

[Appendices]

- 1 . Member List of the Study Team**
- 2 . Study schedule**
- 3 . List of the parties concerned in the recipient county**
- 4 . Minutes of Discussion and Technical Note**
- 5 . Other relevant data**

【Appendices - 1 : Member List of Study Team】

(1) Field survey (September 3, 2006 – October 12, 2006)

Job title	Name	Occupation
Team leader	Tsutomu MORIYA	Resident Representative, JICA Mongolia office
Planning management	Yoichi INOUE	Water Resources Development and Environment Management Team, Project Management Group III, Grant Aid Management Dept., JICA
Chief consultant/ Waste treatment plan/ Environmental and Social Consideration	Ichiro KONO	Kokusai Kogyo Co., Ltd.
Waste collection plan/ Equipment plan/ O&M plan	Susumu SHIMURA	Kokusai Kogyo Co., Ltd.
Facility plan/ Design	Naofumi SATO	Kokusai Kogyo Co., Ltd.
Execution plan/ Procurement plan/Costing	Hiroshi FUJITA	Kokusai Kogyo Co., Ltd.
Interpreter	Toshiyuki HANDA	Techno Staff Co., Ltd.

(2) Explanation of Basic Design Study Draft Report (January 13, 2007 – January 27, 2007)

Job title	Name	Occupation
Team leader	Tsutomu MORIYA	Resident Representative, JICA Mongolia office
Planning management	Yoichi INOUE	Water Resources Development and Environment Management Team, Project Management Group III, Grant Aid Management Dept., JICA
Chief consultant/ Waste treatment plan/ Environmental and Social Consideration	Ichiro KONO	Kokusai Kogyo Co., Ltd.
Facility plan/ Design	Naofumi SATO	Kokusai Kogyo Co., Ltd.
Execution plan/ Procurement plan/Costing	Hiroshi FUJITA	Kokusai Kogyo Co., Ltd.
Interpreter	Toshiyuki HANDA	Techno Staff Co., Ltd.

(3) Explanation of Basic Design Study Draft Final Report (March 31, 2007 – March 24, 2007)

Job title	Name	Occupation
Team leader	Tsutomu MORIYA	Resident Representative, JICA Mongolia office
Chief consultant/ Waste treatment plan/ Environmental and Social Consideration	Ichiro KONO	Kokusai Kogyo Co., Ltd.
Execution plan/ Procurement plan/Costing	Hiroshi FUJITA	Kokusai Kogyo Co., Ltd.
Interpreter	Toshiyuki HANDA	Techno Staff Co., Ltd.

【Appendices - 2 : Study schedule】

(1) Field survey (September 3, 2006 – October 12, 2006)

Date			Team Leader (JICA)	Planning management (JICA)	Chief consultant/ Waste treatment plan/ Environmental and Social Consideration	Waste collection plan/ Equipment plan/ O&M plan	Facility plan / Design	Execution plan/ Procurement plan/Costing	Interpreter										
			Tsutomu MORIYA	Yoichi INOUE	Ichiro KONO	Susumu SHIMURA	Naofumi SATO	Hiroshi FUJITA	Toshiyuki HANDA										
1	3-Sep	Sun	Narita Beijing, Beijing 19:30 (OM224) Ulaanbaatar 22:45																
2	4-Sep	Mon	Meeting with JICA Mongolia office, Embassy of Japan, Municipal of Ulaanbaatar / Explanation of Inception report																
3	5-Sep	Tue	Site Investigation (Naragiin Enger New disposal site, Ulan Churute disposal site, Equipment work shop)																
4	6-Sep	Wed	Discussion of Minute																
5	7-Sep	Thu	Discussion of Minute																
6	8-Sep	Fri	Signing of Minute, Reporting to Embassy of Japan and JICA Mongoia office)																
7	9-Sep	Sat	Ulaanbaatar 7:45 (OM501) Narita 17:30	Site Investigation in Ulaanbaatar city					Ulaanbaatar 07:25(OM223) Beijing 8:30. Bijing 14:50(JL782) Narita 19:15										
8	10-Sep	Sun																	
9	11-Sep	Mon																	
10	12-Sep	Tue																	
11	13-Sep	Wed																	
12	14-Sep	Thu																	
13	15-Sep	Fri																	
14	16-Sep	Sat																	
15	17-Sep	Sun																	
16	18-Sep	Mon																	
17	19-Sep	Tue																	
18	20-Sep	Wed																	
19	21-Sep	Thu																	
20	22-Sep	Fri																	
21	23-Sep	Sat																	
22	24-Sep	Sun																	
23	25-Sep	Mon																	
24	26-Sep	Tue																	
25	27-Sep	Wed																	
26	28-Sep	Thu																	
27	29-Sep	Fri																	
28	30-Sep	Sat							Ulaanbaatar 7:25(OM223) Beijing 08:30, Beijing 14:50(JL782) Narita 19:15					Site Investigation in Ulaanbaatar city					
29	1-Oct	Sun												Editing of collected data and Internal meeting					
30	2-Oct	Mon																	Site Investigation in Ulaanbaatar city
31	3-Oct	Tue																	
32	4-Oct	Wed																	
33	5-Oct	Thu																	
34	6-Oct	Fri																	
35	7-Oct	Sat																	
36	8-Oct	Sun																	
37	9-Oct	Mon																	Editing of collected data and Internal meeting
38	10-Oct	Tue																	Site Investigation in Ulaanbaatar city
39	11-Oct	Wed																	
40	12-Oct	Thu																	
								Travelling (Ulaanbaatar - Narita)											

(2) Explanation of Draft Report (January 13, 2007 – January 27, 2007)

Date			Team Leader (JICA)	Planning management (JICA)	Chief consultant/ Waste treatment plan/ Environmental and Social Consideration	Facility plan / Design	Execution plan/ Procurement plan/Costing	Interpreter
			Tsutomu MORIYA	Yoichi INOUE	Ichiro KONO	Naofumi SATO	Hiroshi FUJITA	Toshiyuki HANDA
1	13-Jan	Sat		Narita 17:55(JL959) Seoul 20:40	Narita Beijing			
2	14-Jan	Sun		Seoul 13:55 (OM302) Ulaanbaatar 16:35	Beijing 09:00(CA901) Ulaanbaatar 11:15			
3	15-Jan	Mon	Meeting with JICA Mongolia office / Courtesy call and explanation of Draft report to Embassy of Japan / Ministry of nature and Environment / Ministry of Finance / Municipal of Ulaanbaatar					
4	16-Jan	Tue	Explanation and discussion of Draft report					
5	17-Jan	Wed	Explanation and discussion of Draft report					
6	18-Jan	Thu	Discussion and Signing of Minute, reportiing to JICA Mongolia office and Embassy of Japan					
7	19-Jan	Fri		Ulaanbaatar 07:45(OM501) Narita 17:30	Site investigation in Ulaanbaatar city			Ulaanbaatar 12:15(CA902) Beijing 14:05, Beijing Narita
8	20-Jan	Sat						
9	21-Jan	Sun						
10	22-Jan	Mon						
11	23-Jan	Tue						
12	24-Jan	Wed						
13	25-Jan	Thu						
14	26-Jan	Fri						
15	27-Jan	Sat						
					anbaatar 10:00(OM223) Beijing 12:00, Beijing 15:05 (JL782) Narita 19			

(3) Explanation of Draft Final Report (March 13, 2007 – March 24, 2007)

