

PN-ABT 929

92990

INTERNATIONAL PRIVATIZATION GROUP

The Private Provision of
Solid Waste Management Services
in La Paz, Bolivia

APPENDICES

Final Report

February 1, 1992

APPENDIX A

SCOPE OF WORK

PRIVATIZATION OF PUBLIC SERVICES

I. Background

The Municipality of La Paz, as part of its ongoing Municipal Strengthening Project, is examining ways in which to privatize the delivery of municipal services in order to improve efficiency, reduce costs, and improve the quality of service to its customers.

In order to implement this program, the Municipality has requested T.A. from USAID/B to help define options for the privatization of some of their services. This would include the necessary baseline analysis and documentation to solicit bidding from private firms for the provision of these municipal services. The first service to be privatized will be Waste Removal and Urban Cleaning. This includes collection of solid waste at the industrial, commercial, hospital, and residential level; the cleaning of streets and parks; subcontracting to microenterprises for waste collection in the outlying areas, and the management of dump sites.

This is considered a high-priority project by the Municipality, since a successful outcome of this project would open the way for the privatization of other services. This project will also have an important demonstration effect for other Municipalities across Bolivia.

II. Scope of Work

This project is expected to have 4 separate phases of work, each addressing particular aspects required to bring this first municipal service to the point of transfer. The first 2 phases are considered to go together for the purposes of this PIO/T. Phases 3 and 4 will be considered at a later date based on the outcome of this initial activity.

PHASE I: Diagnostic of the current system of Waste Removal in La Paz.

This will include:

- a) A diagnostic of the generation of the city's solid waste (components of the waste stream by category, seasonal variations, examination of historical data and trends, future projections of costs and service levels).
- b) A technical analysis of how waste removal/urban cleaning services, are currently delivered; examining the organization, cost and efficiency.
- c) A review of the World Bank diagnostic on dump sites and landfills, and recommendations with regard to its implementation.

- d) Assessment of citizen's behavior with regard to waste removal.

PHASE II. Analysis of private options for the delivery of Waste Removal Services.

This will include:

- a) The evaluation of alternatives for the private provision of waste disposal and urban cleaning services.
- b) Determination of the scope and geographical coverage of services to be carried out by private enterprises.
- c) Determination of the appropriate contracting mechanism for each alternative.
- d) Preparation of a cost analysis for each alternative of service delivery.
- e) Definition of the system of control for the contracts.
- f) Revision of scope of work for Phase III based on the contract mechanism chosen.

III. Level of Effort

This contract will require the following level of effort based on a six-day work week:

PHASE I and II

Project/Task Manager	20 days
Industry Specialist No. 1	50 days
Industry Specialist No. 2	50 days
Financial Analyst	60 days

IV. Deliverables

A report analyzing the current system of delivery of waste disposal and urban cleaning services within the Municipality of La Paz, in accordance with the scope of work, as well as alternative scenarios for the privatization of these services.

(Five copies each in English and Spanish).

V. Contracting Period and Start-Up Date

AID/W is requested to negotiate this contract buy-in as soon as possible, based on the SOW contained in this PIO/T. For Phase I and II, the estimated period of performance will extend for 60 days.

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The effective date will be the date of the signature on the contract buy-in.

The contractor should plan on providing the required technical services on May .

VI. Location of Services

The primary location of services will be La Paz, Bolivia.

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BEST AVAILABLE DOCUMENT

Scope of Work

I. CONTRACTING PROCESS

Revise draft contract documentation and present it in final form

Work closely with contracting agency in the final details of the contract document

Finalize criteria for the evaluation and selection of company bids

Identify potential international bidders if appropriate

Work closely with the contracting agency to answer any questions posed by the bidders before the deadline determined jointly.

II. COMMUNICATIONS STRATEGY

Analyze the Public Opinion Survey (completed 6/28/91) in order to identify target audiences and project presentation language

Produce a seed communications document which will serve as a basis for future communications

Define a communications strategy, action plan and communications calendar.

Manage and supervise the implementation of the communications strategy (includes hiring a Public Relations Agency, coordinating efforts with the Empresa Municipal de Aseo, Dirección de Comunicaciones and the Dirección de Saneamiento Urbano.)

Define a communications approach and plan with labor unions and other critical groups

III. INSTITUTION BUILDING - EMPRESA MUNICIPAL DE ASEO (EMA)

Assist the Dirección de Saneamiento Urbano (DSU) and the Board of Directors of EMA in the general institution building of EMA. This will include the following areas:

Definition of a Contracting Strategy

Definition an Administrative Structure and its accompanying Policies

Preparation of a Budget (1991 - 1992)

Definition of a 1991-2 Work Plan

Definition of a Scope of Work and Budget for the evaluation of the proposal and negotiation stage.

IV. ADVISORY SERVICES TO THE EXECUTING UNIT

Assist the GOB in establishing guidelines and procedures for privatization aimed at ensuring the integrity and transparency of the privatization.

Assist the GOB in the design and establishment of a system for the targeting and selection of enterprises to be privatized.

Assist the Executing Unit in the preparation of a workplan

Key Personnel

**Tasks I-III: Project/Task Manager
Privatization Specialist
Industry Specialist
Financial Analyst
Labor Specialist**

Task IV: Privatization Specialist

Deliverables

I: Contract Documents

II: Communications Strategy Document (including the seed document and the labor communications strategy)

III: Technical Assistance Document

IV: Technical Assistance Document

Level of Effort

Tasks I-III:

Project/task Manager	6 days
Privatization Specialist	28 days
Labor Specialist	19 days
Financial Analyst	34 days

BEST AVAILABLE DOCUMENT

APPENDIX B

GLOSSARY OF TERMS

GLOSSARY

1. **AWARDEE:** the bidder whose proposal has been formally selected by the Board of Directors of the E.M.A.
2. **BIDDER/RESPONDENT:** the responsible firm(s) signing the proforma invoice and in whose name the Bid Bond is issued.
3. **BLOCK:** each section of a public thoroughfare between one street and the next, on the same side of the street.
4. **CELL:** a designated physical space in a landfill where waste is spread, compacted and covered daily. Once waste layers fill it, the cell is sealed and waste is deposited in another cell.
5. **COLLECTION POINT:** a specific place on the street/sidewalk where waste belonging to residents, businesses, industries, hospitals, etc., is placed for collection.
6. **COLLECTION ROUTE:** an area containing a number of collection points for solid waste served by a single unit, or collection truck.
7. **COMMERCIAL GARBAGE:** garbage generated by offices, businesses, restaurants, commercial establishments, clubs, official organizations, military units, and any other entities similar to the preceding.
8. **CONSORTIUM/JOINT VENTURE:** a partnership between two or more firms which, while maintaining their individual legal existences, agree to act jointly under a single management structure and in accordance with common rules with respect to this bid invitation. Consortia represent a single entity with respect to dealings with the contacting entity and the members thereof respond jointly and without limitation for all liabilities incurred.
9. **CONTRACTOR:** the successful bidder signing the contract
10. **CONTROL CELL:** a cell where representative garbage is deposited in order to monitor and measure leachate and methane gas production at the landfill.
11. **CORRECTION:** any and all actions to be taken to eliminate any existing deficiency.
12. **COVER:** solid or substitute material that is spread over the solid waste deposited at the landfill on a daily basis.
13. **COMPACTION TRUCK:** a truck that is equipped with a solid waste compacting mechanism.

14. **COMPACTION TIME:** the time required to compact solid waste by a truck's compaction mechanism.
15. **DEAD ANIMALS:** any animal found dead on the public thoroughfare. Such animals must be picked and transported to the place of final deposit.
16. **DEFICIENCY:** any condition or characteristic of the services provided not in compliance with the requirements of the contract.
17. **DEMOLITION MATERIALS/CONSTRUCTION WASTE:** materials originating in garbage produced as a result of the construction of buildings or pavement, demolition thereof, etc. These materials consist largely of stones, bricks, stone-like materials, reinforced cement, ferrous and nonferrous metal, wood, glass, etc. Collection of this type of garbage is NOT included in this project.
18. **FIELD STUDY:** inspections and studies of the area carried out by the bidder prior to submission of the proposal that enable him to make contact and become familiar with the characteristics of the service area, so that he may proceed to develop, on this basis, the required operating plan.
19. **FILL:** solid waste material deposited at the landfill.
20. **FIXED CONTAINER:** a solid waste container that is placed at a slant in a fixed position at a designated location.
21. **GARBAGE PILES:** garbage that has accumulated in the public thoroughfare, especially that which is bulky and which, as a result of its volume and/or weight, cannot be picked up by manual sweeping efforts.
22. **GRACE PERIOD:** a period of sixty days that shall commence on the same day that service is initiated.
23. **GRAVITY FEED:** the force that allows the solid waste to slide from the fixed container into a dump truck.
24. **GET READY/PUT AWAY:** the time required by a worker to sign in/out, and get the equipment ready for operation or parked.
25. **HOSPITAL, SANITARIUM AND LABORATORY WASTE:** all waste originating in activities involving the treatment of wounds, surgical procedures and/or analytical and research laboratories, together with all garbage similar to domestic garbage that cannot be separated from the preceding, shall be considered to be pathogenic-type and shall be given special treatment, which shall be specified on containers and in pick-up schedules, in accordance with prevailing health standards and the project submitted

26. **INDUSTRIAL GARBAGE:** garbage resulting from industrial processes of any type other than processes involving the construction of buildings of any type. This may be toxic, nontoxic, or extremely toxic. This bid covers only the collection of nontoxic industrial garbage discarded clandestinely in the public thoroughfare, leaves, branches, dust, papers, fruit residues, human and animal excreta, glass, small boxes, dead animals, cardboard, plastics and other solid waste similar to the proceeding which has been discarded in the public thoroughfare.
27. **LANDFILL:** an engineered facility for the final disposal of solid waste that is spread in thin layers, compacted to its smallest volume and covered each day with soil or substitute material. A number of cells constitute a landfill.
28. **MACRO-ROUTING:** the distribution of services by zones, depending on their particular characteristics and/or type of garbage produced.
29. **MANUAL STREET SWEEPING AND CLEANING:** sweeping and cleaning operation that covers pedestrian walkways, curbs, median strips, landscaped areas and parks, performed exclusively with manual tools and/or by means of human power.
30. **MECHANICAL SWEEPING:** sweeping and/or vacuuming of the sides or shoulders of the streets using machinery and equipment.
31. **MICRO-ROUTING:** the detailed description of the route to be followed in providing specific garbage collection, manual sweeping or mechanical sweeping services.
32. **MICRO-ENTERPRISE:** an independent enterprise consisting of a work force of between two and twelve people, authorized by E.M.A. to collect solid waste and clean streets in areas having a steep slope within the zone assigned to the contractor and in which access by contractor vehicles and/or machinery is either impossible or detrimental to vehicles.
33. **MICRO-ENTERPRISE COLLECTION POINT:** a designated and specified location where micro-enterprise staff deposits the garbage collected, together with the waste generated by the street cleaning operations carried out by the contractor. The contractor is responsible for transporting this waste to the disposal site.
34. **MINIATURE DUMPING AREA:** small areas where residents illegally dump their solid waste (ex: empty lots, ravines).
35. **NON-COMPACTING TRUCK:** a truck that is not equipped with a solid waste compacting mechanism.

36. **NON-ROUTE TRAVEL:** all travel outside of the collection routes such as travel between the service center and the first collection point.
37. **NON-RETURNABLE CONTAINERS:** containers holding solid waste, such as plastic or paper bags, that are not returned to residents.
38. **PAVED STREETS:** streets having a layer of concrete, bituminous or asphalt mixtures, paving blocks, stone slabs or any other type of material that provides physical resistance to vehicular traffic.
- 39.* **PERFORMANCE RATING:** the percentage rating given to a worker for the level of effort on the job.
40. **RESIDENTIAL SOLID WASTE AND GARBAGE:** all garbage generated in households and/or small businesses whose garbage is similar to that of households. This category shall include, but not be limited to, organic materials, glass, china, paper, cardboard, plastic, used clothing, products of minor repairs to rental property and buildings, households sweepings, electric home appliances that have been discarded, landscaping and garden trimmings generated in the residential unit itself, and other waste or garbage similar to the above.
41. **ROUTE TRAVEL:** travel within a route for the purpose of collecting solid waste.
42. **RETURNABLE CONTAINER:** containers that are returned to the residents.
43. **REARLOADER:** a solid waste collection truck that is loaded from the rear.
44. **REFUSE/GARBAGE:** Useless or discarded material that has been abandoned by its owner, possessor or holder having a liquid content that is insufficient to enable it to flow freely, including, though in no particular order, sequence, and not limited to, ashes, glass, food remains, paper, bottles, leaves, nontoxic industrial waste, refuse accumulated as a result of street sweeping or the cleaning of either public places as well as all materials similar to the preceding, exclusive of construction waste.
45. **REFUSE FROM PARK/LAWN CLEANING:** refuse originating in the cleaning or beautification of lawns and/or the pruning of trees or shrubs located on public or private land, and lawn mowing
46. **REFUSE FROM STREET SWEEPING:** refuse originating from street sweeping activities and including, but not limited to, domestic, industrial or commercial garbage discarded clandestinely in the public thoroughfare, leaves, branches,

dust, papers, fruit residues, human and animal excreta, glass, small boxes, dead animals, cardboard, plastics and other solid waste similar to the preceding which has been discarded in the public thoroughfare.

47. **ROLL-ON/ROLL-OFF TRUCK:** a truck equipped with a hoisting mechanism to pull a large solid waste container onto the truck bed.
48. **ROLL-ON/ROLL-OFF CONTAINERS:** a large solid waste container used in conjunction with a roll-on/roll-off truck.
49. **SERVICE CENTER:** a facility that contains supervisory and administrative personnel where crew members sign in and out, and where collection equipment is parked. Also called "Garage," "Yard," or as in Bolivia "Posta"
50. **SIDELoader:** a solid waste collection truck that is loaded from the side.
51. **SPECIAL COLLECTIONS:** a that collects special types of solid waste such as that which is generated by pruning of shrubs and trees by park maintenance crews. It also includes dead animals
52. **SPECIAL ROUTE:** an area containing a number of special non-residential collection stops, such as hospitals, served by a single unit.
53. **STREET CLEANING:** that process performed by means of street washing machinery and earthmoving and other equipment, or by means of a combination thereof, which facilitates the removal or collection of garbage accumulated in the public thoroughfare that because of its volume or physical characteristics, cannot be collected and transported jointly with street sweeping waste or household, commercial, or industrial garbage.
54. **SUPERVISION, AUDITING AND INSPECTION:** the administrative supervisory and monitoring activity exercised by the E.M.A. or its designee during the life of the contract with respect to the services provided and in compliance with the terms of the contract.
55. **SYSTEM FOR DETERMINING TARE WEIGHT:** the means that will be used to determine the weight of each truck with no load. As a result of the effect that fuel, lubricants, accumulated and unloaded garbage, and other elements may have on the tare weight as determined by the manufacturer, empty trucks may be weighed several times during the same month in order to determine the average tare weight, which will in turn serve to determine the official weight of the garbage collected.

56. **TECHNICAL SPECIFICATIONS:** the set of norms containing a description of the minimum required characteristics, ways and means of providing the various services.
57. **TEST ROUTES:** routes that are developed for the specific purpose of testing the validity of time standards that have been developed for a specific job.
58. **TIME STUDIES:** the development of time standards for an average well-trained worker, working under normal working conditions at a normal pace.
59. **TRANSFER STATION:** a facility where waste received from collection vehicles is transferred to large truck trailers for transport to the final disposal site (landfill). A transfer station is considered an intermediate disposal site.
60. **WEIGHT OF GARBAGE COLLECTED:** the weight of the garbage calculated as the total weight of the garbage collection vehicle on the scales, less the official weight of the vehicle.
61. **WEIGHING SYSTEMS:** only those located at the transfer station and the sanitary landfill shall be considered for purposes of calculating the official weight of the garbage collected, consisting of scales and other instruments used in determining the weight of trucks, whether loaded or empty, and to issue official weight certificates.

APPENDIX C

INDEPENDENT LEGAL OPINION

July 2, 1991

Price Waterhouse
La Paz, Bolivia

Of our consideration:

We are pleased to submit the following legal report for your consideration in reference to your request of June 24 for detailed information on solid waste management services subcontracts for the city of La Paz.

1. DOCUMENTS EVALUATED:

- Request for legal opinion
- Political Constitution of the State
- Bolivian Civil Code
- October 1, 1985 Organic Municipal Law
- Municipal Ordinance No. 50, July 10, 1989
- Municipal Ordinance No. 51, July 12, 1989
- Supreme Decree No. 21660, July 10, 1987
- Supreme Decree No. 22407, January 11, 1990
- Administration and Government Control Law, July 20, 1990
- Supreme Decree No. 22836, June 14, 1991

2. INTRODUCTION

The Supreme Government has outlined a structural adjustment policy to introduce a reorganization plan with the purpose of improving efficiency and productivity in state-owned enterprises, thus allowing for private investment participation through several unpublished mechanisms, such as privatization of public corporations and joint venture contract subscription, authorizing to carry out work, projects, tasks, services, supplies and others.

The National Government has expressed several legal opinions to conform with this strategy, for example, Supreme Decree 22407, of November 1, 1990, attempts to outline innovative policies together with private sector participation, allowing for investment guarantees and independent service contracting as well as joint ventures.

Subsequently, Law No. 1178 of July 20, 1990, (Administration and Government Control Law, better known as the SAFCO Law) whose main objective is to program, organize, execute and control the acquisition, as well as the effective and efficient use of resources necessary for the compliance and timely adjustment of policies, programs, supply of public project services and others.

Law No. 1182 of September 17, 1990 (Investment Law) stimulates promotion and guarantees national and foreign private investment joint venture contracts.

Supreme Decree No. 22836 of June 14, 1991 defines the concept of privatization, as "the sale, exchange, transfer, through any means, the whole or part thereof, of assets or corporate operations, belonging totally or partially to the State of Bolivia, to an individual or combined corporation, not belonging to the State of Bolivia or dependencies thereof, with the exception of those specified in Articles 138 and 139 of the Political Constitution of the State

(nationalized mining organizations and hydrocarbon deposits), and establishes mechanisms to transfer, dissolve and/or sell state-owned enterprises".

3. LEGAL ASPECTS FOR SUBCONTRACTING PRIVATE SOLID WASTE MANAGEMENT SERVICES FOR THE CITY OF LA PAZ.-

For evaluation purposes in this report, we have followed the documents' text, paying particular attention to those objectives relating to the contracting of solid waste management services for the City of La Paz, as well as to the legal aspects of private sector solid waste management contracting, emphasizing whenever possible other relevant legal aspects.

In the request for legal opinion, there were three outlined aspects that require special legal consideration, and can be summed up as follows:

- 3.1 The question of contracting capacity.
- 3.2 Prohibitions and limitations of Municipal Ordinances Nos. 50 and 51.
- 3.3 Types and legal aspects of contracts.

3.1 The problem of contract authorization.

- 3.1.1 The first question raised is who, in fact, has the capacity to authorize a contract. There are specific standards outlined in this respect stating who can assume this legal responsibility.

According to the Municipal Organic Law, dated October 1, 1985, a Municipality is considered a public entity, and the autonomy of the Municipal Government is executed through its officers, according to the Political Constitution of the State.

Its jurisdiction is territorial in nature and its authority is based on the Political Constitution of the State (Articles 200 and 206) its current legal attributes, such as the authority to establish guidelines by means of ordinances, regulations or resolutions, rights and obligations of citizens living within its boundaries, and the coercive power to demand compliance thereof. The Municipal Government has jurisdiction over all administrative, judicial, economic, technical, and social actions which result in a relationship in which the Municipality performs as subject, object or agent.

According to Article 9 of the above mentioned Law, the Municipal Government has jurisdiction over the following matters: public services and their regulation (insert 4), urban cleaning services (insert 12).

The Municipal Government is governed by the Council and Municipal Board, the highest legislative authorities of a municipality, and the Mayor, who is the executive, representative and administrative authority of the Municipal Government.

According to Article 19, the Municipal Council and the Municipal Board are empowered with faculties to establish Rules, Regulations, Ordinances, Resolutions and other municipal norms, as well as to approve contracts and agreements subscribed by the Mayor with any natural or legal entity, be it public or private, approve concession services according to law, or any other attributes in accordance with the Political Constitution of the State (Article 201).

Besides those attributes established under Article 205 of the Political Constitution of the State, Mayors also have the authority to enforce Ordinances, Resolutions and municipal

contracts, preside over Administrative or Directive Assemblies of enterprises and entities dependent on the Municipality.

On the other hand, Chapter II of the Municipal Organic Law, which covers municipal contracts and concessions, determines that "contracts are subscribed by the Mayor with previous authorization by the Council or the Municipal Board" and according to law (Article 68).

Article 72 establishes that the provision of public services at a Municipal level, or indirect exploitation of Municipal funds, will be awarded through a concession with its corresponding public bid.

According to regulations reviewed by us regarding municipal enterprises, Municipalities have the power to create or participate in dispersed and/or decentralized enterprises, to render municipal services due to reasons of an administrative, economic, technical or institutional nature, for the benefit of the community, or when these services are not subject to contract by concession.

Likewise, these established municipal enterprises shall have their own legal entity and property rights under Municipality supervision.

These statutory provisions indicate that the Municipal government, through the Mayor's executive power, is duly authorized to subscribe contracts and concessions, previously approved by the Council or Municipal Board.

The Municipal Council, authorized by law and through Municipal Ordinance No. 50, of October 7, 1989, established "as a municipal and public service entity, endowed with legal

character and individual power, the Municipal Solid Waste Management Enterprise - EMA", legally sanctioned through Municipal Ordinance No. 51 of December 7, 1989.

It is evident that the creation of EMA is not consistent with the legal concept of the Organic Law, for when EMA was established through an Ordinance, a conflict arose between the urban cleaning functions of the Municipality and EMA's responsibilities.

In effect, the administrative decree which created EMA seems to have a definite and premeditated purpose, socially and legally it is decisive, in light of its executable and binding legal aspects.

According to administrative law, this executability is synonymous with efficiency, once an act is completed it will produce the effects/consequences without further delay.

At present, Municipal Ordinances Nos. 50 and 51 are not enforced. It is necessary to indicate that in Bolivia, at present there is no administrative law binding the Municipality to carry out its administrative functions. There is a conflict of functions between EMA and the Department of Urban Solid Waste Management, which is part of the Municipality.

It is well known that an equal ranking regulation cancels or overrules a similar one; therefore, the Municipal Ordinances in question must be modified by means of another Ordinance.

Consequently, Municipal Ordinances Nos. 50 and 51 are in effect only while there are no other ones that modify or override them taking precedence, since they are special laws, according to Article 4 of the Judicial Organization Law, which hinge on the Political Constitution of the State (Articles 59, 96, 228 and 229).

The Board of Directors and the General Manager of EMA are responsible for its management and policy. The Board of Directors is comprised of several representatives, having the Municipal Mayor as its President. This representation, granting the President and the General Manager their legal authority, is based on Article 6 of Ordinance 50, and Article 42 of Ordinance 51, with the exceptions provided for in Article 41 (Insert 9) of the Statutes (Ordinance 51) which establishes that corporate contracts (EMA) must be authorized by its Board of Directors.

Likewise, EMA is permitted to authorize any type of contract with any type of person, subordinate to the existing statutes and regulations on management contracts, prohibiting it to transfer ownership of its assets, except when authorized by the Municipal Council.

As a result, EMA has the capacity to make contracts by means of its legal representatives, be it through subcontract of services or joint venture contracts, which must be drawn before the Municipal Council so that they are approved according to the mandate of Municipal Laws (Articles 11 and 12).

3.1.2. Possible consequences for non-enforcement of Municipal Ordinances Nos. 50 and 51.-

From a constitutional law perspective, Municipal Ordinances Nos. 50 and 51 must be inexcusably binding since they are within the mainframe of the Political Constitution of the State and its amendments.

By simply reading Ordinances Nos. 50 and 51, we can conclude that the purpose of creating EMA was to establish a suitable agency, capable and competent of warranting

adequate solid waste management services in La Paz, with administrative procedures and sufficient economic, financial and optimal legal independence.

To fulfill this objective, it is logical to establish a practical and legal methodology which justifies and complements the continuous and solid existence of an agency such as EMA. If we accept both Ordinances in full strength, and contracts are subscribed with third parties within this legal framework, either through concession, lease, administration or joint venture, there shall be a stable legal link and the objective(s) specified in those Ordinances will be fulfilled.

Any other legal solution would misconstrue this judiciary structure and would lead to serious legal risks.

The previous rationale, based on Article 31 of the Political Constitution of the State, explicitly states that all acts carried out by any unauthorized person(s) shall be rendered illegal, as well as those acts executed by authorized personnel not based on the law. Currently the Urban Solid Waste Management Administration is carrying out functions outside its constitutional powers, thus facing a possible nullity suit from EMA.

