F.No. 34/05/2008-EO(F)

Government of India
Ministry of Personnel, P.G. and Pensions
(Department of Personnel and Training)

New Delhi, the 3 March, 2008.

Subject: A group training course in Operation and maintenance of Urban Water Supply System to be held in Japan from 19th May, 2008 to 26th July, 2008.

The undersigned is directed to state that the Japan International Cooperation Agency (JICA) under the Technical Cooperation Programme of the Government of Japan has invited applications for a group training course in Operation and maintenance of Urban Water Supply System to be held in Japan from 19th May, 2008 to 26th July, 2008. The details of the course and the application form may be drawn from Ministry of Personnel, Public Grievances and Pensions website (www.persmin.nic.in).

- 2. This Group Training Course is particularly meant for engineers responsible for operation and maintenance of urban water supply schemes/authorities using surface water resources and be currently engaged in urban water supply field offices, such as water treatment plants, operation and maintenance effices with five (5) years' practical experience in that area. He/She should be under fifty five (55) years of age and should be a graduate from technical colleges or authorized water training institutes, or have equivalent qualifications. He/She should be in good health, both physically and mentally and not be serving in the military. The candidate should have sufficient command of written and spoken English.
- 3. This training course is designed to support developing countries to formulate action plans to solve issues on urban water supply system by introducing techniques for the operation and maintenance of water supply systems using surface water resources.
- 4. The fellowship award covers a Round-trip air ticket between an international airport designated by the JICA and Japan, Allowances for (accommodation, living expenses and shipping), expenses for JICA study tours, free medical care for participants who may fall ill after reaching Japan. The participants are not allowed to take any family member during the training course.
- 5. The nomination details should be submitted in the JICA's prescribed proforma(A2A3) duly authenticated by the Department concerned. The application forms should be routed through the concerned Ministries/Departments/State Governments and it should also be certified by the Competent Authority that the institution is a Government institution.
- 6. The applications should reach this Department before 20th March, 2008. Nominations received after the prescribed date will not be considered. The circular inviting applications for training course is available on this Department's website (www.persmin.nic.in).

(Trishaljit Sethi) Director

1. M/o Water Resources, Shram Shakti Bhavan, New Delhi-110001.

M/o Urban Development & Poverty Alleviation, Maulana Azad Road, New Delhi-110001

3. All the State Governments/Union Territories.

Director(Technical), NIC with the request to post the circular along with the JICA's circular and the enclosed proformas on the Department's website.



For a better tomorrow for all.

Japan International Cooperation Agency

(Government of Japan)

No. 3/GT-CP/2008

26th February, 2008

Dear Ms. Arun Prabha,

A. Group Training Course in Operation and maintenance of Urban Water Supply System will be held in Japan from 19th May, 2008 to 26th July, 2008 under the Technical Cooperation Programme of the Government of Japan.

We are forwarding herewith six copies of the General Information Booklet on the above offer. It is requested that the following documents of the selected candidate may please be submitted to this office by 28th March, 2008:-

- (1) The Nomination Form A2A3 together with the medical history questionnaire,
- (2) The desired Country Report
- (3) The filled in Questionnaire

Further details are available in the General Information Booklet. It may be noted that the completed Country Report and Questionnaire are essential for screening of applications.

It is further informed that 10 slots are available globally for the above course and it would be much appreciated if you could take further necessary action and submit the nomination(s) of suitable candidate(s) to this office by the designated date.

With regards,

Yours sincerely,

Deputy Resident Representative

Encl: As stated above.

Ms. Arun Prabha Under Secretary (PMU and Trg.) Department of Economic Affairs Ministry of Finance New Delhi

Copy to:-

Mr. R.K. Kharb, Section Officer, Department of Personnel and Training, Ministry of Personnel, Public Grievances and Pensions, North Block, New Delhi.

JICA India Office 3A, (3rd Floor), Lotus Towers, Community Centre, New Friends Colony, New Delhi-110025. INDIA

TEL: +91-11-41672580~5 FAX: +91-11-41672586 URL: http://www.jica.go.jp/



TRAINING AND DIALOGUE PROGRAMS

GENERAL INFORMATION ON

GROUP TRAINING ON OPERATION AND MAINTENANCE OF URBAN WATER SUPPLY SYSTEM

集団研修「都市上水道維持管理」 JFY 2008

<Type: Solution Creation Program / 類型:課題解決型 > NO. J08-00696

From April 2008 to February 2009

Phases in Japan: From May. 19th, 2008 to Jul. 26^{trh} 2008

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.

Preface

The Japanese Government extends official development assistance (ODA) to developing countries to support their self-help efforts that will lead to economic progress and a better life for their citizens of those countries.

Since its foundation in 1974, the Japan International Cooperation Agency (JICA) has implemented Japan's technical cooperation under the ODA program.

As of October 2003, JICA has transformed itself into an "Independent Administrative Institution", a new form of governmental agency. Important changes include closer attention paid to grass-roots level cooperation, peace-building, cost performance, faster decision-making, and accountability. JICA continues to be an official agency responsible for implementing ODA programs, in particular technical cooperation, on behalf of the Government of Japan.