Date			Team Leader (JICA)	Chief consultant/ Waste treatment plan/ Environmental and Social Consideration	Execution plan/ Procurement plan/Costing	Interpreter
			Tsutomu MORIYA	Ichiro KONO	Hiroshi FUJITA	Toshiyuki HANDA
1	13-Mar	Tue		Narita Beijing		
2	14-Mar	Wed		Beijing 9:00(CA901) Ulaanbaatar 11:15, Meeting with JICA Mongolia office and Municipal of Ulaanbaatar		
3	15-Mar	Thu	Explanation of Draft Final Report to Municipal of Ulaanbaatar and courtesy call to Ministry of Nature and Environment and Minstry of Finance			
4	16-Mar	Fri		Explanation and discussion of Draft Final report		
5	17-Mar	Sat		Site Investigation, resurvey of price and reserch of progress of waste fud system		
6	18-Mar	Sun				
7	19-Mar	Mon				
8	20-Mar	Tue				
9	21-Mar	Wed				
10	22-Mar	Thu	Explanation, discussion of Draft Final Report and discussion of minute			
11	23-Mar	Fri	Signing of minute and reporting to Embassy of Japan and JICA Mongolia office			
12	24-Mar	Sat		Ulaanbaatar 10:00(OM223) Beijing 12:00, Beijing 15:05 (JL782) Narita 19:20		

【Appendices - 3 : List of Interviewer】

(1) Field survey

<Mongolian side>

Municipality of Ulaanbaatar

Mr. Gombosuren Munkhbayar	General Manager of Ulaanbaatar City and Chief of the Mayor's office
Mr. Bold Tsegmid	Director of City Maintenance and Public Utility Agency
Mr. Badam Delgerbayar	Head of Waste Management Department, City Maintenance and Public Utility Agency

Ministry of Nature and Environment

Mr. Enkhee Gavaa	Director of International Cooperation Department
Mr T. Batzorig	Senior officer of International Cooperation Department
Ms.Sarantuya	Officer of Environment Natural Resources Department

Ministry of Finance

Mr. Togmid Dorjkhand	Deputy Director General of Department of Policy and Coordination for Loans and Aid
Mr. Khuukhee Erdenebileg	Officer of Department of Policy and Coordination for Loans and Aid

<Japanese Side>

Embassy of JAPAN in Mongolia

Tomohiro NIIMI	Second Secretary
----------------	------------------

JICA Mongolia Office

Miho SASAKI	Assistant Resident Representative
-------------	-----------------------------------

(2) Explanation of Draft Report

<Mongolian side>

Municipality of Ulaanbaatar

Mr. Gombosuren Munkhbayar	General Manager of Ulaanbaatar City and Chief of the Mayor's office
Mr. Bold Tsegmid	Director of City Maintenance and Public Utility Agency
Mr. Badam Delgerbayar	Head of Waste Management Department, City Maintenance and Public Utility Agency

Ministry of Nature and Environment

Mr. Enkhee Gavaa	Director of International Cooperation Department
Mr T. Batzorig	Senior officer of International Cooperation Department
Ms.Sarantuya	Officer of Environment Natural Resources Department

Ministry of Finance

Mr. Togmid Dorjkhand	Deputy Director General of Department of Policy and Coordination for Loans and Aid
Mr. Khuukhee Erdenebileg	Officer of Department of Policy and Coordination for Loans and Aid

<Japanese Side>

Embassy of JAPAN in Mongolia

Tomohiro NIIMI	Second Secretary
----------------	------------------

JICA Mongolia Office

Miho SASAKI	Assistant Resident Representative
-------------	-----------------------------------

(3) Explanation of Draft Final Report

<Mongolian side>

Municipality of Ulaanbaatar

Mr. Gombosuren Munkhbayar	General Manager of Ulaanbaatar City and Chief of the Mayor's office
Mr. Bold Tsegmid	Director of City Maintenance and Public Utility Agency
Mr. Badam Delgerbayar	Head of Waste Management Department, City Maintenance and Public Utility Agency

Ministry of Nature and Environment

Mr. Enkhee Gavaa	Director of International Cooperation Department
Mr T. Batzorig	Senior officer of International Cooperation Department
Ms.Sarantuya	Officer of Environment Natural Resources Department

Ministry of Finance

Mr. Togmid Dorjkhand	Deputy Director General of Department of Policy and Coordination for Loans and Aid
Mr. Khuukhee Erdenebileg	Officer of Department of Policy and Coordination for Loans and Aid

<Japanese Side>

Embassy of JAPAN in Mongolia

Tomohiro NIIMI	Second Secretary
----------------	------------------

JICA Mongolia Office

Miho SASAKI	Assistant Resident Representative
-------------	-----------------------------------

【Appendices – 4 : Minute of Discussion, Technical Note】

Number	Name of Document	Date
	Minutes of Discussion No 1	Sep 09, 2006
	Minutes of Discussion No 2	Jan 18, 2007
	Minutes of Discussion No 3	Mar 23, 2007
	Technical Note No1	Sep 29, 2006
	Technical Note No2	Jan 25, 2007

MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY
ON
THE PROJECT FOR IMPROVEMENT OF SOLID WASTE MANAGEMENT
IN ULAANBAATAR IN MONGOLIA

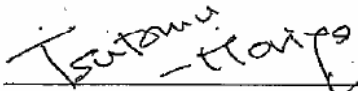
In response to a request from the Government of Mongolia, the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of Solid Waste Management in Ulaanbaatar in Mongolia (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

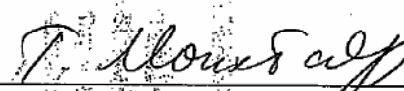
JICA sent to Mongolia the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Tsutomu MORIYA, Resident Representative, JICA Mongolia Office, and is scheduled to stay in the country from September 4 to October 11, 2006.

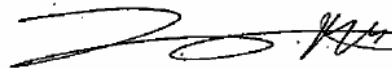
The Team held discussions with the officials concerned of the Government of Mongolia and conducted a field survey at the study area.


In the course of discussions and field survey, 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.

Ulaanbaatar, September 8, 2006


Mr. Tsutomu MORIYA
Leader
Basic Design Study Team
Japan International Cooperation Agency (JICA)


Mr. Gombosuren MUNKHBAYAR
General Manager of Ulaanbaatar city
Head of the Governor's working division
Municipality of Ulaanbaatar
The Government of Mongolia


Mr. Togmid DORJKHAND
Deputy Director-General
Department of Policy and Coordination for
Loans and Aid
Ministry of Finance
The Government of Mongolia


Mr. Gavaa ENKHEE
Director
International Cooperation Department
Ministry of Nature and Environment
The Government of Mongolia

ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve the solid waste management of Municipality of Ulaanbaatar (hereinafter referred as "MUB") through procuring equipment related to solid waste management and constructing Narangiin Enger Disposal Site (hereinafter referred as "NEDS").

2. Project sites

The Project sites are 7 Duuregs in Ulaanbaatar City (hereinafter referred as "UBC") as described below and NEDS, the location thereof is shown in the attached Annex-1.

1	Bayangol Duuregs
2	Bayanzurkh Duureg
3	Songinokhaikhan Duureg
4	Sukhbaatar Duureg
5	Khan-Uul Duureg
6	Chingeltei Duureg
7	Nalaikh Duureg

3. Responsible and Implementing Agency

3-1) The Responsible Agency is Municipality of Ulaanbaatar (MUB)

3-2) The Implementing Agency is City Maintenance and Public Utility Division (hereinafter referred as "CMPUD") of MUB.

The Mongolian side explained that at present Nuuts Company is in charge of operation of final disposal sites in UBC and maintenance of equipment for final disposal under the direct control of CMPUD and TUKs (cleansing companies licenced by Duuregs) are in charge of waste collection in UBC and maintenance of waste collection equipment on the contract basis with MUB.

The Mongolian side explained that reorganization of waste management system is under consideration and will be approved by the middle of December 2006.

3-3) Present Organization Chart of Implementing Agency is described in Annex-2



4. Items requested by the Government of Mongolia

After discussions with the Team, the items described in Annex-3 were finally requested by the Mongolian side. JICA will assess the appropriateness of the request through further study and will recommend to the Government of Japan for approval.

