

**MINUTES OF MEETING ON THE INTERIM REPORT OF
THE STUDY ON REGIONAL SOLID WASTE MANAGEMENT
FOR ADANA-MERSIN IN THE REPUBLIC OF TURKEY**

1. INTRODUCTION

1.1 The Study Team has submitted twenty (20) copies of the Interim Report to the Government of the Republic of Turkey. Consequently a series of meetings were held from February 22 to March 2 in Ankara, Adana and Mersin in Turkey to discuss the report submitted. A list of officials attending in the above meetings is given in the Appendix 1.

2. ISSUES AND DECISIONS

2.1 Various issues were discussed and clarifications on the Interim Report (IT/R) were made. Subsequently appropriate consensus was reached during the meetings. These issues, clarifications and consensus are outlined in the following paragraphs.

2.2 Pilot Project

The Study Team informed the Turkish side that JICA approved the implementation of the following two pilot projects and allocated a budget for them. The Team requested the Turkish side to take their responsibility in the projects in accordance with the work responsibilities described in the table below:

Table 1: Outline of the Sofulu Disposal Site Improvement Work & the Division of the Work

Work Item	Machinery & Facilities	Approx. Qty	Responsible Body
1. Extinguish fire by soil covering and sprinkling of water	heavy machinery, dumptruck, fire trucks	-	Adana GM
2. Arrangement of landfill slope and soil covering	heavy machinery, dumptruck	-	Adana GM
3. Prevention of spontaneous fire	gas removal facilities	20 places	JICA
4. Reduction of leachate generation	drainage facilities to block rainwater infiltration from outside of the area	1200m	Adana GM
5. Leachate treatment	leachate drains leachate regulation pond leachate circulation facility	1200m 500m ² 1600m	JICA
6. Prevention of the generation of offensive odour by soil covering	heavy machinery, dumptruck	-	Adana GM
7. Mitigation of adverse impacts on surrounding environment	buffer zone	1400m	Adana GM
8. Assessment of the improvement work	bus	two busses for two days	Adana GM

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Table 2: Compost Quality Improvement & Separate Collection

Items	Outline	Equipment & Materials	Responsible Body
Compost Quality Improvement	Improvement of existing facility	Installation of recovery line for non-putrescible waste	JICA
	Recovery of non-putrescible waste	Allocation of 8 workers	Mersin GM
	Facilitation of fermentation	Mixing and moistening of compost	Mersin GM
	Improvement of the management of the compost plant	Preparation of operation manual	JICA
	Pilot project assessment	Survey on compost market and the appropriate price of compost	JICA
Separate Collection	Gain residents' co-operation	Installation of a notice requesting for co-operation Preparation of pamphlets Holding assemblies and meetings	JICA JICA Mersin GM
	Implement separate collection	Distribution of plastic bags Installation of containers for separate collections Collection of segregated waste	JICA JICA Mersin GM

The Turkish side replied that they will take their responsibility in these projects in accordance with the role assignment mentioned above.

2.3 Extension of the Study Period

The Study Team requested the Turkish side to extend the study period for about one month as indicated in the study schedule given in the Appendix 2 in order to implement the proposed pilot projects.

Turkish side approved the request.


2.4 Sites for the Feasibility Study (F/S)

In order to conduct several field surveys related to the F/S, such as topographic survey, etc., the Study Team confirmed the sites for the F/S as follows:

1. For Adana Greater Municipality the extended use of the present Sofulu disposal site with a by-product plant with appropriate recycling facilities shown in the attached map given in the Appendix 3.
2. For Mersin Greater Municipality the construction of a disposal site and a composting plant with appropriate recycling facilities at the ÇİMSA site shown in the attached map given in the Appendix 4.

Turkish side confirmed their agreement.

2.5 Contents of the EIA for the F/S

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Based on the F/S sites confirmed above the Study Team clarify the contents of the EIA for the F/S as shown in the summary of the IT/R, i.e. Table 7-4 for the Sofulu site and Table 8-4 for ÇIMSA site.

The Turkish side agreed upon the clarification.

2.6 Master Plan (M/P) Scenarios

As for the SWM M/P for each GM the Study Team presented 3 scenarios in the IT/R and requested the Turkish counterpart to carefully examine their advantages and disadvantages, problems to be encountered, issues to be solved, etc., and select by the end of the second study work in Turkey mid-April 1999.

The Turkish side acknowledged the request.

2.7 Turkish Version of Reports

At the meeting of the discussion on the Progress Report (1) the Turkish side suggested the Study Team to prepare at least Turkish summary of every report.

According to the discussion with the JICA headquarters on the suggestion above the Team replied they will prepare the reference reports in Turkish for the IT/R, P/R (2) and Draft Final Report.

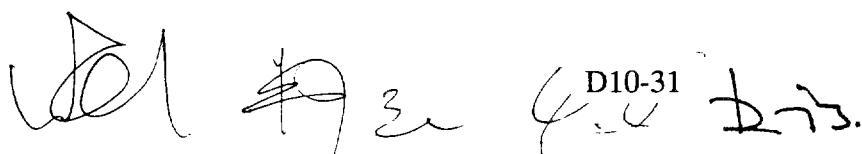
2.8 Comments on the IT/R

The Study Team requested the Turkish side that all comments by the Turkish side to the IT/R should be given to the Study Team Adana Office by 31 March, 1999.

The Turkish side affirmed the request.

3. CONCLUSION

- 3.1 With the above clarifications and modification to be reflected, the IT/R was approved provisionally by the Turkish side.