JICA's programs include Technical Cooperation Projects, Dispatch of Technical Cooperation Experts, Technical Training of Overseas Participants, Development Studies, Dispatch of Japanese Volunteers, Disaster Relief and Grant Aid, etc.

Technical Training of Overseas Participants applies to key administrators, technicians and researchers in developing countries and areas. It includes the transfer of knowledge and technologies necessary for development through training conducted both at home and abroad. This is one of the most fundamental "human resource development" programs implemented by JICA.

Those who have received such technical training are now contributing in many ways to the development of their home countries and areas. Many have gone on to become national leaders, top-ranking administrators and researchers while others are now imparting their acquired skills nationwide.

Course Background

This training course is designed to support developing countries to formulate action plans to solve issues on urban water supply system by introducing techniques for the operation and maintenance of water supply systems using surface water resources.

Osaka Municipal Waterworks Bureau

The city of Osaka is situated at the heart of the Japanese archipelago. It has been developed over the centuries as a center of Japanese political and economic life. The city's water supply system became only the fourth modern supply system in the country when it was inaugurated in November 1895. Numerous expansion programs in line with the growth of the city's area and population have since brought the system's supply capacity up to its current daily level of 2.43 million m³. The system's organizational structure includes a head office, branch offices (customer service centers, water rate collection centers, pipe laying, maintenance units, etc.), water treatment works, and engineering offices (for maintenance and new construction projects), giving a total employee figure of approximately 2,180.

I. ESSENTIAL FACTS

COURSE TITLE	Operation and Maintenance of Urban Water Supply Systems	
DURATION	May 19, 2008~ July 26, 2008	
DEADLINE FOR APPLICATION	March 28, 2008 *for acceptance at the JICA office or the Embassy of Japan	
NUMBER OF PARTICIPANTS	10	
LANGUAGE	English	
TARGET GROUP	Engineers responsible for operation and maintenance of urban water supply schemes/authorities using surface water resources	
TRAINING TYPE	Solution Creation Program All the participants and their organizations are required to formulate action plans to solve issues on urban water supply system or related field.	
COURSE OUTCOME	Action plans to solve issues on urban water supply system in participants' respective organizations will be formulated by participants' organizations with utilizing obtained skills and knowledge in the training in Japan.	
COURSE OUTPUT	After the completion of this training course in Japan participants will be able to draft feasible action plans to solve issues on urban water supply system in participants' respective organizations, with utilizing lessons learnt from the following technologies used in Japan, which will be introduced in the training.	
	 Maintenance technologies of pipelines and service installations. Operation of intake, treatment and distribution facilities. Water treatment and water quality control 	
TRAINING INSTITUTION	Osaka Municipal Waterworks Bureau Address: 1-14-16 Nanko-Kita, Suminoe-ku, Osaka 559-8558, Japan Tel.: 81(*)-6(**)-6616-5406 Fax.: 81(*)-6(**)-6616-5409 URL: http://www.water.city.osaka.jp/english/index.html	
* Accommodations for the whole period of the training are to be arranged by JICA	JICA Osaka Address: 25-1 Nishi-Toyokawa-cho, Ibaraki-shi, Osaka 567-0058,	

ALLOWANCES & EXPENSES

The Government of Japan provides the following allowances and covers the following expenses through JICA in accordance with relevant laws and regulations.

Details

Round-trip air ticket between an international airport designated by JICA and Japan, accommodation allowance, living allowance, outfit allowance, shipping allowance, expenses for JICA study tours, free medical care for participants who become ill after arrival in Japan (costs related to preexisting illness, pregnancy and dental treatment are not included), etc.

(*) country code of Japan (**) area code

(Note) *Information on this booklet is available on our website. (http://www.jica.go.jp/worldmap/english.html#osaka)

II. CURRICULUM (tentative)

(Before coming to Japan)

Issue analysis in applying organizations

Applying organizations are required to analyze issues in their organizations and make clear objectives to participate in the training.

*The organizations are also required to make a commitment to formulate and implement the action plan after completion of the training in Japan.



(During stay in Japan)

Issue Analysis Workshop

Inception Report Presentation

- · Issues in your organizations
- · What you expect to learn in the training course



General Information on Water Supply Systems

- Waterworks in Japan
- · Water supply systems of Osaka City

Water Quality Control

Operation and Maintenance of Intake, Treatment and Distribution Facilities

Maintenance of Mechanical, Electrical and Measuring Instruments

· For Preparation of Action Plan

Discussion on Purification Related Issues



Maintenance of Pipelines

Maintenance

Discussion on Service Installation and Distribution Issues

• For Preparation of Action Plan



Practical Training on Maintenance of Service Installations and distributions



Draft of Action Plan

Make drafts of feasible action with utilizing lessons learnt in the training, which must be finalized and authorized by participants' organizations after the training.



(after the training in Japan)

Finalization and authorization of the action plan by participants' organization

*Participants' organizations are required to submit the finalized action plans by February, 2009.