5. Japan's Grant Aid Scheme

5-1) The Mongolian side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-5.

5-2) The Mongolian side will take the necessary measures, as described in Annex-6, for smooth

implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

6. Schedule of the Study

6-1) The consultant members of the team will proceed to further studies in Mongolia until October 10, 2006.

6-2) JICA will prepare the draft report in English and dispatch a mission in order to explain its contents in the middle of December 2006.

After Explanation of the draft report, JICA will proceed to further study and prepare the draft final report and dispatch a mission in order to explain its contents in the middle of March 2007.

6-3) In case that the contents of the draft final report is accepted in principle by the Government of Mongolia, JICA will complete the final report and send it to the Government of Mongolia by July 2007.

7. Other relevant issues

7-1) Phases of the Study

The Team explained that the Study consisted of two phases; Phase I and II. In Phase I, JICA will prepare the draft report which includes a basic concept of the Project and its basic design. In phase II, JICA will prepare the draft final report which includes the engineering design on the basis of the study results of Phase II.

The final report will be completed by JICA through integration of the study results of both Phase I and II.

7-2) Target Year

Both sides confirmed that target year of the project shall be 2010.

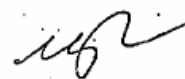
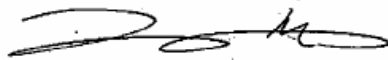
7-3) Monitoring plan of the NEDS by the Mongolian side

Both sides confirmed the monitoring plan and locations of NEDS by the Mongolian side as follows;

Monitoring Plan of NEDS :

1. Air pollution	NH ₃ , CO ₂ , CH ₄ , SO ₂ , H ₂ O, Temperature for Landfill gas
2. Soil pollution	Soil hygiene assessment indicators stipulated by Minister's resolution # 68/A/61, June 22, 1989, Appendix 5, Ministry of Nature and Environment and Ministry of Health (UST 3297-91)..
3. Groundwater pollution	The indicators of bacteriology, nitrogen and other compounds stipulated by "The Drinking water quality standard UST0900-92"
4. Surfacewater pollution	Electric conductivity, Cl ⁻ , pH
5. Noise	Noise level
6. Offensive odor	Personal check
7. Settlement	Settlement level of landfill surface

Monitoring locations: as attached in ANNEX-4.



The Mongolian side promised to arrange necessary budget and personnel for conducting the above-mentioned monitoring plan of NEDS.

The Japanese side explained that total amount of necessary budget and personnel for the monitoring will be shown in the draft report to be prepared by the Japanese side.

7-4) Resettlement of Ger Houses within the site of NEDS

The Mongolian side explained that the candidate site of NEDS is already secured by MUB but two Ger Houses still exist in the candidate site of NEDS.

The Mongolian side also explained that MUB shall allocate alternative lands for them and take necessary actions to resettle them by the end of August 2007.

7-5) Sanitary Landfill at NEDS

The Mongolian side explained that MUB shall operate sanitary landfill at NEDS after completion of construction of NEDS and procurement of machineries by the Project.

The Mongolian side also explained that MUB shall allocate necessary budget for recruiting necessary personnel and Operating and Maintenance (O&M) of machineries in order to properly operate sanitary landfill at NEDS.

The Japanese side explained that total amount of necessary budget and personnel for operating NEDS will be shown in the draft report to be prepared by the Japanese side.

7-6) Construction of Sorting Yard

The Japanese side proposed that sorting yard requested by the Mongolian side shall be constructed by the Mongolian side using construction machineries to be procured under the Project because introduction of separate waste collection system which is prerequisite of sanitary hand sorting is not decided yet.

The Mongolian side strongly requested construction of sorting yard should be included in the Project, but after discussions between both sides, the Mongolian side finally agreed on it and both sides confirmed that construction of sorting yard is excluded from the requested items by the Mongolian side.

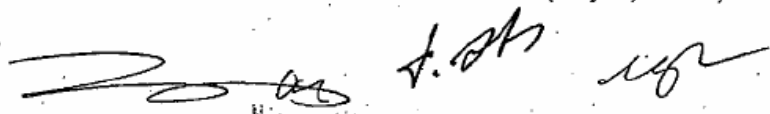
Both sides also confirmed that sorting yard is the very important and necessary facility for securing job opportunities and sanitary working conditions of Waste Pickers, and the Mongolian side explained that they will construct it by themselves.

The Mongolian side promised to proceed to further study for introducing separate waste collection system with the cooperation of JICA Development Study Team on "The Study on Solid Waste Management Plan for Ulaanbaatar City in Mongolia".

7-7) RDF manufacturing plant

The Mongolian side strongly requested that construction of RDF manufacturing plant shall be included in the Project because they put much emphasis on promotion of 3Rs (Recycle, Reduce,

(Tw)



Reuse) and treatment of paper and plastic waste.

The Japanese side explained that construction of RDF manufacturing plant is difficult under the Japanese Grant Aid Scheme because introducing of separate waste collecting system which is prerequisite of introducing RDF manufacturing is not decided yet and construction of RDF plant was not originally requested in the application form for Japanese Grant Aid submitted by the Mongolian side.

After discussions between both sides, both sides finally confirmed that RDF manufacturing plant shall not be included in the Project.

The Mongolian side explained that they will proceed to further study for introducing RDF manufacturing with the cooperation of JICA Development Study Team on "The Study on Solid Waste Management Plan for Ulaanbaatar City in Mongolia".

7-8) Considerations for Waste Pickers

The Mongolian side promised to pay necessary attention and consideration to Waste Pickers who are currently working at Ulaan Chuluut Disposal Site (hereinafter referred as "UCDS") and prospected to move to NEDS for Waste Picking after closing of UCDS and opening of NEDS.

The Mongolian side explained that MUB will introduce separate waste collection system in the Planned Area and construct Naragiin Enger Recycling Complex (NERC) next to NEDS including sorting yard in future in order to provide job opportunities for Waste Pickers.

The Japanese side proposed that the Mongolian side shall secure necessary place and time for Waste Picking in landfill operation of NEDS before completion of construction of NERC (especially sorting yard). The Mongolian side agreed on it and both side confirmed that the Japanese side will study operation methods of landfill in order for Waste Pickers to continue their works at NEDS.

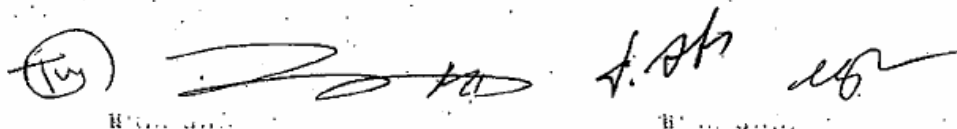
The Mongolian side requested necessary facilities for organization of Waste Pickers and the Japanese side promised to convey the request to the Government of Japan.

7-9) Construction of the Central Workshop for waste collection equipment

The Mongolian side explained that the Central Workshop shall be constructed by the Mongolian side by the end of 2007 and necessary budget will be approved by the end of December 2006.

The Mongolian side promised to arrange necessary budget and personnel to properly operate the Central Workshop.

The Japanese side explained that total amount of necessary budget and personnel for operation and maintenance of the equipment to be procured by the Project will be shown in the draft report to be prepared by the Japanese side.



7-10) Provision of Collection Service to all the households in UBC

The Mongolian side explained that they shall provide collection services to all the households in UBC including Ger area by the year 2010 and promised to make all possible efforts to realize it including reorganization of waste management and financial system for solid waste management.

7-11) Reorganization of financial system for solid waste management

The Mongolian side explained that MUB had revised collection fee on 1st September 2006 and reorganization of financial system for solid waste management is under consideration and will be approved by the end of December 2006.