3.1.3. Steps required to establish EMA's operations

We consider that the steps to be followed in setting forth EMA's operations are specified in Municipal Ordinances Nos. 50 and 51, for which the Mayor, shall make the following provisions, among others:

Determine transfer of power of all initial corporate assets under Municipal Ordinance No. 50, through a public deed, as well as effect capital payment of Bs 3,000,000; said public

deed must be subscribed before the Government's Notary Public office, presenting the previously mentioned Public Ordinances Nos. 50 and 51 as supporting evidence.

Once these acts are completed, appoint the Board of Directors, based on nominations made by participating entities.

The Board of Directors will then proceed to elect the General Manager, and jointly they will proceed to establish EMA, its organization and functions as specified in the aforementioned Ordinances.

In case of failure to enact the implementation mechanisms defined above, EMA still holds complete legal and corporate authority.

A specific timeframe to carry out the implementation process cannot be clearly established (for bureaucratic and administrative reasons). However, if there should be evidence of a political will to initiate future contracts between EMA and other third parties in order to improve services and attain specified objectives, it is possible to grant a speedy and timely implementation process. If this is not the case, a transfer mechanism between the current service under the Solid Waste Management Service Administration and EMA should be designed, since this requires no specific regulations, except the interinstitutional understanding to carry out this objective.

Once the judiciary and legal aspects previously described are concluded, EMA's objectives can then be carried out by subcontracting services or through other alternatives such as joint venture contracts, carried out in accordance to the specific legal dispositions prevailing over these matters.

4. PROHIBITIONS AND LIMITATIONS OF MUNICIPAL ORDINANCES NOS. 50 AND 51 OF JULY 10 - 12, 1989.

As we continue these discussions, we must advise that, Article 13 of Public Ordinance 50, and Article 18 of Public Ordinance No. 51, allow EMA to authorize any type of contract with any type of entity, be these private or public, with the purpose of carrying out cleaning services, fashioning the contract according to the statutes and legal ordinances already existing regarding management contracts.

In Articles 19, numbers 11 and 12, the Organic Law on Municipalities specifies that the Municipal Council must approve all contracts and agreements subscribed by the Mayor. Also, Article 72 specifies that public services, or the handling of the Municipality's assets, carried out in an indirect form, shall be performed through a concession based on public bidding.

Within this established legal framework, we proceed to summarize the questions raised in this request for legal opinion:

a) Article 19 of the Organic Municipal Law

Once a contract between EMA and the private sector is signed, the Mayor shall have it approved by the Municipal Council, also required under Article 19, (insert 11 and 12).

b) Risk of legal suit against the Department of Urban Waste Management and possibilities of winning

Due to questions raised in this request for legal opinion, we must indicate that City Hall does not have necessary authority to approve cleaning service contracts between the Department of Urban Waste Management and private entities, be it through subcontracting of

services and/or through a joint venture contract, or any other such mechanism, due to the fact that it lacks operational and executive power; doing so would violate Article 31 of the Political Code, and would invite legal suit for unconstitutionality.

c) EMA is empowered to grant any type of contract to any type of entity, private or public, through its legal instruments, the Mayor and the General Manager, with previous endorsement by the Board of Directors and approval by the Municipal Council.

d) In this respect, there is a definite legal opinion in the law books we reviewed establishing the necessary requirements for approving contracts subscribed by the Mayor, with previous authorization from EMA's Board of Directors. Approval by the Council is subsequent to the signing of the contract.

e) Article 72 of the Organic Municipal Law on is applicable in any case; even though EMA is a decentralized municipal enterprise, previous public bidding must take place, and has to be channeled through special agencies contracted by the Executive Power as stated in Supreme Decree No. 2166 of October 7, 1987 (Chapter III on the Acquisition of Assets and Contracting of Services for the Public Sector, Articles 205 to 218).

f) Contracts subscribed by EMA, be it through subcontracting of its operations or joint ventures with private corporations, contain all the legal protection necessary, since they were subscribed under the stated legal stipulations.

g) We sustain that the contracts signed by EMA's legal instruments are subject to those provisions stated in Article 19, inserts 11 and 12 of the Organic Municipal Law.

5. TYPE AND NATURE OF LEGAL CONTRACTS TO BE GRANTED

a) While analyzing the legal provisions contained in this report, we advise that the Mayor, as President of the Board of Directors, together with the General Manager, constitute EMA's legal instruments. These are the people authorized in their legal capacity to sign all contracts, whatever type or character they may have, sharing or not in service and responsibility.

b) Based on the premise that the contract(s) to be signed between EMA and a private corporation does not imply relinquishing said service, nor any other act related to the transfer of power, in conformity with the stipulations of Municipal Ordinances Nos. 50 and 51, Articles 13 and 18 respectively, requires no previous authorization from the Municipal Council for EMA's representatives to subscribe it, but do require the Municipal Council's approval, as stated in inserts 11 and 12 of Article 19 of the Organic Municipal Law.

There is an apparent divergence between the authorization and the approval processes, understandable due to the fact that the Organic Municipal Law dates from 1985 and Ordinances Nos. 50 and 51 dates from 1989.

An appropriate interpretation of these norms allows us to determine that even though both statements are synonymous in concept, they legally take on a different connotation, since what the lawmaker strives to achieve is to prevent conflicting situations while carrying out administrative procedures and the execution thereof. In that sense the Mayor's power of enactment is granted by mandate through the Ordinances, and the Municipal Council's approval simply qualifies, accepts or ratifies these actions.

When the norm requires that the Municipal Council consider the subscription of a contract, it must be viewed under a different perspective; this procedure precedes the formalization of the administrative act, whose requirements lack judiciary character.

c) While reviewing the legal and judiciary background in reference to the authorization of administrative contracts of technical services, we must point out that Bolivia previously had state-based policies, in which municipal public services were administered by the State, having no private enterprise participation, with the exception of concessions, utilization and distribution of electrical services, we can state that there is no legal or judiciary precedent, for which we must withhold our opinion in this respect.

d) The service contract is defined on Articles 732 to 749 of the Civil Code of the Bolivian legislation, under the rules of workmanship contract.

To illustrate this point, we indicate that the law defines a service contract as:

"By means of a contract of workmanship, the employer or contractor assumes, by himself or under his direction and independently, the realization of a given task in exchange of previously established compensation. The object of this contract can be the repair or transformation of an object, or any other work resulting in or lending of services".

f) Regarding equipment rental, we must indicate that Municipal Ordinances Nos. 50 and 51, in Articles 13 and 18 respectively, prohibit transfer of title of any and/or all of EMA's cleaning service assets, or the transfer of administration or concession thereof, except when authorized by the Council. These rules also state that EMA can grant any kind of contract, including rental of equipment to private contractors, not the transfer of title, but an

arrangement whereby a party allows the use and temporary enjoyment of a movable asset in exchange for a rental fee.

g) In the possibility of a rental equipment contract between EMA and the private sector, we proceed to answer the question regarding the legality of compensation.

To allow for compensation, the parties involved must reciprocally be a lender and a debtor, in order for the two debts to be canceled out by means of compensation.

Compensation takes place the moment the two debts coexist in equal amounts, or in a lesser amount. This legal figure does not operate 1. by trade, 2. automatically, and must be agreed upon between the parts.

h) The rental of equipment agreed upon by EMA and individuals, according to Organic Law on Municipalities, (Article 19, insert 11), must be approved by the Municipal Council for it to be in full legal force. According to Municipal Ordinances Nos. 50 and 51, Articles 13 and 18, it requires no previous authorization.

6. AWARDING OF SERVICE CONTRACTS. ADMINISTRATION. DISPENSATION. CONCESSION AND COMPLETION OF SERVICES

In addition, we have been requested completion of the enclosed report on the legal nature and basic components of the contracts referred to in the epigraph.

In this regard, Article 450 of the Bolivian Civil Code states that: "a contract is viable when two or more people establish, modify or terminate a legal relationship". That same legal body further states that the norms contained within civil ordinances regarding contracts are applicable to all contracts, whether or not they have a special title, with no risk

whatsoever to those established under some other particular contract nor to other existing codes and laws (Article 451 of the Civil Code).

The Bolivian Legal Code grants contractual rule, as an integral component of its nature and confirms the requirements for its establishment the necessary contractual freedom, representation, consent, capacity, the object of contract, its form, condition, terms, its interpretation, its effects, termination, nullity and annulment, and contractual resolution.

The Civil Code regulates in particular the following contracts: sale, barter, donation, lease, contract to build (service), societies, mandate, deposit and guarantee, lodging, mortgage, loan, "comodato", mutual agreement, other contracts contingent to gambling and betting, bond and transactions.

Commercial operations law encompasses contracts such as commercial organizations, purchase/sale, deposits, bonds, mortgages, supplies, transportation, mutual funds, insurance, lodging, publishing, mandate, agency, commissions and consignments, commercial and banking accounts.

Likewise, national legislation provides for other means of contracting not specified in general legislation but incorporated in the judiciary system to comply with diverse economic situations, by means of explicit rules which are not always regulated. An example of this practice is Empresas Multinacionales Andinas (EMA) (Andean Multinational Enterprises), which are contractually organized and implemented in the countries included in the Cartagena Agreement, whose regulation was revised recently by Decision 292 and the innovative design of Joint Venture Contracts incorporated in Bolivia through Supreme Decree No. 22407 of January 11, 1990.

Initially, we can conclude that service contracts are regulated by the labor law contract contained in the Civil Code, the management contract is not under a special ordinance even though civil and commercial standards are applicable, the performance contract is derived from 22836 Supreme Decree of June 14, 1991, and comes under administrative law, even though it typically does not fall in this category, and finally, the concession and transfer of are procedures for accepting the rendering of services by means of any contractual agreement be it civil, commercial or administrative.

It is necessary to define the scope of different types of contracts within Bolivian legislation, and its correlation to the different kinds of contracts.

As we have already stated, service contracts fall within the generic concept of management contracts with private rights entitlement.

Management contracts between legal entities and other parties, with the purpose of lending services or carrying out assignments, fall within civil and commercial laws. When public administration and specific parties negotiate this type of contract it becomes a management contract based on administrative ordinance regulations.

Within public law statutes, concession contracts fall within the jurisdiction of public entities, for which an individual or a corporation is granted certain rights or privileges for utilization of resources or performing of services. For the operation of general or local services, granted through a bid, or a public licitation, a public entity subscribes an individualized contract with a third party, such as a administrative concession contracts, by virtue of which the contracting party becomes the administrator and requests payment of services the same way that governmental services deals with service fees to the public. Such

is the case of the Bolivian Electrical Energy Corporation, which has been utilizing services for supply and distribution of electrical energy in the cities of La Paz and Oruro.

Concession contracts adopt a pattern similar to those of transfer of power, actions or services, with practical results since it is unlawful to negotiate assets which belong to the State.

We will not spend a great deal of time on Performance Contracts since the contractual relation takes effect between public entities, including public service enterprises, geared at deregulating procedures in which public corporations already operate, for their subsequent transfer to the private sector.

7. JOINT VENTURE CONTRACTS

Up until the implementation of Supreme Decree 22407 dated January 11, 1990, there was no commercial practice in the country regarding this type of contract. Nevertheless, we could say that due to its similarity, commercial legislation, through its form of accidental society or participative accounts, can be perceived as a form of joint venture agreement.

In a sense, these contracts are limited to certain external investment programs, integrating resources of common interest, such as multinationals, and for the exploitation of natural resources, the latter being a typical example of this type of contract. With the implementation of Investment Law 1182 of October 17, 1990, a complementary warranty legislation is set forth, establishing a suitable mechanism with higher ranking standards.

These rulings (Supreme Decree 22407 and the Law on Investments) allow State organizations, entities and corporations, government corporations and others, incorporated or represented in this country, to associate as joint ventures for the development or execution of

tasks, projects, works, services, etc., whether these rights, works, or services are of a complementary nature or directly linked to the principal objective of Joint Venture contracts.

They follow Bolivian Law, are required to have legal domicile in this country, and do not constitute a society nor establish legal entity.

Rights and obligations are regulated by contractual liberty, which is subordinate to the limitations of the law and allowances within the legal context.

The legality of such a contract is established through a public deed, with specific ordination of responsibility allocated to each partner and the administration of the corporation.

8. CONCLUSIONS

According to our legal analysis of several norms, we advise that subcontracting services for urban clean-up for the city of La Paz between EMA and the private sector, are feasible if the operational responsibility rests with EMA, that is to say, this responsibility would not be shared with the private sector.

However, we also advise that there is the possibility of entering into a Joint Venture contract between EMA and the private sector, with contractual latitude, in which case, of course, the responsibility for services would rest solely and exclusively with EMA. In any case, responsibilities could be established in the particular contract.

Awaiting any additional clarifications you might require and thanking you for the trust you have placed in our Legal Office, we extend you our warm regards.

APPENDIX D

PUBLIC OPINION SURVEY

**ENCUESTAS & ESTUDIOS
URBAN WASTE DISPOSAL SURVEY
MUNICIPAL GOVERNMENT OF LA PAZ**

BACKGROUND

From June 21-26 a municipal survey was conducted in continuation of the February and March surveys. The results hope to establish comparative guidelines not only with the February and March surveys but also with those from last year. A subsection of this Municipal survey was assigned to the topic of urban cleaning services in La Paz.

PUBLIC RESPONSE

Since May, a positive change has been noted in public opinion. We can now confirm this fact through the following statistics:

The month of June has enabled us to offset the negative results we encountered in February. The strongest negative feelings were received from increasingly older people, women, people of increasingly lower occupational status, Aymara Indians, politically central and leftist people, apolitical people, and people from increasingly lower socio-economic levels.

GENERAL RECOMMENDATIONS

1.) Our greatest difficulties were encountered with the lower socio-economic levels. It is our belief that we should intensify our public relations campaign through direct contact or visits to work sites. Furthermore, we should initiate canvassing programs (house-to-house visits).

The following chart illustrates past public sentiment: see page 2A

The following chart demonstrates projected (2 years) public sentiment: see page 2A

2.) We have arrived at a time of positive momentum. All possible effort should be made in order to keep it. This momentum has made it possible to recover the Acuerdistas that had gone to Capra and has placed UCSistas and Condepistas at the forefront of the program. The institutional campaign should be approached aggressively. (Note: these are all political parties)

Compared to foreign capitals, 38% of the people believed that La Paz is worse of than other capital cities, 18% believe that it is equal to other cities, and only 9% thought that it is better off.

3.) It would be valuable to incorporate several themes (such as "La Paz, one of the cleanest cities in Latin America", or "La Paz, one of the cities with the most progress in America", etc.) into the public relations campaign, or as part of the Feria de San Francisco Project.

BEST AVAILABLE DOCUMENT

PROBLEMS OF THE CITY OF LA PAZ

When compared to previous surveys, the principal problems of La Paz have not been substantially altered. They are still sanitation, sewage and road repairs.

The following chart indicates the percentage values for July, November (1990), February, and May (1991): see page 3A

The preceding chart establishes the order in which the job should be approached. There are three clearly defined groups:

- a) sanitation, road repairs and sewage
- b) potable water, lighting and traffic
- c) other problems

We should not only address the problems that the public deems of utmost importance, but we should also consider the short amount of time until the elections and intensify our efforts to resolve the problems in group a).

If we divide the problems by zones the results are as follows: (see page 4A)

With regards to November, February, and May there have been no modifications. The sanitation aspect that was important in February and May is still true today. To our understanding, the following recommendations should be followed: improve cleaning efforts in zones 4 (Miraflores), 6 (north of the Marillo Plaza), 7 (northern zone, Agua de la Vida), 8 (Mariscal Santa Cruz, Tejar), 9 (Nueva Potosi), 10 (Obispo Indaburo), and 12 (Sopocachi). A combined program of road repairs and sanitation work should be established in zones 1 (Portada, Munaypata Villa Victoria), 2 (Achachicala), and 13 (Zona Sur). Road repairs are most needed in zones 3 (Villa Fátima para arriba) and 5 (San Antonio y V. Copacabana). Zone 11 (Tembladerani y Tacagua) needs basic work on its sewage system.

The problems listed below are rated [on a scale 1 (poor)-7 (excellent)] on their importance to us. (see page 5A)

-A comparison of the chart that lists the problems and the preceding chart which measures public concern illustrates that in group a) sanitation and road repairs need to be addressed before sewage, and that in group b) lighting and traffic deserve more attention than potable water.

-Compared to the results from the surveys conducted in February and May, sanitation and road repairs continue to be the most important concerns of the public.

-Having solved the problem of Cholera, the public concern with health has returned to normal levels.

The following chart indicates the government's response to these concerns in terms of levels:
(see page 6A)

-If sanitation and road repairs are the city's main problems, are the ones that generate most public concern, then the figures assigned to them by the government are unsound. For at least the entire months of July and August, the Departments of Sanitation and Public Works should attempt to resolve these problems.

Let us examine the sanitation/urban cleaning aspect in particular:

- 1. What does sanitation/urban cleaning mean to the public?

53% believe it is garbage collection; 30% think it is street cleaning; 13% believe it is dirt removal; and 2% think it is a lack of hygiene. It is clear that most people believe that sanitation involves only garbage collection and street cleaning.

In zone 1 the main problem is garbage collection; in zone 2 the main problem is street cleaning; in zones 3 and 4 the problem is collection; in zone 5 garbage collection is critical (it seems that it never occurs); in zone 6 there are problems with collection and cleaning; in zone 7 street cleaning is imperative; zones 8,9, and 10 need both cleaning and collection; in zone 11 road repairs should be made before any sanitation changes; in zones 12 and 13 the problem is street cleaning.

- 2. How is the sanitation service in the city?

49% found it average, 38% found it poor, and 13% believed it to be good. It is especially bad for women, and as we proceed to lower socio-economic levels particularly in zones 1,2,3,6,7, and 10.

- 3. Why do they consider it poor?

There are three fundamental reasons. The first group (25%) thinks that there is no work done, or if it is done that it is of poor quality. The second group (18%) believes that it is due to the size of the city and that not all parts can be reached. The final group (17%) believes it is due to the fact that the work is inconsistent or intermittent. It would be worthwhile to focus a small public relations campaign on the municipality's efforts to improve its sanitation services, particularly the microenterprise project.

- 4. Who is responsible for the poor quality of service?

42% blame the Mayor; 23% the Sanitation Department; 20% the citizens; and, 11% the sanitation workers. For those people who believe that the service is poor, the blame on the Mayor rises to 55%. It is obvious that there should be an effort to divert the responsibility and

place it on the citizens themselves. If the degree of blame placed on the Mayor does not diminish rapidly, it could hurt the Mayor's campaign in December.

- 5. Does the government collect the garbage?

74% yes; 26% no. In the following areas the majority of the people have not seen one garbage truck servicing the area: zones 2 (64%), 3 (42%), 5 (31%), 7 (33%), 8 (31%), and 11 (29%). It might be worthwhile to redesign collection routes.

- 6. How many times was the garbage picked-up in the last week?

For 31% three time, 28% two times, 23% one time. Zones 1 (55%), 4 (33%), and 11 (30%) have one collection per week. Sixteen percent of the people in zone 6 reported that their garbage had not been collected at all. Garbage collection should occur more than once in the necessary areas. A night-time collection program should be considered.

- 7. Why do they think the government does not collect the garbage?

Results point to three reasons: 17% believe that the city is too big; 15% believe it is from a lack of organization; and, 12% think it is due to lack of equipment. The arrival of the new Japanese trucks has not made any conclusive impression on the public (53% do believe the service has improved while 41% believe it has remained the same). The trucks are either not visible enough or the service has truly not improved.

-The following are average responses [on a scale of 1(poor)-7(excellent)] to the following phrases:

1. garbage collection is efficient	3.14
2. the public is responsible for the trash	4.63
3. La Paz is a clean city	2.76
4. the sweepers do a good job	3.25
5. the streets of La Paz are always dirty	4.21
6. Garbage collection occurs regularly	2.93

-In short, with respect to garbage collection, the public believes that there is an average quality service. They regard La Paz as a dirty city, or at least not a clean one. If the public is responsible for the trash, then the government does not have an efficient garbage collection system, and even less a consistent one. Since the public perception is that they are responsible for the production of the trash, this gives us a basis for placing a greater portion of the blame for the sanitation problems on the public as has been stated before.

- 8. How many people knew about the microenterprise system?

92% of the people surveyed had not been informed of the microenterprise system . Of the 8% that knew about the program, 69% of those do not use it. Seventy-eight percent thought that the idea would provide a helpful way to eliminate the sanitation problems. There cannot be a better basis to launch a public relations campaign for the microenterprise system.

- 9. What does the public think about paying for the service?

33% believed that they should not have to pay for garbage collection, while 32% believed they should pay a fair price. Fifteen percent believed the service to be expensive, while 13% found it inexpensive.

-The following are average responses [on a scale of 1(poor)-7(excellent)] to the following phrases:

1. the sanitation workers are efficient	3.34
2. the sanitation workers are honest	3.58
3. the sanitation workers do not do their work	3.69
4. the sanitation workers request money	2.58
5. they are the best workers in the government	3.40
6. they should be replaced by a private firm	4.05

-In short, after discovering that the public does not blame the sanitation workers for the filth in La Paz, we can now see that there is really no overwhelming opinion about them. Perhaps the only thing we can say is that it might be better to replace them with a private company.

- 10. What does the public think about the privatization of the sanitation responsibilities?

57% believed it to be a good idea; 18% thought it to be an average idea; and, 18% thought it to be a bad idea. Who are the main opponents of privatization? women, increasingly older people, people of increasing occupational status, and Spanish-speaking people. As we move towards the left we find both high and low levels of opposition.

- 11. Would a private company be more efficient?

64% think that a private company would be more efficient. Seventy-three percent are convinced that it would be more expensive.

Respecto al pasado el sentimiento del público paceño es el siguiente:

	Mayo	Novi	Febr	Mayo	Junio
Mejor	25%	21%	19%	20%	21%
Peor	31%	33%	37%	36%	33%
Igual	40%	44%	44%	43%	45%

Si la comparación es a futuro (cómo vivirán dentro de dos años) los resultados son:

	Febr	Mayo	Junio
Mejor	20%	25%	28%
Peor	21%	20%	22%
Igual	35%	40%	41%

Recomendación 2.- Hemos ingresado en un momentum que tiende a positivar sentimientos. Se deben hacer todos los esfuerzos que sean necesarios para no perder este momentum. Este sentimiento positivo ha permitido la posibilidad de recuperar Acuerdistas que se fueron a Capra y ha colocado al frente casi de manera exclusiva a UCSistas y Condepistas. Debe apretarse fuerte la campaña institucional.

Si es que se pretende comparar La Paz con otras ciudades del extranjero, un 38% cree que La Paz es peor que las capitales que conocen, 18% cree que es igual y sólo un 9% que es mejor.

Recomendación 3.- Como parte de la publicidad a lanzarse o como parte del proyecto de la feria en plaza San Francisco, valdria la pena lanzar algunos temas: "La Paz una de las ciudades más limpias de Latinoamérica". "La Paz una de las ciudades con mayor progreso en America", etc, basado en información que se registra en foros o prensa internacional. En todo caso La Paz es peor que otras ciudades particularmente para los grupos altos.

2.- Los Problemas de la Ciudad.-

Comparativamente con las encuestas anteriores no se han modificado sustancialmente los principales problemas de la ciudad de La Paz: siguen siendo limpieza, alcantarillado y mejoramiento de calles.

Una tabla comparativa con los meses de Julio y Noviembre de 1990 y Febrero y Mayo de 1991 nos da los siguientes valores porcentuales:

Problema	Juli	Novi	Febr	Mayo	Junio
limpieza	20%	22%	22%	16%	19 %
calles	15%	12%	12%	14%	16 %
alcantarillado	26%	22%	15%	13%	15 %
Agua Potable	12%	5%	4%	8%	9 %
iluminación	8%	8%	2%	5%	8 %
Tráfico			5%	5%	8 %
vendedores amb	%	6%	1%	2%	4 %
Salud	3%	2%	5%	4%	2 %
embovedados	5%	8%	4%	2%	2 %

- La tabla precedente establece el orden en el que se debe trabajar. En ella se puede percibir claramente la existencia de tres grupos:

- a) Limpieza, Calles y Alcantarillado
- b) Agua potable, iluminación, Congestionamiento de tráfico
- c) Los demás problemas

- No sólo debe cuidarse el orden en que los paceños sienten sus problemas, sino y dado el corto tiempo que hay a las elecciones debe concentrarse e intensificarse la solución a los problemas del grupo a).

