

### Attachment 3: List of Persons Concerned

#### Ministry of Foreign Trade and International Cooperation

Mr. John Isaacs, Permanent Secretary  
Ms. Choo An Yin, Foreign Service Officer II

#### Ministry of Housing and Water

Hon. Shaik K.Z. Baksh, M.P., Minister of Housing and Water  
Mr. Claudette E. Moore, M.A., Permanent Secretary

#### Ministry of Finance

Mr. Neermal Rekha, Finance Secretary  
Mr. Tarachand Balgobin, Division Head, Project Cycle Management Division

#### Guyana Water Incorporated: GWI

Mr. Michael J. Clark, Managing Director  
Mr. Kevin Horn, Asset Development Team Leader  
Mr. Altaf Gafoor, Design Engineer, Asset Development Team  
Mr. Dilip Singh, Divisional manager  
Mr. Deonarim Nandlall, Assistant Divisional Manager

#### Guyana Environmental Protection Agency

Mr. Doorga Persaud, Executive Director

#### Inter-American Development Bank

Mr. Sergio Varas Olea, Representative  
Mr. Javier Grau, Natural Resource Specialist

#### Department for International Development, DFID

Mr. Peter G. S. Smith, Water & Sanitation Adviser, DFID Guyana  
Ms. Lynn MacAulay, Deputy Head

#### Embassy of Japan in Venezuela

Mr. Yasuo MATSUI, Ambassador  
Mr. Motoharu SHIRAI, First Secretary

#### Embassy of Japan in Trinidad and Tobago

Mr. Shigenobu KATO, Ambassador  
Mr. Kaoru TSURITA, First Secretary  
Mr. Kazunori HARADA, Second Secretary



Attachment 4 Minutes of Discussions

MINUTES OF DISCUSSIONS  
ON THE BASIC DESIGN STUDY  
ON THE PROJECT FOR WATER SUPPLY IN CORRIVERTON  
IN THE CO-OPERATIVE REPUBLIC OF GUYANA

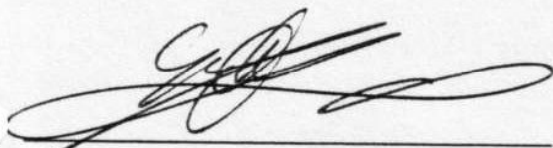
Based on the results of the Preliminary Study, the Government of Japan decided to conduct a Basic Design Study on the Project for Water Supply in Corriverton (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to the Co-operative Republic of Guyana ( hereinafter referred to as "Guyana" ) the Basic Design Study Team (hereinafter referred to as "the Team" ), which is headed by Mr. Omura Yoshiki, Senior Advisor, Institute for International Cooperation, JICA, and is scheduled to stay in the country from November 15 to December 20.

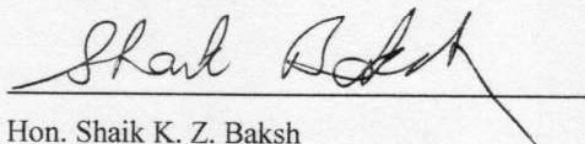
The Team held discussions with the officials concerned of the Government of Guyana and the representatives of the Guyana Water Incorporated.

In the course of the discussions, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

Georgetown, November 18, 2005

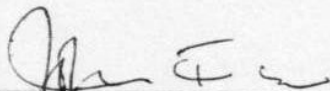


Mr. Omura Yoshiki  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency  
Japan



Hon. Shaik K. Z. Baksh  
Minister of Housing and Water  
Guyana

(Witness)



Mr. John Isaacs  
Permanent Secretary  
Ministry of Foreign Trade and International Cooperation  
Guyana

## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to improve the health and living standard of the people who live in the project area through construction and rehabilitation of water supply facilities.

### 2. Project area

The project area is confirmed as the area from No. 51 Village to Moleson Creek, Corriverton, Region 6, as indicated in the request from the Government of Guyana. The location of the area is shown in Annex-1.

### 3. Responsible and Implementing Agency

The Responsible Agency is the Ministry of Housing and Water, and the Implementing Agency is Guyana Water Incorporated (GWI).

### 4. Items requested by the Government of Guyana

After discussions with the Team, the items described in Annex-2 were finally requested by the Guyanese side. JICA will assess the appropriateness of the request, make the Basic Design and recommend to the Government of Japan for approval.

### 5. Japan's Grant Aid Scheme

The Guyanese side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Guyana as explained by the Team and described in Annex-3 of the Minutes of Discussions signed by both parties on June 27, 2005.

### 6. Schedule of the Study

6-1 The Team will proceed to further studies in Guyana until December 20, 2005 for the field survey.

6-2 JICA will prepare the draft report in English and dispatch a mission to Guyana in order to explain its contents around March 2006.