Curriculum for Training Program in 2007 (reference only)

	Subject	Type *	Object
1. G	eneral Information on Water Supply Systems		*To understand history, scheme and management of
	1. Waterworks in Japan	L	water supply system of Osaka City and Japan.
	2. Outline of water supply system of Osaka City	L	*To understand the outline of
	3. Outline of Japan Waterworks Association	L	Japan Waterworks Association.
	4. Management of water supply service of Osaka City	L	
	5. Disaster measures of Osaka City	L	
	Operation and Maintenance of Intake, Treatment and Distrib	ution	*To acquire/improve operation technologies of
Faci	1. Outline of purification plant	L	intake, treatment and
	2. Outline of purification facilities (observation)	0	distribution facilities.
	Outline of purification facilities (sedimentation, advanced system and filtration, etc)	L	
	4. Operation of purification facilities	P	
	5. Operation of distribution facilities	L	
	6. Operation of intake, treatment and distribution facilities	L	
	7. Observation of distribution plant	О	
3. W	ater Quality Control		*To acquire/improve water quality control technologies,
	1. Water quality control (basics)	L	iron and manganese removal technologies, and
	2. Water quality control (method)	L	other basic technologies for purification.
	3. Water quality control (chlorination theory)	L	
	4. Study of accident cases related to water quality control	L	
	5. Outline of conventional water treatment	L	
4. M	aintenance of mechanical, electrical and measuring instruments		*To acquire/improve maintenance technologies of
	1. Maintenance of mechanical instruments	L	mechanical, electrical and measuring instruments of
	2. Maintenance of mechanical instruments	P	intake, purification and
	3. Maintenance of electrical and measuring instruments	L	distribution facilities.
	4. Maintenance of electrical and measuring instruments	P	
5. M	aintenance of Pipelines	*To acquire/improve maintenance technologies of	
	1. Maintenance of pipelines (outline)	L	pipelines.
	2. Maintenance of pipelines (detection of underground leakage)	L	
	3. Maintenance of pipelines (detection of underground leakage)	P	
	4. Maintenance of pipelines (operation of leakage detection equipment)	P	
	5. Maintenance of pipelines (attachments and joints)	P	

Subject	Type *	Object	
6. Maintenance of pipelines (piping practice)	P		
7. Maintenance of pipelines (management of drawings and data)	L		
8. Maintenance of pipelines (planning of leakage detection work)	L		
6. Maintenance of Service Installations		*To acquire/improve maintenance technologies of	
1. Maintenance of service installations (outline)	L	service installations.	
2. Maintenance of service installations (water meters)	P		
3. Outline of service activities	L		
4. Maintenance of service installations (activities of service offices)	P		
5. Maintenance of service installations (maintenance technology)	L		
6. Maintenance of service installations (piping and branching)	P		
7. Practical Training		*To deepen understanding of service installations and	
Maintenance of service installations and distribution	P	distribution.	
8. Discussions			
1. Country report presentation	D	*To understand the current situation of participants' countries and the expectations for the training.	
2. Preparation for country report presentation		8	
3. Discussion (purification related issues)		*To supplement the	
4. Discussion (service installation and distribution related issues)	D	knowledge and technology for preparation of action plan	
5. Action plan presentation	D	*To exchange opinions about your action plan to make it more practical one. *To deepen understanding of	
9.Visits		water resource and water	
1. Water resource (Lake Biwa), Lake Biwa Museum	О	supply related facilities,. materials for water supply	
2. Yokogawa Museum	О		
3. Osaka Aquarium Kaiyukan	О		
4. Kubota Corporation	О		
5. Taisei Kiko Co., Ltd.	О		
6. Kobe Water Science Museum	О		
7. Library of Kyoto Municipal Waterworks Bureau	О		
8. Sekisui Chemical Co., Ltd.	О		
10.Study Trip	·	*To understand water supply service in other city, and its	
1.Hiroshima Municipal Waterworks Bureau	T	history and culture. *To deepen understanding of	
2. JFE Engineering Corporation	T	manufacturing of pipelines	
* Type of Class	1	•	

III. REQUIREMENT FOR APPLICATION

Applicants should:

- (1) be nominated by their government in accordance with the procedures mentioned in section IV.
- (2) be engineers responsible for operation and maintenance of urban water supply schemes/authorities using surface water resources,
- (3) be currently engaged in urban water supply field offices, such as water treatment plants, operation and maintenance offices, and have at least five (5) years' practical experience in that area.
- (4) be graduates from technical colleges or authorized water training institutes, or have equivalent qualifications,
- (5) have a sufficient command of written and spoken English,
- (6) be under 55 years of age,
- (7) be in good health, both physically and mentally, to undergo the training, and
- (8) not be serving in the military.

ATTENTION

Participants are required:

- (1) not to change course subjects or extend the course period,
- (2) not to bring any members of their family,
- (3) to return to their home country at the end of their course according to the international travel schedule designated by JICA,
- (4) to refrain from engaging in political activities or any form of employment for profit or gain, and
- (5) to observe the rules and regulations of their place of accommodation and not to change accommodations designated by JICA.