- Si desmenuzamos estos problemas por zonas, los resultados son:

Zona	Prob 1 (%)	Prob 2 (%)	Prob 3 (%)
1	calles (36)	limpieza (21)	Alcantar (18)
2	Alcantaril (27)	limpieza (23)	calles (23)
3	calles (46)	alcantaril (11)	limpieza (10)
4	limpieza (54)	alcantaril (13)	calles (9)
5	calles (38)	alcantaril (16)	agua (12)
6	limpieza (31)	calles (28)	alcantari (14)
7	limpieza (45)	calles (25)	alcantari (15)
8	limpieza (31)	calles (30)	alcantari (19)
9	limpieza (26)	calles (24)	alcantari (9)
10	limpieza (29)	calles (23)	alcantari (12)
11	alcantaril (17)	calles (15)	limpieza (13)
12	limpieza (39)	calles (15)	alcantar (7)
13	agua pot (43)	calles (17)	trafico (9)

Sustancialmente con respecto a Noviembre, Febrero y Mayo no hay modificaciones. El tema de limpieza que en Febrero y Mayo era crítico hoy también lo es. A nuestro entender valdría la siguiente recomendación: concentrarse en limpieza en las zonas 4 (Miraflores), 6 (norte de la plaza Murillo), 7 (zona norte, Agua de la Vida), 8 (Mariscal Santa Cruz, Tejar), 9 (Nueva Potosí), 10 (Obispo Indaburo) y 12 (Sopocachi). Establecer un sistema mixto de arreglo de calles y limpieza en las zonas 1 (Portada, Munaypata Villa Victoria), 2 (Achachicala), 3 (Barrios al norte de la plaza Villarroel), y 13 (Zona Sur). El Tratamiento de las zonas 3 (Villa fátima para arriba) y 5 (San Antonio y V. Copacabana) induce a pensar una concentración del trabajo en resolver el tema de calles y 11 (Tembladerani y Tacagua) que resulta más complejo pues requiere un trabajo fundamental en el alcantarillado.

De entre todos los problemas cuáles son los problemas que preocupan mas? En escala de 1 a 7 obtenemos los siguientes promedios:

Problema	Mayo	Junio
limpieza	5.55	5.81
arreglo calles	5.35	5.81
salud	5.62	5.70
iluminación	5.42	5.59
cong tráfico	5.04	5.57
alcantarillado	5.31	5.48
agua potable	5.31	5.42
honestidad alcaldia	5.12	5.38
trabajo alcaldia	5.06	5.37
vendedores ambulantes		5.17
Transporte	4.93	5.01
serv. telefónico	4.76	4.72

- Una comparación de la tabla de problemas con ésta de preocupaciones nos muestra que en el grupo denominado a) el tema pasa fundamentalmente por calles y limpieza antes que por alcantarillado y que en el grupo b) por iluminación y congestiónamiento de tráfico antes que por agua potable.
- Comparativamente con Febrero y Mayo limpieza y calles siguen siendo las dos preocupaciones mayores de los paceños.
- Habiéndose diluido la preocupación por el cólera, la preocupación por salud se halla en franca bajada hasta ubicarse en un punto normal.

Frente a estas preocupaciones cómo reacciona la alcaldía en sus servicios? Presentamos a continuación una tabla comparativa:

Servicio	Mayo	Julio	Novi	Febr	Juni
calles	3.38	4.18	3.69	3.53	2.71
iluminación	3.67	4.06	3.92	3.62	2.95
parques	3.10	3.65	3.54	3.79	
alcantarilla	3.43	3.84	3.49	3.30	2.87
mercados	3.28	3.57	3.45		
transporte	4.23	4.24	4.11	3.89	3.59
limpieza	3.03	3.08	2.94		2.60
cultura	3.52	3.78	4.09		
agua Potable				3.73	3.15
servicio ele				3.83	
teléfonos				3.67	3.39
salud				3.56	3.25
Promedio	3.46	3.80	3.60	3.66	3.06

- Si calles y limpieza son los problemas principales de la ciudad, y son los dos temas que preocupan de sobremanera a los paceños, resultan peligrosos los promedios que en servicios de estos dos items logra la alcaldía. Por lo menos por todo el mes de Julio y Agosto debería tenerse al departamento técnico y de Saneamiento preocupados de resolver estos dos problemas.

Veamos el tema de la limpieza en particular:

- Qué es lo que la gente entiende por limpieza de la ciudad? para un 53% se trata de recojo de basura, para un 30% de barrido o aseo de las calles, para un 13% exceso de tierra y para un 2% la falta de higiene. Queda claro que el tema de limpieza pasa casi exclusivamente por recojo de basura y por el barrido o aseo de las calles.

APPENDIX E

COMMUNICATIONS CAMPAIGN

CAMPAIGN OBJECTIVES

It is believed that new efforts directed at garbage collection will bring more effective results. Nevertheless, several groups might voice objections to the following topics:

- Privatization
- Cost to the consumer
- Unemployment

Therefore, it is necessary to formulate a public relations campaign that will anticipate any such objections and will also convey the advantages of the new sanitation system. They are:

1. To increase environmental and sanitary concerns in the public sector.
2. To establish awareness about the destiny of the city and its waste.
3. To convey the message that this is the only solution possible if the city is to prosper.
4. To project EMA's image as an efficient organization
5. To promote the understanding that the Municipal Government will continue to control the service.

TARGETS

Since the entire public sector is going to benefit from the new system, there are four distinct groups that require a distinct and individual approach. They are:

1. The City Council
2. Opinion Leaders
3. Neighborhood Groups
4. The People of La Paz

PUBLIC RELATIONS STRATEGY

The public relations campaign has been divided into two stages. The first half of the campaign (45 days) will be devoted to the smaller groups: the City Council, the neighborhood groups, and the opinion leaders. The remaining 45 days will be directed towards the consumers.

MEANS AND MECHANISMS

For the smaller groups, the information will be disseminated by way of videotapes and information pamphlet. For the consumer, there will be two television commercials, newspaper advertisements, and a radio jingle.

MEETINGS WITH SMALLER GROUPS

For the first stage, there will be specific meetings with the target groups identified. We hope to meet with the City Council in their own office building. See Appendix A.

There will be a meeting for the opinion leaders. See Appendix B.

For the neighborhood groups, there will be an independent coordinator that will organize an exposition of the project. At this point, there will be specific communication with civil institutions such as: "Friends of the City", "ASOBUR", etc. See Appendix C.

CREATIVE STRATEGY

BASIC PROMISE

With the new service, we will resolve the serious sanitation problem in our city.

SECONDARY PROMISES

- EMA will contribute to the welfare of the people of La Paz
- EMA is the only solution to avoid an approaching and serious tragedy. Great cities of the more developed countries use the same system as EMA will.
- EMA will be able to offer the service to all of the people of La Paz.
- EMA will provide new jobs for the people of La Paz.

CAMPAIGN TONE

SMALLER GROUPS

The tone will be rational and will sell the efficiency, experience, technology and profitability for the Municipal Government.

CONSUMERS

The tone will be rational in terms of environmental concerns, but it will also carry an emotional appeal.

CONTENT OF ADVERTISEMENTS

VIDEOTAPES AND FOLDER

These pieces will contain a retrospective history of the city's growth in demographic terms and the Municipal Government's efforts with regards to sanitation, explaining the various ways the Mayor deals with different problems. In this way, the actuality of the sanitation problem will be evident. Later, the entire garbage collection transfer and disposal process will be explained schematically.

The pamphlet will contain descriptive photographs of the actual situation and a graph which explains the newly implemented system.

SPOTS AND JINGLES

The first of these pieces will perform the function of raising public awareness by presenting the problem along with the appropriate solution.

The second one will strengthen the image of EMA as an organization that promises a modern and innovative solution to the problem.

NET IMPRESSION OF THE CONSUMER

EMA will be presented as one institution in charge of all of the aspects of urban cleaning including garbage collection, waste disposal and landfill management. There will be a single logo that will be seen on every uniform, machine, piece of property and tool. This logo will come to represent the very notion of urban cleaning.

MEDIUM-RANGE PLANS

We understand that a program of this magnitude requires that the philosophy of the company become ingrained in the fabric of the community. Some ideas that could accomplish this are:

- a campaign to institute environmentally-oriented games in the school system designed to educate the young people about the importance of general sanitation
 - distribution of decals for public places
 - close association with the Institutional Clergy: The Episcopalian Conference of Bolivia
- Every piece of literature would carry our slogan and logo.

PUBLIC RELATIONS STRATEGY

MEDIA: Television, Radio and Newspapers

CITY: La Paz

COVERAGE: Local

DURATION: 6 weeks

TELEVISION

We believe that in order to achieve the goals and expectations of the project, the television spots have to be shown during the peak times of broadcasting.

The creation of two 20 second spots was proposed in order to achieve the greatest saturation of the public.

APPENDIX F

**COLLECTION SERVICES
INVITATION FOR BID**

DOCUMENTS FOR INTERNATIONAL PUBLIC BID No. C3D/089/91 (A)

EMPRESA MUNICIPAL DE ASEO
(MUNICIPAL SANITATION ENTERPRISE)

E.M.A.

GARBAGE COLLECTION, STREET SWEEPING AND CLEANING, AND
GARBAGE TRANSPORTATION SERVICES

PUBLIC BID
No. C3D/089/091 (A)

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INTERNATIONAL PUBLIC BID
No. C3D/089/91 (A)

CHAPTER I
INSTRUCTIONS TO BIDDERS

INTERNATIONAL PUBLIC BID

CHAPTER I

INSTRUCTIONS TO BIDDERS

A. INTRODUCTION

1. **Object.** The purpose of this Public Bid is to contract, for a period of five years, private enterprises to provide, in the name and on behalf of the E.M.A. (Empresa Municipal de Aseo) **SERVICES COVERING GARBAGE COLLECTION, STREET SWEEPING AND CLEANING AND TRANSPORTATION OF GARBAGE** to its intermediate or final place of disposal.
2. **Legal basis.** This bid shall be subject to the provisions of D.S. 21660 dated July 10, 1987, D.S. 22176 dated April 13, 1989, the Bolivian Civil Code and Related Regulations.
3. **Definition of bidder.** The responsible firm(s) signing the proforma invoice and in whose name(s) the Bid Bond is issued.
4. **Bidder requirements**
 - 4.1 This bid is directed toward national and/or foreign firms having technical and financial capabilities and experience and which were legally organized prior to January 1, 1991.
 - 4.2 When the respondent is an association or joint venture in which both foreign and Bolivian firms are participating, the participation of the latter must be at least 15%.
 - 4.3 For purposes of this bid and the corresponding contract, the members of the association or joint venture shall respond jointly and without limitation.
5. **Prices and form of payment**
 - 5.1 Prices must be expressed in United States dollars, and may not be modified subsequently.
 - 5.2 The Empresa Municipal de Aseo shall pay the Contractor a fixed price per ton of waste collected, transported and unloaded in the sites established for that purpose.

B. BID DOCUMENTS

6. The bid documents are as follows:

CHAPTER I Instructions to Bidders

CHAPTER II General and Technical Specifications

CHAPTER III Bid Submission Forms

ANNEXES

7. Clarification of bid documents

- 7.1 Any bidder may request clarifications with respect to the bid documents by submitting such a request in writing to C3D.
- 7.2 The period for submitting the request for clarification shall expire fifteen (15) calendar days prior to the date established for opening the bids.
- 7.3 C3D shall answer all requests for clarification in writing (via letter, fax or telex), with copies to all bidders.

8. Modification of bid documents

- 8.1 C3D may, on behalf of the Entity, and for any cause and at any time up to five days prior to the expiration of the period established for the submission of bids, modify the Bid Documents by means of an amendment to be communicated to bidders, whether on its own initiative or as a response to requests for clarification submitted by bidders.
- 8.2 All potential bidders shall be notified in writing (via letter, telex or fax) with respect to the amendments, which shall become binding. The amendments must be picked up by the bidders from the offices of C3D.

C. CONTENTS OF BIDS

9. Bids shall be submitted in 2 envelopes

- 9.1 Envelope "A": Legal Documents
- 9.2 Envelope "B": Technical/Economic Proposal

**10. Documents to be submitted in Envelope "A"
(1 original and 1 copy)**

10.1 For national bidders

- 10.1.1 RUC -- Legalized photocopy of income tax, issued within 30 days of the date of submission of the bid.
- 10.1.2 Certificate of registration in the General Directorate of Commerce and Stock Companies (original document, with a

period of validity sufficient to cover this invitation to bid).

- 10.1.3 Certificate of Fiscal Solvency issued by the Controller General of the Republic.
- 10.1.4 Legal domicile of the bidder.
- 10.1.5 Statement certifying that the firm has a detailed knowledge of, and has visited, the areas covered by this bid.
- 10.2 **For foreign bidders**
 - 10.2.1 Valid certificate(s) of legal existence and activity issued by an appropriate public entity in the country of origin of the bidder.
 - 10.2.2 Certificate of legal representation: issued by the competent authorities to the person having the legal capacity to submit the bid.
 - 10.2.3 Letter of commitment in which the bidder agrees, in the event of a favorable decision, to appoint a local representative who will comply with the provisions of Bolivian law.
- 10.3 **For partnerships or joint ventures**

In the case of an association or joint venture, each partner shall individually submit the corresponding documentation.

 - 10.3.1 Partnership agreement. Consortia or joint ventures shall be organized in accordance with the provisions of Supreme Decree 22407 dated January 11, 1990.
 - 10.3.2 Statement certifying that the firm has a detailed knowledge of, and has visited, the areas covered by this bid.
- 11. **Documents to be submitted in envelope "B"**
 - 11.1 A note from the respondent indicating that he has received, and is familiar with, the material contained in these Bid Documents.
 - 11.2 Letter of transmittal and commitment.
 - 11.3 Bid submission forms (Chapter III).
 - 11.4 Financial statements of the bidder, covering the three most recent years, ending with December 31, 1990.

In the event that the bidder is a consortium, financial statements shall be submitted for each of the firms making up the consortium.

- 11.5 Certifications issued by the competent authorities with respect to compliance with contracts, whether already executed or currently being implemented, the purpose of which is to provide urban sanitation services.

The certifications to be submitted shall be of two types:

11.5.1 Contracts executed

Certifications with regard to contracts covering garbage collection and street cleaning and which have already been executed, to contain as a minimum the following:

- a) Starting date of contract (day, month, year)
- b) Expiration date of contract (day, month, year)
- c) Reason for termination of contract
- d) Size of the population served
- e) Total number of tons collected per day (for an average of six days per week)
- f) Services provided (to be specified)
- g) Total number of tons collected during the life of the contract.

Respondents must submit a certification issued by the official contracting entity.

11.5.2 On-going contracts

To facilitate the analysis of garbage collection and street sweeping contracts currently in effect, respondents shall submit a certification issued by the official contracting entity to which services are being provided, to include the following data:

- a) Starting date of each contract.
- b) Planned duration of each contract, together with expiration date.
- c) Total number of tons collected per day under each contract (for an average of six days per week).

- d) Services provided by the Contractor (collection, sweeping, others).
 - e) Contract extensions or amendments to date.
 - f) Population served
- 11.6 A Bid Bond in the amount of US\$50,000 (fifty thousand United States dollars) having a validity of one hundred twenty (120) calendar days as of the date of bid opening.
- 11.7 Technical Proposal containing all the information requested in the Technical Specifications as well as all material and information that, in the judgement of the respondent, is deemed necessary.

12. Period of validity of the bid

- 12.1 The bid shall have a validity of one hundred twenty (120) calendar days following the date on which the bids are opened.
- 12.2 Under exceptional circumstances, C3D may request bidders to extend the period of validity of their offers, to which the bidder may refuse without risk of forfeiting his Bid Bond.

13. The Bid Bond may be executed if:

- 13.1 The bidder withdraws his bid within the period of validity established in the bid form, or
- 13.2 In the event that the bid is accepted and the bidder does not sign the contract in accordance with subparagraph 25.1.

D. SUBMISSION OF BIDS

14. Envelopes shall be labeled as follows:

Licitación Nr. C3D/089/91 [Bid No. C3D/089/91]
 Sobre [envelope] "(Relevant Letter)"
 NOMBRE DE LA EMPRESA PROPONENTE [NAME OF THE RESPONDENT FIRM]

15. Closing date for submission of bids

- 15.1 Bids must be received in the offices of C3D in La Paz no later than 11:30 hours on September 19, 1991.

- 16. **Language.** Proposals must necessarily be submitted in Spanish. Technical Catalogues will be accepted in English.

17. MODIFICATION AND WITHDRAWAL OF BIDS

- 17.1 Bidders may not modify their bids once they have been submitted, although they may withdraw their bids prior to opening. In the event a bid is withdrawn following the opening of bids, the bidder shall forfeit his Bid Bond.
- 17.2 The advice of withdrawal of bid shall be submitted in writing prior to or at the time such action is taken.

E. Opening and evaluation of bids

18. With regard to the opening ceremony

- 18.1 Bids shall be opened in the presence of representatives of those bidders wishing to attend at 15:00 hours on September 19, 1991 in the offices of C3D in La Paz.
- 18.2 At the time bids are opened, the names of the bidders shall be announced, together with their overall prices, bids withdrawn, and compliance or noncompliance with necessary guarantees, as well as anything else which C3D, at its discretion, deems advisable.

19. Clarification of bids

- 19.1 In order to facilitate the examination, evaluation and comparison of bids, C3D may, at its discretion, request a bidder to clarify his bid. The request for clarification and the corresponding response shall be made in writing (via letter, fax or telex) and no changes in prices and/or any other parameters involved in the grading of bids shall be requested, offered or allowed.

20. Preliminary examination

- 20.1 Arithmetic errors shall be corrected as follows. If there is a discrepancy between the unit price and the total price resulting from multiplying the unit price by the corresponding amount, the unit price shall prevail and the total price shall be corrected.
- 20.2 Prior to proceeding to the detailed evaluation in accordance with subsection 18, C3D shall determine whether each bid is essentially in compliance with the bid documents as responding, without differences of substance, to all provisions and conditions contained in those documents.
- 20.3 C3D, in coordination with the entity, may ignore minor errors of form or omission in accordance with the bid documents or irregularities contained in a bid, providing that the bid does not depart significantly from the above-

mentioned bid documents and providing that the position of another bidder is not affected thereby.

21. System for evaluating and comparing bids

21.1 Bids which are in compliance with legal requirements, are submitted within the time stipulated, and are accompanied by the Bid Bond shall be evaluated in accordance with the following parameters:

1.	Experience	20 points
2.	Financial Capability	15 points
3.	Technical Proposal	30 points
4.	Price per Ton	<u>35 points</u>

TOTAL 100 points

F. ADJUDICATION OF CONTRACT

22. Right of the Entity to modify amounts at the time of adjudication

22.1 The Entity reserves the right to increase or decrease the service areas to be consigned without any modification to unit prices or other stipulations or conditions. (These modifications shall not exceed 10%).

23. Right of the Entity to accept or reject any or all bids

23.1 The Entity reserves the right to accept or reject any bid as well as to call off the bid process entirely and reject all bids at any time prior to adjudication of a contract, without incurring any responsibility with respect to the bidder or bidders affected by such a decision or any obligation to disclose the reason therefor.

24. Advice of adjudication

24.1 The Entity shall be responsible for notifying the bidder(s) selected.

25. Signing of the contract

25.1 Beginning with the date of receipt of the advice of adjudication, the selected bidder shall have a period of 15 days in which to sign the Contract (which period may be extended by the E.M.A.), toward which end it will be necessary to submit a Performance Bond in an amount equal to 10% of the total amount awarded, together with the following documentation:

25.1.1 **For national firms**

25.1.1.1 Legal charter, duly legalized by the competent notary public.

25.1.1.2 Notarized power of attorney issued to the legal representative of the firm.

25.1.2 **For foreign firms**

25.1.2.1 The document identified in subparagraph (11.2.1) shall be legalized by the Bolivian Consul and certified by the Ministry of Foreign Relations of Bolivia.

25.1.2.2 Notarized power of attorney issued to the legal representative of the firm, legalized by the Bolivian Consul and certified by the Ministry of Foreign Relations of Bolivia.

25.1.3 Partnership or joint venture
Partnership contract. In addition, each partner shall individually submit the relevant documentation duly legalized by the Bolivian Consul and certified by the Ministry of Foreign Relations of Bolivia.

25.2 The selected bidder shall be responsible for having the contract protocolized by the government notary.

25.3 Noncompliance by the selected bidder with the provisions of paragraph 25.1. shall be sufficient grounds for declaring the adjudication null and void and proceeding to execute the Performance Bond.

25.4 **Other guarantees**

25.4.1 Guarantee covering proper maintenance and repair of equipment

In order to guarantee the proper maintenance and repair of property belonging to the E.M.A., the Contractor shall establish a guarantee in favor of the E.M.A., equal to 30% of the assessed value of the vehicles leased by the E.M.A. to the Contractor.

25.4.2 Guarantee covering the partial or total loss of vehicles

The Contractor shall establish a guarantee in favor of the Empresa Municipal de Aseo in order

to guarantee payment of the value of the vehicles in the event of total or partial loss as a result of accident, theft, fire, riot, disturbance, coup d'état, flooding, terrorism, sabotage, cave-in, landslide or mudslide, or any other phenomenon, whether natural or man-made, causing, or having the potential to cause, damage to the equipment owned by the Empresa Municipal de Aseo.

25.4.3 . Liability guarantee

The Contractor shall establish a guarantee in favor of the Empresa Municipal de Aseo in the amount of US\$1,000,000 in order to guarantee payment of indemnifications resulting from damages caused to third parties as a result of the service provided.

INTERNATIONAL PUBLIC BID

No. C3D/089/91 (A)

CHAPTER II

TECHNICAL SPECIFICATIONS

CHAPTER II

GENERAL AND TECHNICAL SPECIFICATIONS

1. GENERAL PRINCIPLES INVOLVING CONTRACT IMPLEMENTATION AND SCOPE OF CONTRACT

1.1 PRINCIPLES

1.1.1 RESPONSIBILITY OF THE E.M.A. FOR PROVIDING SERVICE

The Empresa de Aseo Urbano (E.M.A.) is solely responsible to the general public for providing the service. However, the Contractors shall be responsible to the E.M.A. for any contractual deficiencies or shortcomings which might occur with respect to the contract, bid conditions and other relevant provisions.

1.1.2 CONTRACTOR AUTONOMY

In order to properly carry out the contract, the Contractor shall enjoy financial, administrative and technical autonomy, providing all actions are carried out in accordance with the conditions set forth in these bid conditions and in the contract.

1.1.3 MUTUAL COLLABORATION

The Empresa Municipal de Aseo, the Contractor and the Supervisor, each retaining its own independence and autonomy, shall act in harmony and mutual collaboration in order to ensure that the service provided is the most beneficial possible for the general public, in accordance with the provisions of these bid conditions and the contract.

1.1.4 CONTRACTOR RESPONSIBILITY

The Contractor shall be solely responsible to the E.M.A. for total compliance with the terms of the contract. His responsibility shall under no circumstances be delegated and the Contractor's actions shall be in accordance with the provisions set forth in the bid conditions, in the contract and in relevant legislation.

1.1.5 MAXIMUM EFFICIENCY AND QUALITY

During the entire life of the contract, the Contractor shall maintain the maximum degree of efficiency possible in the work performed and shall provide services of the highest quality possible, at the risk of becoming liable for the sanctions contemplated in the contract.

1.1.6 EXCLUSIVITY IN THE AREA COVERED BY THE CONTRACT

In the area covered by the contract, the Contractor shall provide, on an exclusive basis, services covering collection and transportation of

garbage and sweeping and cleaning of streets in accordance with the terms of the contract and these bid conditions.

1.1.7 OWNERSHIP OF THE GARBAGE

The E.M.A. shall at all times be the owner of all of the garbage generated in the city of La Paz. The Contractor, by acting on behalf of the E.M.A., shall not become the owner of the garbage, but rather only its possessor from the time the garbage is collected and transported until the time it is unloaded.

1.2 AREAS TO BE INCLUDED IN THE CONTRACT

For purposes of submitting bids, three types of bids covering three different areas shall be admitted:

Area A includes the entire urban perimeter of the city of La Paz to the east of the Choqueyapu River.

Area B includes the entire urban perimeter of the city to the west of the Choqueyapu River.

Area C includes the entire city.

Visits to these areas prior to submission of bids are obligatory and accordingly the respondent confirms that he is familiar with the two areas included under the contract as well as with their individual characteristics, details and peculiarities.

For purposes of contract adjudication, the E.M.A. shall adjudicate areas A and B to different respondents or, alternatively, may adjudicate to a single respondent that area known as area C, as the E.M.A. deems advisable. However, all respondents must include in their proposal bids corresponding to each of the three areas mentioned.

The proposal shall analyze and describe the technical, economic and financial conditions corresponding to each of the areas subject to the bid process, in accordance with the terms of these bid conditions.

1.3 TERM OF THE CONTRACT

The term of the contract shall be for five (5) years and ninety days beginning on the day following its execution. This period may be renewed for an additional five years.

The first ninety days shall be known as the "implementation period" and shall be that period of time granted to the Contractor to organize the operation, hire staff, procure equipment and carry out all other activities necessary for implementing the project.

Respondents may include in their bids a lesser term for the implementation period. If any respondent should submit an

implementation period less than ninety days, such period shall not subsequently be increased under any circumstances.

Once this period has expired, the Contractor shall begin to provide service to the public.

This period may only be increased on the prior express written authorization of the Manager of the Empresa Municipal de Aseo. This authorization shall be preceded by a Technical Opinion issued by the Supervisor and recommending such an extension.