6-3 In case that the contents of the report are accepted in principle by the Government of Guyana, JICA will complete the final report and send it to the Government of Guyana by July 2006.

## 7. Other relevant issues

### 7-1. Target year

Both sides agreed to set the target year of the Project in 2015.

### 7-2. Water demand projection

Both sides agreed to set the per capita water demand for the Project referring to previous projects (180 litre/capita /day), available analysis and future plans of GWI, and to design the project facilities based on the water demand to be calculated by the per capita demand and population in 2015 to be estimated.

### 7-3. Components of the Project

In order to achieve the Project targets, 24-hour supply of safe water in enough amount with appropriate service pressure, the Project would require water sources, water treatment plant(s) for iron removal and disinfection, storage reservoir(s), elevated tank(s) and pipelines to connect those components. Optimum component configuration will be determined by comparing several alternatives consisting of number and location of water sources, treatment plant(s), storage reservoir(s) and elevated tank(s).

### 7-4. Water source plan

In view of economic operation and maintenance, it will be required to optimize locations and numbers of operating water wells and water treatment plants for iron removal. The water source shall be selected existing wells considering the production capacity, possible seawater intrusion, required rehabilitation works and locations in the whole system.

The Guyanese side will start the well pumping test and carry out camera inspection of each of the existing wells in a week.

### 7-5. Unaccounted-for water

The Project aims at reducing unaccounted-for water by installing water meters. Installation of water meters would result in increasing of water charge revenue and decreasing water wastage by encouraging users' awareness of need for water conservation. It would strengthen the financial sustainability of GWI. However, on the other hand, it may cause people's discontent with high water charges and avoidance of payment. Therefore, the Team pointed out that the unaccounted-for water control should be implemented together with considering proper tariff system and people's awareness.

#### 7-6. Technical assistance

The Guyanese side requested the Team to consider the possibility to include technical assistance (so-called "Soft Component") into the Project for capacity development in the following fields:

- (1) Control of water quality;
- (2) Control of water distribution; and
- (3) Reduction of unaccounted-for water.

The Team will investigate necessity, contents of the technical assistance and its justification.

#### 7-7. Environmental and social consideration

The Guyanese side will obtain the environmental permit from the Environmental Protection Agency of Guyana after the selection of facilities sites. The environmental permit shall be received by March 2006.

The Team explained that due consideration would be necessary in the course of the Study for the following impacts on environment and society:

- (1) Land acquisition with consensus of stakeholders;
- (2) Proper treatment and disposal of wastewater and sludge discharged from the water treatment plant(s);
- (3) Impact on groundwater, including risk of seawater intrusion;
- (4) Financial impact on customers, especially on impoverished people, by introducing meters; and
- (5) Noise, vibration and accidents caused by construction work and operation.

Both sides agreed to take the following actions during the Study:

##### For the Team

- (1) To inform the result of the site selection;
- (2) To recommend mitigation plan and monitoring plan;
- (3) To consider environment factors in planning of the facilities;
- (4) To assist GWI's information disclosure to the stakeholders, if necessary;

##### For the Guyanese side

- (1) To take further actions required by relevant laws and guidelines, if any; and
- (2) To disclose the information to stakeholders.

#### 7-8. Undertakings of the Guyanese side

The Guyanese side agreed to provide the followings to the Team for the smooth implementation of the Study:

- (1) To provide the Team with available relevant data, information and materials necessary for the execution of the Study;
- (2) To prepare answers for the Questionnaire presented by the Team;
- (3) To assign full-time counterparts to the Team during their stay in Guyana to play the following roles:
  - to make appointments and set up meetings with related organizations whatever the Team intends to visit,
  - to attend the site survey and any other visiting with the Team, and
  - to assist and advise the Team for their collection of data and information as much as possible,
- (4) To secure the permission to take photographs and enter into private properties and restricted areas for the Team for proper execution of the Study, if necessary;
- (5) To take any measures deemed necessary to secure the safety of the members of the Team; and
- (6) To make arrangements to allow the Team to bring back to Japan any necessary data, maps and materials related to the Study, subject to approval by the Government of Guyana, in order to analyze the Project and prepare the reports.