Both sides confirmed that the Team will discuss further with the Mongolian side to effectively reorganize financial system for solid waste management.

7-12) Green belts of NEDS

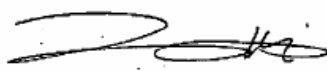
Both sides confirmed that trees for Green belts of NEDS shall be planted and maintained by the Mongolian side.

The Mongolian side requested that the Japanese side shall construct fences for Green belts to prevent plastic waste from flying into another area.

The Japanese side promised to convey the request to the Government of Japan.

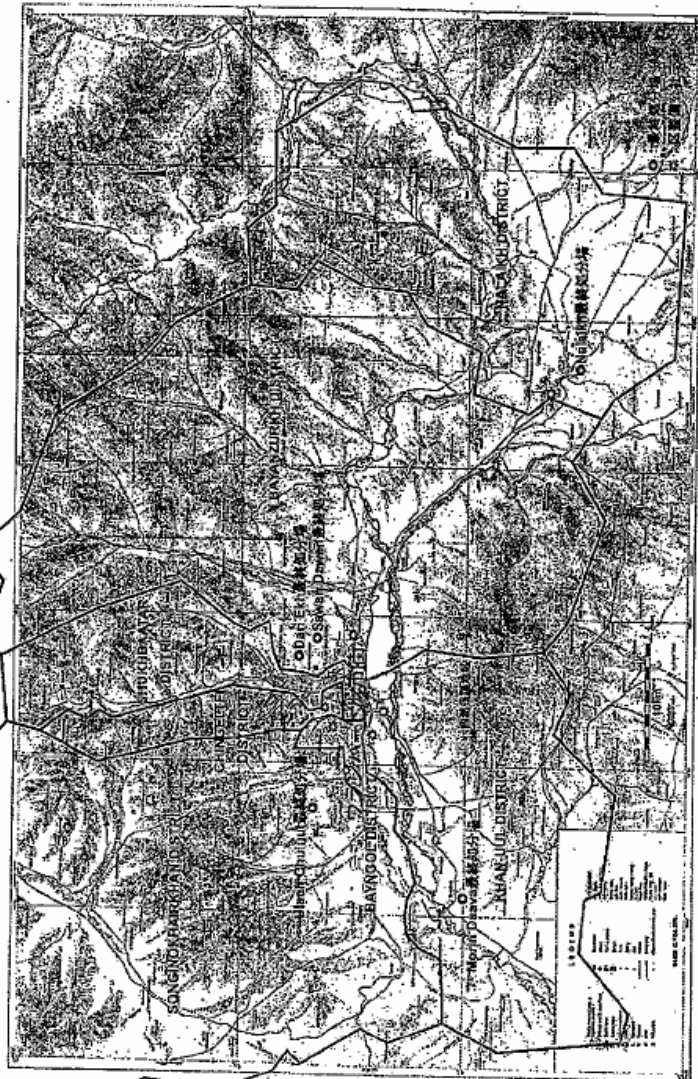
7-13) Both sides confirmed that the Mongolian side shall be responsible for the results of the execution of the Project on the basis of all documents and drawings prepared as a result of the Study.

(Tw)





ANNEX-1: Project Area and Location of NEDS



Project Area (7 Duuregs in Ulaanbaatar City)

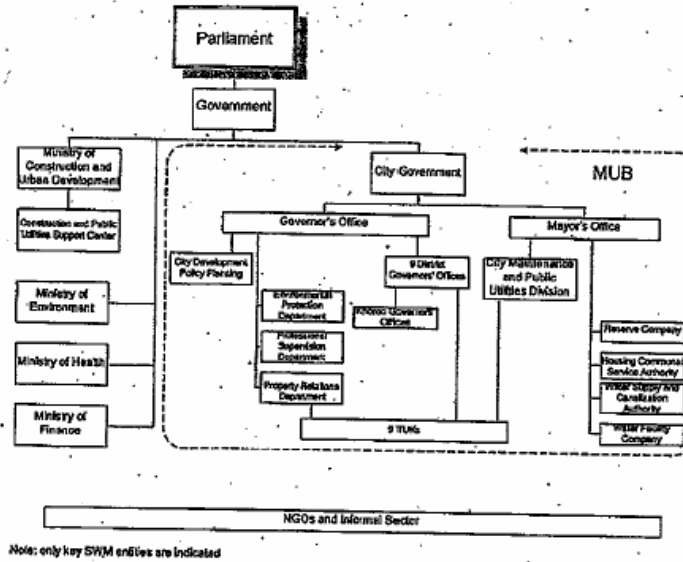
(Tu)

[Handwritten signature]

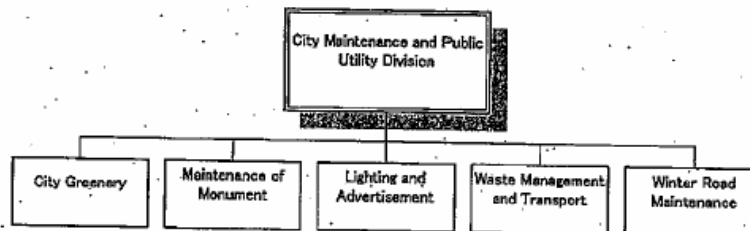
[Handwritten signature]

Annex-2:

Organization chart of Municipality of Ulaanbaatar (MUB)



Organization chart of City Maintenance and Public Utility Division (CMPUD)



(Signature)

(Signature)

(Signature)

Annex-3: Items requested by the Mongolian side

1) Construction of Nagiin Enger Disposal Site

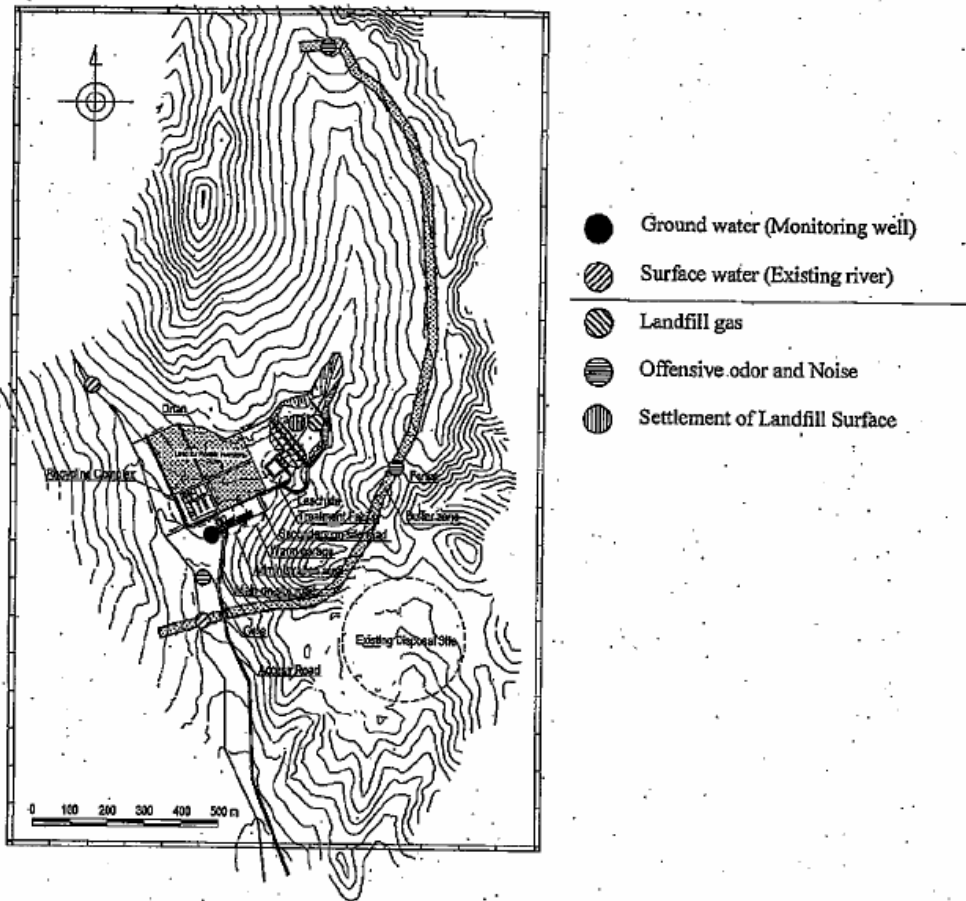
2) Procurement of equipment listed as below;