1.4 FORM OF PAYMENT

The Empresa Municipal de Aseo shall pay the Contractor a flat fee per ton collected, transported and unloaded at the intermediate or final disposal site indicated by the E.M.A. The number of tons to be paid shall be that which the Supervisor certifies that the Contractor has collected, transported and unloaded at the final disposal site, with the value per ton to be paid by the Contractor to the E.M.A. for equipment leasing being automatically discounted. The basic prices shall be those identified as price per ton in the respective proposal and shall not be subject to modification.

Payment shall be made by the E.M.A. and the Contractor shall have no relationship with the users of the service with regard to payment.

In order to determine the tare weight of the vehicle, the Supervisor or the E.M.A. shall establish that system which they deem most appropriate and which will allow the net weight of the garbage to be determined with the greatest degree of accuracy. Toward this end, various weighing operations may be carried out with respect to each vehicle during a given week or given month and the weight to be applied shall be the average weight obtained during the various weighing operations carried out during the period.

The Contractor shall submit monthly invoices to the Empresa within the first ten working days of the following month. For purposes of the initial invoice, regardless of the day on which services are initiated, an account statement will be cut as of the last day of the month in which services are initiated. Following that date, invoices shall run from the first day of the month to the last day of the month.

The Supervisor shall be responsible for verifying the bills or invoices submitted to the E.M.A. by the Contractor charged with providing garbage collection and street sweeping services. Invoices not containing the concurrence or approval of the Supervisor will not be paid.

However, a period of five working days is hereby established to allow the Supervisor to approve or object to the invoices submitted by the firms charged with providing garbage collection and street sweeping and cleaning services. If after such a period has transpired the Supervisor has not objected in writing to the bill or invoice submitted, it shall

be understood that approval has been given and the period established for the E.M.A. to effect payment shall begin.

In those cases in which the Supervisor detects differences or inconsistencies in the billing, he may make any objections which he deems appropriate prior to a expiration of the period of ten working days. All objections must be set forth in writing. Once corrected, the Supervisor shall have a period of only five calendar days to approve the invoice or make new objections, which must be submitted fully justified. In substantiating the amount billed, the Supervisor shall compare the weight vouchers submitted by the entity charged with garbage collection and street sweeping services with those obtained by the operators of the weighing system.

For purposes of billing, days begin at 00:00 hours and end at 24:00 hours. This time period shall serve as the basis for organizing the bills submitted.

The E.M.A. shall have a period of twenty calendar days beginning on the day of final approval of the invoice by the Inspector to pay the bills submitted and if the monthly bills which have been accepted wholly or in part by the Supervisor are not paid within such that period, the E.M.A. shall pay interest at the rate established for 30 day deposits by the Superintendency of Banks.

In order to guarantee payment, the E.M.A. shall open a special account in the Banco del Estado in which it shall deposit monthly the amounts collected from users of the sanitation service.

If the amount collected for sanitation service is not sufficient, the E.M.A. shall make up the difference.

This account shall be used to pay services covering garbage collection, street sweeping and cleaning, supervision and services relating to the sanitary land fill and transfer plant.

1.5.1 DAMAGE TO THE WEIGHING SYSTEM

In the event that the weighing system should break down or become inoperative, the average daily number of tons from the invoice corresponding to the preceding month shall be used for billing.

When the breakdown or inoperability of the weighing system occurs during the first month of service, the daily average obtained during the period in which the weighing scale was working properly shall be used for billing.

2. DEFINITIONS OF CERTAIN TERMS

In order to facilitate the proper interpretation of documents, bid conditions, annexes thereto and the contract itself, the following words and expressions shall be understood as having the following meanings:

BIDDER OR RESPONDENT: The responsible firm(s) signing the proforma invoice and in whose name the Bid Bond is issued.

AWARDEE: The bidder whose proposal has been formally selected by the Board of Directors of the E.M.A.

CONTRACTOR: The successful bidder signing the contract.

TECHNICAL SPECIFICATIONS: The set of norms containing a description of the minimum required characteristics, ways and means of providing the various services.

SUPERVISION, AUDITING AND INSPECTION: The administrative supervisory and monitoring activity exercised by the E.M.A. or its designee during the life of the contract with respect to the services provided and compliance with the terms of the contract.

REFUSE OR GARBAGE: Useless, thrown away or discarded material which has been abandoned by its owner, possessor or holder having a liquid content which is insufficient to enable it to flow freely, including, in no particular order or sequence and not limited to, ashes, glass, food remains, paper, bottles, leaves, nontoxic industrial waste, refuse accumulated as a result of street sweeping or the cleaning of other public places as well as all materials similar to the preceding, exclusive of construction waste.

PUBLIC THOROUGHFARE: Areas set aside or intended for public, vehicular or pedestrian traffic which make up the road infrastructure of the city and include streets, roadways, medians, walkways, roadsides including landscaped areas or areas set aside for trees or plants, or any other combination of the foregoing elements extending between building lines.

PAVED STREETS: Streets having a layer of concrete, bituminous or asphalt mixtures, paving blocks, stone slabs or any other type of material providing physical resistance to vehicular traffic.

CONSORTIUM OR JOINT VENTURE: A partnership between two or more firms which, while maintaining their individual legal existences, agree to act jointly under a single management structure and in accordance with common rules with respect to this bid invitation. Consortia represent a single entity with respect to dealings with the contracting entity and the members thereof respond jointly and without limitation for all liabilities incurred.

BLOCK: For purposes of these documents, a "block" shall be understood to be each section of the public thoroughfare between one street and the next, on the same side of the street.

RESIDENTIAL SOLID WASTE OR RESIDENTIAL GARBAGE: This definition includes all garbage generated in households and/or small businesses whose garbage is similar to that of households. This category shall include, but not be limited to, organic materials, glass, china, paper, cardboard, plastic, used clothing, the products of extremely minor repairs to rental property and minor repairs to buildings, household sweepings, electric home appliances which have

been discarded, landscape and garden trimmings generated in the residential unit itself, and other waste or garbage similar to the above.

COMMERCIAL GARBAGE: Garbage generated by offices, businesses, restaurants, commercial establishments, clubs, official organizations, military units and any other entities similar to the preceding.

INDUSTRIAL GARBAGE: Garbage which is the result of industrial processes of any type other than processes involving the construction of buildings of any type.

This may be nontoxic, toxic or extremely toxic. This bid procedure covers only the collection of nontoxic industrial garbage. The other types of garbage, i.e., toxic or extremely toxic garbage, is not to be collected under the terms of this bid.

REFUSE FROM STREET SWEEPINGS: Refuse originating from street sweeping activities and including, but not limited to, domestic, industrial or commercial garbage discarded clandestinely in the public thoroughfare, leaves, branches, dust, papers, fruit residues, human and animal excreta, glass, small boxes, dead animals, cardboard, plastics and other solid waste similar to the preceding which has been discarded in the public thoroughfare.

GARBAGE PILES: Garbage piles are defined as garbage which has accumulated in the public thoroughfare, especially that which is bulky and which, as a result of its volume and/or weight, cannot be picked up manually or by means of manual sweeping efforts.

REFUSE FROM PARK AND LAWN CLEANING: Refuse originating in the cleaning or beautification of lawns and/or the pruning of trees or shrubs located on public or private land, lawn mowing, etc.

DEAD ANIMALS: Any animal found dead on the public thoroughfare. Such animals must be picked up and transported to the place of final disposal.

WASTE FROM HOSPITALS, SANITARIUMS AND LABORATORIES ENGAGED IN ANALYSIS AND RESEARCH OF PATHOGENS: All waste originating in activities involving the treatment of wounds, surgical procedures and/or analytical and research laboratories, together with all garbage similar to domestic garbage which cannot be separated from the preceding, shall be considered to be pathogenic-type garbage and shall be given special treatment, which shall be specified on containers and in pick-up schedules, in accordance with prevailing health standards and the project submitted.

DEMOLITION MATERIALS OR CONSTRUCTION WASTE: Materials originating in garbage produced as a result of the construction of buildings or pavement, demolitions thereof, etc. These materials consist largely of stones, bricks, stone-like materials, reinforced cement, ferrous and nonferrous metal, wood, glass, etc.

Collection of this type of garbage will NOT be included in the contract.

FIELD STUDY: Those inspections and studies of the area carried out by the bidder prior to submission of the proposal and which enable him to make contact and become familiar with the characteristics of the service area so that he may proceed to develop, on this basis, the required operating plan.

MANUAL SWEEPING AND CLEANING OF STREETS: The sweeping and cleaning operation covering pedestrian walkways, curbs, median strips, landscaped areas and parks, performed exclusively with manual tools and/or by means of human power.

MECHANICAL SWEEPING: The sweeping and/or vacuuming of the sides or shoulders of the streets by means of machinery and equipment.

STREET CLEANING: That process performed by means of street washing machinery and earthmoving and other equipment, or by means of a combination thereof, which facilitates the removal or collection of garbage accumulated in the public thoroughfare which, because of its volume or physical characteristics, cannot be collected and transported jointly with street sweeping waste or household, commercial or industrial garbage.

MACRO-ROUTING: The distribution of services by zones, depending on their particular characteristics and/or the type of garbage produced.

MICRO-ROUTING: The detailed description of the route to be followed in providing specific garbage collection, manual sweeping or mechanical sweeping services.

COLLECTION POINT: A specific place on the street/sidewalk where waste belonging to residents, businesses, industries, hospitals, etc., is placed for collection.

ROUTE/COLLECTION ROUTE: An area containing a number of collection points for solid waste served by a single unit.

SPECIAL ROUTE: An area containing a number of special nonresidential collection stops, such as hospitals, served by a single unit.

MICRO-ENTERPRISE: An independent enterprise consisting of a work force of between 2 and 12 people, authorized by the E.M.A. to collect solid waste and clean streets in areas having a steep slope within the zone assigned to the Contractor and in which access by Contractor vehicles and/or machinery is impossible.

POINT OF COLLECTION OF THE MICRO-ENTERPRISE: A point designated and specified in the scope of work where the micro-enterprise deposits the garbage collected, together with the waste generated as a result of street cleaning operations carried out by the Contractor.

WEIGHT OF GARBAGE COLLECTED: The weight of the garbage calculated as the total weight of the garbage collection vehicle on the scales, less the official weight of the vehicle.

WEIGHING SYSTEMS: Only those located in the Kantutani transfer station and the Mallasa sanitary landfill shall be considered for purposes of calculating the official weight of the garbage collected, consisting of scales and other instruments used in determining the weight of trucks, whether loaded or empty, and to issue official weight certificates.

SYSTEM OR PROCEDURE FOR DETERMINING TARE WEIGHT: The means which will be used to determine the weight of each truck with no load. As a result of the effect which fuel, lubricants, accumulated and unloaded garbage, and other elements may have on the tare weight as determined by the manufacturer, empty trucks may be weighed several times during the same month in order to determine the average tare weight, which will in turn serve to determine the official weight of the garbage collected.

TRANSFER STATION OR PLANT: The facility located on Avenida La Costanera. This facility will preferably be the final destination of all garbage collection vehicles. The sanitary landfill shall only be used as a final destination for garbage collection vehicles in provisional cases.

DEFICIENCY: Any condition or characteristic of the services provided not in compliance with the requirements of the contract.

CORRECTION: Any and all actions to be taken to eliminate any existing deficiency.

GRACE PERIOD: A period of 60 days which shall commence on the same day on which service is initiated.

3. CONTRACTOR PERSONNEL

3.1 Availability of personnel

The Contractor, as the party solely responsible for project implementation and compliance, shall have available, at all times and for his own expense, all staff necessary to comply with all contractual obligations as well as to ensure proper provision of the services contracted. It will be the exclusive responsibility of the Contractor to pay all salaries and other employee benefits as defined in Bolivian labor legislation, as well as to comply with the provisions of the Social Security Law.

Contractor personnel shall not be connected in any way with the E.M.A..

3.2 PREFERENCE IN THE SELECTION OF PERSONNEL

Contractors, when selecting the staff to use in their operations, shall be required to give preference to those employees of Saneamiento Urbano (Directorate of Urban Sanitation) desiring to provide services to the contracting firm and willing to accept the Contractor's requirements as regards personnel selection. Contractors are under no obligation to hire individuals who do not meet the needs of the firm or who otherwise

do not satisfy the requirements of the firm with regard to new employees.

In any case, when a candidate who has worked for HAM - SANEAMIENTO receives the same rating as another applicant, preference shall be given to the individual having prior experience in garbage collection activities in Saneamiento Urbano (Directorate of Urban Sanitation).

Toward this end, the manager of the E.M.A. shall, once the contract has been signed, provide the corresponding list of personnel to be examined by the Contractor.

As regards amount and quality, the selection of personnel shall be carried out in accordance with the organizational structure of the Contractor, and every effort shall be made to attain the maximum possible degree of efficiency.

3.3 UNIFORMS AND GEAR

The Contractor shall provide all gear necessary to satisfactorily provide the services requested. All personal shall be issued gear, at least three yearly, including rain gear.

Such gear will include uniforms in accordance with the activities to be carried out, with all staff being required to wear the same color (shirt or sweatshirt, pants and shoes.)

Uniforms provided to female workers engaged in street sweeping and garbage collection tasks shall respect and comply with a currently prevailing traditions and usage in the city of La Paz with regard to women's clothing.

All uniforms should comply with industrial safety requirements dictated by the particular activity to be carried out.

3.4 ORGANIZATION OF PERSONNEL

The respondent shall include in his bid an organization chart indicating the responsibilities of each official, as well as the names and obligations of other key members of the staff. This organization chart must be kept updated during the entire life of the contract and any change occurring in key operating employees shall be communicated to the Supervisor as well as to the Municipality.

The Contractor shall at all times during the period in which services are provided retain the services of an individual who will be responsible for the entire operation and who will be empowered to act on behalf of the Contractor in matters involving the service provided.

The respondent shall include in his proposal the number of staff members to be used in each service to be provided, together with an indication of the days and hours to be worked.

The list of personnel shall be broken down by type of work or activity and shall include the total number of workers assigned to each area, including administrative duties.

3.5 STAFF ATTITUDES WITH RESPECT TO THE COMMUNITY

Contractor staff shall show proper respect for all service users, for the community in general and especially for those individuals charged with carrying out supervision activities.

Contractor staff shall be prohibited from making any type of gesture or using any type of language which might be considered obscene or offensive to public decency or decorum. The Contractor shall at all times make every effort to ensure that his staff maintain cordial relations with the community.

Workers are expressly prohibited from requesting or receiving gratuities or allowing and/or performing the selection, classification or commercialization of the garbage collected, which must be transported to the final disposal sites in the same condition in which picked up. Failure to comply with this provision shall constitute grounds for applying the corresponding sanctions.

3.6 SPECIAL REQUIREMENTS FOR DRIVERS

All Contractor workers carrying out activities involving the operation of motor vehicles of any type or size shall be in possession of the appropriate driver's license, which shall be issued by the competent authorities, for operating the vehicle assigned. The Supervisor is authorized to review at any time the validity of such licenses and may prohibit a driver from carrying out these functions in the event of failure to comply with this requirement.

The Contractor shall maintain an up-to-date register of the drivers assigned to each vehicle, together with such data as name, address and registration number of the vehicles to which they have been assigned.

3.7 TRAINING OF BOLIVIAN EMPLOYEES AND TECHNOLOGY TRANSFER

The Contractor shall provide administrative and technical training to all Bolivian staff members in his employ and engaged in providing the services described in this contract.

The proposal should contain a description of the staff training program. Likewise, it should contain an indication of the subjects to be covered in such training activities, broken down in accordance with the various levels of personnel.

3.8 SUITABILITY OF MANAGEMENT PERSONNEL

Each respondent shall submit, in accordance with form No. 6, the names and work history of the management staff and advisors who will be

responsible for supervising the provision of service and for overseeing the work carried out. This information will be used to determine the suitability of management personnel.

4. MACHINERY AND EQUIPMENT

4.1 EQUIPMENT TO BE LEASED BY THE E.M.A.

In order to carry out the activities covered under the contract, the Contractor shall lease the garbage collection vehicles, garbage dump trucks and roll-on/roll-off equipment which the E.M.A. has available and which are listed below:

15 1990 TOYOTA GARBAGE COLLECTION TRUCKS WITH COMPACTOR, HAVING A LOAD CAPACITY OF APPROXIMATELY 7 TONS AND RADIO EQUIPMENT ALREADY INSTALLED.

6 1990 TOYOTA ROLL-ON/ROLL-OFF TRUCKS WITH A LOAD CAPACITY OF APPROXIMATELY 7 TONS AND RADIO EQUIPMENT ALREADY INSTALLED.

35 CONTAINERS WITH A CAPACITY OF 10 CUBIC METERS.

2 1990 HINO GARBAGE DUMP TRUCKS WITH RADIO EQUIPMENT ALREADY INSTALLED.

The respondent shall select from the preceding list those which he considers necessary to properly perform his operations and at no time shall use vehicles having characteristics similar to those of the E.M.A. vehicles, except in the event that the E.M.A.-owned vehicles do not meet the needs of the respondent.

The respondent shall include in his proposal the above-described list of E.M.A.-owned equipment which he will use in the provision of services, clearly identifying each unit of equipment.

Likewise, the Contractor shall submit a list of all equipment other than E.M.A.-owned equipment to be used in providing services. This list must be submitted by the Contractor.

Considering that the E.M.A.-owned equipment is limited in number, in the event that a decision is made to contract areas A and B to two different respondents, the vehicles selected by the respondents shall be delivered to them proportionately to the garbage currently being collected in each of the areas, in accordance with estimates made by the Directorate of Urban Sanitation and/or the E.M.A.

However, in the event that the equipment which is eventually leased out turns out to be insufficient, the respondents may request to lease garbage collection vehicles currently owned by the E.M.A. and which do not appear on the preceding list, are not of the same model year, and do not have the same characteristics as the equipment appearing in the initial list. Such a request shall be included in the proposal with a clear indication as to which of the garbage collection vehicles (other than those appearing in the initial list) the Contractor wishes to lease

and the amount of the lease payment that he would be willing to pay for each vehicle.

4.2 CONDITIONS UNDER WHICH VEHICLES WILL BE LEASED

The conditions under which E.M.A.-owned garbage collection vehicles, garbage dump trucks, containers, radio equipment and roll-on/roll-off equipment will be leased are as follows:

4.2.1 Terms of lease of E.M.A.-owned vehicles and equipment

The term of lease of E.M.A.-owned vehicles shall be equal to the term of the contract covering the operation of garbage collection and streets sweeping services. In the event service contract is terminated prematurely, the lease contract shall similarly terminate.

4.2.2 Monthly lease fee

The monthly lease fee which the Contractor will pay to the E.M.A. for the use of the vehicles must be proposed by the respondents. This amount must be expressed as a fixed monthly fee in U.S. dollars for each vehicle or unit of equipment leased. If the vehicles contain radio equipment, the proposed fee should include the lease of such equipment.

The amount offered as lease fee must always be paid, regardless of circumstances.

The amount offered as lease fee must be greater than the amount of the depreciation of each unit of equipment as determined below:

- a) For 1990 Toyota garbage collection vehicles having a compactor of approximately 14 cubic meters, depreciation has been calculated at US\$8,093.00 per vehicle; this amount includes depreciation of the vehicle and compacting equipment. In addition, the amount of the yearly depreciation on the radio equipment is US\$360.00 per set.
- b) The 1990 Toyota roll-on/roll off trucks have an estimated yearly depreciation of US\$4,897.00 per vehicle. In addition, the amount of the yearly depreciation on the radio equipment is US\$360.00.
- c) The 1990 Hino garbage dump trucks have an estimated yearly depreciation of US\$4,427.00 each, and in addition the amount of depreciation on the radio equipment is US\$360.00 per set.
- d) The yearly depreciation for the containers is estimated at US\$1,270.00 per container.

4.2.3 Form of payment of lease fee

The monthly payment of the lease fee for the vehicles shall be made by means of an offsetting charge or compensating accounts between the Contractors and the E.M.A., such that the E.M.A. will pay the Contractor

only the value of the number of tons invoiced less the amount corresponding to the lease fees.

4.2.4 Rights and obligations of the Contractor

The Contractor, as lessor of E.M.A.-owned equipment, shall have, in addition to the obligations stipulated by law, the following primary obligations, especially as regards with the maintenance and use of E.M.A.-owned equipment:

- a) As per the provisions of Article 685 of the Civil Code, the E.M.A. shall grant to the lessor the use or temporary enjoyment of the goods (equipment) covered by the lease contract, which shall be assigned exclusively to providing the service contracted, in accordance with each type of vehicle.
- b) The lessor or Contractor shall be responsible for providing maintenance and making the regular repairs mentioned in Article 692 of the Civil Code and shall also, for his own account and expense, carry out all necessary repairs not included in said provision. That is to say, all repairs, both major and minor, required during the life of the lease contract shall be carried out by the Contractor/lessor of the equipment.

The E.M.A. shall bear no responsibility for repairs of any kind. Likewise, the Contractor/lessor shall be responsible for providing the preventive maintenance necessary for maintaining the lease equipment in perfect working order.

The repairs and preventive or curative maintenance for the vehicles and compactors or any other component of the leased equipment shall be carried out in accordance with the manufacture's repair and maintenance manual.

- c) The Contractor/lessor is responsible for providing fuel, lubricants and other items is necessary for the proper operation of the trucks and/or equipment leased as well as for the operation of the equipment per se.
- d) The leased equipment shall be maintained in optimum conditions of cleanliness and presentability, with the Contractor/lessor being responsible for providing for the daily washing and cleaning of each vehicle.
- e) The Contractor shall be responsible for the total or partial loss of the leased equipment, including loss by reason of force majeure or act of God. In order to guarantee payment of the equipment in the event of total or partial loss, the Contractor shall take out a guarantee policy as required in these bid conditions.

- f) The lessor shall use the leased goods in accordance with their nature, taking into account the operating instructions recommended by the manufacturer.
- g) The E.M.A. may terminate the lease of the vehicles in event of gross negligence by the Contractor in complying with his responsibilities regarding maintenance and repair or in the event that the vehicles are not used in accordance with their nature or are used for purposes other than those set forth in this contract.
- h) Upon termination of the contract, the Contractor shall return the leased equipment in perfect operating conditions, toward which end all necessary repairs must be made. In the event that the Contractor does not return the vehicles in the condition hereby stipulated, the E.M.A. may proceed to execute the Performance Bond.

4.3 TECHNICAL INSPECTION OF THE CONDITIONS OF E.M.A.-OWNED VEHICLES

In order to become acquainted with the current conditions of the vehicles, the respondents may inspect those vehicles on August 18 and August 25, 1991, in the operating area of the Directorate of Urban Sanitation located on AVENIDA DEL EJERCITO in the city of La Paz.

In addition, respondents may request special inspections not less than 5 days prior to the scheduled inspection date. The E.M.A. reserves the right to accept or reject such requests. However, the last date possible for requesting such inspections shall be 10 days prior to the date established for the closing of these bid proceedings.

4.4 INVENTORY PRIOR TO DELIVERY

Prior to delivering the vehicles to the Contractors, a detailed notarized inventory, describing the operating conditions and status of each of the principal components of each vehicle, shall be made.

4.5 INCREMENTS AND AVAILABILITY OF EQUIPMENT

The Contractor, as sole responsible party to the E.M.A. for the execution of the contract and compliance with all its terms, shall at all times have available, at his own expense, the additional equipment deemed necessary for complying with all contractual obligations with respect to proper delivery of the service for which the Contractor is responsible.

The proposal shall specify the type of additional equipment to be used and provide a definition of the technical characteristics thereof, with manufacturers' catalogs to be included as attachments to the proposals.

In the event of population increases and/or increases in the production of garbage in the zone for which the Contractor is responsible, the Contractor shall increase for his own account the equipment to be used.

The Contractor shall be responsible for any deficiencies caused by the lack of equipment.

4.6 SPECIAL CHARACTERISTICS OF THE VEHICLES

Any vehicles, machinery or equipment assigned by the Contractor to service delivery and which are in addition to the equipment leased from the E.M.A. shall satisfy the following minimum requirements:

All must be new and the latest available model, and the mileage indicated on the odometer shall not be greater than that necessary to reach the operating base of the Contractor. The chassis and compactors of any truck placed into service in order to renew the vehicle pool during the life of the contract shall also be in compliance with these conditions.

Vehicles providing any of the services covered under the contract shall be equipped with a cabin having sufficient capacity to transport those employees which, in addition to the driver, are responsible for providing the specific service to which the vehicle has been assigned.

Vehicles with compactors shall be equipped with a hydraulic compacting system with semiautomatic valves than can be stopped in case of emergency.

During the life of the contract, the vehicles, machinery and in general all rolling stock shall be kept in optimum conditions both mechanically and technically aspects, as well as regards paint and general appearance, or risk incurring the sanctions set forth for this type of infraction.

The bodies of the vehicles assigned to the collection and transportation of domestic, industrial, commercial or sweeping wastes and/or those producing odors which the public might find disagreeable, shall be of the compacting kind, and shall close so as to prevent the loss of liquid, and shall also be equipped with an automatic device to facilitate rapid unloading.