IV. PROCEDURE FOR APPLICATION

- 1. A government desiring to nominate applicants for the course should fill in and forward one (1) original and three (3) copies of the application form (Form A2A3) for each applicant and forward them to the JICA office (or the Embassy of Japan) by March 18, 2008.
- 2. The JICA office (or the Embassy of Japan) will inform the applying government whether or not the nominee's application has been accepted **no later than April 18, 2008**.

3. COUNTRY REPORT (ANNEX I)

Applicants are requested to prepare Country Report on the present situation of water supply systems in their countries/local government. This report is to be used as material for screening of candidates during selection, as well as for presentations to be made by each participant and as reference material for comparative studies during the course.

The Country Report should be typed in English in accordance with the format indicated in ANNEX I and submitted with the Form A2A3

Note: In the course of training, participants will make a presentation on the Country Report. It is advisable for participants to prepare audio-visual aids such as slides, pictures, maps, PowerPoint, etc., for more efficient presentation.

4. QUESTIONNAIRE (ANNEX II)

Applicants are requested to fill in the questionnaire attached in and submit it with the Form A2A3. It should be filled out completely. In cases where information is not available or is unknown, fill in the space with N/A.

Applications without a duly completed Country Report and Questionnaire shall not be accepted.

*E-format (Microsoft Excel) of COUNTRY REPORT and QUESTIONNAIRE are available on our website (http://www.jica.go.jp/branch/osic/english/training/index.html).

V. OTHER MATTERS

1. Pre-Departure Orientation

Before coming to Japan, pre-departure orientation is held at the JICA office or the Embassy of Japan to provide participants with details of travel to Japan, conditions of training and other necessary matters.

An introduction video "TRAINING IN JAPAN" is shown and a brochure "GUIDE TO TRAINING IN JAPAN" is provided to each participant at the time of the orientation. Japanese learning material "SIMPLE CONVERSATION IN JAPANESE" (textbook and cassette tape) is also provided to participants.

- 2. Participants are strictly advised to visit the JICA counter upon arrival at Kansai International Airport, the designated airport of arrival in Japan. The JICA Counter is located at the south-end corner of the arrival hall on the 1st floor. A JICA-designated Travel Agent will provide participants with instructions and tickets to get to their designated accommodations.
- 3. Allowances, such as for accommodation, living, clothing, and shipping, will be paid on the

second day of the designated course schedule, which is May 20, 2008. Those participants who will arrive in Japan before that day are kindly advised to bring the necessary funds to cover expenses as JICA only provides accommodation facilities.

4. General Orientation for Introduction to Japan

Participants are scheduled to participate in a 2-day orientation program offered by JICA Osaka for the purpose of providing participants with general information on key points regarding Japan and with the tools needed for adapting to life and training in Japan. Basic information on Japanese values, behavior and customs, as well as economic and social institutions are to be provided.

5. Japanese language course

An intensive Japanese language course will be conducted prior to the technical training for one (1) week (25 hours). A general Japanese language course is organized in the evening for the participants who are interested in learning the language

6. Certificate

A certificate will be awarded by JICA to participants who successfully complete the course.

VI. DEVELOPMENT EDUCATION PROGRAM

The purposes of the International Cooperation Program of JICA are not only to share Japanese knowledge, experience and ideas with participating countries, but also to promote mutual understanding between participating countries and Japan. The Japanese government recognizes the importance of citizen participation in its International Cooperation Program and has thus recently placed a greater emphasis on this aspect of the Program. With this objective, JICA collaborates with schools and local governments as well as various kinds of community-based organizations to expose the members to the rich heritages of foreign cultures represented by participants, as a precious first step to promote international exchange and cooperation.

To provide a stronger foundation for these activities, JICA has been conducting a Development Education Program for Japanese citizens in all training courses and seminars it offers. Participants are encouraged to bring any materials necessary to introduce the cultural heritages and/or natural histories of their own countries, such as national costumes, musical instruments, works of art, photographs, and so on. This program is scheduled to start on the first Thursday following the participants' arrival in Japan.

ANNEX I

Operation and Maintenance of Urban Water Supply Systems

Inception Report

Name :
Country:
 General information on your city/town (geographical features, total population, social and economic status, climate, etc.)
2. Name of organization: (organization chart, number of employees, etc)
3. Your present position
 Technical issues your organization has and subjects your organization particularly requires you to learn in the training course. (Please have a <u>discussion</u> in your organization and fill the chart on the next page with the <u>consensus</u> of your organization.)

	technical problems	measures currently being taken	your expectation for the training
*organization			
*water resource *water pollution *water quality control			
*water treatment facilities			
*mechanical and electrical facilities *measuring equipment			
*pipelines			
*service Installation			