Equipment	Specification	Unit	Quantity
1. Waste collection equipment			
1.1 Compactor truck	15 m3	Unit	14
1.2 Compactor truck	8 m3	Unit	6
1.3 Dump truck	8 ton	Unit	13
1.4 Skip Loader Truck	for 5m3 container	Unit	2
1.5 Container	5 m3	Unit	40
1.6 Truck	2 ton	Unit	2
2. Landfill equipment			
(For NEDS)			
2.1 Bulldozer	21 ton class	Unit	2
2.2 Excavator	0.7 m3	Unit	1
2.3 Dump truck	10 ton	Unit	3
2.4 Water tank truck	6000L	Unit	1
2.5 Pick up truck	4WD	Unit	1
(For Morin Davaa and Khoroo21)			
2.7 Bulldozer	13 ton class	Unit	1
2.8 Wheel loader	1.2m3	Unit	1
(For Nalaikh)			
2.9 Wheel Loader	1.2m3	Unit	1
3. Workshop equipment and tools			
3.1 Equipment	Tire changer, compressor, welder, car lifter etc	Lump sum	1
3.2 Tools	maintenance tools	Lump sum	1

H. M. S. G.

H. M. S. G.

ANNEX-4 : Planed Locations for Monitoring of NEDS



(T)

[Signature]

[Signature]

ANNEX-5 : JAPAN'S GRANT AID SCHEME

1. Grant Aid Procedure

- 1) Japan's Grant Aid Program is executed through the following procedures.
 - Application (Request made by a recipient country)
 - Study (Basic Design Study conducted by JICA)
 - Appraisal & Approval (Appraisal by the Government of Japan and Approval by Cabinet)
 - Determination of (The Notes exchanged between the Governments of Japan and the recipient country)
 - Implementation

- 2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA to conduct a study on the request. If necessary, JICA send a Preliminary Study Team to the recipient country to confirm the contents of the request.

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Programme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

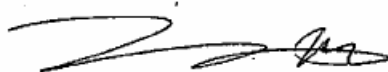
Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2. Basic Design Study

- 1) Contents of the Study
The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project"), is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- a) confirmation of the background, objectives and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation;
- b) evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from the technical, social and economic points of view;
- c) confirmation of items agreed on by both parties concerning the basic concept of the Project;
- d) preparation of a basic design of the Project; and



e) estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For the smooth implementation of the Study, JICA uses a consulting firm selected through its own procedure (competitive proposal). The selected firm participates the Study and prepares a report based upon the terms of reference set by JICA.

At the beginning of implementation after the Exchange of Notes, for the services of the Detailed Design and Construction Supervision of the Project, JICA recommends the same consulting firm which participated in the Study to the recipient country, in order to maintain the technical consistency between the Basic Design and Detailed Design as well as to avoid any undue delay caused by the selection of a new consulting firm.

3. Japan's Grant Aid Scheme

1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

4) Under the Grant, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

(Tw)

W. J. J. J. J.

W. J. J. J. J.

However, the prime contractors, namely consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

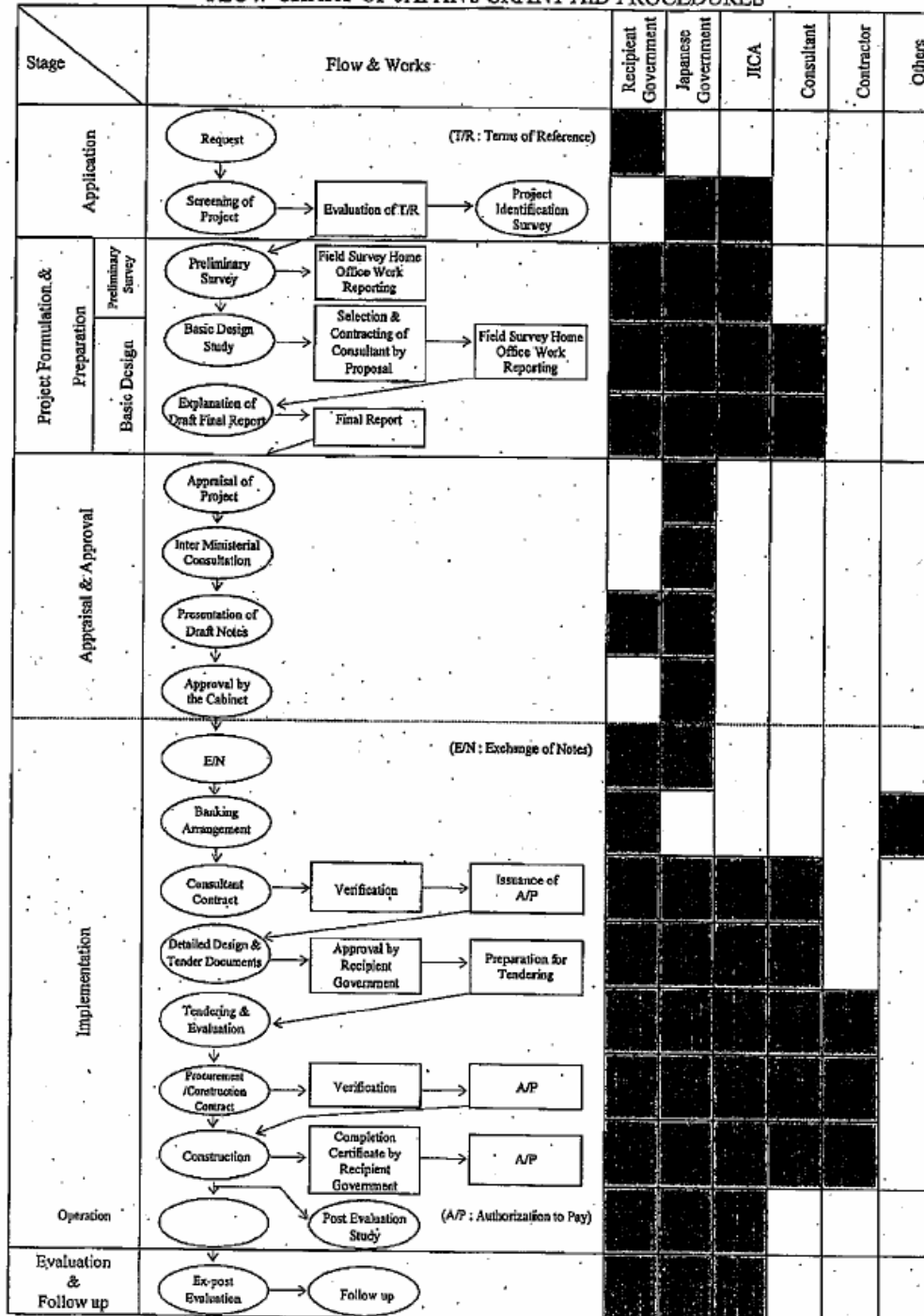
- 5) **Necessity of "Verification"**
The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability of Japanese taxpayers.
- 6) **Undertakings required to the Government of the recipient country**
 - a) to secure a lot of land necessary for the construction of the Project and to clear the site;
 - b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities outside the site;
 - c) to ensure prompt unloading and customs clearance at ports of disembarkation in the recipient country and internal transportation therein of the products purchased under the Grant Aid;
 - d) to exempt Japanese nationals from customs duties, internal taxes and fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts;
 - e) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such as facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work;
 - f) to ensure that the facilities constructed and products purchased under the Grant Aid be maintained and used properly and effectively for the Project; and
 - g) to bear all the expenses, other than those covered by the Grant Aid, necessary for the Project.
- 7) **"Proper Use"**
The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign the necessary staff for operation and maintenance of them as well as to bear all the expenses other than those covered by the Grant Aid.
- 8) **"Re-export"**
The products purchased under the Grant Aid shall not be re-exported from the recipient country.
- 9) **Banking Arrangement (B/A)**
 - a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.
 - b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of recipient country or its designated authority.