Equipment assigned to perform special activities such as collecting trimmings from landscape beautification activities or garbage in the form of large objects, may have different characteristics and do not necessarily have to be of the compacting type. For these purposes, the Contractor may use open-bodied vehicles, dump trucks, roll-on/roll-off vehicles or any other similar type of vehicle which is technically adequate for performing the duties which they have been assigned, on the condition that they provide appropriate transportation for the garbage collected as well as automatic unloading.

The equipment assigned to garbage collection activities shall be equipped with appropriate running boards which shall in turn be equipped with a non-skid surface in order to allow safe employee access to the loading bin.

All vehicles bodies, both open and closed, shall provide for rapid loading and unloading of all garbage contained therein, avoiding to the maximum extent possible the spillage of garbage and the generation of dust.

All open-bodied equipment which the respondent plans to use must be equipped with tarpaulins or similar covers in order to protect garbage from exposure to wind and thus prevent it from scattering or spilling during transportation. Dump trucks or similar vehicles which the Contractor plans to use shall also comply with these requirements.

4.7 VEHICLE IDENTIFICATION

All equipment to be used by the Contractor shall be painted uniformly with colors to be determined by the Contractor.

Each vehicle shall be identified with the Contractor logo as well as with the official logo of the E.M.A. of La Paz, both of which shall be placed so as to be visible to the public. In addition to the logos, each vehicle shall also be provided with a unique internal identification number.

In addition, both sides of the vehicle shall contain the following wording: "RECLAMOS AL TELEF. No....", in the center of the cabin doors. The telephone number(s) shall be that (those) which the Contractor assigns to the claims office.

4.8 EXCLUSIVE USE OF VEHICLES

Contractor equipment which is assigned to the implementation of the contract shall be used exclusively for the contract purposes under risk of incurring the sanctions set forth in these bid conditions as well as in the contract.

In no case may the Contractor make use of the equipment for transporting personnel other than those employees assigned to the service being provided during the course of their normal activities.

Except as expressly authorized in writing by the Supervisor, the Contractor may not use any vehicle which has not been registered for providing the services contracted. The Supervisor shall authorize the use of such vehicles only in the event of a duly substantiated emergency.

4.9 REPLACEMENT EQUIPMENT

The Contractor shall include in his fleet of vehicles sufficient replacement units to ensure the regularity and continuity of service in the event of damage, breakdown, etc., in accordance with the terms of the proposal.

The respondent shall indicate in his proposal the number of vehicles to be made available as back-up units.

5. CONTRACTOR FACILITIES

5.1 Types of facilities and location

The Contractor's facilities shall include garages, workshops and washing areas sufficient to provide proper maintenance, repairs and washing and cleaning of the units on a daily basis in accordance with the task assigned, as well as dressing rooms and showers for Contractor personnel.

Likewise, the Contractor shall provide facilities which are appropriate for the proper operation of his administrative offices.

The facilities must be located within the area falling under the jurisdiction of the Municipality of La Paz.

In no case shall the public thoroughfare be used for repairs, parking, vehicle security, or other similar activities.

The Contractor shall not allow persons not involved in the service being provided to have access to or remain in, sites designated for providing support functions for such services. Excepted from the preceding shall be the staff of the Supervisor, which shall have access to all Contractor facilities.

5.2 OFFICES FOR THE SUPERVISOR

Contractor shall be responsible for providing the Supervisor with an office located within the Contractor facilities, properly equipped with desks and chairs and at least one telephone line which shall be in the Contractor's name and for the Contractor's expense. This office shall have an area not less than 60 square meters.

6. STANDARDS FOR SERVICE DELIVERY

6.1 Garbage collection service

6.1.1 Waste to be collected

Waste collection service includes the collection of all solid waste produced in the zone covered by the contract and classified as residential or domestic garbage, nontoxic industrial waste, commercial garbage, public market garbage, noncontaminating pathogenic waste, street sweeping and cleaning waste, garbage piles, large generators, park maintenance waste, tree and bush trimmings, garbage generated by hospitals, clinics and laboratories, dead animals and other similar material.

Excluded from the preceding list is construction waste, which will not be collected by the Contractor.

6.1.2 General standards for the garbage collection service

Service shall be provided in accordance with the methodology presented in the proposal and shall be such as to ensure that none of the different types of waste contemplated in the contract or in these technical specification are excluded from the garbage collection services to be provided.

Toward this end, each respondent shall propose potential collection routes for the various types of waste.

During contract execution, routes may be modified with a view toward achieving a maximum degree of efficiency, providing the modifications do not involve a decrease in service coverage. In the event that the route modifications involve a modification of collection schedules, the prior approval of the Supervisor shall be required; in addition, the Contractor shall duly inform the users with respect to these changes.

Collection services shall be carried out using the door to door system, except in special cases when the system of collection in containers shall be used, or in those zones in which existing street conditions are such that the garbage collection vehicles are prevented from entering.

Garbage collection service includes transportation and unloading of waste in the final disposal site, which shall preferably be the transfer station, as indicated by the E.M.A.

Garbage collection must be performed in such a way as to minimize noise and avoid waste falling on the public thoroughfare, it being the responsibility of the Contractor to immediately proceed to clean up the affected area in the event that should happen.

Waste collection service shall not be interrupted for any reason whatsoever, except on authorization of the Supervisor. In the event of a vehicle breakdown, the Contractor shall replace the vehicle with back-up equipment. This [sic] may not be suspended for any reason except on the written authorization of the manager of the E.M.A..

Garbage collection service shall be provided in accordance with the frequency of pick-up as defined herein and in the schedules established in the proposal.

In those areas in which the containers system of garbage collection is used, the Contractor shall install in each site as many containers as are necessary to ensure that the garbage deposited by users shall not exceed the available capacity. The installation of containers shall not involve any cost for users.

All collection units shall be equipped with accessory materials (pushbroom, broom, etc.), as specified in the proposal, to facilitate cleaning up the street in the event of breakage of receptacles or similar occurrences.

6.1.2 GARBAGE COLLECTION SERVICE PROVIDED BY MICRO-ENTERPRISES

In areas in which there are no access roads and the terrain offers insurmountable obstacles to access by garbage collection vehicles or dump trucks, the Contractor shall contract garbage collection services and, if feasible, street sweeping services from the so-called manual GARBAGE COLLECTION MICRO-ENTERPRISES. The E.M.A. shall deliver to the Contractor the list of micro-enterprises which have been organized and authorized to operate in each of the zones covered by the contract; following the signing of the contract, the micro-enterprises contracted by the Contractor shall comply with the norms and requirements stipulated by the HAM and must likewise be authorized by the E.M.A. prior to the signing of the contract.

There shall be no labor relationship between the micro-enterprise and the Contractor, since a commercial services contract or similar arrangement shall be carried out in such a way that no labor relationship is created.

The contracting of such micro-enterprises shall be binding on the Contractor, providing that the former have been authorized by the E.M.A.; such micro-enterprises may only be contracted to provide residential garbage collection services and, from time to time, manual street sweeping services exclusively in those zones having steep hills.

The Contractor is prohibited from subcontracting any or all the services with which he is to be charged, with the exception of the previously described micro-enterprises.

6.1.2.1 FORMS OF PAYMENT TO MICRO-ENTERPRISES

The Contractor shall pay the micro-enterprises for each ton or fraction thereof collected and transported to the storage site established for such purpose as mutually agreed by the Contractor and the micro-enterprise. The Supervisor shall approve this storage site, which shall be provided with the appropriate equipment for collecting the amount of garbage to be transported by the micro-enterprises.

The Contractor shall pay the micro-enterprise an amount not less than that determined by the E.M.A. in accordance with studies which he has carried out.

6.1.2.2 TECHNICAL TRAINING AND ENTREPRENEURIAL ADVISORY ASSISTANCE

In order to support the social function of the micro-enterprises, the Contractor shall provide technical and entrepreneurial advisory service

to the micro-enterprises to enable them to improve their levels of efficiency and organization.

Respondents shall specify in their proposals the aid and assistance programs to be offered to the micro-enterprise subcontractors.

6.1.3 FREQUENCY OF SERVICE AND HOURS OF OPERATION

The schedule for waste collection shall be defined by the respondent in his proposal, taking into consideration the characteristics of each zone, the difficulties generated by vehicle or pedestrian traffic as well as any other factor which might influence service delivery. The proposal shall include a clear description of the garbage collection schedule corresponding to each zone in each of the two areas to be contracted out.

The schedules submitted in the proposal may only be modified with the prior authorization of the manager of the E.M.A., providing the appropriate information campaigns are conducted in order to inform the public.

Weekly frequency shall be understood to mean the number of times that the service is provided to a given user during a period of one week.

Except in special circumstances, the normal frequency for providing residential garbage collection service shall be three (3) times per week. This service shall be provided with this degree of frequency regardless of whether the week contains holidays. However, the Supervisor may authorize the Contractor to suspend work on the following official holidays: December 25, January 1, July 16, August 6, May 1, November 2, and Holy Friday.

As special exceptions to the above-established normal frequency, service must be provided a minimum of six (6) times per week in the zone and in the locations described below:

- a) **Markets and hotels:** All markets and hotels located in any of the zones covered by the contract shall receive service with a minimum frequency of seven times per week, with the exception of those requiring in a greater frequency as a result of the amount of garbage generated.
- b) **Hospitals, clinics and similar health care installations:**

All installations of this type located in the zones covered in the contract shall receive service with a minimum frequency of six times per week.
- c) **Industries which, in the opinion of the Contractor, require a greater frequency if garbage collection.** In the event that the respondent feels that a particular industry, as a result of the type of garbage produced, requires a greater frequency of

collection, he shall so indicate in his proposal, together with the list of industries and/or commercial entities to which service will be provided at a frequency greater than three times per week and an indication of the frequency with which such service is to be provided, the corresponding hours of operation, and the garbage collection system to be employed.

- d) Open-air Fairs: On days on which open-air fairs are held are health in any of the sectors of the zones covered by the contract, garbage collection and street sweeping services shall be provided on the same day that such fairs are held, once they have concluded.

6.1.4 SPECIAL NORMS APPLICABLE TO RESIDENTIAL GARBAGE COLLECTION

6.1.4.1 Definition and general norms

Residential garbage collection service shall include the collection of all waste produced and placed on the public thoroughfare by residential or family units and by small businesses, as well as by all other producers similar to the preceding.

In the case of garbage generated by apartment buildings, each such building shall be considered to be an individual user and the resulting garbage shall be considered to be residential or domestic.

The garbage collection operation must be carried out with care in order to ensure that upon conclusion no waste has been scattered or spilled onto the public thoroughfare. The Contractor shall avoid any deficiency which might negatively impact on the quality of the service provided, under risk of incurring the sanctions established in the contract.

The compacting operation shall be carried out in accordance with the instructions provided by the manufacturer of the compactors and every effort be made to carry out such compacting in areas in which it will cause the least amount of disturbance to residents. In no case shall this operation be carried out in front of hospitals, clinics or any other type of health care installation.

In those cases where garbage is collected from multifamily units and/or clusters of buildings, containers must be installed which will facilitate the accumulation of waste during non-collection days, as required by the E.M.A. or when the Contractor deems advisable. The respondent shall include in his proposal the sites in which this system is to be used.

The respondent shall submit a plan for carrying out such a task, together with an indication of the schedules and suggested routes as well as the number of trips to be made on a given day by a particular vehicle.

6.1.5 COLLECTION OF STREET SWEEPING WASTE

This service shall consist of the collecting of waste which are generated by those operations charged with manual or mechanical street sweeping, or by any other action giving rise to the accumulation of garbage on the public thoroughfare.

The collection and transportation of street sweeping waste shall be carried out on the same day that the sweeping takes place, preferably by means of a special service created for that purpose or in conjunction with the residential garbage collection service provided in the zone. The Contractors shall plan for the collection of street sweeping waste in such a way that waste does not remain on the streets for more than five hours.

The proposal shall include a detailed description of the operating plan and methodology to be employed in providing this service.

6.1.6 SPECIAL COLLECTION AND STREET CLEANING

This service shall consist of collecting special types of waste, such as the that resulting from pruning of parks and trees, dead animals, garbage piles, mounds, and other large volume waste, other than construction waste, thrown away clandestinely, which cannot be collected by the normal residential, industrial or commercial garbage collection system or by the street sweeping waste collection system.

This service shall be provided with the equipment which the Contractor deems necessary, especially as regards collection of garbage piles.

Waste generated by tree pruning and lawn maintenance waste shall be transported in equipment which is appropriate for this type of activity.

Respondents shall include in their proposal a determination of the type of equipment to be assigned to such activity and shall submit as well an outline of the operating plan which will govern this activity.

In any case, in order to carry out and plan the collection of waste and garbage piles generated in areas of high levels of pedestrian traffic and a considerable concentration of commercial activities, particularly informal or street merchants, the Contractor shall be sure to take into consideration the hours in which garbage is generated and the hours when commercial activity begins, thus making it impossible to provide cleaning services. The proposal shall include work plans which take into consideration these special characteristics and which define the zones in which this type of special activity will be carried out.

Special cleaning services: The Contractor shall perform exceptional tasks using all means at his disposal to resolve extraordinary situations originating in acts of God or force majeure, such as earthquakes, floods, major accidents, landslides, disasters and catastrophes of all types.

In the event of sporadic, unforeseen accidents or unexpected events which generate garbage in the public thoroughfare, the Contractor shall be on the site in question no later than two (2) hours following notification of the occurrence in question, in order to proceed to clean up the area, providing that the Contractor has personnel is on duty. If this were not the case, the Contractor shall be on the site at the beginning of the following shift.

In these cases, the Contractor shall use the type of equipment and the number of workers deemed most advisable to pick up the waste scattered in the street.

In cases of events of a folk, political, religious, civic, cultural, sporting or other nature carried out in the public thoroughfare, the Contractor shall submit a plan, sufficiently in advance, to ensure that the site will be cleaned up as soon as the event has concluded. The E.M.A. or the Municipality shall advise the Contractor sufficiently in advance of such an event. However, if the event is not advice to the Contractor, the latter shall proceed to clean up the site as soon as possible.

With large events, the Contractor shall provide the means necessary to accumulate the garbage during the course of the event and subsequently proceed to carry out clean-up activities following the conclusion of the event, in accordance with the operating plan submitted. Such a plan must be approved by the Supervisor.

6.1.7 INDUSTRIAL AND COMMERCIAL COLLECTION SERVICE

Industrial and commercial collection service is that service provided to industries and businesses producing waste which is generated by industrial processes or by the commercial or institutional activity carried out.

Service to such users, when storage needs so dictate, shall be provided by means of containers which shall be supplied by the Contractor and which shall imply no cost whatsoever for the user. The vehicles assigned for this type of collection duty shall be equipped with a mechanical system to facilitate the lifting and unloading of the contents of each container into the vehicle.

The respondent shall include in his bid the provision of this type of collection service either in combination with residential collection or by means of and schedules and frequencies of collection.

The respondent shall specify in his bid the names of the industries to be serviced with special frequency garbage collection, the frequency to be employed, and the exact locations of such industries.

6.1.8 GARBAGE RECOLLECTION BY MEANS OF CONTAINERS IN RESIDENTIAL AREAS

Respondents may present as a residential collection system the option of collecting garbage by means of containers to be placed in certain residential areas of the city, when such areas contain clusters of buildings or residences.

The use of containers shall be obligatory in those areas of the zone covered by the contract in which road infrastructure is nonexistent or in which the existing infrastructure is insufficient to permit garbage collection vehicles to enter the zone, as well as in the storage sites of the micro-enterprises.

The vehicles assigned to this type of garbage collection service shall be equipped with a mechanical system which will allow the contents of each container to be lifted and unloaded inside the vehicle.

The respondent shall submit a plan which shall include a definition of the specific areas to be served by this system. The E.M.A. shall evaluate the advisability of using such a system, based on the characteristics of each zone.

The Contractor shall not charge the users for installation of such containers.

6.1.8.1 General norms regarding containers

The containers used by the Contractor shall be new and shall be painted in the color and contain the logos of the Contractor and the E.M.A., together with the corresponding unit number.

The Supervisor may request the removal of any containers in poor operating conditions and the Contractor shall be obligated to replace the removed unit with a unit in optimum operating conditions.

The Contractor shall maintain all containers in an appropriate state of cleanliness and sanitation.

In those areas in which the container collection system is used, the Contractor shall install in each site the number of containers necessary to ensure that the garbage deposited by users does not exceed the available capacity.

The Contractor shall specify the dimensions of the containers to be used in garbage collection activities performed in industrial or commercial areas or in areas in which access is difficult, and shall describe the general manufacturing characteristics thereof.

6.1.9 User census

The Contractor shall take a census of industrial and commercial users, which shall include the name of the user, direction, volume of garbage produced, approximate weight, and frequency of service. This census

shall be submitted no later than one year following commencement of activities.

6.2 STREET SWEEPING SERVICE

6.2.1 Manual sweeping service

This service consists of street cleaning activities carried out through the use of human force and includes the sweeping of each block to the point that all sidewalks and public areas are free from paper, leaves, accumulated sand along the edges of sidewalks as well as any other object or material which may be swept by hand.

Waste which is the result of manual sweeping activities shall be placed in plastic bags which, once their capacity has been reached, shall be closed by tying a knot in the upper opening and placed on the street for subsequent collection.

6.2.1.1 Areas to be swept

The area to be swept includes all streets containing pavement, paving blocks, paving stones and paving tiles, including medians, public landscaped areas and public areas set aside for pedestrian and/or vehicles traffic. This service includes the sweeping of leaves and paper and similar materials found in the above-mentioned areas.

Sweeping shall be carried out so as to include the surface of curbs and/or gutters on any of the streets of La Paz when such cleaning is not performed mechanically.

Respondents shall submit a sweeping plan indicating potential routes and hours during which sweeping would be performed as well as an estimate of the number of [square] meters of sweeping to be performed by each operator.

6.2.1.2 Frequency of service and hours of operation

The respondent shall submit a frequency of a minimum of one (1) sweeping per week for strictly residential zones and shall submit a frequency of a minimum of three times per week for zones having a high volume of pedestrian traffic, which shall be appropriately identified by the respondent. The respondent shall include in his proposal the zones in which the previously mentioned minimum street sweeping services will be provided together with an indication of the zones in which service will either be provided on a daily basis, more frequently, or at a frequency other than those mentioned above.

Toward this end, the Contractor shall submit a map on which such zones shall be identified, together with an indication of the frequency with which service is to be provided in each.

Street sweeping routes and frequencies which the Directorate of Urban Sanitation has established for 1991 shall constitute the minimum frequency for purposes of the proposal.

The hours for providing street sweeping services shall be determined by the respondent and shall take into consideration the difficulties which may occur in each zone as a result of vehicles parked in public areas as well as the existence of other obstacles or informal trade activities.

6.2.1.3 Maps

Respondents shall submit maps of the zones and a list of the streets on which manual street sweeping services shall be provided with a frequency of three times per week or higher, together with an exact indication of the number of blocks on each street in which service will be provided at the special frequency.

6.2.1.4 Manual sweeping on holidays

Manual street sweeping service shall not be provided on Sundays nor on official holidays other than Sunday, except in the case of special events requiring such service, in which case the Supervisor shall provide the Contractor with the corresponding instructions not less than three working days in advance with no modification in the price paid per ton to be implied thereby.

6.2.1.5 Manual street sweeping equipment

Respondents shall submit a list of the equipment which they plan to use for manual street sweeping. Likewise, they shall submit a graphic, detailed description of the equipment to be used.

6.2.1.6 Operation plans

Respondents shall include in their proposal a description of the operating plan which they will use for providing manual street sweeping services, and specially as regards the macro-routes to be used in the street sweeping activity.

6.2.1.7 Sweeping sheds or stations

The respondent, may include in his proposal the use of sheds for sweeping activities which shall be at the Contractor's own expense. In the event that the respondent's operating system allows the use of such sheds or stations, the respondent shall describe their functions and characteristics.

6.2.1.8 Cleaning of garbage containers and public receptacles

Respondents shall take into consideration in their proposals the fact that the cleaning of public canisters or garbage receptacles located on

the streets in the zone covered by the contract forms a part of the street sweeping service.

7. UNLOADING OF WASTE

The Contractor shall transport and unload all waste collected in the sites designated by the E.M.A. for that purpose.

These sites are as follows:

- a) The new Mallasa sanitary landfill located in Mallasa National Park.
- b) The Kantutani transfer plant located on Avenida Costanera.

In principle, the unloading of garbage shall take place at the Kantutani transfer plant, although the Supervisor or the E.M.A. may order the unloading to take place in the Mallasa sanitary landfill when such action is deemed advisable or when situations occur which would prevent unloading from taking place at the transfer plant.

Likewise, during the course of contract implementation, the E.M.A. may designate new sites for unloading waste, toward which end the E.M.A. and the Contractor shall reach an agreement on the corresponding price modifications.

Respondents may visit the sites identified as final or intermediate garbage disposal sites. The submission of proposals shall automatically imply that the respondents have visited the unloading zone and have a detailing knowledge of the characteristics thereof.

The proposal shall indicate the number of unloading operations to be carried out by each type of vehicle on each working day.

8. INTERNAL SUPERVISION OF OPERATIONS

Without detriment to the external control function to be carried out by the E.M.A. through the offices of the Supervisor, the Contractor shall institute an internal control system which will enable him to monitor the performance of the assigned duties by his staff.

Toward this end, the Contractor shall place in operation control vehicles, equipped with radio-telephone sets, with the understanding that responsibility for obtaining authorization from the corresponding authorities to use the appropriate radio sending and receiving frequencies shall be the responsibility of the Contractor.

The Contractor shall conduct field monitoring activities while providing each of the services contracted and shall carry out inspections subsequent to service delivery.

As a complement to the field monitoring activities, the Contractor shall keep statistics which will provide details with regard to the historic implementation of operations. These statistics shall include, but not be limited to, the following:

Fuel consumption per vehicle, tire consumption per vehicle, performance of manual sweeping personnel in terms of kilometers or blocks swept, performance of garbage collection personnel in terms of tons of garbage transported, time required to complete each micro-route, transportation time between the micro-route and the final disposal site, personnel costs per ton, billing per ton, total billing, number of collection stops as well as all other information which the Contractor deems useful.

This information may be requested by the contracting party at any time.

Respondents shall submit a detailed description of the monitoring systems or mechanisms which they propose to use in performing this task.

Respondents shall indicate the number of employees, vehicles and other equipment which they plan to use in implementing these controls.

9. SUPERVISION

The E.M.A. may contract a private firm to perform, in the name and on behalf of the E.M.A., the supervisory function whose purpose will be to verify the operation and corroborate proper compliance with contractual obligations by the Contractor.

The Supervisor, in order to properly fulfill his obligations, shall have access to the Contractor's facilities and equipment and shall be provided with an office to be located in such facilities, as previously set forth in these bid conditions.

10. MECHANICAL MAINTENANCE

Respondents shall specify in their proposal the general plan covering the maintenance to be provided to their vehicles, whether directly or by means of third party contracts to provide such services, in accordance with the provisions contained in that regard.

This plan should take into consideration the various types of maintenance to be given to the vehicles and shall likewise identify the staff to be used in performing this activities.

Equipment maintenance and repair may be subcontracted totally or in part to a third party, providing that such service must be provided by a shop authorized by the manufacturer, for the account and risk of the

Contractor. Any events of noncompliance or deficiency in the service which is caused by the maintenance thus subcontracted out shall be the exclusive responsibility of the Contractor.

In the event that the Contractor performs all or a part of the equipment maintenance and repair, he shall have available the minimum area, equipment and systems necessary to enable any maintenance and repair to be performed on the vehicles and equipment assigned to the Contract, as required during the course of service delivery.

Likewise, the Contractor shall institute a vehicle washing system, whether of his own or subcontracted, which will enable him to keep all vehicles used to provide service as clean as possible.

In any case, the proper functioning of equipment and vehicles shall be the exclusive responsibility of the Contractor.

In order to perform vehicle maintenance, the Contractor shall take into consideration the manufactures' specifications and shall comply with all specifications provided by the manufacturer with regard to repair and preventive maintenance procedures, as well as with regard to the type of spare parts to be used.

11. RELATIONS WITH THE COMMUNITY AND MICRO-ENTERPRISES

11.1 Community relations plan

The Contractor shall develop plans and programs aimed at maintaining active and close relations with the community in the area in which services are provided.

These plans shall be based on two primary objectives:

- a. Community information plans dissemination with regard to hours of operation, frequency of collection, and norms and general characteristics of the services provided.
- b. Plans and programs aimed at educating the community and at developing a culture of urban sanitation which will involve communities in problem solving.

These plans and programs shall be on-going and shall begin immediately upon the signing of the contract.

Respondents shall describe in their proposal the general guidelines for education campaigns to be conducted during contract implementation.

11.2 Development of educational campaigns

The Contractor shall set aside no less than 2 per cent of monthly billings to the implementation of the above-mentioned campaigns. Such

campaigns shall be coordinated with the Supervisor. Respondents shall include in their proposal a general description of the implementation of such campaigns.