Questionnaire
on current situation of water supply system in your town or city

(1)	Information on the organization		
A.	Year of water supply inauguration		
B.	Served population		
C.	Water supply capacity	m³/day	
D.	Supply type	1.gravity system	
		2.pump system	
E.	Management system	1.national government	
	,	2.local government	
		3.public corporation	
		4.private enterprise	
		5.other()	
F.	Accounting system	1.government accounting	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.enterprise accounting (independent)	
G.	Main items of annual income and	income (macpendent)	
U.	expenditure and their percentage	1. (%)	
	expenditure and their percentage	2. (%)	
		expenditure (70)	
		1. (%)	
		2. (%)	
H.	Main source of finance for water resource	1.	
11.	development and facility maintenance cost	2.	
	development and facility maintenance cost	2.	
I.	Water tariff	(Please attach water tariffs.)	
J.	Outline of metering and water bill	(1 lease attach water tarms.)	
٦.	collection		
	Concention		
(2)	Water Resource Development		
A.	Water resource	1.surface water (river/lake/spring)	
A.	water resource	2.ground water (shallow well/deep well)	
		3.dam	
		4. seawater desalination	
D	Water resource development L. d.		
В.	Water resource development body	1.national government	
		2.local government	
		3.public corporation	
		4.private enterprise	
		5.other(
C.	State subsidies for water resource	\square 1.yes \square 2.no	

(3)	ronulion of water resource and water quanty of	Control incasures
A.	Water quality-related problems	1. 2.
		3.
B.	Main sources of water pollution	1.household wastewater
		2.industrial wastewater
		3.livestock wastewater
		4.other (
C.	Water quality control measure	1.introduction of sewage system
	The second secon	2.separate wastewater treatment
		3.wastewater quality regulations
		4.protection of water resource (such as
		prohibiting entry or waste discharge to
		water resource areas)
		5.other (
)
(4)	Intake Facilities	
A.	Intake volume	\square 1.surface water m^3/day
		\square 2.ground water m^3 /day
		\square 3.dam m^3 /day
		$\boxed{4.\text{other}}$ 4.other $\boxed{\text{m}^3/\text{day}}$
B.	Intake facilities	
	1) Intake type	☐1.intake tower ☐2.intake weir
		☐3.intake gate ☐4.pump
		\square 5.other (
	2) Raw water main	1.intake pipe 2.intake conduit
		3.other (
	3) Grit chamber	1.exist 2.not exist
		•
(5)	Treatment Facilities	
A.	Number of treatment plants	
B.	Capacity	m³/day
C.	Sedimentation type	☐1.high rate coagulo-sedimentation
		☐2.horizontal flow type sedimentation
		☐3.slant-board type sedimentation
D.	Filtration type	☐1.rapid sand filtration
		(gravity system/pressure system)
		2.slow sand filtration
E.	Filter media	1.sand (cm thick)
		2.gravel (cm thick)
		3.anthracite (cm thick)
		4.other (cm thick)
G.	Coagulant	1.aluminum sulfate (solid/liquid)
		2.poly aluminum chloride
		3.other ()
Н.	Alkali	1.caustic soda
11.	Airaii	2.soda ash
		2.soda asn 3.slaked lime
	1	TI IN STAKED HITTE

I.	Disinfectant	1.liquid chlorine
		2.sodium hypochlorite
		3.chlorinated lime
J.	Wastewater treatment	1.sun drying bed
		2.dehydrator
		3.heat desiccation
		4.untreated
		5.other ()
(6)	Mechanical and Electrical Facilities and Measi	uring Equipment
(b) A.	Electrical facilities	
71.	1) Receiving voltage	V
		V
	2) Number of input circuits	
	3) Input transformer capacity	() kVA () unit
		() kVA () unit
		() kVA () unit
	4) Power consumption of last year	kWh
	5) Manufacturer	1.domestic manufacturer
		2.foreign manufacturer
	6) Operation and maintenance staff training facilities	1.exist 2.not exist
B.	Power Generators	
	1) Purpose	1.main operation
		2.reserve
		3.other ()
	2) Capacity	kVA
	3) Type	1.diesel
		2.gas turbine
		3.other ()
	4) Manufacturer	1.domestic manufacturer
		2.foreign manufacturer
	5) Staff training facilities	1.exist 2.not exist
C.	Motors	
	1) Capacity	() kW () unit
		() kW () unit
		() kW () unit
	2) Manufacturer	1.domestic manufacturer
		2.foreign manufacturer
	3) Staff training facilities	1.exist 2.not exist
D.	Pumps	2
	1) Pumping capacity	() m3/min. () unit
		() m3/min. () unit
		() m3/min. () unit
	2) Type	1.vertical shaft type
		2.horizontal shaft type
Ī		3.inclined shaft type