(tu)





FLOW CHART OF JAPAN'S GRANT AID PROCEDURES



Annex-6: Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To secure land		●
2	To Clear, level and reclaim the site when needed		●
3	To construct gates and fences in and around the site	●	●
4	To construct the parking lot		●
5	To construct roads		
	1) Within the site	●	
	2) Outside the site		●
6	To construct the buildings	●	
7	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1) Electricity		
	a. The distributing line to the site		●
	b. The drop wiring and internal wiring within the site	●	
	c. The main circuit breaker and transformer	●	
	2) Water supply		
	a. The city water distribution main to the site	—	—
	b. The supply system within the site (receiving and elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (for storm, sewer and others) to the site	—	—
	b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	●	
	4) Telephone system		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		●
	b. The MDF and the extension after the frame/panel	●	
	5) Furniture and Equipment		
	a. General furniture		●
	b. Project Equipment	●	
8	To bear the following commissions to a bank in Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
9	To ensure unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		●
	3) Internal transportation from port of disembarkation to the project site	●	
10	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.		●
11	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contract.		●
12	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant		●
13	To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and installation of the equipment		●

B/A: Banking Arrangement

A/P: Authorization to Pay

Signature

Signature

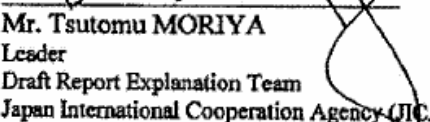
**MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY
ON
THE PROJECT FOR IMPROVEMENT OF SOLID WASTE MANAGEMENT
IN ULAANBAATAR IN MONGOLIA
(EXPLANATION OF DRAFT REPORT)**


In September and October 2006, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team on the Project for Improvement of Solid Waste Management in Ulaanbaatar in Mongolia (hereinafter referred to as "the Project") to Mongolia (hereinafter referred to as "Mongolia"), and through discussion, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

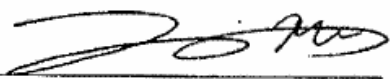
In order to explain and to consult with the Government of Mongolia on the components of the draft report, JICA sent to Mongolia the Draft Report Explanation Team (hereinafter referred to as "the Team"); which is headed by Mr. Tsutomu MORIYA, Resident Representative, JICA Mongolia Office, from January 14 to January 27, 2007.

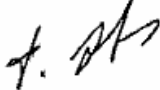
As a result of discussions, both parties confirmed the main items described on the attached sheets.

Ulaanbaatar, January 18, 2007


Mr. Tsutomu MORIYA
Leader
Draft Report Explanation Team
Japan International Cooperation Agency (JICA)


Mr. Gombosuren MUNKHBAYAR
General Manager of Ulaanbaatar city
Head of the Governor's office
Municipality of Ulaanbaatar
The Government of Mongolia


Mr. Togmid DORJKHAND
Deputy Director-General
Department of Policy and Coordination for
Loans and Aid
Ministry of Finance
The Government of Mongolia


Mr. Gavaa ENKHEE
Director
International Cooperation Department
Ministry of Nature and Environment
The Government of Mongolia

ATTACHMENT

1. Components of the Draft Report

The Government of Mongolia agreed and accepted in principle the components of the draft report explained by the Team.

2. Japan's Grant Aid scheme

The Mongolian side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Mongolia as explained by the Team and described in Annex-5 and Annex-6 of the Minutes of Discussions signed by both parties on September 8, 2006.

3. Responsible and Implementing Agency

3-1) The Responsible Agency is Municipality of Ulaanbaatar (hereinafter referred as "MUB")

3-2) The Implementing Agency is City Maintenance and Public Utility Agency (hereinafter referred as "CMPUA") of MUB.

The Mongolian side explained that after reorganization of waste management system of MUB CMPUA was at present in charge of both waste collection works and final disposal sites operation works including maintenance of equipment, and CMPUA directly manages them.

3-3) Present Organization Chart of Implementing Agency is described in Annex-1

4. Schedule of the Study

4-1) The consultant members of the team will proceed to further studies in Mongolia until January 27, 2007.

4-2) JICA will proceed to further study and prepare the draft final report and dispatch a mission in order to explain its contents in the middle of March 2007.

4-3) In case that the contents of the draft final report is accepted in principle by the Government of Mongolia, JICA will complete the final report and send it to the Government of Mongolia by July 2007.

5. Other relevant issues

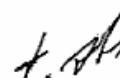
5-1) Components of the Project

Both sides confirmed that the Project would be composed of the items listed in Annex-2 in case the Japanese Government would finally decide to implement the Project.

Both sides also confirmed that procurement of Wheel loader with back hoe for Morin Davaa Disposal Site (MDDS) would be further studied by the Japanese side.



1



5-2) Reorganization of financial system for solid waste management

The Mongolian side explained that they introduced new financial system for waste management called "Waste Fund" as described in Annex-3 and the "Waste Fund" system was put into effect on 1 January 2007.

5-3) Budget and Personnel Allocations for Operation and Maintenance (O&M)

The Japanese side explained necessary budget and personnel for operation and maintenance (O&M) of the Project as described in Annex-4, and both sides confirmed that the Mongolian side should allocate all the necessary budget and personnel for O&M of the Project as described in Annex-4 in case the Japanese Government would finally decide to implement the Project.

The Mongolian side explained that necessary budget for the Project would be covered by waste collection and disposal fee and own budget of MUB.

5-4) Monitoring plan of the Narangiin Enger Disposal Site (NEDS) by the Mongolian side

The Mongolian side explained that they should conduct periodical environmental monitoring in Narangiin Enger Disposal Site (NEDS) and promised to arrange necessary financial arrangement as described in Annex -7.

The Mongolian side promised to send periodical Monitoring Reports to JICA Mongolia Office every year.

5-5) Preparation works for Central Workshop and warm garages for waste collection equipment

The Mongolian side explained that CMPUA had already secured necessary budget for preparation works for Central Workshop and warm garages and promised to complete necessary works by the end of 2007.

5-6) Equipment for Morin Davaa Disposal Site (MDDS)

The Mongolian side strongly requested to include Wheel loader with back hoe for Morin Davaa Disposal Site (hereinafter referred as "MDDS") in the Project and explained as follows;

- a) EIA process of MDDS is on-going and will be completed by the end of July 2007.
- b) MDDS is duly approved and owned disposal site by MUB and it was constructed before introduction of Mongolian EIA law. There is no legal problem in disposing of wastes in MDDS.
- c) The Mongolian side will take necessary measures for introducing semi-sanitary landfilling in MDDS including leveling existing wastes and covering them with soils.

The Japanese side promised to convey the request to the Government of Japan.

The Japanese side explained that Wheel loader with back hoe for MDDS cannot be included in the Project without completion of the EIA process and it should be excluded from

the Project unless the Mongolian side complete the EIA process by the end of July 2007. The Mongolian side understood it.