11.3 Information campaign prior to start-up of activities

The respondents selected shall develop a mass media information campaign covering the hours and frequency of garbage collection in the zones covered by the contract, which shall be launched prior to the date on which service provision is to begin. The description of this campaign shall be included in the proposal.

12. PROJECT IMPLEMENTATION

Implementation of the operating plan

The Contractor shall begin providing the services contracted within a period of ninety (90) calendar days beginning on the day following the signing of the contract.

At that time, the Contractor shall begin providing all services involving street sweeping and cleaning, and garbage collection, transportation and unloading in the final disposal site, in accordance with the contract.

Upon signing the contract, the Contractor shall immediately begin planning and implementing the project.

In the event of noncompliance with this condition, a fine shall be applied for each day of delay in beginning work under the contract. This daily fine shall be equal to the amount which the Contractor would have received if service had been provided.

12.1 Information

Within a period of twenty (20) calendar days beginning on the date on which the implementation period is to begin, the Contractor shall submit a tentative work program, which shall include the following items:

1. Recruiting and training of personnel
2. Establishment of driver pool
3. Operating program
4. Detailed implementation program
5. Information regarding procedures involved in procuring and importing additional Contractor-owned equipment
6. Information regarding the procurement and installation of the operating bases.

Within a period of sixty (60) calendar days following the date of start-up of the implementation period, the Contractor shall submit a complete project including:

- Incorporation of the zones and micro-routes, tentative site for beginning and ending each route, number of trips per vehicle, etc., for each of the services to be provided (collection of residential, commercial and industrial garbage, street sweeping and street cleaning, containers in emergency areas, markets, supermarkets, fairs, etc.), the definitive design of which shall be submitted fifteen (15) days prior to the date established for initiating service.

- Final plan for contracting and training personnel
- Final plan for forming the pool of drivers
- Staff orientation program consisting of trial runs and operating tests.
- Program of internal supervision to be developed, with the indication of the number of employees to be assigned to such operation
- Other information as requested by the E.M.A. or the Inspector.

Within this same implementation period, the Contractor shall advise the responsible individuals in educational institutions, hospitals, clinics, sanatoriums, public buildings, police units, hotels, museums, free fairs, marketplaces, supermarkets, Armed Forces, industries, etc. as to the hours of operation and method to be used to collect waste from each of the preceding establishment, when they are to be served by means of the container system.

Likewise, special information campaigns shall be conducted in the zone covered by the contract to familiarize users with the new hours of operation and frequency of collections.

During the entire implementation period, Contractors shall meet with an individual to be designated by the E.M.A. to develop jointly the corresponding evaluation plan as regards the progress achieved under the project.

Prior to beginning work, the Contractor shall submit his definitive operating plan, which shall include a detailed description of all aspects of the service delivery operation for the first year of activities. This plan shall be approved by the E.M.A., which may recommend modifications as required.

13. PENALTIES

Overview

13.1 General principles

- a. The Municipality and the Contractor shall cooperate mutually in order to achieve the common goal of keeping the area covered by the contract in optimum conditions of cleanliness.
- b. In the event that the Contractor is be responsible for any failure to comply with his obligations, the municipality may, in

accordance with its own criteria and the provisions of this chapter, impose upon the Contractor one of the penalties set forth in this document, in accordance with the nature of the infraction. In order to determine whether or not an infraction has been committed, the E.M.A. shall attempt to determine the causes thereof, taking into consideration all circumstances prevailing at the time of the event which might have given rise to such an infraction.

- c. The Contractor shall not be penalized for deficiencies committed during the grace period, but shall be responsible for correcting such deficiencies.
- d. Notwithstanding the provisions contained in subparagraph d., the municipality reserves the right to apply penalties during the grace period if the Contractor, in the opinion of the Supervisor and Inspector, commits serious and repeated infractions and in particular if he fails to comply with the time period established for the implementation period.

13.2 PROCEDURE FOR IMPOSING PENALTIES

13.2.1 Procedure during the grace period

13.2.1.1 Purpose of the grace period

The purpose of the grace period is to encourage the establishment of a good working relationship between the Contractor and the municipality and to allow the Contractor to make the necessary adjustments during the start-up of operations.

In order to assist both parties to better define the deficiencies and infractions as they occur, the Contractor shall carefully monitor his operations, and shall prepare and submit weekly to the municipality during the grace period a report dealing with each of the deficiencies occurring therein.

In his report, the Contractor shall attempt to:

Identify the deficiency by type, frequency, location, cost and responsible party (Contractor, individual citizen, municipality, etc.)

Describe the actions taken or to be taken by the Contractor, as required, in order to correct the infraction or deficiency.

Specify the responsibilities of the Contractor and the municipality respective as regards the correction to be made and in accordance with the type of deficiency.

13.2.1.2 Steps to be taken by the Contractor

The Contractor shall take the steps necessary to correct the deficiencies for which he is responsible during the grace period. The object is for the Contractor and Supervisory personnel to receive training during the grace period, under actual operating conditions, and thus acquire an in-depth understanding of the type of deficiencies which can occur, together with their causes, frequency and steps to be taken to correct them.

13.3. NORMAL PROCEDURE

Once the grace period has expired, any deficiency or infraction shall be considered in accordance with the following procedure:

- 13.3.1 The detection of shortcomings shall be largely the responsibility of the Contractor. However, the Inspector shall notify to the Contractor with respect to any shortcoming detected by his inspection system. Within a period of twelve (12) hours following the detection of such shortcoming, the Supervisor shall advise the other party in writing with regard thereto.
- 13.3.2 Within a period of 24 hours issuance or receipt of any advice with regard to detection of a shortcoming, the Contractor shall submit to the Supervisor "a report on the investigation of shortcomings", which shall indicate the causes thereof, the resulting damage, if any, and the actions taken to resolve the situation.
- 13.3.3 Within a period of 48 hours following receipt of any report on the investigation of shortcomings, the Supervisor shall deliver to the Contractor a written advice approving the corrective measures proposed or already taken, or requesting modifications or additions thereto, together with the specification of the penalty to be applied to the Contractor in accordance with paragraph 13.5, if applicable. Notwithstanding the preceding provisions, the Contractor shall, whenever possible, immediately proceed to correct the deficiency, taking care to avoid delays with respect to the notification procedure.
- 13.3.5 The above-described procedure shall not apply when the fault consists of noncompliance with operating hours and/or frequency of collection of residential, industrial, or commercial garbage, or collection from hospitals, marketplaces, or street sweeping. Substantiation of the fact of noncompliance shall be sufficient grounds to justify imposing the corresponding sanction. This same provision shall apply in those cases in which the Contractor attempts to artificially or fraudulently increase the weight of the garbage.
- 13.3.6 **Imposition of fines**
- The E.M.A., subject to concurrence of the supervisory firm, shall impose the applicable fines.

13.4 Amount and payment of penalties

1. The following table identifies, by category, specific deficiencies and establishes the penalties which the municipality may impose upon the Contractor for each. Each unit of fine corresponds to the amount equivalent to the fee which the Contractor receives per ton of garbage at the time the sanction is imposed.

DEFICIENCY	PENALTY Units of Fine
1. Accepting or soliciting gratuities by Contractor personnel	10 per occurrence
2. Changing clothing in public	1 per occurrence
3. Failure to use uniform	5 per occurrence
4. Inappropriate use of uniform	1 per occurrence
5. Inappropriate behavior vis-a-vis the general public	2 per occurrence
6. Failure to comply with service program	5 per occurrence
7. Failure to provide adequate uniforms for Contractor personnel	3 per occurrence
8. Abandoning a loaded vehicle on the public thoroughfare	5 per occurrence
9. Failure to comply with submission of insurance policies in the form and on the date stipulated in the contract	10 per occurrence
10. Absence, inadequacy or lack of appropriate visibility with regard to identity of vehicle	1 per occurrence
11. Vehicle driven by a driver not licensed to drive that type of vehicle	50 per occurrence
12. Lack of cleanliness of equipment, vehicles or Contractor facilities	10 per occurrence
13. Failure to deliver waste to the final disposal site	10 per occurrence
14. Picking and/or selecting materials from among the waste set out for collection or in the contracted vehicles or in the area of final disposal by Contractor workers or by any person authorized by the Contractor	10 per occurrence
15. Failure to supply the equipment or personnel necessary to fulfill the Contractor's obligations	15 per occurrence for each day of non compliance
16. Use of any vehicle for purposes other than those specified in the Contract	5 per occurrence per day

- | | | |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 17. | Use of a nonregistered vehicle without proper authorization | 5 per occurrence per day |
| 18. | Failure to comply with operating hours or with the frequency of collection of garbage or street sweeping waste in the form and at the times specified | 100 per day |
| 19. | Failure to leave the areas of garbage collection clean and orderly following collection | 20 per occurrence per day |
| 20. | Failure to sweep streets in the form and at the time programmed | 50 per day |
| 21. | Failure to maintain or repair equipment | 10 per occurrence |
| 22. | Improperly or artificially increasing the weight of the garbage (i.e., by wetting the garbage) | 500 per truck per occurrence |
| 23. | Any other infraction not specified | up to 300 per occurrence |

In addition to the specific deficiencies established in the preceding program, the municipality reserves the right to impose a penalty up to the maximum amount per occurrence established in item 21, for any other deficiency of the Contractor with respect to compliance with his obligations under the contract.

Without detriment to other provisions included in these bid conditions, the Contractor may be sanctioned with gradual penalties of between one (1) and ten (10) per cent of the total amount of service billings for the month in which the Contractor, by whatever means, obtained, or attempted to obtain, from the municipality or the Supervisory firm, improper retribution by means of a ruse, bribe or trickery in any form.

The parties shall immediately attempt to resolve the situation by means of written communications or substantiations. If the parties are unable to resolve the disagreement within a period of 20 calendar days following receipt by the Contractor of the advice referred to in paragraph 13.3, the Contractor shall have the right to make such appeals as he considers appropriate in accordance with the administrative procedure of the municipality of La Paz.

14. ALTERNATIVES PROPOSED

Respondents shall submit the basic technical proposal for each of the three areas, but may also submit one (1) alternative proposal for each area. If a respondent submits more than one alternative proposal, the only proposals to be considered shall be the basic proposal and the alternative proposal identified as No. 1 for each area.

LETTER OF TRANSMITTAL AND COMMITMENT

Messrs.
C3D/Empresa Municipal de Aseo
Calle Pinilla # 262
La Paz, Bolivia

Messrs. C3D:

In response to the convocation notice published on August 13, 1991 with regard to participation in the National Public Bid covering a contract for provision of services involving garbage collection, street sweeping and cleaning, and transportation of the garbage to the intermediate and/or final disposal site and for operation of the transfer plant and sanitary landfill, the firm and/or consortium of firms known as.....

..... is pleased to submit, through our legal representative, Mr., a bid containing all of the information required, which has been prepared wholly in compliance with the instructions, technical specifications and other documents making up the terms and conditions of the bid.

The individual signing this letter of transmittal and commitment states as follows:

1. That he confirms having examined, studied and made use of the documents delivered by C3D/E.M.A. with regard of the submission of bids, and in particular the Convocation Notice, Instructions to Bidders, Technical Specifications, and Bid Submission Forms, as well as the clarifications and modifications provided subsequently. He expressly states his agreement with said documentation.
2. That he vouches for the veracity and accuracy of all information submitted in this bid.
3. That he authorizes C3D and/or the Empresa Municipal de Aseo to carry out all inquiries necessary to verify the truthfulness of the statements and documents submitted and to obtain clarification and information with respect to the experience, technical capability, economic solvency and other necessary information regarding the firm and/or consortium of firms submitting this proposal.
4. That neither the municipality of La Paz, the Empresa Municipal de Aseo or C3D shall assume any responsibility whatsoever for any error or omission of the bidder, nor for any commitments which the latter may have acquired in the course of preparing this proposal.
5. That he unconditionally accepts the procedure established by the Agency and by the E.M.A. for carrying out the Bid, which shall conclude with the corresponding adjudication, with the understanding that no claims whatsoever shall be allowed.

6. That by submitting this proposal he accepts his obligations as bidder and, in the event that he is selected as awardee of the contract which is the object of this bid, that he will proceed to execute said contract, a draft of which has been received and accepted by the bidder, together with the bid documents.
7. That he agrees to legalize the partnership or consortium of firms, in the event that it is not already legalized, prior to signing the respective contract.
8. That by virtue of the appointment and/or power of attorney granted to him, he has full and sufficient authority to execute the necessary proceedings in this bid process, and accredits the legitimacy of his intervention by means of the duly legalized appointment or power of attorney attached hereto.

SIGNATURE:

Place and date

Legal Representative

INTERNATIONAL PUBLIC BID

No. C3D/089/91 (A)

ANNEXES

INTERNATIONAL PUBLIC BID

No. C3D/089/91 (A)

CHAPTER III

BID SUBMISSION FORMS

EMPRESA MUNICIPAL DE ASEO "E.M.A."

FORM NO. 1

ANALYSIS OF UNIT PRICES -- ZONE A
UNLOADING IN THE TRANSFER PLANT
PRICE IN DOLLARS

	COSTS PER TON	BREAKDOWN PER TON
I. Investment		%
Equipment		%
Facilities		%
II. Operating Costs		%
Materials and Inputs		%
Operating Personnel		%
Leases		%
III. Indirect Costs		%
Administration		%
Administrative Personnel		%
Other Costs		%

IV. Financial Costs	%
Annual Interest	%
Other Financial Costs	%
V. Contingencies	%
VI. Profits	%
Total Unit Price per Ton	100%

Signature

Date of estimate:

Note: All amounts must be expressed in United States dollars.

EMPRESA MUNICIPAL DE ASEO "E.M.A."

FORM NO. 2

ANALYSIS OF UNIT PRICES -- ZONE B
UNLOADING IN THE TRANSFER PLANT
PRICE IN DOLLARS

	COSTS PER TON	BREAKDOWN PER TON
I. Investment		x
Equipment		x
Facilities		x
II. Operating Costs		x
Materials and Inputs		x
Operating Personnel		x
Leases		x
III. Indirect Costs		x
Administration		x
Administrative Personnel		x
Other Costs		x

IV.	Financial Costs	%
	Annual Interest	%
	Other Financial Costs	%
V.	Contingencies	%
VI.	Profits	%
Total Unit Price per Ton		100%

Signature

Date of estimate:

Note: All amounts must be expressed in United States dollars.

EMPRESA MUNICIPAL DE ASEO "E.M.A."

FORM NO. 3

ANALYSIS OF UNIT PRICES -- ZONE A
UNLOADING IN THE MALLASA SANITARY LANDFILL
PRICE IN DOLLARS

	COSTS PER TON	BREAKDOWN PER TON
I. Investment		%
Equipment		%
Facilities		%
II. Operating Costs		%
Materials and Inputs		%
Operating Personnel		%
Leases		%
III. Indirect Costs		%
Administration		%
Administrative Personnel		%
Other Costs		%

IV.	Financial Costs	%
	Annual Interest	%
	Other Financial Costs	%
V.	Contingencies	%
VI.	Profits	%
Total Unit Price per Ton		100%

Signature

Date of estimate:

Note: All amounts must be expressed in United States dollars.

EMPRESA MUNICIPAL DE ASEO "E.M.A."

FORM NO. 4

ANALYSIS OF UNIT PRICES -- ZONE B
UNLOADING IN THE MALLASA SANITARY LANDFILL
PRICE IN DOLLARS

	COSTS PER TON	BREAKDOWN PER TON
I. Investment		%
Equipment		%
Facilities		%
II. Operating Costs		%
Materials and Inputs		%
Operating Personnel		%
Leases		%
III. Indirect Costs		%
Administration		%
Administrative Personnel		%
Other Costs		%

IV. Financial Costs	%
Annual Interest	%
Other Financial Costs	%
V. Contingencies	%
VI. Profits	%
Total Unit Price per Ton	100%

Signature

Date of estimate:

Note: All amounts must be expressed in United States dollars.

EMPRESA MUNICIPAL DE ASEO "E.H.A."

FORM NO. 5

GENERAL TECHNICAL SUMMARY OF THE BID

Zone: _____

Hours of Collection: a.m. from _____ to _____ p.m. from _____ to _____

Garbage Collecting Trucks

Assigned to Service Delivery _____

Brand, Model _____

Capacity of the Truck _____

Unloading, Compacting Ration - Capacity of the Y3 Box

No. of Trips by Each Vehicle per Day (Hours) _____

Collection Personnel per Shift:

A. Drivers a.m. _____ p.m. _____

B. Load Handlers a.m. _____ p.m. _____

Other Equipment Assigned

Hours of Operation for Street Sweeping a.m. _____ p.m. _____

Men Assigned to Street Sweeping per Shift:

Hours of Operation for Mechanical Sweeping: a.m. _____ p.m. _____

Equipment for Mechanical Sweeping:

Day Shift Supervisors:

Night Shift Supervisors:

Supervisory Equipment: Radio-Brand-Range-Amount

Street Cleaning Equipment

(Specify Type and Amount)

Hours of Operation for Street Cleaning Service

Men Assigned to Street Cleaning Service

Back-up Vehicles

Back-up Personnel

CHAPTER III

BID C3D/089/91 (A)

EMPRESA MUNICIPAL DE ASEO "E.M.A."

FORM NO. 6

SUMMARY OF PERSONNEL AND EQUIPMENT

SUMMARY OF PERSONNEL

Employee Category	Number
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SUMMARY OF EQUIPMENT

No. of Units	Type of Equipment	Model, Capacity, Year, Total Load	Capacity of Compactor	Brand of Compactor
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CHAPTER III

BID C3D/089/91 (A)

EMPRESA MUNICIPAL DE ASEO "E.M.A."

FORM NO. 7

SUMMARY OF BID PRICES

SUMMARY OF PRICES - UNLOADING AT THE TRANSFER PLANT

Tons	Total Tons	Price	Total
Per Day	for 5 Years	per Ton	Price

ZONE A

ZONE B

ZONE A+B

SUMMARY OF PRICES UNLOADING AT THE

MALLASA SANITARY LANDFILL

711

Tons Per Day	Total Tons for 5 Years	Price per Ton	Total Price
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ZONE A

ZONE B

ZONE A+B

The number of tons per day and the total number of tons are indicative, not absolute figures. Each respondent shall carry out his own studies and compare the above figures with those obtained from his own calculations.

Neither the Empresa Municipal de Aseo nor the Municipality shall assume any responsibilities whatsoever if the amount of waste generated in each zone is less than that estimated by the respondents or as indicated in these tables.

Price calculation shall be based on the number of tons estimated by the respondent. All prices must be expressed in United States dollars.

Signature

APPENDIX G

**TRANSFER STATION AND LANDFILL
OPERATION SERVICES
INVITATION FOR BID**

DOCUMENTS FOR INTERNATIONAL PUBLIC BID No. C3D/089/91 (C)

EMPRESA MUNICIPAL DE ASEO
(MUNICIPAL SANITATION ENTERPRISE)

E.M.A.

OPERATION OF THE SERVICES COVERING TRANSFER OF GARBAGE
IN THE KANTUTANI TRANSFER PLANT
AND FINAL DISPOSAL IN THE MALLASA SANITARY LANDFILL

PUBLIC BID
No. C3D/089/091 (C)

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INTERNATIONAL PUBLIC BID
No. C3D/089/91 (C)

CHAPTER I
INSTRUCTIONS TO BIDDERS

INTERNATIONAL PUBLIC BID

CHAPTER I

INSTRUCTIONS TO BIDDERS

A. INTRODUCTION

1. **Object.** The purpose of this Public Bid is to contract, for a period of five years, private enterprises to provide, in the name and on behalf of the E.M.A. (Empresa Municipal de Aseo) **THE OPERATION OF THE SERVICES COVERING TRANSFER OF GARBAGE IN THE KANTUTANI TRANSFER PLANT AND FINAL DISPOSAL OF ALL GARBAGE IN THE MALLASA SANITARY LANDFILL** to its intermediate or final place of disposal.
2. **Legal basis.** This bid shall be subject to the provisions of D.S. 21660 dated July 10, 1987, D.S. 22176 dated April 13, 1989, The Bolivian Civil Code and Related Regulations.
3. **Definition of bidder.** The responsible firm(s) signing the proforma invoice and in whose name(s) the Bid Bond is issued.
4. **Bidder requirements.**
 - 4.1 This bid is directed toward national and/or foreign firms having technical and financial capabilities and experience and which legally organized prior to January 1, 1991.
 - 4.2 When the respondent is an association or joint venture in which both foreign and Bolivian firms are participating, the participation of the latter must be at least 15%.
 - 4.3 For purposes of this bid and the corresponding contract, the members of the association or joint venture shall respond jointly and without limitation.
5. **Prices and form of payments**
 - 5.1 Prices must be expressed in United States dollars, and may not be modified subsequently.
 - 5.2 The Empresa Municipal de Aseo shall pay the Contractor a fixed price per ton of waste collected, transported and unloaded in the sites established for that purpose.

B. BID DOCUMENTS

6. The bid documents are as follows:

CHAPTER I	Instructions to Bidders
CHAPTER II	General and Technical Specifications
CHAPTER III	Bid Submission Forms

ANNEXES

7. Clarification of bid documents

- 7.1 Any bidder may request clarifications with respect to the bid documents by submitting such a request in writing to C3D.
- 7.2 The period for submitting the request for clarification shall expire fifteen (15) calendar days prior to the date established for opening the bids.
- 7.3 C3D shall answer all requests for clarification in writing (via letter, fax or telex), with copies to all bidders.

8. Modification of bid documents

- 8.1 C3D may, on behalf of the Entity, and for any cause and at any time up to five days prior to the expiration of the period established for the submission of bids, modify the Bid Documents by means of an amendment to be communicated to bidders, whether on its own initiative or as a response to requests for clarification submitted by bidders.
- 8.2 All potential bidders shall be notified in writing (via letter, telex or fax) with respect to the amendments, which shall become binding. The amendments must be picked up by the bidders from the offices of C3D.

C. CONTENTS OF BIDS

9. Bids shall be submitted in 2 envelopes

- 9.1 Envelope "A": Legal Documents
- 9.2 Envelope "B": Technical/Economic Proposal.

**10. Documents to be submitted in Envelope "A"
(1 original and 1 copy)**

10.1 For national bidders

- 10.1.1 RUC -- Legalized photocopy of income tax, issued within 30 days of the date of submission of the bid.

- 10.1.2 Certificate of registry in the General Directorate of Commerce and Stock Companies (original document, with a period of validity sufficient to cover this invitation to bid).
- 10.1.3 Certificate of Fiscal Solvency issued by the Controller General of the Republic.
- 10.1.4 Legal domicile of the bidder.
- 10.1.5 Statement certifying that the firm has a detailed knowledge of, and has visited, the areas covered by this bid.
- 10.2 For foreign bidders
- 10.2.1 Valid certificate(s) of legal existence and activity issued by an appropriate public entity in the country of origin of the bidder.
- 10.2.2 Certificate of legal representation: issued by the competent authorities to the person having the legal capacity to submit the bid.
- 10.2.3 Letter of commitment in which the bidder agrees, in the event of a favorable decision, to appoint a local representative who will comply with the provisions of Bolivian law.
- 10.3 For partnerships or joint ventures
- In the case of an association or joint venture, each partner shall individually submit the correspondent documentation.
- 10.3.1 Partnership agreement. The consortia or joint ventures shall be organized in accordance with the provisions of Supreme Decree 22407 dated January 11, 1990.
- 10.3.2 Statement certifying that the firm has a detailed knowledge of, and has visited, the areas covered by this bid.
11. Documents to be submitted in envelope "B"
- 11.1 A note from the respondent indicating that he has received and is familiar with, the material contained in this Bid Document.
- 11.2 Letter of transmittal and commitment.
- 11.3 Bid submission forms (Chapter III).
- 11.4 Financial statements of the bidder, covering the three most recent years, ending with December 31, 1990.

In the event that the bidder is a consortium, financial statements shall be submitted for each of the firms making up the consortium.

- 11.5 Certifications issued by the competent authorities with respect to compliance with contracts, whether already executed or currently being implemented, the purpose of which is to provide urban sanitation services.

The certifications to be submitted shall be of two types:

11.5.1 Contracts executed

Certifications with regard to contracts which have already been executed, to contain as a minimum the following:

- a) Starting date of contract (day, month, year)
- b) Expiration date of contract (day, month, year)
- c) Reason for termination of contract
- d) Size of the population served
- e) Total number of tons collected per day (for an average of six days per week)
- f) Services provided (to be specified)
- g) Total number of tons collected during the life of the contract.

Respondents must submit a certification issued by the official contracting entity.

11.5.2 On-going contracts

To facilitate the analysis of contracts currently in effect, respondents shall submit a certification issued by the official contracting entity to which services are being provided, to include the following data:

- a) Starting date of each contract.
- b) Planned duration of each contract, together with expiration date.
- c) Total number of tons collected per day under each contract (for an average of six days per week).
- d) Services provided by the Contractor (collection, sweeping, others).