	3) Use		1.raw water () units
			2.transmission () units
			3.distribution () units
			4.other () units
	4) Manufacturer		1.domestic manufacturer
			2.foreign manufacturer
	5) Staff training facilities		1.exist 2.not exist
E.	Measuring equipment		
	1) Water level gauge		() units
	0) El	Type	1.immersion 2.pressure 3.float
	2) Flowmeter	Type	() units \[\bigcap 1.ultrasonic
		Type	2.electromagnetic
			3. Venturi tube or Orifice
	3) Measurement type		1.analog 2.digital
	3) Wedstrement type		
(7)	Water Ovality	•	
	Water Quality		C::-1 - 14
	Water Quality Data	raw	water finished water
,	Furbidity		
	NTU or Kaolin turbidity unit)		<u> </u>
2) (Color (Pt-Co unit or others)		
3) p	ьH 		
4) I	ron (mg/l)		
5) N	Manganese (mg/l)		
6) I	Hardness (mg/l)		-
7) A	Ammonia (mg/l)		
8) N	Nitrite (mg/l)		
9) F	KMnO4 consumption (mg/l)		
10)	BOD (mg/l)		
	_		
В. У	Water Quality Monitoring System		
1)	Water quality standards		□1.yes (set by) □2.no
2)	Laboratory staff and facilities for mor	nitoring	1.own facilities (number of staff)
			2.subcontracted to other organizations
3)	Monitoring points and measuring fr	requency	1.raw water(times/day,week,month) 2.settled water(times/day,week,month)
	in treatment process		3.filtered water
			(times/day,week,month)
			4.finished water
			(times/day,week,month)
4)	Monitoring stations and frequency	on ter	1
¬'	water	on tap	2.measuring frequency
	water		(times/day,week,month)

5)	Major laboratory equipment		1. 2.		
	Maintenance of Pipelines Length of pipelines by diameter				
	1) raw water pipelines				
	Ø	mm			km
	Ø	mm		_	km
	Ø	mm			km
	2) transmission pipelines				1
	Ø	mm			km
	Ø	mm			km
	Ø	mm			km
	 distribution pipelines Ø 	*****			1
	Ø	mm			km km
	Ø	mm mm			km
	Ø	mm			km
	ø	mm			km
R I	Length of pipelines by material	-			
Д. 1	1) grey cast iron pipe			km	
	2) ductile iron pipe			km	
	* *				
	3) galvanized iron pipe			km	
	4) steel pipe			km	
	5) asbestos cement pipe			km	
	6) concrete pipe	-		km	
	7) PVC pipe			km	
	8) other			km	
			1		
C.	Type of internal lining				По п
	1) grey cast iron pipe		1.Cement 3.Others		☐2.Epoxy resin ☐4.None
	2) ductile iron pipe		1.Cement		2.Epoxy resin
	2) ductile from pipe		☐3.Others		4.None
	3) galvanized iron pipe		1.Cement		2.Epoxy resin
	4) steel pipe		3.Others		4.None 2.Epoxy resin
	1) Steel pipe		3.Others		4.None
D.	Leak rate				%
E.	Leakage control measures		1.implement	nted	2.no
F.	Use of split repair sleeves for leak repair	irs	□1.yes		

(9) Maintenance of Service Installations Service method 1.direct connection 2.tank system 3.combination of direct connection and tank system В. Service type 1.individual connection 2.common tap system C. Service pipe material 1.lead 2.copper 3.steel pipe galvanized steel pipe lined steel pipe stainless steel pipe 4.iron pipe gray cast iron pipe ductile iron pipe 5.PVC pipe 6.polyethylene pipe 7.asbestos cement pipe 8.other (Service pipe diameter 713mm 20mm 25mm D. **7**30mm 740mm]50mm 75mm 7100mm 125mm ☐ 150mm ☐ 200mm 250mm 300mm E. Connection methods of service lines to 1.direct tapping distribution mains 2.corporation stop with saddle 3.plit tapping sleeve 4.other (F. Storage of drawings 1.yes (paper microfilm) 32.no

Note: Applications without a duly completed Country Report and Questionnaire shall not be accepted.

1.yes (

2.analog

1.

1.inferential

1.by direct staff

2.no

2.by subcontractors

3.digital

%)

Water meters

Repair of service pipe leaks

2) Method of repair

1) Please list main causes of leaks.

Meter type

G.

H.

I.

^{*}E-format (Microsoft Excel) for COUNTRY REPORT and QUESTIONNAIRE are available on our website (http://www.jica.go.jp/branch/osic/english/training/index.html).



Welcome to JICA Osaka

Osaka International Center of Japan International Cooperation Agency (JICA Osaka) extends a hearty welcome to all JICA participants.

1. Location of the center in the Kansai region

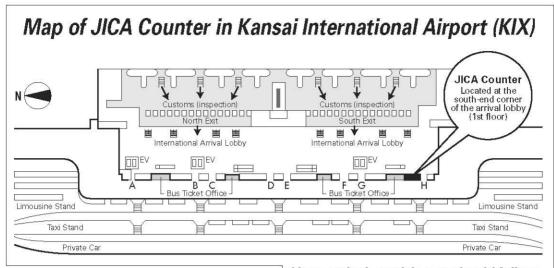
JICA Osaka is located in Ibaraki City, Osaka prefecture, in the heart of the Kansai region. Ibaraki lies close to the ancient cultural centers of Kyoto and Nara, and to the commercial, industrial and economic center of Osaka, and the city of Kobe.