5-7) Technical assistance (Soft Components)

Both sides confirmed that technical assistance (so-called "Soft Components") listed in Annex-5 will be implemented in case the Japanese Government would finally decide to implement the Project.

The Japanese side explained that detail components of technical assistance (Soft Components) are under consideration and will be explained by the Team around the middle of March 2007.

The Mongolian side promised to allocate necessary personnel and resources to conduct technical assistance (Soft Components).

The Mongolian side requested technical assistance for waste collection works such as management of waste collection vehicles to be included the Soft Components and the Japanese side promised to convey the request to the Government of Japan.

5-8) Hazardous Wastes

The Mongolian side agreed that the hazardous wastes such as hazardous medical wastes and hazardous industrial wastes should not be transported and disposed of at NEDS and other three municipal landfill sites and MUB will take necessary measures described in the Annex-6

5-9) Obligations of the Mongolian side for implementing the Project

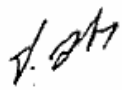
The Mongolian side agreed to take necessary measures and bear the necessary cost for implementing the Project as described in Annex-8

5-10) Submersible pump for recirculation of leachate treatment facility of NEDS

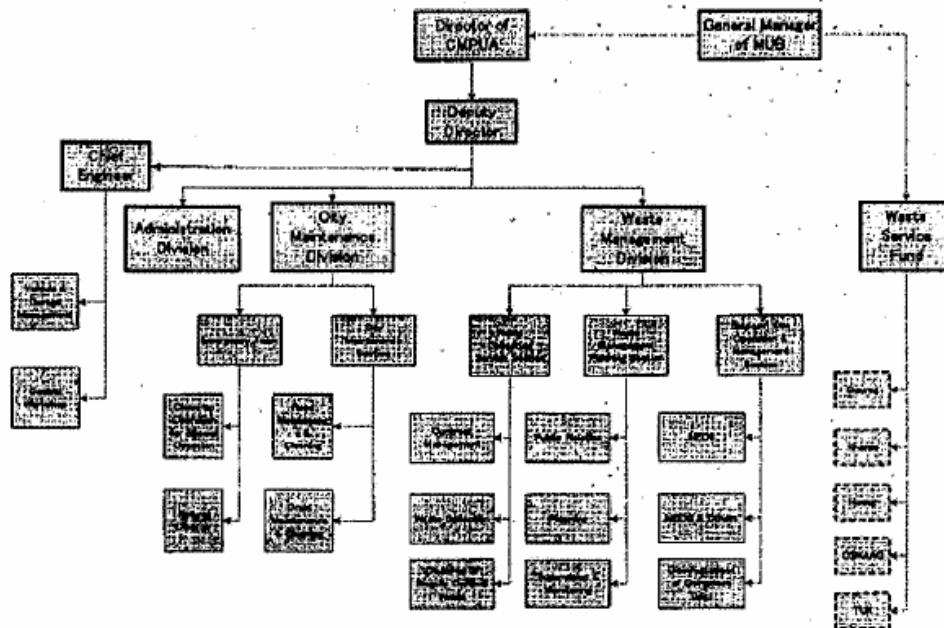
The Mongolian side agreed to purchase submersible pump for recirculation of leachate treatment facility of NEDS by their own budget before the completion of construction works of NEDS. The Japanese side promised to inform the Mongolian side of the required detail spec of the pump.

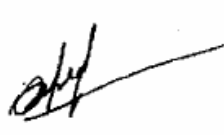
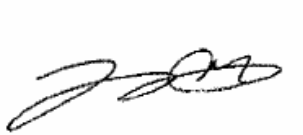
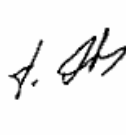


3



Annex-1: Organization chart of City Maintenance and Public Utility Agency (CMPUA)





4
(T)


Annex-2: Components of the Project

Facilities Lists

No	Description	Specification	Quantity	Purposes
A	Narangin Enger Disposal Site			
	Facilities of Disposal Site			
A 1	Embankment	Filling, Crown width:8m, Height:10m	1 no	Proper waste disposal
A 2	Rainwater drainage	V shape concrete U shape concrete Earth drainage	Approx.1,200m Approx.800m Approx.600m	Diversion of rainwater and clear boundary of disposal site
A 3	Road for common vehicles and waste collection vehicles	Asphalt pavement	Approx.800m	Access to disposal site smoothly
A 4	Road for heavy equipment	Gravel pavement	Approx.500m	Access to disposal site
	Environmental Protection Facility			
A 5	Leachate collection facility	Perforate steel pipe diameter:600mm Impervious wall(Reinforced concrete)	Approx.320m 1 no	Collection and transfer of leachate to treatment facility
A 6	Leachate Treatment Facility	Reinforced Concrete	1 no	Treatment of the Leachate
A 7	Gas removal facility	Perforated steel pipe, cobble stone	26 nos.	Removal of methane gas
A 8	Fence for prevention of waste scattering	Inside net fence :H=3.0m Outside=2.0m	Approx.2,200m Approx.2,200m	Prevention of plastic waste scattering
A 9	Buffer zone(Mongolian side responsibility)	Zones planted with trees	1 unit	Mitigation of environment deterioration
A 10	Tire wash pit	Reinforced concrete	1 no	Wash the dirty tire of collection vehicle after dumping waste
	Operation & Maintenance Facility			
A 11	Final Disposal Site Administration Office	Reinforced concrete, steel frame structure: 1 story	1 no	Operation & Maintenance of final disposal site and welfare for waste pickers
A 12	Weight Bridge & Control House	Reinforced concrete: 1 story	1 no	Weigh of collection vehicles & control of registration
A 13	Public toilet for waste pickers	Closet bowl for men: 3nos. Closet bowl for women:3 nos	1no	Sanitary facility for waste pickers working at the disposal site
A 14	Main gate	Steel structure	1 no	Control of collection vehicle and prevention of illegal dumping in the night.
A 15	Telephone line		App.300m	Communication
A 16	Utility pole and electric wire		App.600m	Operation of facilities at the disposal site

[Signature]

[Signature]