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APPENDIX 1

LIST OF ATTENDANTS

< Turkish Side >

Ministry of Environment

Ilker BASAYDIN

Sami AGIRGUN

Umit GENÇ

Filiz Baycan

Akif Torun

Deputy Undersecretary

General Director, Directorate of Environmental
Pollution Prevention and Control;

Head, Waste Management Department

Environmental Engineer

Environmental Engineer

Adana Province

Okkes BOZAN

Mehmet A. GUZELANT

Manager

Environmental Engineer

Adana Greater Municipality

Nurettin ÇELMEOGLU

Fahrettin ASIÇI

Hulya KUS

Foreign Relations Advisor of Mayor

Director, Environmental Protection Department

Chemist, Environmental Protection Department

Içel Province

Zeynep YALDIZ

Zuhal Ozananar

Engineer, Içel Province Environmental
Department

Geological Engineer

Mersin Greater Municipality

Ilhan SAYAN

O. Necat KEYKUBAT

Zuhal OZANANAR

Consultant of Mayor

Director, Special Project Department

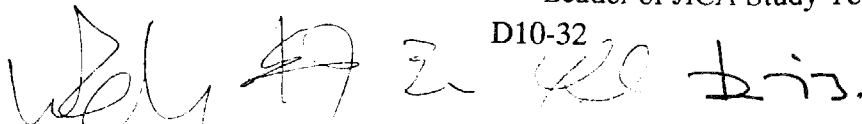
Environmental Department

< Japanese Side >

JICA Study Team

Susumu SHIMURA

Leader of JICA Study Team

 D10-32

Takeshi TOMIYASU
Kamil S. SORGUN
Precha CHUNTAKORN

Naofumi SATO
K. Taylan DERICIOGLU

Disposal Plan (2) and Medical Waste Plan
Collection and Haulage Plan
Waste Amount and Composition Surevey and
Analysis of Waste Stream
Facility Design & Cost Estimation
Organisational and Institutional Development
Plan

JICA Advisory Committee for the Study

Takashi IKEGUCHI

Chairman of the Advisory Committee

JICA Headquarters

Taketo KUROKI

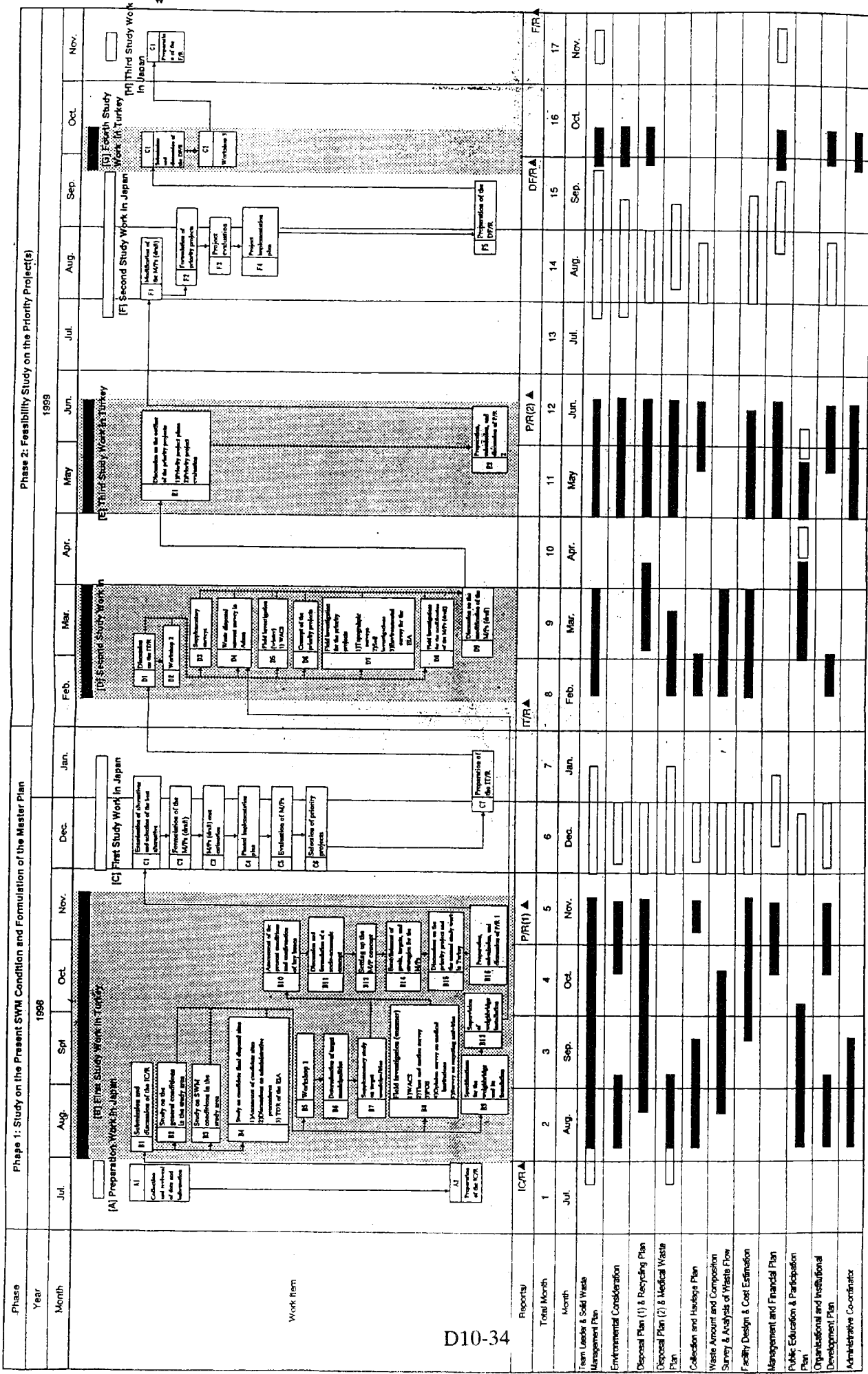
Second Development Study Division, Social
Development Study Department