2. Orientation Program & Japanese Language Course

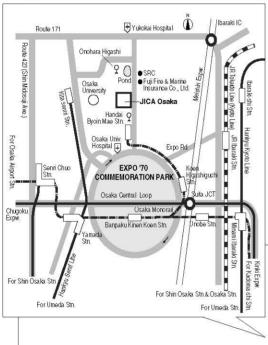
- (1) The four days after arrival at JICA Osaka are dedicated to an orientation program, during which participants are introduced to JICA Osaka and its facilities, attend lectures on Japan's economy, society and culture, and participate in an international exchange program with local communities.
- (2) It is desirable that participants acquire basic Japanese daily conversation for use in communication with training institution personnel and in other situations outside the scope of their technical training. JICA Osaka therefore offers:
 - ① an intensive Japanese language course as an integral part of the training program in designated courses
 - ② an optional Japanese language course held in the evenings

3. Recreational Program

Occasionally, JICA Osaka, in concert with community groups, organizes a program of recreational activities and exchange events, including introductions to flower arrangement, tea ceremony and visits to Japanese homes.



Map of the JICA Osaka Vicinity



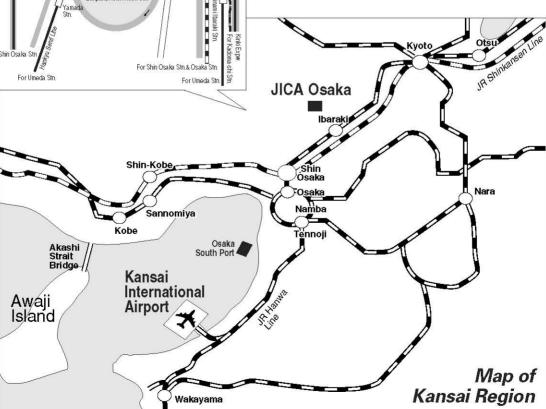
Upon arrival, participants should follow the procedure below:

- 1. Ride on Wing Shuttle (red elevated tram).
- 2. Pass through Immigration.
- 3. Collect baggage and pass through Customs Inspection.
- Go to the JICA Counter located at the south-end corner of the arrival lobby (1st floor)

The staff at the JICA Counter will provide participants with a limousine bus ticket to Osaka Station

(alight at Hotel New Hankyu).

At Osaka Station, a representative of the travel agency designated by JICA will meet the participant. The participant will be taken to JICA Osaka by taxi (with a taxi ticket), which takes approximately 30 minutes.







Program Team III, Osaka International Center (JICA Osaka) Japan International Cooperation Agency (JICA)

Address: 25-1 Nishi-Toyokawa-cho, Ibaraki-shi, Osaka 567-0058, Japan URL: http://www.jica.go.jp/worldmap/english.html#osaka

E-mail: jicaosic@jica.go.jp

Tel.: 81 (*) -72 (**) -641-6900 Fax.: 81 (*) -72 (**) -641-6910

(*): country code for Japan (**): area code for Ibaraki

Technical Cooperation by The Government of Japan

Training Award of Japan International Cooperation Agency (JICA)

Application by the Go	vernment of				Р	lease provide o	one original	
for a training course in the field of			Please provide one original and three copies. Please print or type.			3.		
(POD IADANIPOD	OPPICIAL HOP)							
(FOR JAPANESE (C N-						
	Course(集団コース)							
	ourse(一般特設) <u>Cou</u>					Recent p	hara	
	Group Course(国別					Recent p	noto	
	ソンターパート) 専門家							
プロジェクト名								
	ual Course(個別一般	2)						
□ Others(C.S, 特别	別案件等) 							
PART A To be comp	pleted by the nominee.							
1 FULL NAME (as in		Family Nam	ne)		/··			
(Family)	(First)				(Middle)			
2 ADDRESS FOR CO	RRESPONDENCE			E OF BIRTH			5 AGE	
			Mor	ith	Date	Year		
Telephone : E-mail :			6 SEX			 □MALE □	FEMALE	
3 NAME AND ADDRESS OF PERSON TO BE NOTIFIED IN CASE OF EMERGENCY		7 MAI	7 MARITAL STATUS SINGLE MARRIED					
			8 NAT	IONAL	ITY			
Relationship to you Telephone:	:		9 REL	IGION				
0 EDUCATIONAL RI	ECORD							
		Years A	ttended	Qua	lification			
Institution	City/Country	From	То	Qualification Obtained		Sı	Subject	
11 TRAINING OR STU	UDY IN FOREIGN C	OUNTRIES	S (in relation	on to pro	fessional in	terests.)		
Institution City/Country Perio		iod	Certificate		Pield	of Studen		
HISHLULIOH	ion City/Country From		То	Degree Awarded		Field of Study		

12 EMPLOYMENT RECORD

1) Present Place of Employment

Name	Title of Present Job
	Date of Taking Up Post
Address	Type of Organization
Telephone:	☐ Governmental/Public ☐ Private
Telex/Fax:	☐ International ☐ Others
2) Previous Job	
Name and Address of Organization	Description of Your Previous Job
Previous Title/Post and Dates(from/to)	
3) Describe briefly the work of your organization and the	e service it provides
of Describe briefly the work of your organization and the	e service it provides.
4) Describe your own job.	
5) Explain how the proposed training will be of benefit return.	to you in the work you will be doing on your
· · · · · · · · · · · · · · · · · · ·	