- e) Contract extensions or amendments to date.
- f) Population served
- 11.6 A Bid Bond in the amount of US\$50,000 (fifty thousand United States Dollars) having a validity of one hundred twenty (120) calendar days as of the date of bid opening.
- 11.7 Technical Proposal containing all the information requested in the Technical Specifications as well as all material and information that, in the judgement of the respondent, it is deemed necessary.
- 12. **Period of validity of the bid**
 - 12.1 The bid shall have a validity of one hundred twenty (120) calendar days following the date on which the bids are opened.
 - 12.2 Under exceptional circumstances, C3D made request bidders to extend the period of validity of their offers, to which the bidder may refuse without risk of forfeiting his Bid Bond.
- 13. **The Bid Bond may be executed if:**
 - 13.1 The bidder withdraws his bid within the period of validity established in the bid form, or
 - 13.2 In the event that the bid is accepted and the bidder does not sign the contract in accordance with subparagraph 25.1.

D. SUBMISSION OF BIDS

- 14. Envelopes shall be labeled as follows:

 Licitación Nr. C3D/089/91 [Bid No. C3D/089/91]
 Sobre [envelope] "(Relevant Letter)"
 NOMBRE DE LA EMPRESA PROPONENTE [NAME OF THE RESPONDENT FIRM]

- 15. **Closing date for submission of bids**
 - 15.1 Bids must be received in the offices of C3D in La Paz no later than 11:30 hours on September 19, 1991.
- 16. **Language.** Proposals must necessarily be submitted in Spanish. Technical Catalogues will be accepted in English.
- 17. **MODIFICATION AND WITHDRAWAL OF BIDS**

- 17.1 Bidders may not modify their bids once they have been submitted, although they may withdraw their bids prior to opening. In the event a bid is withdrawn following the opening of bids, the bidder shall forfeit his Bid Bond.
- 17.2 The advice of withdrawal of bid shall be submitted in writing prior to or at the time such action is taken.

E. Opening and evaluation of bids

18. With regard to the opening ceremony

- 18.1 Bids shall be opened in the presence of representatives of those bidders wishing to attend at 18:00 hours on September 19, 1991 in the offices of C3D in La Paz.
- 18.2 At the time bids are opened, the names of the bidders shall be announced, together with their overall prices, bids withdrawn and compliance or noncompliance with necessary guarantees, as well as anything else which C3D, at its discretion, deems advisable.

19. Clarification of bids

- 19.1 In order to facilitate the examination, evaluation and comparison of bids, C3D may, at its discretion, request a bidder to clarify his bid. The request for clarification and the corresponding response shall be made in writing (via letter, fax or telex) and no changes in prices and/or any other parameter involved in the grading of bids shall be requested, offered or allowed.

20. Preliminary examination

- 20.1 Arithmetic errors shall be corrected as follows. If there is a discrepancy between the unit price and the total price resulting from multiplying the unit price by the corresponding amount, the unit price shall prevail and the total price shall be corrected.
- 20.2 Prior to proceeding to the detailed evaluation in accordance with subsection 18, C3D shall determine whether each bid is essentially in compliance with the bid documents in responding, without differences of substance, to all provisions and conditions contained in those documents.
- 20.3 C3D, in coordination with the entity, may ignore minor errors of form or omission in accordance with the bid documents or irregularities contained in a bid, providing that the bid does not depart significantly from the above-mentioned bid documents and providing that the position of another bidder is not affected thereby.

21. System for evaluating and comparing bids

21.1 Bids which are in compliance with legal requirements, are submitted within the time stipulated, and are accompanied by the Bid Bond shall be evaluated in accordance with the following parameters:

1.	Experience	20 points
2.	Financial Capability	10 points
3.	Technical Proposal	20 points
4.	Price per ton	<u>50 points</u>

TOTAL 100 points

F. ADJUDICATION OF CONTRACT

22. Right of the entity to modify amounts at the time of adjudication

22.1 The Entity reserve the right to increase or decrease the service areas to be consigned without any modification to unit prices, or other stipulations or conditions. (These modifications shall not exceed 10%).

23. Right of the entity to accept or reject any or all bids

23.1 The Entity reserves the right to accept or reject any bid as well as to call off the bid process entirely and reject all bids at any time prior to adjudication of a contract, without incurring any responsibility with respect to the bidder or bidders affected by such a decision or any obligation to disclose the reason therefor.

24. Advice of adjudication

24.1 The Entity shall be responsible for notifying the bidder(s) selected.

25. Signing of the contract

25.1 Beginning with the date of receipt of the advice of adjudication, the selected bidder shall have a period of 15 days in which to sign the Contract (which period may be extended by the E.M.A.), toward which end it will be necessary to submit a Performance Bond in an amount equal to 10% of the total amount awarded, together with the following documentation:

25.1.1 For national firms

25.1.1.1 Legal charter, duly legalized by the competent notary public.

25.1.1.2 Notarized power of attorney issued to the legal representative of the firm.

25.1.2 For foreign firms

25.1.2.1 The document identified in subparagraph (11.2.1) shall be legalized by the Bolivian Consul and certified by the Ministry of Foreign Relations of Bolivia.

25.1.2.2 Notarized power of attorney issued to the legal representative of the firm, legalized by the Bolivian Consul and certified by the Ministry of Foreign Relations of Bolivia.

25.1.3 Partnership or joint venture Partnership contract. In addition, each partner shall individually submit the relevant documentation duly legalized by the Bolivian Consul and certified by the Ministry of Foreign Relations of Bolivia.

25.2 The selected bidder shall be responsible for having the contract protocolized by the government notary.

25.3 Noncompliance by the selected bidder with the provisions of paragraph 25.1. shall be sufficient cause for declaring the adjudication null and void and proceeding to execute the Performance Bond.

25.4 Other guarantees

25.4.1 Guarantee covering proper maintenance and repair of equipment.

In order to guarantee the proper maintenance and repair of property belonging to the E.M.A., the Contractor shall establish a guarantee in favor of the E.M.A., equal to 30% of the assessed value of the vehicles leased by the E.M.A. to the Contractor.

25.4.2 Guarantee covering the partial or total loss of vehicles. The Contractor shall establish a guarantee in favor of the Empresa Municipal de Aseo in order to guarantee payment of the value of the vehicles in the event of total or partial loss as a result of accident, theft, fire, riot, disturbance, coup d'état, flooding, terrorism, sabotage, cave-in, landslide or mudslide, or any other phenomenon, whether natural or man-made, causing, or having the potential to cause,

damage to the equipment owned by the Empresa Municipal de Aseo.

25.4.3 Liability Guarantee

The Contractor shall establish a guarantee in favor of the Empresa Municipal de Aseo in the amount of US\$1,000,000 in order to guarantee payment of indemnifications resulting from damages caused to third parties as a result of the service provided.

INTERNATIONAL PUBLIC BID

No. C3D/089/91 (C)

CHAPTER II

TECHNICAL SPECIFICATIONS

CHAPTER II
TECHNICAL SPECIFICATIONS
CONTRACTING OF SERVICES COVERING
INTERMEDIATE AND FINAL DISPOSAL

1 Purpose of the services to be contracted

The Empresa Municipal de Aseo shall contract a private firm to carry out, in the name and on behalf of the E.M.A., **THE OPERATION OF THE SERVICES COVERING TRANSFER OF GARBAGE IN THE KANTUTANI TRANSFER PLANT AND FINAL DISPOSAL OF ALL GARBAGE IN THE MALLASA SANITARY LANDFILL.**

The activities to be carried out in performing these functions are as follows:

1.1 Garbage transfer service

- Reception of garbage in the Kantutani transfer station.
- Organization of truck traffic to facilitate unloading of vehicles.
- Efficient organization of the unloading of waste in the bins located at the Kantutani transfer station.
- Operation of the system for transporting garbage in trucks provided for that purpose by the E.M.A..
- Unloading of waste from trucks at the Mallasa sanitary landfill.
- Maintenance and repair of transportation equipment owned by the Empresa Municipal de Aseo.
- Maintenance of facilities at the Kantutani transfer station.
- Provision of security services with respect to the transfer station facilities.
- Continuous cleaning of facilities and equipment at the transfer station.
- Other tasks as required for the proper functioning of the garbage transfer service.

1.2 Final disposal service

Final disposal service shall be provided at the Mallasa sanitary landfill located in the site known as Mallasa National Park.

In providing final disposal services, the Contractor shall be guided by the specifications contained in these bid conditions covering operation of the sanitary landfill.

The end result of this service shall be the final disposal of the garbage unloaded in the sanitary landfill, which includes ecological plans for recovering the land.

This service shall also include the construction of retention walls, leaching flumes, access roads and other construction works which shall be performed in accordance with the provisions contained in the (landfill project).

2. Definitions of certain terms

For purposes of this bid, the terms defined below shall have the meaning provided:

SANITARY LANDFILL: Refers to the official site for the final disposal of city garbage located in the area of the Mallasa National Park known as the Mallasa Sanitary Landfill (Relleno Sanitario Mallasa).

TRANSFER PLANT OR STATION: This is the group of facilities located on Avenida Costanera in which the transfer takes place with respect to the garbage transported in garbage collection vehicles to the tractor trailers which will take the garbage to its final disposal site. The transfer station is known as the Kantutani Transfer Station. The transfer station is also known as the intermediate disposal site.

EMPRESA MUNICIPAL DE ASEO - E.M.A.: This is the decentralized municipal enterprise, created by virtue of municipal ordinances # 50 and 51 of 1989, which is responsible for providing public urban sanitation services.

AGENCY or AGENT: For purposes of this bid procedure, the agent or agency shall be C3D.

GARBAGE COLLECTION AND STREET SWEEPING SERVICE: This is the public municipal garbage collection service provided by the E.M.A., by means of subcontracts signed with one or more firms or provided directly by the E.M.A., and consisting of the collection and transportation of all waste or garbage in the city and the unloading of that garbage at the intermediate or final disposal sites.

FINAL DISPOSAL SERVICE: This consists of the operation and management of the site for the final disposal of garbage by means of the system known as sanitary landfill or sanitary burial, which is to be performed in accordance with the specifications contained in these bid conditions and the provisions of the operating manual for the above mentioned landfill.

SERVICE COVERING THE INTERMEDIATE DISPOSAL OR TRANSFER OF GARBAGE: This service consists of organizing and operating the transfer station and in transporting the garbage being transferred to the intermediate disposal site.

SUPERVISION: This is the supervisory and monitoring activity covering services to be contracted as well as compliance with the conditions of the contract, which is performed by the E.M.A. or by the entity designated by the E.M.A. for that purpose.

3. Term of the contract

The contract to be signed shall have an initial term of five (5) years, which may be renewed for an additional period of five years. Contract implementation shall begin on the day following contract legalization.

For purposes of this contract, legalization shall be understood to mean the incorporation of the contract into a public document (escritura publica) carried out in full compliance with the legal provisions established for that purpose.

However, in order for the Contractor to begin to fully carry out his contractual duties, the E.M.A. shall formally deliver the facilities and machinery which the Contractor will use in providing the service.

4. Form of payment

Respondents must include in their proposal a flat fee per ton of garbage received at the transfer station and a flat fee per ton of garbage received directly in the Mallasa sanitary landfill, in accordance with the price forms contained in these bid conditions.

It is understood that the amount to be paid for the operation of the transfer station, the amount to be paid for transportation to the sanitary landfill site, and the amount to be paid for final disposal is included in the price proposed per ton of garbage received at the transfer station.

The proposed price per ton of garbage received directly at the sanitary landfill shall include only the final disposal.

The services contracted shall be paid for in accordance with the number of tons transferred and ultimately disposed of. The number of tons to be paid shall be that number which the Supervisor certifies as having been received and weighed at the transfer station and/or sanitary landfill and must be equal to the number of tons transported by the entity or entities authorized by the E.M.A. for that purpose.

To enable the Contractor to know who is authorized to unload garbage, the Supervisor shall provide a list of the companies or individuals authorized to unload garbage at any of the intermediate or final disposal sites.

The Empresa Municipal de Aseo shall not pay the Contractor for tonnage received from persons or firms not authorized to unload garbage at the transfer station or sanitary landfill. The Supervisor shall be authorized to review the Contractor's billings and shall refuse to pay for any tonnage unloaded by any persons not authorized for that purpose by the E.M.A..

To facilitate monitoring activities to be exercised by the Contractor, the Supervisor shall deliver a copy of each weight certificate, which shall contain the number of tons of garbage deposited at the sanitary landfill and/or transfer station and the company unloading that garbage.

The Contractor shall submit monthly to the Empresa the invoice or account for collection within the first ten working days of the month following the month in which service was provided. For purposes of the initial invoice, regardless of the day on which service was begun, the statement of account shall be cut as of the last day of the month in which services began. Starting with that date, invoices submitted shall cover the period between the first day of the month and the last day of the month.

The Supervisor shall be responsible for verifying the invoices or accounts for collection submitted by the Contractor responsible for providing intermediate disposal or transfer services as well as final disposal services. Invoices not containing the concurrence or approval of the Supervisor shall not be paid.

A period of five working days is established to enable the Supervisor to approve or object to the invoices submitted by the firms responsible for garbage collection and street sweeping and cleaning. If, once this period has expired, the Supervisor has not objected in writing to the invoice or account for collection, such invoice or account for collection shall be understood to have been approved and the period established for the E.M.A. to effect payment will be begin.

In those cases in which the Supervisor detects differences or inconsistencies in the billing, he may make the objections it considers pertinent within a period of ten working days. All objections must be made in writing. Once the objections have been corrected, the Supervisor shall have a period of only five calendar days to approve the invoice or present new objections, which must be submitted together with the corresponding justification.

In verifying the billing, the Supervisor shall compare the weight certificates submitted by the Contractor to those obtained by the weighing system operators.

For purposes of billing, days begin at 00:00 hours and end at 24:00 hours. This time period shall serve as the basis for organizing invoices.

The E.M.A. shall have a period of 20 calendar days, beginning with the final approval of the invoice by the Supervisor, in which to pay the amounts due and if the monthly invoice approved by the Supervisor is not paid in full or in part within that period of time, it shall pay interest in accordance with interest paid on 30 day deposits as established by the Superintendency of Banks.

In order to guarantee payment, the E.M.A. will open a special account in the Banco del Estado, in which it will deposit monthly all amounts collected for sanitation services provided. This account shall be used to cover payments

for services covering garbage collection, street sweeping and cleaning, supervision, and sanitary landfill and transfer stations services.

The basic fees shall be those established in United States dollars as the price per ton in the corresponding proposal, and shall be unalterable.

For purposes of calculating the number of tons to be received, Annex #1 contains the volume of waste which has been unloaded by the Municipality at the Mallasa Sanitary Landfill between June 1 and July 15, 1991. These figures are provided merely as points of reference for the respondent, who should review the corresponding figures and submit his offer based on his own estimates.

4.1 Damage to the weighing system

In the event of damage to or breakdown of the weighing system, the average daily number of tons corresponding to the most recent month invoiced shall be used for purposes of current billing.

If the damage or breakdown in the weighing system occurs during the first month of billing, the daily average for the period in which the weighing scale last worked properly shall be used billing.

5. Contractor personnel

5.1 Availability of personnel

The Contractor, as the party solely responsible for project implementation and compliance, shall have available, at all times and for his own expense, all staff necessary to comply with all contractual obligations as well as to ensure proper provision of the services contracted. It shall be the exclusive responsibility of the Contractor to pay all salaries and other employee benefits as defined in Bolivian labor legislation, as well as to comply with the provisions of the Social Security Law.

5.2 Preference in the selection of personnel

Contractors, when selecting the staff to use in their operations, shall be required to give preference to those employees involved in activities related to the final disposal and transfer of garbage at Saneamiento Urbano (Directorate of Urban Sanitation). Contractors are under no obligation to hire individuals who do not meet the needs of the firm or who otherwise do not satisfy the requirements of the firm with regard to new employees.

In any case, when a candidate who has worked for HAM - SANEAMIENTO receives the same rating as another applicant, preference shall be given to that applicant.

Toward this end, the manager of the E.M.A. shall, once the contract has been signed, provide the corresponding list of personnel to be examined by the Contractor.

Prior to employment, all personnel assigned to work directly in the transfer station or sanitary landfill operations shall submit to complete medical exams with a view toward substantiating that the workers are healthy at the time they are contracted.

Such medical examinations shall be given at least once a year during the entire life of the contract.

5.3 Uniforms and gear

The Contractor shall provide all gear necessary to satisfactorily provide the services requested, and especially rain gear. All personnel shall be issued gear, at least three yearly.

Such gear shall include uniforms in accordance with the activities to be carried out, with all staff being required to wear the same color (shirt or sweatshirt, pants and shoes.)

Workers carrying out activities in areas used for unloading garbage both at the transfer station and at the sanitary landfill, must be provided with protective masks which will prevent them from inhaling foul smelling substances or gases which might affect their health as well as with rubber boots providing them with adequate protection.

5.4 Organization of personnel

The respondent shall include in his bid an organization chart indicating the responsibilities of each official, as well as the names and obligations of other key members of the staff. This organization chart must be kept updated during the entire life of the contract and any change occurring in key operating employees shall be communicated to the Supervisor as well as to the Municipality.

The Contractor shall at all times during the period in which services are provided retain the services of an individual who will be responsible for the entire operation and who will be empowered to act on behalf of the Contractor in matters involving the service provided.

The respondent shall include in his proposal the number of staff members to be used in each service to be provided, together with an indication of the days and hours to be worked.

The list of personnel shall be broken down by type of work or activity and shall include the total number of workers assigned to each area, including administrative duties.

5.5 Special requirements for drivers

All Contractor workers carrying out activities involving the operation of motor vehicles of any type or size, and especially workers charged with driving tractor trailers at the transfer station, shall be in possession of the appropriate driver's license, which shall be issued by the competent authorities, for operating the vehicle assigned. The Supervisor is authorized to review at any time the validity of such licenses and may prohibit a driver from carrying out these functions in the event of failure to comply with this requirement.

The Contractor shall maintain an up-to-date register of the drivers assigned to each vehicle, together with such data as name, address and registration number of the vehicles to which they have been assigned.

The Contractor shall be responsible for damage caused by drivers to E.M.A.-owned vehicles or for damage caused to third parties while operating E.M.A.-owned vehicles.

5.6 Technical management personnel

Each respondent shall submit, in accordance with form #4, the names and service records of the management and advisory staff that will be responsible for the service to be provided and for the oversight of activities. This information will be used to analyze the suitability of management personnel.

Management personnel shall preferably be civil engineers having experience in earth moving and/or experience in managing sanitary landfills or transfer stations.

6. Equipment for Contractor operations

In order to carry out the duties included under the contract, the Contractor shall proceed to lease the TRACTOR TRAILERS, BULLDOZERS AND SEMITRAILERS which the E.M.A. has available and which are detailed below:

3 1990 320 HP TRACTOR TRAILERS WITH A LOAD CAPACITY OF APPROXIMATELY 50 TONS AND EQUIPPED WITH RADIO EQUIPMENT.

6 SEMITRAILERS WITH A CAPACITY OF 40 CUBIC METERS EACH.

2 1990 216 HP BULLDOZERS FOR PERFORMING COMPACTING ACTIVITIES AT THE SANITARY LANDFILL.

1 200 HP BULLDOZER WITH CATERPILLAR MOUNT

From the preceding list, the respondent may select those items of equipment which it deems necessary for carrying out its operations, but at no time shall the Contractor use vehicles having characteristics similar to those belonging to the E.M.A. unless the E.M.A.-owned vehicles are insufficient to meet the needs of the respondent.

The respondent shall include in his proposal a list of the E.M.A.-owned equipment which it will use in providing the services, said equipment to be clearly identified.

Likewise, the Contractor shall submit a list of equipment other than the E.M.A.-owned equipment to be used in providing the services.

6.1 Conditions under which vehicles will be leased

The conditions under which E.M.A.-owned equipment will be leased are as follows:

6.1.1 Terms of lease of the EQUIPMENT

The term of lease of E.M.A.-owned vehicles shall be equal to the term of the contract covering the intermediate and final disposal of garbage.

6.1.2 Monthly lease fee

The monthly lease fee which the Contractor shall pay to the E.M.A. for the use of the vehicles must be proposed by the respondents and shall be expressed as a fixed monthly fee in U.S. dollars for each unit of equipment leased.

The amount offered as lease fee must be greater than the amount of the depreciation of each unit of equipment as determined below:

- a) For the 1990 216 hp bulldozer compactors, annual depreciation has been calculated at US\$13,750.00 per vehicle per year.
- b) The 1990 tractor trailers have an estimated yearly depreciation of US\$5,810.00 per vehicle. In addition, the amount of the yearly depreciation on the radio equipment is US\$360.00.
- c) The 40 square meter semitrailers have an estimated depreciation of US\$13,894.00 per unit.
- d) The caterpillar bulldozer has an estimated depreciation of US\$11,841.00 per container.

6.1.3 Form of payment

The monthly payment of the lease fee for the vehicles shall be made by means of an offsetting charge or compensating accounts between the Contractors and the E.M.A., such that the E.M.A. will pay the Contractor only the value of the number of tons invoiced less the amount corresponding to the lease fees.

6.1.4 Rights and obligations of the Contractor

The Contractor, as lessor of the E.M.A.-owned equipment, shall have, in addition to the obligations stipulated by law, the following primary

obligations, especially as regards with the maintenance and use of E.M.A.-owned equipment:

- a) As per the provisions of Article 685 of the Civil Code, the E.M.A. shall grant to the lessor the use or temporary enjoyment of the goods (equipment) covered by the lease contract, which shall be assigned exclusively to the operation of the services covering final disposal and transfer of garbage.
- b) The lessor or Contractor shall be responsible for providing maintenance and making the regular repairs mentioned in Article 692 of the Civil Code and shall also, for his own account and expense, carry out all necessary repairs not included in said provision. That is to say, all repairs, both major and minor, required during the life of the lease contract shall be carried out by the Contractor/lessor of the equipment.

The E.M.A. shall bear no responsibility for repairs of any kind. Likewise, the Contractor/lessor shall be responsible for providing the preventive maintenance necessary for maintaining the lease equipment in perfect working order.

The repairs and preventive or curative maintenance for the vehicles or any other component of the leased equipment shall be carried out in accordance with the manufacture's repair and maintenance manual under risk of incurring the corresponding sanctions.

- c) The Contractor/lessor is responsible for providing fuel, lubricants and other items is necessary for the proper operation of the trucks and/or equipment leased as well as for the operation of the equipment per se.
- d) The leased equipment shall be maintained in optimum conditions of cleanliness and presentability, with the Contractor/lessor being responsible for providing for the daily washing and cleaning of each vehicle.
- e) The Contractor shall be responsible for the total or partial loss of the leased equipment, including loss by reason of force majeure or act of God. In order to guarantee payment of the equipment in the event of total or partial loss, the Contractor shall take out a guarantee policy as required in these bid conditions.
- f) The lessor shall use the leased goods in accordance with their nature, taking into account the operating instructions recommended by the manufacturer. The Contractor shall use the vehicles and equipment exclusively to carry out his obligations under the contract.
- g) The E.M.A. may terminate the lease of the vehicles in event of gross negligence by the Contractor in complying with his

responsibilities regarding maintenance and repair or in the event that the vehicles are not used in accordance with their nature or are used for purposes other than those set forth in this contract.

- h) Upon termination of the contract, the Contractor shall return the leased equipment in perfect operating conditions, toward which end all necessary repairs must be made. In the event that the Contractor does not return the vehicles in the condition hereby stipulated, the E.M.A. may proceed to execute the Performance Bond.

6.2 Technical inspection of the conditions of E.M.A.-owned vehicles

In order to become acquainted with the current conditions of the vehicles, the respondents may inspect those vehicles on August 25, 1991. The vehicles will be available in the facilities of the transfer plant and Mallasa sanitary landfill.

In addition, respondents may request special inspections not less than 5 days prior to the scheduled inspection date. The E.M.A. reserves the right to accept or reject such requests. However, the last date possible for requesting such inspections shall be 10 days prior to the date established for the closing of these bid proceedings.

6.3. Inventory prior to delivery

Prior to delivering the vehicles to the Contractors, a detailed notarized inventory, describing the operating conditions and status of each of the principal components of each vehicle, shall be made.

6.4. Increments and availability of equipment

The Contractor, as sole responsible party to the E.M.A. for the execution of the contract and compliance with all its terms, shall at all times have available, at his own expense, the additional equipment deemed necessary for complying with all contractual obligations with respect to proper delivery of the service for which the Contractor is responsible.

The proposal shall specify the type of additional equipment to be used and provide a definition of the technical characteristics thereof, with manufacturers' catalogs to be included as attachments to the proposals.

7. Transfer station operating system

The operation of the transfer station shall be based on the following operating parameters:

7.1 Entrance of vehicles for unloading

Entrance of garbage collection vehicles shall be made through of the entrance to the transfer plant at which the weighing scales are located.

No vehicle shall unload garbage until it has been weighed, except in the event that the weighing equipment is broken or malfunctioning.

7.2 Organization of unloading

The Contractor shall organize a system to accommodate the traffic of trucks arriving to unload garbage in such a way as to avoid traffic jams or obstruction of vehicles at the unloading platforms.

