required to submit his/her own Job Report, IAS and Special Report following the instruction in the previous sections. Participants will have a presentation of his/her Job Report up to 10 minutes at the earlier stage of the training program in order to share knowledge and background with other participants as well as the instructors. Visual materials such as Power Point and pictures may be helpful for your presentation if you bring them with you. When you use PowerPoint, it is preferable to use letters more than 24 points and not to use pictures on the background.

IAS and Special Report are referred and utilized throughout the course to derive a proper theme of Action Plan

#### (2) Action Plan

Accepted participants are required to formulate an action plan at the end of the training program in Japan to show your ideas and plans, which you carry out after return home, reflecting the knowledge and method acquired from the training. Each participant will have 10 minutes for presentation.

#### (3) Laptop

Participants are requested to bring their own laptops upon arrival in Japan. They will be useful to take notes, modify reports, and prepare for presentations.

#### 2. International Exchange Program with local communities

JICA encourages international exchange between JICA participants and local communities. Participants will have a chance to visit elementary schools or junior high schools. Therefore, participants are recommended to bring their national costumes or crafts and materials such as CDs and photographs that will make the exchange program more fruitful.

#### 3. Remarks

JICA training is implemented for the purpose of development of human resources who will promote the advancement of the countries, but not for the enrichment of individuals or private companies. Matters of a trade secret and patent techniques will remain confidential and inaccessible during the training.

## Waste Management Technique (B) (JFY 2013) Job Report

Name:
Country:
Organization and present post:
E-mail:
FAX:
Remarks 1: The Report should be typewritten in English (12-point font, appropriately spaced, A4 size paper) and total pages of the report should be limited to 3 pages (not including organization chart).  Remarks 2: Please don't forget checking the analysis sheet  Remarks 3: Each participant is required to have presentation in 10 minutes based on this Job Report at the early stage of the training for the purpose of making the training more effective and fruitful by comprehending the situations and problems of the participants each other.  Remarks 4: It is also requested to prepare a POWERPOINT for the presentation. When you use PowerPoint, it is preferable to use letters more than 24 points and not to use pictures on the background.  Remarks 5: Please itemize your answer and make them specific
<ul><li>1. Organization and main tasks (up to 1 page)</li><li>(1) Main tasks of the organization (Please include annual turnover or product amount, name of products and number of employees.)</li></ul>
(2) Organization chart Please draw a chart of your organization including the department (section) names with the number of staffs in it and mark where you are positioned (The chart should be attached and not be counted in this page limit).
(1) Brief description of your assignments
<ul><li>2. Existing challenges in your section (up to 1 page)</li><li>(1) Challenges you are facing in your section (Please describe concrete details)</li></ul>
(2) Countermeasures for these challenges
(3) Obstacles in the process of solving those challenges

#### 3. Expectations for the training course (up to 1 page)

- (1) Most interesting subjects or topics in this training course and reasons why do you pick up the subjects
- (2) How do you expect to apply skills and knowledge according the listed items in Curriculum after you return to your home country?
- (3) Other matters you are expecting for this course, if any.

  (Basically this training program is fixed and cannot be changed upon your request.)

### **Waste Management Technique (B)** (JFY 2013) Questionnaire

Name:						
Country:						
Organization and present post:						
E-mail:						
FAX:						
Remarks 1: The Questionnaire should be typewritten in English (12-point font, appaper), and total pages of the report should be limited to 2 pages.  Remarks 2: Please itemize your answers and make them specific.	prop	riate	ly spa	aced	, A4 :	size
Have you ever studied the following subjects? Please check either answer is "Yes", please fill in "Years" parentheses with your year respective items.						
respective items.						
respective items.	ΥE	S	N	<b>O</b>	Yea	ars
(1) Environmental science and engineering	(	)	(	)	(	)
(1) Environmental science and engineering	(	)	(	)	(	)
(1) Environmental science and engineering	(	)	(	)	(	)
(1) Environmental science and engineering	(	)	(	)	(	)
(1) Environmental science and engineering	( ( (	) ) )	( ( (	) ) )	( ( ( (	) ) )
(1) Environmental science and engineering	( ( (	) ) )	( ( (	) ) )	( ( ( (	) ) )
(1) Environmental science and engineering	( ( (	) ) )	( ( (	) ) )	( ( ( (	) ) )

- Volume of waste per day

- Capacity (volume and area)

- Rate of tipping fee

(2) Landfill Site

- Management (local government or private company)