JICA Turkey Office

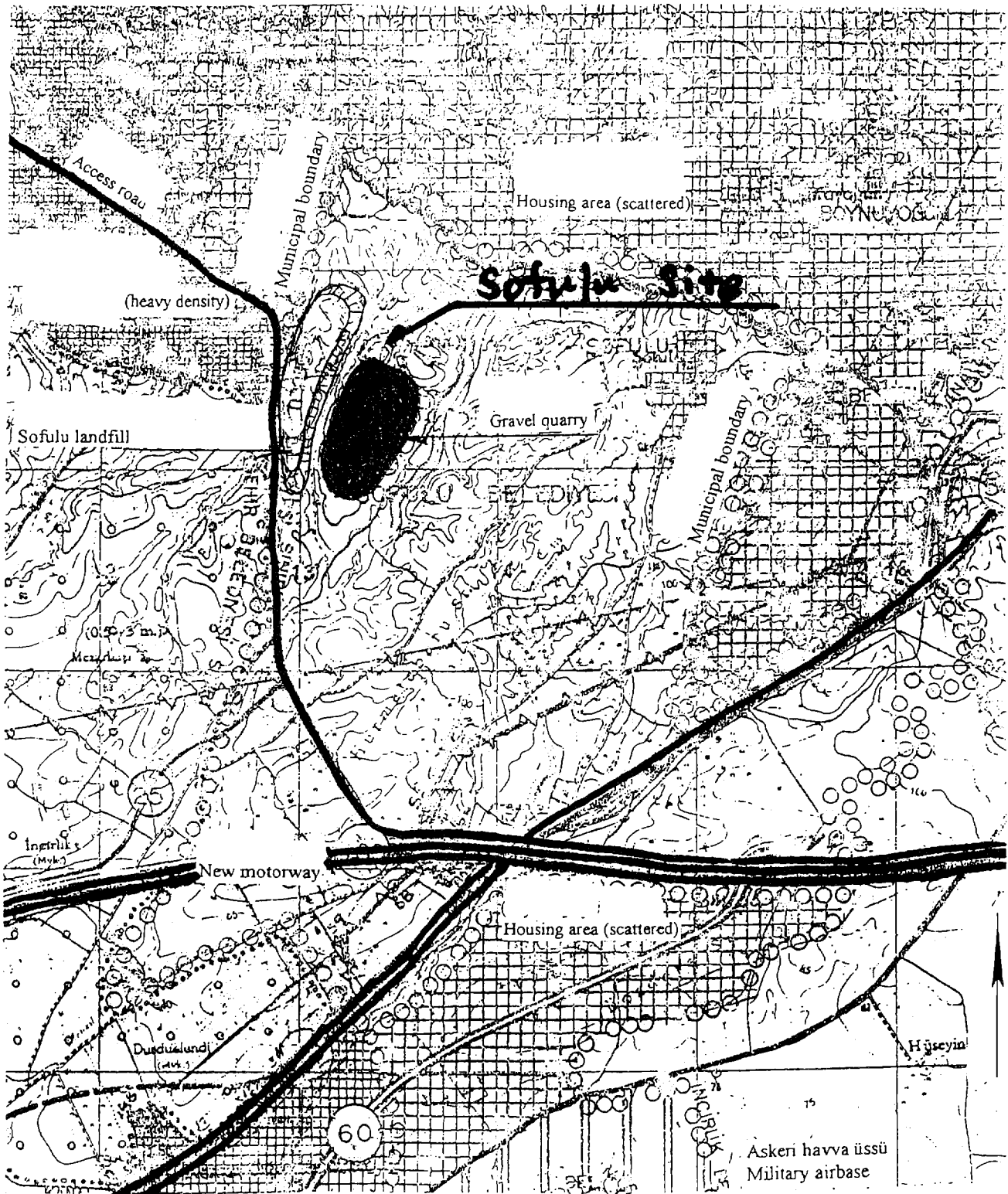
Nurettin ELBIR

Consultant to JICA Ankara Office

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Appendix 3

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ÇİMSA SITE

ORGANİZE SANAYİ BÖLGESİ

BAĞCILAR

TEKKE

YENİTAŞKENT

CAM SANAYİ

YAKAKOY

KARACAILYAS

HAMURLU

ADANALIOĞLU

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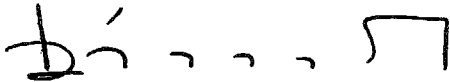
Appendix 4
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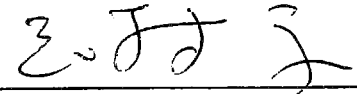
MINUTES OF MEETING
ON
THE PROGRESS REPORT (2)
OF
THE STUDY ON REGIONAL SOLID WASTE MANAGEMENT
FOR
ADANA-MERSIN
IN
THE REPUBLIC OF TURKEY

AGREED UPON BETWEEN
THE MINISTRY OF ENVIRONMENT
AND
JICA STUDY TEAM

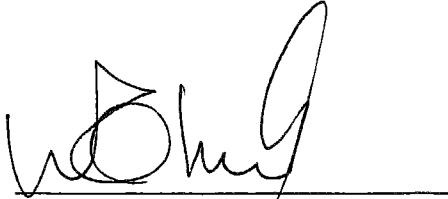
Ankara, June 10th, 1999



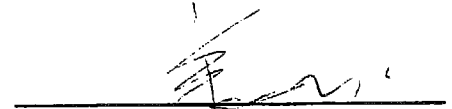
Dr. Ilker BASAYDIN
Acting Undersecretary
The Ministry of Environment



Mr. Susumu SHIMURA
Leader of JICA Study Team



Mr. Nurettin ÇELMEOGLU
Foreign Relations Consultant of
Adana Greater Municipality
On behalf of Mayor



Mr. Ilhan SAYAN
Responsible Engineer of the project
~~Consultant of Mayor of~~
Mersin Greater Municipality
On behalf of Mayor

**MINUTES OF MEETING ON THE PROGRESS REPORT (2) OF
THE STUDY ON REGIONAL SOLID WASTE MANAGEMENT
FOR ADANA-MERSIN IN THE REPUBLIC OF TURKEY**

1. INTRODUCTION

- 1.1 The Study Team has submitted twenty (20) copies of the Progress Report (2) to the Government of the Republic of Turkey. Consequently a series of meetings were held from June 3rd to 8th in Ankara, Adana and Mersin in Turkey to discuss the report submitted. A list of officials attending in the above meetings is given in the Appendix 1.

2. ISSUES AND DECISIONS

- 2.1 Various issues were discussed and clarifications on the Progress Report (P/R) (2) were made. Subsequently appropriate consensus was reached during the meetings. These issues, clarifications and consensus are outlined in the following paragraphs.

2.2 Master Plan (M/P) Scenarios


The team presented three (3) SWM M/P scenarios for the Turkish side in the IT/R and requested them to carefully examine the scenarios' advantages and disadvantages, problems to be encountered, issues to be solved, etc., and select by the end of the second study work in Turkey mid-April 1999.

Both Adana and Mersin Greater Municipalities decided to select scenario 2 for this study. However, since year 2020, the M/P target year, is very far from now, they expressed they like to be free to change the scenario in accordance with socio-economic situation, technology progress, etc. in future.

2.3 Contents of the Feasibility Study (F/S) for the Adana Greater Municipality (GM)

Since the SWM M/P scenario 2 was selected as mentioned above, the study team and the Turkish side confirmed the contents of the F/S for the Adana GM which cover:

1. New construction of a sorting plant, a compost plant and a final disposal site at the present Sofulu disposal site, and
2. Rehabilitation of the current Sofulu dump site part of which is being conducted by the pilot project.

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The team presented an overall Sofulu site development plan as attached Appendix 2 and proposed a treatment/disposal amount of the above-mentioned SWM facilities as shown in the table below.