13 LANGUAGE PROFICIENCY

IS EMINGUIGH TROTTCHENCY					
1. English					
Listening	□ excellent	good	☐ fair	□ poor	
Speaking	□ excellent	good	☐ fair	□ poor	
Writing/Reading	□ excellent	good	☐ fair	□ poor	
2. Mother Tongue					
3. Other Language					
	□ excellent	good	☐ fair	□ poor	
14 NOMINEE'S DECLARATION To b	e signed by the nominee.				
I certify that the statements made b	y me in this form are tru	e and correct to	the best of m	y knowledge.	
If accepted for a training award, I	agree:				
 (a) not to bring any member of my (b) to carry out such instructions nominating Government and the (c) to follow the course of study or with which I undertake to study (d) to refrain from engaging in police (e) to submit any progress report of (f) to return to my home country at also fully understand that if grant make adequate progress, or for oth Government of Japan. Date:	and abide by such cone Japanese Government training, and abide by two retrain. tical activities, or any revaluation questionnate the end of my course ted a training award it her sufficient cause includes	in respect of the he rules of the in form of employ ires which may of study or train may be subsequent ading physical comments	nis course of institution or e ment for profit be prescribed ning. ently withdraw onditions determined to the prescribed ning.	training. stablishments t or gain. vn if I fail to rmined by the	
Date: Signature:					
PART B To be completed by nominee OBSERVATIONS OF NOMINATIN 1 Describe what work the nominee v	G ORGANIZATION will be expected to do o	n his return.			
2 Explain how the proposed training	will be of benefit to th	e work of your	organization.		

3 (For Non-Group Training only) Describe:	
1) Subject area of the training	required.
2) Special subjects which are process (continue on an additional sh	particularly important and should be included in the training program eet if necessary).
3) Period of training required (from/to).
4) Notice required before nomi	nee can be released from present post.
OFFICIAL NOMINATION	gned by a responsible government official.
I certify that:	
	its in this form and I am satisfied that they are authentic and relate to
the nominee.	
I accordingly nominate this po	erson on behalf of the
Government of	
Date:	Signature:
Position:	
	Official stamp
	Organization:

MEDICAL HISTORY AND EXAMINATION FOR JICA TRAINING AWARD

M	IEDICAL HISTORY TO	BE COMPLETED BY	Y NOMINEE		
1 NAME OF NOMINEE(I	ast name, first name, mic	idle name)			
2 DATE OF BIRTH	3 NATIONALITY	4 SEX	5 ADDRESS FOR CONTACT		
(mo/day/yr)	o minomini	male	o Abbitass For Control		
(mo/day/yr)		female			
6 NAME OF TRAINING	COURSE/SEMINAR				
7 LENGTH OF TRAINING	G COURSE/SEMINAR (we	eks, months)			
, and the same of					

8 IMPORTANT NOTICE

Before you complete the Medical History Questionnaire, you are hereby notified that:

A medical condition resulting from an undisclosed pre-existing condition may not be financially compen sated for by JICA and may result in termination of your training program.

I understand and accept the terms of this notice. _____ Yes ____ No

9 NOMINEE WILL CHECK "YES" OR "NO" AND EXPLAIN

	YES	NO		EXPLANATION
a.			Have you had any significant or serious illness or injury? (If hospitalized, give place & dates.)	
b.			Have you had any operations or advice by a physician to have an operation? (Give place & dates.)	
c.			Do you currently use any drugs for treatment of a medial condition? (Give name & dose.)	
d.			Have you ever been a patient in a mental hospital or sanitarium or treated by a Psychiatrist? (Give place & dates.)	

10 NOMINEE WILL INDICATE "YES" OR "NO" TO EACH ITEM

DO YOU NOW HAVE OR HAVE YOU EVER HAD THE CONDITIONS LISTED BELOW?

(Check each item, if yes, enclose the relevant condition with a circle.)

	YES	NO	CONDITION
a.			Asthma, emphysema, or other lung conditions
b.			Tuberculosis or live with anyone who has tuberculosis
c.			High blood pressure, heart disease
d.			Stomach, liver (hepatitis), gall bladder disease
e.			Kidney or bladder disease, stone or blood in urine
f.			Diabetes (sugar in the urine)
g.			Depression, excess worry, attempted suicide, or other psychological symptoms
h.			Acquired Immune Deficiency Syndrome (AIDS)
i.			Tumor, abnormal growth, cyst, or cancer
j.			Bleeding disorder, blood disease (sickle cell anemia)

I CERTIFY THAT I HAVE READ THE ABOVE INSTRUCTIONS AND ANSWERED ALL QUESTIONS TRULY AND COMPLETELY TO THE BEST OF MY KNOWLEDGE.

11 PRINTED NAME OF NOMINEE	12 DATE	13 SIGNATURE OF NOMINEE		