- Method for measurement (or estimation) of volume of waste

- Distance from collecting spot to landfill site

- (3) Industrial Waste
  - Kinds/volume of industrial waste
  - Waste generator can be identified?
- (4) Population in the area which your organization is in charge of
- (5) The annual budget (U.S. dollar) for solid waste management
- (6) Solid waste management
  - a. Breakdown by weight of the annual solid waste materials and percentage

	Weight	(tons)	Perd	entage
- food	(	t)	(	%)
- paper	(	t)	(	%)
- plastic	(	t)	(	%)
- metals	(	t)	(	%)
- others	(	t)	(	%)

b. Breakdown of annual municipal solid waste budget and their percentage

	Budg	get (USD)	Perd	centage
- collection	(	USD)	(	%)
- construction of treatment/disposal facilities	(	USD)	(	%)
- disposal operation and management	(	USD)	(	%)
- others	(	USD)	(	%)

- (7) Compost plant
  - Method and capacity
- (8) Medical/Toxic waste treatment
  - Kind/volume of medical/toxic waste treatment
  - Treatment method
- (9) Environmental education
  - Method and target persons

#### Issue Analysis Sheet (IAS) and Special Report Guidelines

#### 1. What is IAS?

- (1) IAS is a tool to logically organize relationships between issues or problems that the nominee's organization is facing and the subjects to be covered in the training program in Japan.
- (2) IAS will help the nominee to clarify his/her issues or problems to be covered in each expected module output and to formulate solutions to them.
- (3) The sheet is to be utilized as a logical process control sheet to draw up improvement plans for the issues by filling out the sheet in phases from prior to the nominee's arrival in Japan through to the end of the training.
- (4) In addition, it is used for the course leader and lecturers to understand the issues that each participant is facing, and provide him/her with technical advice, useful references and solutions through the training program in Japan.

#### 2. How to fill out IAS?

- (1) Please refer to Item 2 "Purpose of Application" of Part A in the Application Form, and describe the issues or problems that your department is facing in column "A" and "B" in each "Expected Module Output" of the IAS. You will formulate practical solutions to these issues/problems through the training program in Japan. If you write cross-cutting issues related to two or more "Expected Module Outputs, you can enter them between the Outputs.
- (2) Please leave column C and D blank. These columns are filled out during the training program in Japan.
- (3) If your organization has many issues/problems to be solved, you can submit two or more sheets.

#### 3. Special Report

- (1) In addition to IAS, Special Report where direct information is to be written. Issue that participant is now facing and struggling for solution is requested to submit. To complete pragmatic sense of Action Plan which is helpful for solution of the specific issue, Special Report is quite referable to deepen the roots of such issue and relate the program arranged in the course.
- (2) Specific form of Special Report is attached in Annex IV hereinafter. Column A, B and C is to be filled in advance at Preliminary Phase, whereas Column D is filled out during the training program in Japan.

#### 3. Remarks

- (1) IAS and Special Report without approval of a nominee's superior is not accepted.
- (2) IAS is a key material for the screening of the nominees. The Japan side puts emphasize on its contents and then proceeds with the screening.
- (3) IAS and Special Report are utilized for orientation and consultation program at the beginning of the training course in Japan.

#### Annex III

# Waste Management Technique (B) (JFY2013)

	Issue Anal	ysis Sheet [Sample			
Expected Module Output	Subjects	A:Issues/Problems you or your organization are facing at work	B:Backgrounds that cause the issues/ problems	C:Measures taken in Japan	D:Proposal to your country
1) Being able to explain the historical process of environmental policy and waste management system in Japan.	<ul> <li>1.Sound material cycle society</li> <li>2.Cleaner production</li> <li>3.Minamata disease research center</li> <li>4.Experience of recycling business project</li> <li>5.Illigal dumping recovery at Teshima island, Kagawa pref.</li> </ul>	1-1 Collection / transport systems of waste have not been established	1-1 Laws and regulations for waste management have not been formulated 1-2 Communities' unwillingness to promote waste management		
2) Being able to explain waste treatment processes (collection, transportation, intermediate treatment, recycling, and composting) in Japan	1.Policies on domestic waste management 2.Collection and transportation of domestic waste 3.Refuse derived fuel factory and power plant in Omuta city 4.Composting of waste from livestock and its inspection techniques	(1) Describe in	Fill in the blanks under A and B according to course objectives.		
3) Being able to explain the techniques and measures of final disposal site in Japan.	1.Visit to final disposal site     2.Visit to incineration factory     3.Technologies used in the leachate treatment     4.Structure of final disposal site	(2) When there	t by just keywords. e is more than one or cause, describe		
4) Being able to explain concrete methods of environmental education and awareness raising.  Name of Superior Officer	1.International cooperation by     Kitakyushu city in environmental     field     2.Environmental education in     Kitakyushu city		(3) You don't D blanks. You will have during the trai make an Action on the final dates.	to fill in thes ning course on Plan Pres	e blanks and
Designation/Position of signature:	•		on the initial de	· <i>y</i> ·	