Table 1: Waste Treatment and Disposal Amount at Sofulu Site

Items	Unit	Amount
Target Year	---	2005
Discharge	ton/day	1,304
	ton/year	475,960
Separated Collection Rate	%	30 % of the above
Amount	ton/year	142,788
Compostable waste (57%)	ton/year	81,389
Non-Compostable waste (43%)	ton/year	61,399
Treated Amount at Sorting Plant (Plant Capacity)	ton/year	82,500
Treated Amount at Compost Plant (Plant Capacity)	ton/year	62,500
Disposal Amount including residues from the above plants	ton/year	437,850

The Turkish side approved the above plan.

2.4 Contents of the Feasibility Study (F/S) for the Mersin Greater Municipality (GM)

Since the SWM M/P scenario 2 was selected as mentioned above, the study team and the Turkish side confirmed the contents of the F/S for the Mersin GM which cover:

1. New construction of a sorting plant, a compost plant and a final disposal site at the CIMSA quarry site, and
2. Rehabilitation of the current compost plant dump site.

The team presented an overall CIMSA quarry site development plan as attached Appendix 3 and proposed a treatment/disposal amount of the above-mentioned SWM facilities as shown in the table below.

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Table 2: Waste Treatment and Disposal Amount at CIMSA Site

Items	Unit	Amount
Target Year	---	2005
Discharge	ton/day	628
	ton/year	229,220
Separated Collection Rate	%	30 % of the above
Amount	ton/year	68,766
Compostable waste (57%)	ton/year	39,197
Non-Compostable waste (43%)	ton/year	29,569
Treated Amount at Sorting Plant (Plant Capacity)	ton/year	30,000
Treated Amount at Compost Plant (Plant Capacity)	ton/year	40,000
Disposal Amount including residues from the above plants	ton/year	185,580

The Turkish side approved the above plan.

2.5 Pilot Project in Adana GM

The Study Team informed the Turkish side that the pilot project in Adana GM, Experiment on Sofulu Disposal Site Improvement, is being conducted efficiently due to the close co-operation of the counterpart and the work items done by the team was completed. However, the team requested the Adana GM to continue the rehabilitation works and sanitary landfill operation in accordance with the improvement plan proposed by the team.

The Turkish side approved the request.


2.6 Pilot Project in Mersin GM

The Study Team informed the Turkish side that the pilot project in Mersin GM, Experiment on Separate Collection and Compost Quality Improvement, is being conducted sufficiently due to the close collaboration of the counterpart and the work items done by the team was completed except the physical/chemical composition analysis of the compost produced by the experiment. However, the team requested the Mersin GM to continue the separate collection in Guven Sitesi Housing Complex as a first step and a model of the separate collection, and operate the compost plant in accordance with the improvement plan proposed by the team.

The Turkish side approved the request.

2.7 EIA Reports

The Study Team clarified that the EIA application procedure shall be the responsibility of Adana and Mersin GMs for their respective projects, i.e. the responsibility of the

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team and the contractor of the team on the EIA report shall be by the end of October 1999, i.e. the preparation of the Final Report (F/R).

After the submission of the F/R all responsibility on the EIA report shall be born by both greater municipalities respectively.

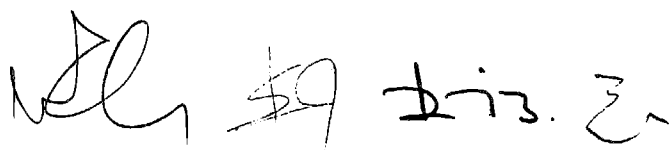
2.8 Comments on the P/R (2)

The Study Team requested the Turkish side that all comments by the Turkish side to the P/R (2) should be given to the Study Team Adana Office by June 30th, 1999 if they are to be considered by the Team for the preparation of the Draft Final Report.

The Turkish side approved the request.

3. CONCLUSION

3.1 With the above clarifications and modification, the P/R (2) was approved by the Turkish side.

Handwritten signature and date: "N. Elçin 29.12.99".

APPENDIX 1

LIST OF ATTENDANTS

< Turkish Side >

Ministry of Environment

Ilker BASAYDIN

Acting Undersecretary

Sami AGIRGUN

General Director, Directorate of Environmental
Pollution Prevention and Control;

Umit GENÇ

Head, Waste Management Department

Adana Greater Municipality

Nurettin ÇELMEOGLU

Foreign Relations Consultant of Mayor

Fahrettin ASIÇI

Director, Environmental Protection Department

Hulya KUS

Chemist, Environmental Protection Department

Adana Province

M. Ali Guzelant

Engineer, Adana Province Environmental
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Mersin Greater Municipality