The Guyanese side agreed to take the necessary measures, as described below, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

#### [ Study and Planning Stage ]

- (1) To secure land for the new facilities to be constructed such as water treatment plant(s), storage reservoir(s) and elevated tank(s);
- (2) To clear, level and reclaim the land and to provide access roads when needed;
- (3) To build the consensus on the implementation of the Project among stakeholders, including residents living around the sites of new facilities;
- (4) To coordinate with other related ministries and authorities;
- (5) To obtain the environmental permit from the Environmental Protection Agency of Guyana following the related laws and regulations in Guyana;
- (6) To complete the well pumping test and camera inspection of each of the existing wells in Corriverton;

#### [ Construction and Procurement Stage ]

- (7) To obtain necessary permissions, licenses, other authorization and budget for implementing the Project, if necessary;

- (8) To provide facilities for distribution of electricity and other incidental facilities such as fences in and around the site;
- (9) To control traffic, secure security of pedestrians and passing cars, minimize negative effects for surrounding environment, protect other buried facilities such as electric cables and telephone lines, coordinate with related authorities;
- (10) To ensure prompt unloading and customs clearance of the products purchased under the Japan's Grant Aid at ports of disembarkation in Guyana;
- (11) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such facilities as may be necessary for their entry into Guyana and stay therein for the performance of their work;
- (12) To bear commissions, namely advising commissions of an Authorization to Pay (A/P) and payment commissions, to the Japanese foreign exchange bank for the banking services based upon the Banking Arrangement (B/A);
- (13) To exempt Japanese nationals from customs duties, internal taxes and fiscal levies which may be imposed in Guyana with respect to the supply of the products and services under the verified contracts;
- (14) To bear all the expenses, other than those covered by the Japan's Grant Aid, necessary for the Project;
- (15) To commence installation of water meters procured by the Japan's Grant Aid after commissioning of the water treatment plant;

[ Operation and Monitoring Stage ]

- (16) To ensure that the facilities and equipment provided under the Japan's Grant Aid be maintained and used properly and effectively for the Project with necessary allocation of personnel and budget; and
- (17) To enhance public relations activities for the customers.

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MINUTES OF DISCUSSIONS  
ON THE BASIC DESIGN STUDY  
ON THE PROJECT FOR WATER SUPPLY IN CORRIVERTON  
IN THE CO-OPERATIVE REPUBLIC OF GUYANA  
(EXPLANATION ON DRAFT REPORT)


In November 2005, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team on the Project for Water Supply in Corriverton (hereinafter referred to as "the Project") to the Co-operative Republic of Guyana (hereinafter referred to as "Guyana"), and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

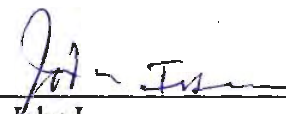
In order to explain and to consult with the Government of Guyana on the components of the draft report, JICA sent to Guyana the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Toshiyuki Nakamura, Deputy Resident Representative, USA Office, JICA, from March 19 to 24, 2006.

As a result of discussions, both parties confirmed the main items described on the attached sheets.

Georgetown, March 23, 2006

  
Mr. Toshiyuki Nakamura  
Leader  
Draft Report Explanation Team  
Japan International Cooperation Agency  
Japan

  
Ms. Claudette Moore  
Permanent Secretary  
Ministry of Housing and Water  
Guyana

  
Mr. John Isaacs  
Permanent Secretary  
Ministry of Foreign Trade and International Cooperation  
Guyana

## ATTACHMENT

## 1. Components of the Draft Report

The Government of Guyana agreed and accepted in principle the components of the draft report explained by the Team. Main components of the project are shown in Annex-1.

## 2. Japan's Grant Aid scheme

The Guyanese side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Guyana as explained by the Team and described in Annex-3 of the Minutes of Discussions signed by both parties on June 27, 2005.

## 3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed item and send it to the Government of Guyana by July 2006.

## 4. Other relevant issues

## 4-1. Environmental permit

GWJ has received from EPA Draft Environmental Permit (Annex-2) for the installation of water treatment plants in No.56 Village and Queenstown.

## 4-2. Technical assistance

Both sides agreed that technical assistance (so-called "Soft Component") should be included in the Project for capacity development in the field of operation and maintenance of the slow sand filtration system.

## 4-3. Measures against water leakage

The Team emphasized the importance of leakage control as a precondition of the project implementation. Understanding the importance of the leakage control, GWJ explained its leakage control activities as follows:

- ✓ GWJ hired 4 craftsmen in January and another 4 in March 2006 each for 6 months and concluded a fixed-amount contract with a contractor. They have started repair works of visible leakage in the Project area.

- ✓ Draft leakage control programme for the Project area in the leakage control strategy is as shown in Annex-3.

#### 4-4. Installation of water meters

The scope of the Project will include procurement of water meters. It is a precondition of the Project to install them and apply the metered rate to reduce unit water consumption. GWI is requested to start installation of the water meters immediately after their delivery in the Project and finish it as soon as possible. GWI elaborated this issue as follows:

Procurement of water meters will be done in phase 1 of the project, and will be complete in May 2007. Tendering for installation will commence in March 2007. Contract award is expected in June 2007. Approximately 3,100 meters will be installed in the area supplied by No.56 Village WTP by the end of 2007. Another 4,425 meters will be installed during 2008 in the area supplied by Queenstown WTP. Remaining meters will be installed in line with growth of the customer base. The approximate cost for the installation of the water meters is G\$50M, which will be covered under the 2007 and 2008 coastal water supply programmes.