# Waste Management Technique (B) (JFY2013) Issue Analysis Sheet

		ie Alialysis Sileet			
Expected Module Output	Subjects	A:Issues/Problems you or your organization are facing at work	B:Backgrounds that cause the issues/ problems	C:Measures taken in Japan	D:Proposal to your country
1)	1.Sound material cycle society	lacing at work		Јарап	Country
,					
Being able to explain	<ul><li>2.Cleaner production</li><li>3.Minamata disease research</li></ul>				
the historical process of					
environmental policy	center				
and waste	4.Experience of recycling business				
management system in	project				
Japan.	5.Illigal dumping recovery at Teshima				
2)	island, Kagawa pref.  1.Policies on domestic waste				
2)					
Being able to explain	management				
waste treatment	2.Collection and transportation of				
processes (collection,	domestic waste				
transportation,	3. Refuse derived fuel factory and				
intermediate treatment,	power plant in Omuta city				
recycling, and	4.Composting of waste from livestock				
composting) in Japan	and its inspection techniques				
3)	1. Visit to final disposal site				
Being able to explain	2. Visit to incineration factory				
the techniques and	3. Technologies used in the leachate				
measures of final	treatment				
disposal site in Japan.	4.Structure of final disposal site				
4)	1.International cooperation by				
Being able to explain	Kitakyushu city in environmental				
concrete methods of	field				
environmental	2.Environmental education in				
education and	Kitakyushu city				
awareness raising.					

Name of Superior Officer:		
Designation/Position of superior officer	<u></u>	
Signature:		

## Annex IV

# Waste Management Technique (B) (JFY2013) Special Report

Column A	Column B	Column C	Column D
Specific Issue during daily job and task in home country.	How to solve such issue or what actions to be taken toward correct direction in your mind at this moment.	Expected subject or program in the course (shown on Annex V) that participant feels referable at this moment.	Information and referable hints getting through the training course in Japan

Name of Superior Officer:	
Designation/Position of superior officer:	
Signature:	

# Annex V Tentative Schedule

Date Scriedule			Subject
Oct	20	(Sun)	Arrival in Japan
	21	(Mon)	Briefing
	22	(Tue)	Program Orientation/General Orientation
	23	(Wed)	Cultural Exchange Program/ Course Orientation and IAS Workshop
	24	(Thu)	IAS Workshop
	25	(Fri)	Job Report presentation rehearsal/Job Report Presentation
	26	(Sat)	Holiday
	27	(Sun)	Holiday
	28	(Mon)	
	29	(Tue)	Policies on Domestic Waste Management, Policies on Industrial Waste Management
	30	(Wed)	Sound Material Cycle Society(Overall views)
	31	(Thu)	Sound Material Cycle Society(law and System)
Nov.	1	(Fri)	Exercise on Carton Box Compost (Lecture and Exercise), Visit to Final Disposal Site
	2	(Sat)	Holiday
	3	(Sun)	Holiday
	4	(Mon)	National Holiday
	5	(Tue)	Collection and Transportation of Domestic Waste, Visit to Incineration Facility
	6	(Wed)	(Study Trip) Refuse Derived Fuel Factory and Power Plant in Omuta City
	7	(Thu)	Minamata city municipality, Minamata Disease Museum
	8	(Fri)	Geo-Thermal Power Plant (Back to JICA KIC)
	9	(Sat)	Holiday
	10	(Sun)	Holiday
	11	(Mon)	Composting of Waste from Livestock and its Inspection Techniques, Experience of Recycling Business Project
	12	(Tue)	Experience of Recycling Business Project, Visit to "Eco Town" (Industrial Park for Recycling Business)
	13	(Wed)	Reuse Techniques of Sewage Sludge, Visit to Organic Agriculture Center
	14	(Thu)	Environmental Education in Kitakyushu City, Visit to Environment Museum
	15	(Fri)	Cleaner Production (How to think & how to execute)
	16	(Sat)	Holiday
	17	(Sun)	Holiday
	18	(Mon)	Intermediate discussion
	19	(Tue)	Cooperation among Industry, Government and Academia for Recycling,