Ilhan SAYAN

Responsible Engineer of the Project
~~Consultant of Mayor~~

Zuhal OZANANAR

Environmental Department

Feray ALTUG

Environmental Department

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JICA Study Team

Susumu SHIMURA

Leader of JICA Study Team

Shinya KAWADA

Environmental Consideration

Tamotsu SUZUKI

Disposal Plan (1) & Recycling Plan

Takeshi TOMIYASU

Disposal Plan (2) & Medical Waste Plan

Kamil S. SORGUN

Collection and Haulage Plan

Precha CHUNTAKORN

Waste Amount & Composition Analysis and
Waste Flow

Naofumi SATO

Facility Design & Cost Estimation

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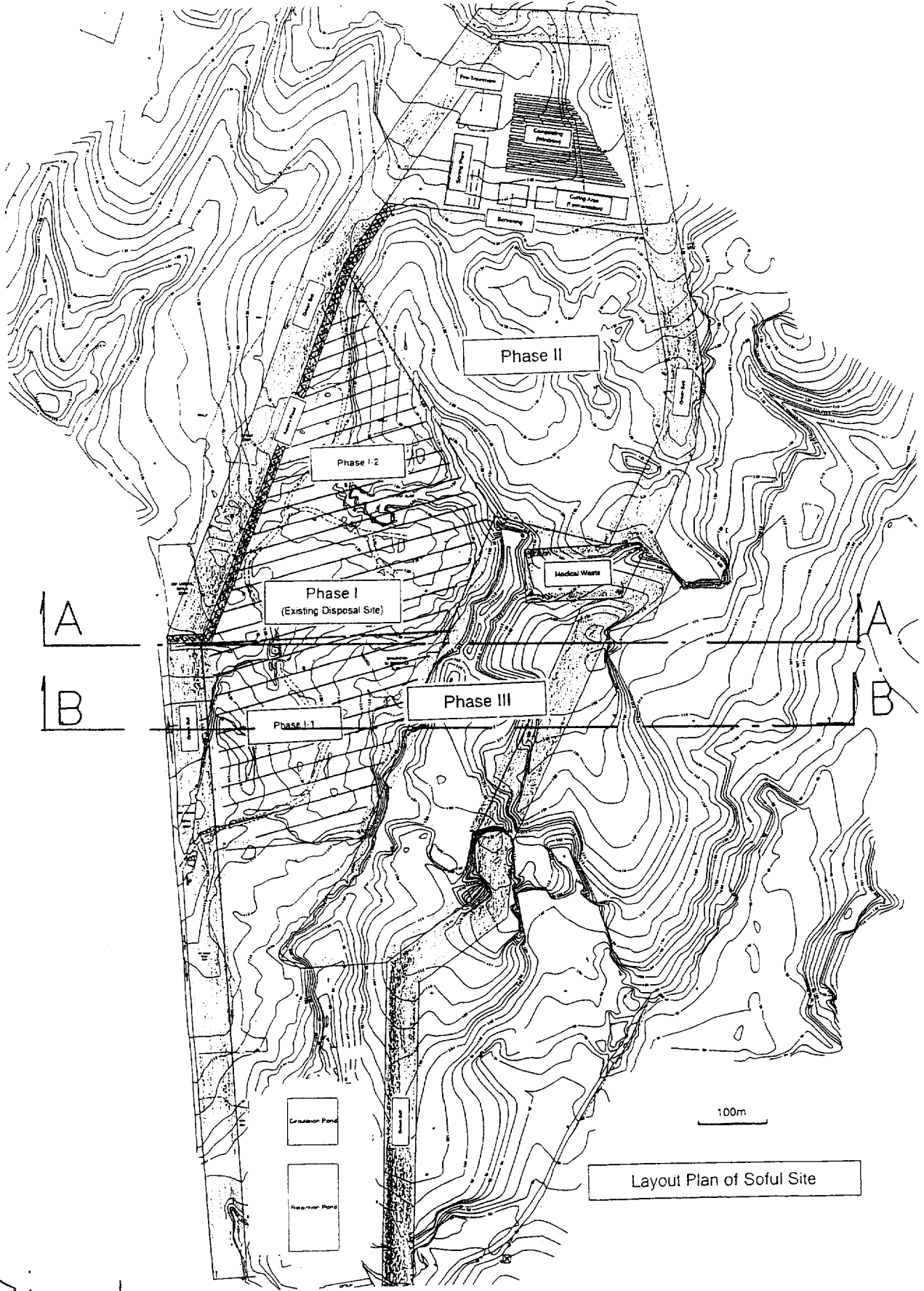
Kozo BABA
Masaharu KINA
K. Taylan DERICIOGLU
Tomomi KITAJIMA

Management and Financial Plan
Public Education & Participation Plan
Organisational and Institutional Development Plan
Administrative Co-ordinator

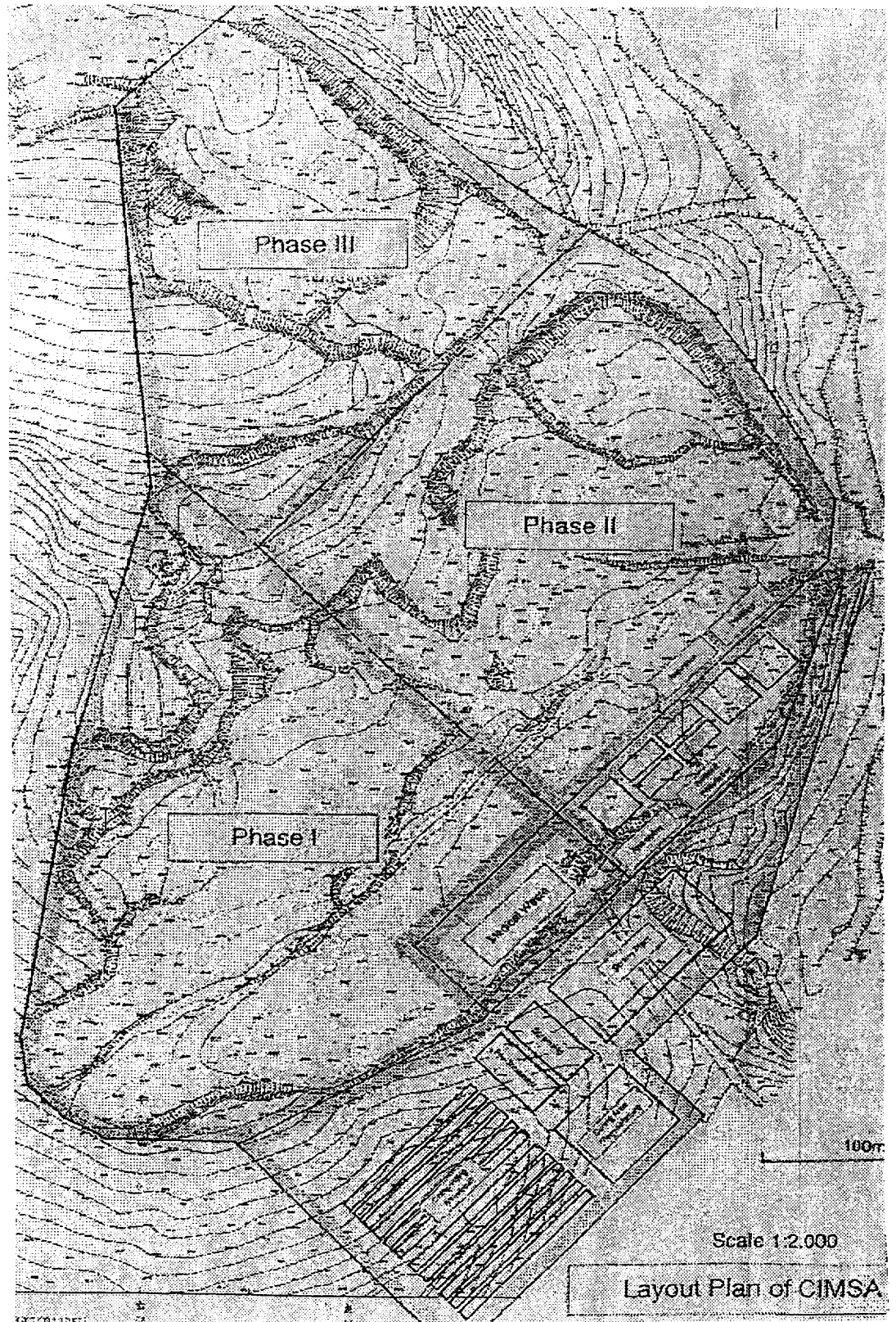
JICA Turkey Office
Nurettin ELBIR

Consultant

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**MINUTES OF MEETING
ON
THE DRAFT FINAL REPORT
OF
THE STUDY ON REGIONAL SOLID WASTE MANAGEMENT
FOR
ADANA-MERSIN
IN
THE REPUBLIC OF TURKEY**