#### 4-5. Water meter maintenance

The Team asked GWI about the maintenance of the water meters to be procured and GWI replied that a central workshop is to be established, which will calibrate and repair them.

#### 4-6. Employment of plant operators

In order to operate two water treatment plants to be constructed in the Project, four operators for each plant are necessary. GWI explained that recruitment of the plant operators would commence by mid 2007 in time for the completion of the first phase of the project.

#### 4-7. Provision of land and electricity

The Guyanese side is requested to secure land for the water treatment plants, emergency generators and fuel tanks in the selected well sites (No. 57 Village, Spring Garden and Queenstown) and the temporary yards.

In order to avoid topsoil stripping during the rainy season, it is necessary to complete site transfer and provision of electric power line within the time specified.

GWI explained that it would undertake to arrange the following:

- ✓ Clearing of the sites in time for construction by February 2007 for No. 56 Village WTP site and January 2008 for Queenstown WTP Site.
- ✓ Provision of electricity to the sites in time for the commencement of construction.

#### 4-8. Undertakings of the Guyanese side

The Guyanese side will take the necessary measures, as described in Annex-4, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

## ANNEX-1: Main components of the project

### 1. FACILITY CONSTRUCTION

#### 1) Water Source Well

| Name of wells      | WTP               | Capacity of Emergency Generator  | Replacement of Pumps            |      |
|--------------------|-------------------|--|---------------------------------|------|
| No.57Village Well  | No.56 Village WTP | 200kVA   | Discharge (m <sup>3</sup> /min) | 2.64 |
|                    |                   |  | Head (m)                        | 53   |
|                    |                   |  | Power (kW)                      | 45   |
| Spring Garden Well | Queenstown WTP    | 150kVA   | Discharge (m <sup>3</sup> /min) | 2.08 |
|                    |                   |  | Head (m)                        | 65   |
|                    |                   |  | Power (kW)                      | 37   |
| Queenstown Well    | Queenstown WTP    | Not installed. Power is supplied from the emergency generator of Queenstown WTP. | Discharge (m <sup>3</sup> /min) | 1.74 |
|                    |                   |  | Head (m)                        | 40   |
|                    |                   |  | Power (kW)                      | 18.5 |

#### 2) Conduction Pipe

| WTP               | Conduction Pipe                              | Material  | Size (mm) | Length (m) |
|-------------------|--|-----------|-----------|------------|
| No.56 Village WTP | From No.57 Village well to No.56 Village WTP | Rigid PVC | 250       | 798        |
| Queenstown WTP    | From Spring Garden well to Queenstown WTP    | Rigid PVC | 250       | 4,332      |
|                   | From Queenstown well to Queenstown WTP       | Rigid PVC | 200       | 100        |

#### 3) WTP

| WTP          | Distribution Area  | Capacity  | Facility  |
|--------------|--|---|---|
| No.56Village | Population: 15,000<br>Area: From No.51Village to No.73Village  | Maximum Daily: 3,800m <sup>3</sup> /day<br>Maximum Hourly: 4,870m <sup>3</sup> /day | Slow sand filter, Storage reservoir, Lift pump, Elevated tank, Chlorine injector, Sand washing tank with storage, Emergency generator, Water quality test kit, Transformer, Office building |
| Queenstown   | Population: 21,600<br>Area: From No.74Village to Moleson Creek | Maximum Daily: 5,500m <sup>3</sup> /day<br>Maximum Hourly: 7,030m <sup>3</sup> /day |   |

#### 4) Distribution Main

| WTP              | Elevated Tank                              | Pipe No | Size(mm) | Connection Point | Length (m) |
|------------------|--|---------|----------|------------------|------------|
| No.56Village WTP | Volume: 203m <sup>3</sup><br>Height: 19.0m | No.1    | 250      | No.57Village     | 798        |
|                  |  | No.2    | 250      | No.67Village     | 7,038      |
| Queenstown WTP   | Volume: 293m <sup>3</sup><br>Height: 25.0m | No.3    | 250      | No78 Springlands | 1,805      |
|                  |  | No.4    | 250      | Crabwood Creek   | 5,830      |

Annex-1-1

## 2. MATERIAL PROCUREMENT

- ✓ Procurement of 8,400 sets of water meter and accessories.
- ✓ Installation work shall be done by the Guyanese side.
- ✓ Early installation is required (by the completion of project).

## 3. SOFT COMPONENT

- ✓ Provision of technical knowledge and skills of slow sand filtration.
- ✓ Shortly before end of the 1<sup>st</sup> phase.