20 (We	Visit to Hiagari Recycling Center for Waste Cans and Bottles		
	d) Technologies used in the Leachate Treatment		
21 (The			
22 (Fri)	, , , , , , , , , , , , , , , , , , , ,		
23 (Sat			
24 (Sui			
25 (Mo			
26 (Tue			
	Participants), Guide to Action Plan Report		
27 (We			
28 (The			
29 (Fri)	· · · · · · · · · · · · · · · · · · ·		
30 (Sat	) Holiday		
Dec. 1 (Sui	) Holiday		
2 (Mo	· <del>                                    </del>		
3 (Tue	Time and Motion Workshop		
4 (We			
5 (Th	Waste Management System with Composting Technology		
6 (Fri	Management and Treatment of Medical Waste		
7 (Sat	) Holiday		
8 (Sui	h) Holiday (Study Trip)		
9 (Mo	n) Illegal Dumping Recovery at Teshima Island, Kagawa Pref.		
10 (Tue	Environmental Activities by Food Industry, Visit to Disaster Reduction		
	and Human Renovation Institution		
11 (We	d) Visit to Mizuho farm (Back to JICA KIC)		
12 (Th	Composting Household Waste(Takakura Method)		
13 (Fri)	Introduction to Environment Administration of Local Government, Recycle Technology of Waste Oil		
14 (Sat			
15 (Sui			
16 (Mo			
17 (Tue			
	Manufacturer		
18 (We	d) Review of Action Plan, Visit to Cement Factory (Recycling Project)		
19 (Th	Solidification Technologies of Waste, Extraction of Non Ferrous Metal		
	from Waste		
20 (Fri)	Presentation of Action Plan, Closing Ceremony		
21 (Sat	) Leave Japan		

<sup>\*</sup>The schedule is subject to minor changes.

#### For Your Reference

#### **JICA and Capacity Development**

The key concept underpinning JICA operations since its establishment in 1974 has been the conviction that "capacity development" is central to the socioeconomic development of any country, regardless of the specific operational scheme one may be undertaking, i.e. expert assignments, development projects, development study projects, training programs, JOCV programs, etc.

Within this wide range of programs, Training Programs have long occupied an important place in JICA operations. Conducted in Japan, they provide partner countries with opportunities to acquire practical knowledge accumulated in Japanese society. Participants dispatched by partner countries might find useful knowledge and re-create their own knowledge for enhancement of their own capacity or that of the organization and society to which they belong.

About 460 pre-organized programs cover a wide range of professional fields, ranging from education, health, infrastructure, energy, trade and finance, to agriculture, rural development, gender mainstreaming, and environmental protection. A variety of programs and are being customized to address the specific needs of different target organizations, such as policy-making organizations, service provision organizations, as well as research and academic institutions. Some programs are organized to target a certain group of countries with similar developmental challenges.

#### **Japanese Development Experience**

Japan was the first non-Western country to successfully modernize its society and industrialize its economy. At the core of this process, which started more than 140 years ago, was the "adopt and adapt" concept by which a wide range of appropriate skills and knowledge have been imported from developed countries; these skills and knowledge have been adapted and/or improved using local skills, knowledge and initiatives. They finally became internalized in Japanese society to suit its local needs and conditions.

From engineering technology to production management methods, most of the know-how that has enabled Japan to become what it is today has emanated from this "adoption and adaptation" process, which, of course, has been accompanied by countless failures and errors behind the success stories. We presume that such experiences, both successful and unsuccessful, will be useful to our partners who are trying to address the challenges currently faced by developing countries.

However, it is rather challenging to share with our partners this whole body of Japan's developmental experience. This difficulty has to do, in part, with the challenge of explaining a body of "tacit knowledge," a type of knowledge that cannot fully be expressed in words or numbers. Adding to this difficulty are the social and cultural systems of Japan that vastly differ from those of other Western industrialized countries, and hence still remain unfamiliar to many partner countries. Simply stated, coming to Japan might be one way of overcoming such a cultural gap.

JICA, therefore, would like to invite as many leaders of partner countries as possible to come and visit us, to mingle with the Japanese people, and witness the advantages as well as the disadvantages of Japanese systems, so that integration of their findings might help them reach their developmental objectives.



#### CORRESPONDENCE

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