**AGREED UPON BETWEEN
THE MINISTRY OF ENVIRONMENT
AND
JICA STUDY TEAM**

Ankara, October 19th, 1999



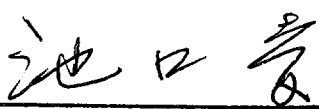
for Dr. Melih AKALIN
Deputy Under-secretary
The Ministry of Environment



Mr. Susumu SHIMURA
Leader of JICA Study Team

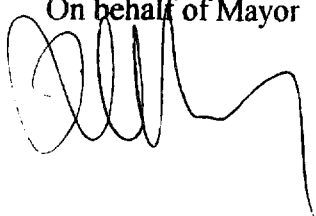


Mr. Nurettin ÇELMEOĞLU
Foreign Relations Advisor to Mayor
Adana Greater Municipality
On behalf of Mayor



Mr. Takashi IKEGUCHI
Chairman of JICA
Advisory Committee

Mr. Ugurhan KILIS
Vice General Secretary
Mersin Greater Municipality
On behalf of Mayor



**MINUTES OF MEETING ON THE DRAFT FINAL REPORT OF
THE STUDY ON REGIONAL SOLID WASTE MANAGEMENT
FOR ADANA-MERSIN IN THE REPUBLIC OF TURKEY**

1. INTRODUCTION

1.1 The Study Team has submitted the following number of copies of the Draft Final Report to the Government of the Republic of Turkey.

- Executive Summary: 30 copies
- Main Report: 30 copies
- Annex: 30 copies
- Data Book: 30 copies
- Environmental Impact Assessment (EIA) Report
for Sofulu Site Development: 30 copies
- Environmental Impact Assessment (EIA) Report
for Cimsa Site Development: 30 copies
- Reference Book in Turkish: 20 copies

Consequently series of meetings were held from October 12th to 14th in Ankara, Adana and Mersin in Turkey to discuss the report submitted. A list of officials attending at the above meetings is given in the Appendix 1.

2. ISSUES AND DECISIONS

2.1 Various issues were discussed and clarifications on the Draft Final Report were made. Subsequently appropriate consensus was reached during the meetings. These issues, clarifications and consensus are outlined in the following paragraphs.

2.2 Amendment of Turkish Solid Waste Control Regulation

The Turkish side informed the Study Team the Article 26th of the Turkish Solid Waste Control Regulation was amended on 18th of August 1999, which stipulates the liner system of a final disposal site. They requested the Team to review the DF/R in accordance with the amendment.

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The Study Team accepted the review. The Team expressed, however, they would like to receive such important information when the amendment was published.

2.3 **Alternative Study**

The Turkish side requested the Study Team to conduct an alternative study in order to reduce the investment for the priority projects.

The Study Team replied they will devote their best effort but they will not revise the EIA report in accordance with the alternative study.

The Turkish side acknowledged this reply.

2.4 **Implementation of the Priority Projects**

Both Adana and Mersin Greater Municipalities expressed their strong intention for the implementation of the proposed priority projects and requested further assistance from the Japanese Government.

The Study Team replied they will convey their intention to the Japanese Government. However, they clarified the Japanese Government assistance is based on the intention of the Turkish Government, so that both GMs need to process the first steps of the issue in the country.

2.5 **EIA Reports**


The Study Team confirmed that the EIA application should be processed by the responsibility of Adana and Mersin GMs for their respective projects, i.e. the responsibility of the team and the contractor (Cukurova University) of the Team on the EIA report shall be over by the end of November 1999, i.e. the preparation of the Final Report (F/R).

After the submission of the F/R all responsibility on the EIA report shall be born by both greater municipalities respectively.

2.6 **Comments on the D/FR**

The Study Team requested the Turkish side that all comments by the Turkish side to the Draft Final Report (DF/R) should be given to the JICA Ankara Office by November 20th, 1999 if they are to be considered by the Team for the preparation of the Final Report.

The Turkish side approved the request.

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2.7 **Publication of the Final Report**

Both side agreed that the final report should be made accessible to the public.

3. **CONCLUSION**

3.1 With the above clarifications and modification, the D/FR was approved by the Turkish side.

T. I.   

APPENDIX 1

LIST OF ATTENDANTS

< Turkish Side >

Ministry of Environment

Melih AKALIN

Umit GENÇ

Melahat OZOGLU

Filiz Baycan

Deputy Under-secretary

Head, Waste Management Department

Chief of Hazardous Waste Section

Environmental Engineer

Adana Greater Municipality

Nurettin ÇELMEOGLU

Hunay EVLIYA

Fahrettin ASIÇI

Foreign Relations Consultant of Mayor

Advisor to the Mayor

Director, Environmental Protection Department

Mersin Greater Municipality

Ugurhan KILIS

Ilhan SAYAN

Feray ALTUG

Vice General Secretary

Consultant of Mayor

Environmental Department

< Japanese Side >

JICA Study Team

Susumu SHIMURA

Shinya KAWADA

Tamotsu SUZUKI

Kamil S. SORGUN

Kozo BABA

K. Taylan DERICIOGLU

Tomomi KITAJIMA

Leader of JICA Study Team

Environmental Consideration



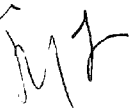
Disposal Plan (1) & Recycling Plan

Collection and Haulage Plan

Management and Financial Plan

Organisational and Institutional Development
Plan

Administrative Co-ordinator

T. I.   

JICA Advisory Committee for the Study

Takashi IKEGUCHI

Kazuchika SATO

Chairman of the Advisory Committee

Member of the Advisory Committee

JICA Turkey Office

Nurettin ELBIR

Consultant

T.I. WJ MZ 2

The Study Team replied to the comments by the related organisations as stated below:

Comments on DF/R by Adana and Team's Response

Volume I: Summary

Comments		Response
Page	Contents	
Location Map (1)	This is an old map of the province. Another province was created from Adana, called Osmaniye. Attached hereto is a map with the new boundaries of Adana.	Yes, we correct the map according to the map with the new boundaries of Adana.
Location Map (2)	idem	ditto
Location Map (3)	idem	ditto
P-5 (Plate 5)	The top left photo inscription leads to an impression as if the entire waste of Adana is hauled by trailers. Instead, it should read as "Municipal solid waste collection in Yuregir, where about 40 percent of the waste is collected by tractor trailers".	Yes, we will correct it as "Municipal solid waste collection in Yuregir, where about 75 percent of collection vehicles in number are tractor trailers".
P-10	Phase 2 and Phase 3 will be changed again, as agreed.	Yes, we will revise it.
Iv and v	Turkish descriptions of the abbreviations are awful due improper computer program. Corrected list is attached separately so that you can copy it instead of writing again.	Thank you very much for your suggestion. However, the final report (F/R) does not include a Turkish reference. We will omit the Turkish abbreviations for the F/R.
Page 1 (1.1)	2 nd line of the third paragraph; use (R) instead of (r) to mention "... Region of Cukurova"	Yes, we will revise it.
Page 3	Para "Joint Study": for clearer description, the phrase in the brackets should end with "... Government, namely the Greater municipalities of Adana and Mersin)"	Yes, we will revise it.
Page 4	List of Members; Adana Province section should also bear Okkes BOZAN (Province Environmental Dept. Director). Also correct the name at the same section as: "Mehmet A. GUZELAND" and please add as the third name from the same Department: Zehra DURAK (Engineer, Adana Province Environmental Dept.)	Yes, we will revise it.
Page 11	(5) Recycling; the third point: Wrong description. Please correct as "... Adana GM nor to the private contractor. The revenues are shared by the private contractor and the scavengers." (8) Operational and Organisational System; second point: last line should be clarified as "... not manage them due to the inappropriate legislation with improper definitions as to the definitions of both the authority and the responsibility leading thus to a weak organisation."	Yes, we will revise it.
Page 14	Table 3-1: Population Forecast Population given for Yeni Adana is completely	Yes, we will cancel the line and add this figure to Seyhan. Thank

Comments																	
Page	Contents																
	wrong for all, 1999 and onwards. Best way is to cancel this line and add this to Seyhan. Just for your information, Yeni Adana has about 460,000 today and will surely reach 1 million by 2008. Currently, 380 blocks with average of 20 dwellings each is under construction, meaning a population of 34,200. In addition to this, there are four sites where villa type houses are at their final step, with a total of 419 houses, meaning 1,600 inhabitants.	you very much for your suggestion.															
Page 16 Table 3.3	<p>Figures for streets and parks may be correct for 1999 but the forecasts for future should be reconsidered. I admit that it was my negligence not to explain our tree plantation and the new parks projects. For instance, only the number of baby trees planted during the years 1997, 1998 and 1999 reached 320,000, on top of the 90,000 old ones. You know the suitable climate and these new trees will grow quickly, representing bigger and bigger volume of trash every year. Next year, we start effectively arrangements of new green lands (750 hectares compared to 116 hectares existing now) whilst replanting on the old ones. Therefore, with rough estimations, I can state the following:</p> <table border="1"> <thead> <tr> <th>Category</th> <th>1999</th> <th>2005</th> <th>2012</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Street</td> <td>51</td> <td>75</td> <td>108</td> <td>120</td> </tr> <tr> <td>Park</td> <td>2</td> <td>8</td> <td>20</td> <td>24</td> </tr> </tbody> </table> <p>NB 1: For street, estimation involves only the impacts of the new trees planted on the streets. NB 2: The same should be taken into account in the second point of the c. Forecast on Waste Composition as well as the Table 3-5.</p>	Category	1999	2005	2012	2020	Street	51	75	108	120	Park	2	8	20	24	We are very sorry to say that we could not change the figures related to waste generation amount, because it will result in the revision of the entire report, including the master plan and the feasibility study. As everybody concerned with the study knows, the team have confirmed the figures so many times, not only at weekly meetings, but also in the M/Ms.
Category	1999	2005	2012	2020													
Street	51	75	108	120													
Park	2	8	20	24													
Page 21	Last paragraph, the 3 rd line; I personally prefer this reads as: "Nonetheless, it has not yet sufficiently proven itself to be a well-established technology."	Yes, we will replace the sentence with yours.															
Page 23	For Institutional System, point 15: should end with: "... management system, including an effective and operational data-base."	Yes, we will revise it.															
Page 49	Table 5-3 Sorting Plant: commencement year should be 2001 instead of 2002.	No, we do not think you could begin operation in 2001. Because before the commencement of operation you need time for detailed design, financial arrangement, and construction.															
Page 80	d. Present Medical Solid Waste... The 4 th line of the 2 nd para As Yuregir has finally possessed a truck designed to collect Medical Waste. I propose an insertion as: "... in Adana GM. During the Workshop 3 conducted in Adana, it has been reported that Yuregir DM, too, has owned and started the operation of a Medical Waste Collection Vehicle."	We will correct the paragraph as "..... in Adana GM. (During the Workshop 3 conducted in Ankara, it was reported that also Yuregir DM had owned and started the operation of a medical waste collection vehicle.)"															
Page 82	Top table, Rate of recycling for 1999 (far right) should read 5.9 instead of 59.	Yes, we will revise it.															