5

(Tuy) f.pts

Equipment List

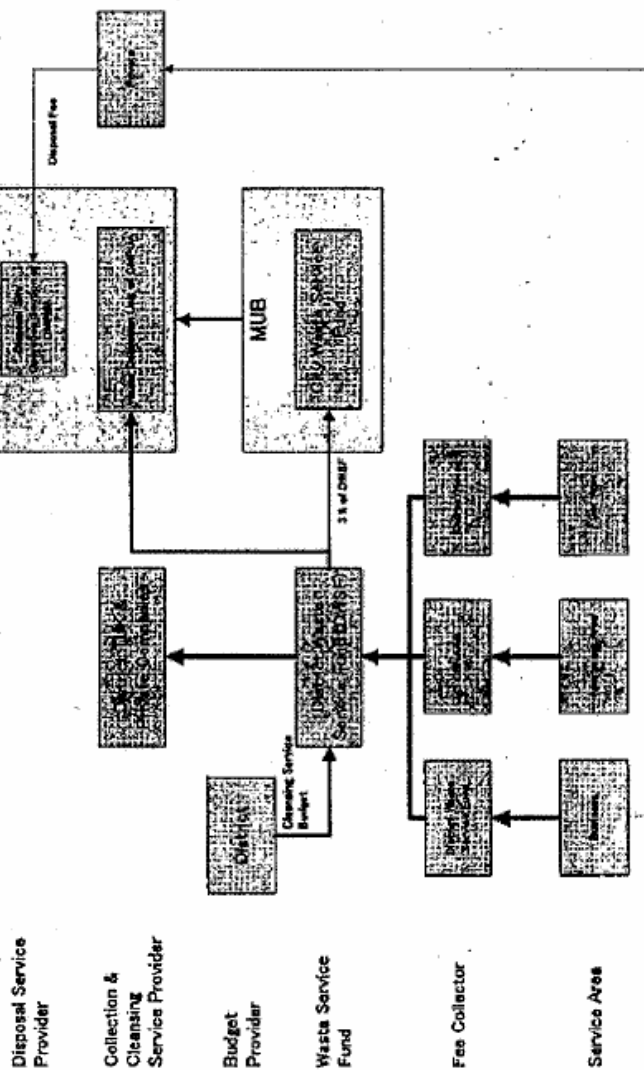
Number	Equipment Name	Major Specification	Q'ty	Purpose
A Collection and Transportation Equipment				
A.1	Compactor Track	Max Volume 15 m ³	23	Collection of Apartment Waste, Business Waste and NH Medical waste
A.2	Compactor Track	Max Volume 8 m ³	7	Collection of Apartment Waste, Business Waste and NH Medical waste
A.3	Dump Truck	Pay load 6 t with Overhead Cover	13	Collection of Gar waste
A.4	Wheel Loader with Back Hoe	Bucket capacity 1.0 m ³	1	Collection of waste from remote area and non-accessible area
B Equipment for Final Disposal Site				
B.1 For Narangin Enger final Disposal Site (NEDS)				
B.1.1	Bulldozer	Equipment weight 21 t class, dry type crawler	3	Laying, compaction of waste, laying of covered soil, construction of earth dam and divider
B.1.2	Excavator	Bucket capacity 0.6 m ³	1	Excavation of covered soil, unload, maintenance of on site road and construction of drainage
B.1.3	Dump Truck	Pay load 10 t	2	Transport of covered soil, dam material and maintenance material for on site road
B.1.4	Water tanker with water gun	Tank capacity 6000 liter	1	Fire fighting, transport of drinking water, water spraying for on site road and watering to green belt
B.2 For Morin Davaa final Disposal Site (MDDS)				
B.2.1	Wheel loader with back Hoe [*]	Bucket capacity 1.0 m ³	1	Laying, compaction of waste, laying of covered soil and construction of divider
C For workshop and warm garage				
C.1 For Central workshop				
C.1.1	Warm water car washer	Discharge volume 800 liter/hr	1	Washing car which bringing to central workshop
C.1.2	Part cleaner		1	Washing of parts
C.1.3	Hydraulic jack for dump track	Max lifting capacity 15 t	2	Lifting up of dump track
C.1.4	Portable jack for compactor track	Max lifting capacity 10 t	2	Lifting up of compactor track
C.1.5	Rigid rack	Max weight 10 t	8	Holding of car body
C.1.6	High pressure grease pump	Max pressure 25Mpa	1	Refill of grease
C.1.7	Oil bucket pump	For 20 liter can	1	Oil changer for track
C.1.8	Tools for oil changing		1	Oil filter wrench, Oil measure, portable fuel can and drain pump
C.1.9	Air compressor	Pressure 9.5 kg/cm ²	1	Air refilling to tire and power source of air tools
C.1.10	Air Impact wrench (Small)	Socket size 8—32mm	1	Disorption of parts
C.1.11	Air Impact wrench (Large)	Socket size 19—41mm	1	Disorption of parts
C.1.12	Tire changer	Applicable tire size 16—25 inch	1	Disorption of tire
C.1.13	Tire maintenance tools		1	Tire lever, bar, Air chuck, air meter, wheel wrench and tire puncture repair set
C.1.14	Basic tools	For metric and inch size	2	Basic tools
C.1.15	Basic tools storage		2	Storage of basic tools
C.1.16	Torque wrench set	Covered range 10—45, 40—180, 80—560 Nm	1	Checking of tighten up bolt

Number	Equipment Name	Major Specification	Q'ty	Purpose
C.1.17	Rapidity battery charger	12-24V, 35/70A	1	Battery charge
C.1.18	Battery service set		1	Gravity check and refilling of battery liquid
C.1.19	Digital circuit tester		1	Checking of electrical component
C.1.20	Electrical welder		1	Welding and sheeting
C.1.21	Gas welder set		1	Welding and cutting
C.1.22	Disk sander	Disk diameter 100mm	1	Grinding of welding area
C.1.23	Electrical Drill	Applicable steel plate thickness 6.5mm	2	Making hole for steel and sheeting
C.1.24	High speed abrasive cutter		1	Cutting of steel and sheeting
C.1.25	Work bench		2	Work bench for parts assembling
C.2	For Narangin Enger warm garage			
C.2.1	Warm water car washer	Discharge volume 800 liter/hr	1	Washing car which bringing to central workshop
D	Equipment for environment monitoring			
D.1	Portable gas analyzer	0~1000ppm	2	Analyzing of flammable gas

[*]Wheel loader with back hoe for Morin Davaa Disposal Site (MDDS) will be further studied by the Japanese side

[Handwritten signatures and initials]

Annex-3: Financial System for waste management "Waste Fund"



Annex-4: Necessary budget and personnel for Operation and Maintenance

BGD:Bayangol District, BZD:Baganuur District, SkhD:Songinokhairkhan District
SBD:Sukhbaatar District, KhUD:Khan Uul District, Chd:Chingeltei District, NAD:Nalaikh District

1. O & M cost for Collection and Transportation of Waste Operation and Maintenance Cost for Collection and Transportation of wastes in Winter in 2010 (for the duration of 6 months)

Unit : Million MNT

Winter	Compactor 15m3		Compactor 8m3		Dump Truck		Total
	Nos	Amount	Nos	Amount	Nos	Amount	
BGD	7	114	0	0	10	161	275
BZD	6	112	0	0	23	362	474
SKhD	4	60	0	0	21	321	381
SBD	2	36	2	25	13	226	287
KhUD	3	54	0	0	13	222	276
Chd	0	0	4	50	16	278	328
NAD	0	0	1	11	4	57	68
Total	22	376	7	86	100	1627	2089

Operation and Maintenance Cost for Collection and Transportation of wastes in Summer in 2010 (for the duration of 6 months)

Unit : Million MNT

Summer	Compactor 15m3		Compactor 8m3		Dump Truck		Total
	Nos	Amount	Nos	Amount	Nos	Amount	
BGD	7	115	0	0	9	145	260
BZD	6	112	0	0	12	197	309
SKhD	4	60	0	0	11	169	229
SBD	3	54	2	25	7	122	201
KhUD	3	55	0	0	9	155	210
Chd	0	0	4	50	8	140	190
NAD	0	0	1	11	2	28	39
Total	23	396	7	86	58	956	1438

2. O & M cost for NEDS Followings are the expected O & M cost for NEDS in year 2010.

Description	Amount (1,000MNT/year)
Salary	27,504
Fuel	289,354
Spare Parts	79,416
Electricity and Heating	50,400
Maintenance of facilities (Extension of Gas Extraction Pipe)	37,200
Others	17,126
Total	501,000

[Signature]

[Signature]

[Signature]

[Signature]

3. O&M cost for Central Workshop

Followings are the expected O & M cost for central workshop.

Description	Amount (1,000MNT/year)
Salary	15,000
Fuel	17,000
Tools and Parts	34,000
Electricity and Heating	20,000
Total	86,000
Total	86,000

4. Required personnel

Following personnel will be required for implementing requested project.

	Position	Person
1	NEDS Disposal Site	
	Section chief	1
	Engineer	2
	Clerk (include Weighbridge)	5
	Supervisor & Mechanic	3
	Operator (Bulldozer, etc)	8
	Mechanic	1
	Worker	2
2	Central Workshop	
	Manager	1
	Technician	1
	Mechanic	3
	Assistant Mechanic	3
	Store keeper	1
	Supervisor	2
	Accountant	1
3	Collection of Wastes	
	Operators for Compactor	30
	Operators for Dump Truck	13
	Workers	86