Comments on DF/R and Team's Response

Volume II: Main Report

Comments		Response
Page	Contents	
P-10	Relocate Phase II and Phase III	Yes, we will revise it.
M1-3	Section b.1 Practicability third line from the end of the para; I PREFER TO READ AS "... and institutional measures as well as legislative readjustments. ...	Yes, we agree to your proposal.
M1-8	second table of "Persons Involved" Please add the name of Mr. Okkes BOZAN as I notified for Vol. 1 Also, correct the title of Mr. Sayan as the responsible engineer of the municipality and not the province.	Yes, we will revise it.
M2-1	2.1.1 second line; The Turkish expression is only "Belediye" and not "Belediyesi" 2.2.1 fourth line; Please write Bosphorous instead of "Bosporous"	Yes, we will revise it.
M2-4	Adana Map to be corrected.	Yes, we will revise it.
M2-5	b.3 Fourth line; Please amend to read as; "... water supply. As of 2002, Adana will acquire fresh water from Catalan Dam, at the end of the completion of the project, to flow 17 m ³ per second, which will meet the demand of the town till the year 2040. 2.2.2 a.1 the third line after the table Please correct it as "... in Yuregir 36 sub-districts, as neighbourhoods, reporting to both the municipalities and the provincial government, "	Yes, we will revise it.
M2-6	a.2.1 second line of the second paragraph; Please correct as "... Board of Advisors, the Inspection Council, and the Legislative Advisors. ...	Yes, we will revise it.
M2-14	2.2.4 First line Please amend to read as: "... master plan. The plan has introduced a fundamental change to expand the city towards the Northern hills, where no settlement were envisaged. Thus, invading the fertile lands was reduced and a modern city emerged at the newly defined lands over which the GM constructed all the infrastructure prior to the housing development. Upon the success of the Yeni Adana (New Adana) Project, the Adana- North Yuregir	Yes, we will amend it.
M2-17	The fifth line: Please amend to read as "... the city. Initially almost all the housing designed were high rise apartments. As of 1998, the GM encouraged villa type housing groups over specially devoted areas in which sporting activities, gardens, swimming pools, and woods were contemplated.	

Comments		Response
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M2-18	2.2.6 para a, first line: Please correct the “an fertile” to read as “a fertile”	Yes, we will revise it.
M2-20	b.2.1 first line Please correct to read as “includes environment and cleansing Tax...” b.2.2 first line; Please amend to read as: “... duty and fees charged upon approval of the construction drawings.”	Yes, we will revise it.
M2-21	b.3.2 first line; Please amend to read as “Distribution of electricity is managed by a state controlled private enterprise.”	Yes, we will amend it.
M2-23	c.4 This paragraph should be followed by the following: A remarkable point regarding the revenues of the GM is the loss of share due to the taxation system. In Turkey, a 5 percent share is provided for the GM’s through the total tax collected in the province. However, a considerable number of large enterprises operating in Adana are paying their tax to Istanbul because the majority of them have holdings with their head office in Istanbul. Adana GM has been trying to overcome this injustice and it is noted that some steps have been taken towards a legislative readjustment.	Yes, we will amend it.
M3-8	Second point, the beginning Please start with “Most ...” instead of “All ...” 3.5.1 third line: Please continue as “ ... conditioning. Furthermore, many farmers have started experiments with second and third crops at the same field; this expanding application attaches higher importance to the consumption of compost.	Yes, we will revise it.
M3-15	3.7.4 / a. Adana, fifth line; Please correct the word “scavenges” to read as “scavengers”. The same chapter, last line of the third paragraph, Please complete with: “TI/day (about 8-10 US\$) based ...	Yes, we will revise it.
M5-7	Table 5-4 Please see the remark made for the same table in Volume I.	As explained the response to the comment on Page 16 Table 3.3 of Volume I we could not change the figures related to waste generation amount.
M6-7	Figure 6-1 In the figure, the box for recycling has a remark reading “By street waste pickers. In para 4 on page M6-8, we presume that recycling activities by the street waste pickers will be disappearing by the year 2020. So, I think the remark in the figure should be suppressed.	The Figure 6-1 draws up the waste stream <u>without implementation of the master plan</u> , in other word of <u>continuation of the present system</u> . Therefore, recycling activities by the street waste pickers will be continued.
M6-21	Table 6-13, Item 3. Hazards, 6: Instead of “collapse”, please write “Collapse and sliding of slope”	Yes, we will revise it.

Comments		Response
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M7-3	<p>Phase 1, Technical Aspects, last line of the second point: Please amend to read as “ ... will commence at the latest from 2002.</p> <p>The second line of the seventh point; I prefer to state the year 2001 instead of 2002.</p>	Yes, we will revise it.
M7-4	<p>Institutional Aspects, point 6 Please add the following as a new complementary paragraph: “Seminars and conferences supported with animation and pamphlets shall be arranged targeting the primary schools and the local TV’s.</p>	Yes, we will amend it.
M7-5	<p>Institutional Aspects I suggest adding another point between the first and second, like: “Possibilities and benefits as well as applicability of inter-municipalities co-operation shall be reviewed.”</p>	Yes, we will amend it.
M7-7	<p>Institutional Aspects As the fifth point, we may state the following: “Export to Middle East countries of compost (perhaps some enriched with additives) shall be considered.”</p>	Yes, we will amend it.

Comments on DF/R by MoE/Mersin GM and Team's Response

Comments		Response
Page	Contents	
EC-1	The needed changes that were done at the 2.2 item of the Protocol signed on October 19, 1999 should be replaced in the Final Report.	Yes, we will revise it.
EC-2	As it is determined at 2.3 item of Protocol, it is essential to make some offerings of administration and system to acquire the opportunity to pay back the credits due to the existing financial situation of the municipalities by making an alternative research for the deducing of Project investments.	Yes, we will revise it.
EC-3	As regular storage of medical waste is forbidden by the European Union, an alternative system should be created for the establishment of a regional medical waste burning establishment.	Although the feasibility study for medical waste disposal sites was conducted based on the request of the MoE due to problems that accompany incineration, such as air pollution and cost, we will provide an additional report on regional medical waste incineration. However, this report will present the advantages/disadvantages and rough cost estimation for installation of an the incineration plant. We will do this because the site for the incineration plant is not identified and due to the time limit set for the study (Our contract for the study with JICA shall terminate end of January 2000.).
EC-4	Detailed explanations should be given for the renovation of Mersin Compost establishment.	Since the existing compost plant is very old and has deteriorated, we concluded that the renovation of the plant would need changing the existing facilities except for the site and entrance building; i.e. a new construction of the plant proposed by the Team at Cimsa site. The DF/R was prepared based on the agreement of the M/Ms that Mersin GM will construct a new plant at Cimsa site (not at the present plant) by 2002. It means the GM will not renovate the plant as it intends to close the existing compost plant and landfill as soon as possible due to objections of the surrounding residents. If the MoE requests the improvement of compost quality produced by the existing plant, a report on this has already prepared by the pilot project, as presented in Annex 7 and Data Book 4.
EC-5	It will be efficient to include the "Manual Prepared on the Topic of Separate Collection at Resource" in the attachment of the Final Report for covering all the studies in this report.	The most important issue to successfully implement a separate collection system is the cooperation of the citizens at the waste generation during discharge. If the administration obtains 100 % of the cooperation, the success of the introduction of a separate collection system would be more than 90 %. The Team prepared an education book for the purpose. This book may also be considered as a reference for the introduction of separate collection system. The Team expects it will be used for the introduction of a