Vehicles which have been weighed on the weighing scales located at the transfer station must necessarily unload at the transfer plant and may not leave the transfer plant loaded except with the special authorization of the Supervisor, provided such action is the result of force majeure.

The Contractor shall organize the unloading operation in such a way that there will be a constant flow of garbage collection vehicles, with no accumulation of vehicles waiting to unload.

Toward this end, the Contractor shall use, to the maximum extent possible, tractor trailers and semitrailers.

Respondents shall include in their proposal an operations plan indicating the probable time required for unloading and the system for the use of semitrailers. This plan shall be designed in such a way that there will always be semitrailers available to enable garbage collection vehicles to unload.

In making his estimates, the respondent shall take into consideration such factors as the accumulation of vehicles at so-called peak hours or hours of maximum traffic.

In the event that the respondent feels that additional semitrailers or tractor trailers are required, they should be included in the proposal and shall be provided by the respondent who is awarded the contract. This cost shall be taken into consideration when calculating the price per ton.

7.3 Exit of vehicles

Once the garbage collection vehicle has unloaded garbage at the transfer plant, it must proceed to exit the transfer plant, toward which end the Contractor shall make the necessary provisions in his traffic organization system.

Vehicles which have unloaded shall not spend any more time than that required to return their unloading mechanisms to their normal position. The Contractor shall ensure that the garbage collection trucks have unloaded all of their garbage in the bins located at the station.

7.4 Loading of the semitrailers

The semitrailers should be filled to capacity without exceeding manufacturers recommendations.

The semitrailer loading operation shall be performed in such a way as to ensure that every effort shall be made to avoid garbage spilling to the ground. In the event that this happens, the Contractor shall clean up the garbage that has spilled as soon as possible.

7.5 Coverings for trailers

As a special safety and sanitation measure, the semitrailers to be mobilized outside the transfer station shall be equipped with a net or tarpaulin which shall cover the top of the vehicle in such a way as to prevent garbage from spilling or scattering outside the trailer during the trip to the transfer station.

7.6 Tractor trailer routes

The routes to be followed by the tractor trailers shall be determined by the respondent in his proposal and shall be indicated on the map of the zone. This route shall be designed in such a way as to minimize the disturbance caused to area residents by the passage of vehicles.

7.7 Unloading of the trailers in the landfill

The garbage transported by the tractor trailers shall be unloaded in the sanitary landfill, in the area which the Contractor has prepared for that purpose.

7.8 Washing in the transfer station

The unloading platform and transfer station bins shall be kept completely clean at all times. Toward this end, the Contractor shall daily wash the unloading zone, at least twice a day, and shall also promptly pick up all garbage spilling from the garbage collection trucks or tractor trailers during garbage transfer activities.

8. Operation of the sanitary landfill

Operation of the sanitary landfill shall entail the following activities:

- Excavations. Breaking up the structure of the terrain and removing the material generated as a result of the excavation.
- Loading Activities. Placement of the material on the platforms, or in boxes, bins or containers on the transportation vehicles.
- Unloading Operations. Throwing or unloading materials transported by the hauling units in the areas or sites established for that purpose within the sanitary landfill.

- Hauling. Transportation of the material from one place to another. The place where the material is deposited shall be called the Loading Site, whereas the place to which it is delivered shall be known as the Unloading Site.
- Accommodation of Waste. This is the unloading and placement of solid waste or garbage at the work site designated for this purpose in accordance with the layout of the sanitary landfill, in such away as to ensure that this operation is carried out in a controlled fashion.
- Scattering of Waste. Distribution and scattering of the solid waste over the inclined slope of the work cell in layers no more than 60 centimeters thick.
- Compacting of Waste. This is the reduction in the volume of solid waste achieved by means of the action of mechanical equipment on such waste. The compacting operation should be performed between two and four times in accordance with humidity and always from bottom to top.
- Covering of the Waste. This is the placing of a layer of compacted earth on top of the waste, the thickness of which shall be between 15 and 30 centimeters. This layer shall cover the solid waste deposited during the working day, with special care being taken to ensure that both the slopes as well as the horizontal surface of the cell are totally covered. This material shall be compacted using the same technique as for solid waste, until the desired degree of compacting is reached.

Note: All operations shall be carried out in accordance with the sanitary landfill project.

8.1 Operations carried out to render the site adequate

a) Clearing operations

Not specified, since as a result of the conditions and characteristics of the site where the sanitary landfill is to be implemented, such operations are not required.

b) Conditioning activities

Prior to carrying out any operation, it will be necessary to perform a series of activities in designed to leave the terrain in conditions which will allow the efficient use of earth moving equipment.

These conditioning activities represent the phase involving the preparation of the land itself, prior to initiating the stage involving movement of terraces, which shall consist largely of tearing down the "Valle de la Luna" formations covering the entire zone in which the sanitary landfill is to be established, so as to loosen the material and

thus facilitate its movement. The use of explosives shall be subject to the following parameters:

b.1. Characteristics of the explosives

b.1.1. Dynamite

To the extent possible ordinary dynamite (7/8") having a maximum expansion power of 60% shall be used.

b.1.2. Fuse

It is advisable that the fuse to be used in blasting work be of the waterproof variety.

b.1.3. Blasting Cap

Of the type normally used in mining operations.

b.1.4. Ammonium Nitrate

This material must be used for filling the hole where the explosives are to be placed in order to provide greater power on explosion.

b.2. General Recommendations Regarding the Use of Explosives

b.2.1 The handmade holes shall have a maximum diameter of 5 centimeters with a rake angle of approximately 30 degrees.

b.2.2 The depth of the holes shall be in proportion to the diameter to be blasted, covering 75% of the length of the diameter.

b.2.3 The number of holes shall be determined on the basis of a careful observation of the terrain and the experience of the personnel in charge of handling the explosives.

b.2.4 The size of the fuse shall be greater than 50 centimeters in relation to the depth of the hole, taking into account the fact that a fuse one meter long takes one minute to burn.

b.2.5 The dynamite cartridge shall be placed 20 centimeters before the fluid in the hole.

b.2.6 The first 20 centimeters from the bottom of the hole shall be filled with ammonium nitrate. Beyond this point, the tamping of the remainder of the hole should be done with extreme caution.

b.2.7 Only wooden canes shall be used for tamping.

c) Earth moving operations

These operations include activities for excavating and moving earth to places where it is needed. Thus, a distinction is made between the excavation site and the deposit or fill site.

The distance between these two sites has a noticeable influence on the selection of machinery for efficiently performing the various operations.

c.1. short distance earth moving

For moving earth over short distances, bulldozers mounted on caterpillar tractors are used. To move earth over a medium distance, the bulldozers can be mounted on heavy tractors equipped with four wheel drive.

For example, for a caterpillar-type tractor the maximum distance to be travelled will be approximately 60 meters, whereas a tractor equipped with tires may travel a distance of up to 120 meters owing largely to the fact that the tire-equipped tractor is able travel in reverse at a greater speed.

In order to achieve optimum performance in the work to be carried out, certain specific techniques are applied which include, for example, operations on downward slopes (with the load either overturning or floating), operations carried out in trenches and side to side operations.

c.1.1. Operations on downward slopes

Whenever possible, an attempt shall be made to move the material downward, as this will require a lesser expenditure of energy and performance will be increased accordingly. (See Fig. 8.1.2.).

Two different types of operation are involved:

1. In the event that it is the slope itself which is to be excavated, the operator shall place the blade of the bulldozer at a given depth in order to cut through the earth. During transportation, the load is implicitly spilled by inertia.

2. In the event that earth must be moved without prior excavation, a load is formed at the excavation site and the blade is then scraped along level with the ground. In this case, the load is not overturned but rather remains in a floating position.

c.1.2. Operations in trenches (see Fig. 8.1.3.)

In order to avoid the loss of earth to the sides of the blade, the load may be moved through a previously dug trench.

The slopes of the trench prevent losses of earth to the sides of the blade.

This technique is applied in cases where the earth must be moved over a relatively long distance.

c.1.3 Side to side operations (see Fig. 8.1.4.)

The following type of operation can also be used in order to avoid excessive loss of earth.

Earth movement with two bulldozers working side by side.

This type of operation requires first of all two or more tractors; in addition, the operators must be trained to work jointly in a synchronized fashion.

c.2. Movement of earth over long distances

The movement of earth over distances greater than 150 meters is carried out by means of scrapers and dump trucks. Scrapers are loading machines, such as power shovels, backloaders and frontloaders.

The operation includes three phases: loading, transporting and unloading by spreading the earth.

c.3. Excavating and Digging

Whenever possible, scrapers are always loaded on a downward slope. In addition, they are often loaded with the aid of a tractor. Thus, it is possible to load the scraper in a minute, or in a minute and a half, over an excavation distance of approximately 30 meters. In order to ensure efficient use of the tractor, it will be necessary for the scrapers to enter the excavation site at intervals of approximately 2 to 3 minutes (see Figure 8.1.5.).

d) Operations involving the construction of cuts and slopes

In order to make a deep cut, which is illustrated graphically in ANNEX 2:

Step No. 1. Establish the construction program, indicating the excavation layers.

Step No. 2. The excavation is carried out in such a way as to follow the line of future slopes, leaving them stepped.

Step No. 3. After excavating to a given depth, a motor grader is used to cut the steps and finish the slopes.

Step No. 4. Following that, excavation proceeds on the following layer.

Step No. 5. After again excavating to a given depth, the motor grader continues with the job of finishing the slopes.

Step No. 6. Excavation continues to the required depth.

Step No. 7. The motor grader finishes the slopes.

Step No. 8. What is left is the cut, as specified in the construction program.

e) Cut and fill operations

In order to build access roads over uneven terrain, it is necessary to perform a series of cut and fill operations so that the road will have an adequate profile.

Type 1 Operation. A central cut on the crest, with fill in both valleys.

Type 2 Operation. A central fill in the valley, with cuts on both lateral crests.

Type 3 Operation. One cut on the crest and one fill in the valley.

The construction plans for the three previously mentioned types of operation are illustrated in figure [ANNEX 2].

A motor grader is used for performing construction work relating to the slopes.

f) Construction Works to Support Access Roads

The construction of dirt access roads must follow the following basic plan, which is illustrated in Figure 8.1.8.

Step No. 1. Definition of the constructor program. The ditches are outlined with stakes. The motor grader makes an initial cut, first on the left hand ditch and then on the next ditch.

Step No. 2. The motor grader makes a second cut until reaching the desired depth of the ditch. The same cut is made in the other ditch.

Step No. 3. The motor grader spreads the dirt.

Step No. 4. Termination of the first spreading.

Step No. 5. The motor grader cuts the backslope of the ditch. The same operation is performed on the other ditch.

Step No. 6. The earth from the backslopes is moved toward the road bed.

Step No. 7. The dirt is spread.

Step No. 8. The motor grader cuts the foreslopes of the ditch.

Step No. 9. With the blade in the ditch, the motor grader cuts the bottom of the ditches.

Step No. 10. The earth on the bottom is lifted up toward the road.

Step No. 11. The dirt is spread, providing the road with a certain slope toward the sides.

Step No. 12. The road and the ditches are now in accordance with the specifications contained in the construction program.

g) Construction of terraces

The following basic work plan, which is illustrated in Figure 8.1.9, should be applied to the construction of contour terraces, following the contour lines.

Step No. 1. Establishment of the construction program on the original incline.

Step No. 2. The motor grader makes a first cut.

Step No. 3. The motor grader makes a second cut.

Step No. 4. The earth is moved downward.

Step No. 5. The motor grader cuts the base of the terrace.

Step No. 6. The motor grader makes a first cut in the upper slope of the terrace.

Step No. 7. The earth is moved toward the fill area.

Step No. 8. The earth is moved toward the lower slope of the terrace.

Step No. 9. A second cut is made in the upper slope.

Step No. 10. The earth is moved toward the fill area.

Step No. 11. One final cut is made, leaving the upper slope in its final form.

Step No. 12. The earth is moved toward the fill area.

Step No. 13. Levelling of the surface. The surface of the terrace is inclined slightly inward.

Step No. 14. Termination of the slope.

8.2 Operation of the sanitary landfill

The sanitary landfill shall operate in accordance with the Area Method, which is illustrated in Figures 8.1.10 through 8.1.11.

a) Width of the Working Face

Depending on the sanitary landfill equipment, the width of the work face should be between 2 and 2.5 times as wide as the blade on the solid waste compactor or as determined by the number of garbage collection vehicles arriving at the landfill at the peak hour.

b) Inspection

At the entrance to the landfill, the waste which is normally deposited at the landfill shall be inspected, entrance shall be granted and a site shall be designated where the waste is to be unloaded.

c) Unloading Zone

Unloading of solid waste must be carried out in such a way as to avoid obstructing operations. The driver shall obey the orders given by the attendant or flagman.

d) Selection of subproducts.

Every effort shall be made to avoid the manual separation of garbage for the purpose of recovering objects and materials having some commercial value in the local and/or regional market, unless the landfill is equipped with facilities for recovering such material, in which case this activity should be regulated both by the sanitation firm as well as by the Office of the Mayor itself.

If recovery of solid waste is carried out manually, the individuals involved shall wear uniforms, goggles, masks, gloves, and caps or helmets in order to avoid to the maximum degree possible the risk of contracting diseases of any type. In addition, as a means of monitoring and evaluating the health status of these workers, they should receive physical examinations at least every six months.

e) Cover material

The principal functions of the material with which solid waste is to be covered daily are as listed below.

- To avoid the scattering of solid waste by the action of the wind.
- To control unpleasant odors.
- To avoid the infiltration of rain water into the garbage substratum.
- To aid in the degradation of the organic material present in the waste, under totally anaerobic conditions.

The type of material to be used shall preferably be of a granular-inert type, the ideal being a combination of sand/clay in percentages of 30% and 70% respectively, *** although sand alone is considered to be an adequate material if it is free from bulky materials, organic materials, tree roots, branches and stones averaging more than 15 centimeters. Poor and inadequate materials for covering the sanitary landfill include sand, mud and pure alluvial deposits, although if combined with clayey materials (e.g., *tapetate*), these materials can be used as cover.

f) Deflection of Rain Water

Every effort shall be made to ensure that the operations of the sanitary landfill are carried out most of the time under dry conditions.

During the rainy season, rainwater shall be deflected into half round conduits or pipes which will carry the water out of the area of operation.

In constructing such conduits, the slope of the terrain shall be taken into consideration. The conduits may be paved with *manzana* stone.

The rain water which is captured may be filtered into the land adjacent to the sanitary landfill or may be diverted to a nearby catch basin if that possibility exists.

The rain water conduits shall at all times be kept free from rocks, sand or residue so as to prevent them from silting up. In addition, they shall be designed in such a way to ensure that the water will flow through them at a minimum speed of 1.0 m/s and that a shovel may be introduced to facilitate removing the silted sand. Both permanent and temporary conduits will be in operation, depending on the fill construction program.

g) Emergency Zone

The sanitary landfill shall include an emergency zone for disposal of solid waste in the rainy season or when for any given reason entrance to the landfill area is not possible. It is recommended that such an area be located adjacent to the sanitary landfill. The total area of the emergency zone will depend on each zone, but it is recommended that it be sufficient to allow waste equivalent to 15 days or more to be stored there.

h) Covering of Waste

Waste shall be covered in accordance with the following specifications:

- Thickness of layers.
Intermediate layers: between 15 and 20 centimeters
Upper layer at least 60 centimeters
- Slope
Transectionally across the cell: from 1 to 1.5%
Lengthwise along the cell: from 0.5 to 1.0%
- Volume
Based on the experiences and observations in other construction works of this type, a figure of 25% should be used as the useful volume of the site.

9. Contractor sanctions

The Contractor may be sanctioned by the E.M.A. on the recommendation of the Supervisor for partial noncompliance with the obligations set forth in these bid conditions or in the contract.

The sanctions or fines shall be imposed in accordance with the particular act of noncompliance, and value thereof shall be determined by the E.M.A. in each particular instance in accordance with the seriousness of the infraction, taking into consideration the damage which the act of noncompliance might have caused the E.M.A. or Municipality.

All fines or sanctions shall be imposed by means of a justified resolution issued by the management of the E.M.A., which shall indicate the amount of the fine as well as the reasons for which it is being imposed.

10. Maintenance of vehicles at the station and equipment at the landfill

Appropriate maintenance of vehicles and other equipment assigned to the transfer plant and sanitary landfill shall be the exclusive responsibility of the Contractor. The Contractor may carry out both preventive and curative maintenance, as well as all necessary repairs, either directly or through subcontracts. However, if all or part of the maintenance is subcontracted, the responsibility for maintaining all equipment in perfect operating order shall continue to fall to the Contractor.

The Contractor shall be responsible for providing preventive and curative maintenance to all vehicles used in the operations of the transfer plant and sanitary landfill. Toward this end, the Contractor shall take out a guarantee policy which ensures proper maintenance of the vehicles and equipment that the E.M.A. has leased to the Contractor.

Expenses for fuel, lubricants, spare parts and other inputs necessary to maintain the vehicles in perfect operating order shall be for account of the Contractor. Likewise, the Contractor shall carry out the repairs necessary to return the equipment in the best possible operating conditions upon termination of the contract.

11. Emergency measures

The operation of the sanitary landfill must be carried out in accordance with the hours of operation during which the various operators of the garbage collection service provide such service to the public. In any event, the operation of the landfill must run, as a minimum, from 6 a.m. to 5 p.m. The landfill should be organized in such a way as to facilitate reception of the waste which is collected during the various waste collection shifts. If nighttime garbage collection hours are in force, the E.M.A. may request that the landfill be operated on a night shift. The transfer station must operate for a minimum of eight daylight hours, with the day to begin at 7 a.m. The hours of operation for the transfer plant must conform to the hours worked by the operators of the garbage collection service. Accordingly, if nighttime garbage collection hours are in force, the E.M.A. may request that the plant be operated on a nighttime schedule.

For purposes of calculating the cost per ton, respondents must submit alternative prices per ton for daytime operations, nighttime operations and combined daytime and nighttime operations.

12. Ownership of solid waste

All waste received in the transfer station and/or sanitary landfill shall be the exclusive property of the Empresa Municipal de Aseo.

13. Environmental protection

All operations involved in the management of the sanitary landfill shall be directed specifically at protecting the ecosystem of the zone and the Contractor shall make every effort to avoid endangering the ecology in any way.

14. Rental of the transfer plant and sanitary landfill offices

With respect to the offices located in the sanitary landfill and transfer plant installations, the respondent shall submit a price for the rental of such offices. This price must be expressed as a flat monthly amount in U.S. dollars for the group of offices located at both sites.

15. Unilateral termination of the contract

The E.M.A. may unilaterally terminate the contract in the event of grave noncompliance with any or all of the contractual obligations of the Contractor and shall not be thereby obligated to pay indemnities to the Contractor. In any event, the E.M.A. may unilaterally terminate the contract if in its judgement the failure to comply with obligations has given rise to consequences which render contract implementation impossible or if the Contractor refuses to accept or execute the modifications which the E.M.A. determines to be necessary in accordance with the provisions of the contract and the bid documents.

INTERNATIONAL PUBLIC BID

No. C3D/089/91 (C)

CHAPTER III
BID SUBMISSION FORMS

SUMMARY OF PRICES PER TON

DAY SHIFT

Form No. 1

RECEPTION SITE	PRICE PER TON	TONS TO BE RECEIVED	TOTAL PRICE
TRANSFER STATION			
SANITARY LANDFILL			

SUMMARY OF PRICES PER TON

NIGHT SHIFT

Form No. 2

RECEPTION SITE	PRICE PER TON	TONS TO BE RECEIVED	TOTAL PRICE
TRANSFER STATION			
SANITARY LANDFILL			

SUMMARY OF PRICES PER TON

DAY AND NIGHT SHIFT

Form No. 3

RECEPTION SITE	PRICE PER TON	TONS TO BE RECEIVED	TOTAL PRICE
TRANSFER STATION			
SANITARY LANDFILL			

INTERNATIONAL PUBLIC BID

No. C3D/089/91 (C)

ANNEXES

APPENDIX H

SUPERVISION SERVICES INVITATION FOR BID

DOCUMENTS FOR PUBLIC BID NO. C3D/089/91 (B)

EMPRESA MUNICIPAL DE ASEO
(MUNICIPAL SANITATION ENTERPRISE)

E.M.A.

SUPERVISION OF GARBAGE COLLECTION, STREET SWEEPING AND CLEANING, AND
GARBAGE TRANSPORTATION SERVICES

PUBLIC BID
No. C3D/089/091 (b)

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- TECHNICAL SPECIFICATIONS	CHAPTER II
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INTERNATIONAL PUBLIC BID
No. C3D/089/91 (B)

CHAPTER I
INSTRUCTIONS TO BIDDERS

PUBLIC BID

CHAPTER I

INSTRUCTIONS TO BIDDERS

A. INTRODUCTION

1. **Object.** The purpose of this Public Bid is to contract, for a period of five years, national private enterprises to provide, in the name and on behalf of the E.M.A. (Empresa Municipal de Aseo) **SUPERVISION OF THE SERVICES COVERING GARBAGE COLLECTION, STREET SWEEPING AND CLEANING AND TRANSPORTATION OF GARBAGE** to its intermediate and/or final place of disposal.
2. **Legal basis.** This bid shall be subject to the provisions of D.S. 21660 dated July 10, 1987, D.S. 22176 dated April 13, 1989, the Bolivian Civil Code and Related Regulations.
3. **Definition of bidder.** The responsible firm(s) signing the proforma invoice and in whose name(s) the Bid Bond is issued.
4. **Bidder requirements**

This bid is directed toward national having technical and financial capabilities and experience and which were legally organized prior to January 1, 1991.
5. **Prices and form of payment**
 - 5.1 Prices must be expressed in United States dollars. They may not be modified subsequently, and shall be calculated taking into account the factors of personnel and equipment, as indicated in paragraph 3, Chapter II.
 - 5.2 The Empresa Municipal de Aseo shall pay the Contractor the price agreed upon in bolivianos.

B. BID DOCUMENTS

6. The bid documents are as follows:

CHAPTER I	Instructions to Bidders
CHAPTER II	General and Technical Specifications
CHAPTER III	Bid Submission Forms
ANNEXES	

7. Clarification of bid documents

- 7.1 Any bidder may request clarifications with respect to the bid documents by submitting such a request in writing to C3D.
- 7.2 The period for submitting the request for clarification shall expire fifteen (15) calendar days prior to the date established for opening the bids.
- 7.3 C3D shall answer all requests for clarification in writing (via letter, fax or telex), with copies to all bidders.

8. Modification of bid documents

- 8.1 C3D may, on behalf of the Entity, and for any cause and at any time up to five days prior to the expiration of the period established for the submission of bids, modify the Bid Documents by means of an amendment to be communicated to bidders, whether on its own initiative or as a response to requests for clarification submitted by bidders.
- 8.2 All potential bidders shall be notified in writing (via letter, telex or fax) with respect to the amendments, which shall become binding. The amendments must be picked up by the bidders from the offices of C3D.

C. CONTENTS OF BIDS

9. Bids shall be submitted in 2 envelopes

- 9.1 Envelope "A": Legal Documents
- 9.2 Envelope "B": Technical Proposal
- 9.3 Envelope "C": Economic Proposal

10. Documents to be submitted in Envelope "A"
(1 original and 1 copy)

10.1 For national bidders

- 10.1.1 RUC -- Legalized photocopy of income tax, issued within 30 days of the date of submission of the bid.
- 10.1.2 Certificate of registration in the General Directorate of Commerce and Stock Companies (original document, with a period of validity sufficient to cover this invitation to bid).
- 10.1.3 Certificate of Fiscal Solvency issued by the Controller General of the Republic.

- 10.1.4 Legal domicile of the bidder.
- 10.1.5 Statement certifying that the firm has a detailed knowledge of, and has visited, the areas in which garbage collection, street sweeping and garbage transportation services are to be provided.
- 10.6 Partnerships

 In the case of an association or joint venture, each partner shall individually submit the corresponding documentation.
- 11. Documents to be submitted in envelope "B"
 - 11.1 A note from the respondent indicating that he has received, and is familiar with, all the material contained in these Bid Documents.
 - 11.2 Letter of transmittal and commitment.
 - 11.3 Financial statements of the bidder, covering the three most recent years, ending with December 31, 1990.
 - 11.4 Certifications issued by the competent authorities with respect to compliance with contracts, whether already executed or currently being implemented, the purpose of which is to provide urban sanitation services.
 - 11.5 Technical Proposal containing all the information requested in the Technical Specifications as well as all material and information that, in the judgement of the respondent, is deemed necessary.
- 12. Documents to be submitted in envelope "C"
 - 12.1 Bid submission form
 - 12.2 A Bid Bond in the amount of US\$5,000 (five thousand United States dollars) having a validity of one hundred twenty (120) calendar days as of the date of bid opening.
- 13. Period of validity of the bid
 - 13.1 The bid shall have a validity of one hundred twenty (120) calendar days following the date on which the bids are opened.
 - 13.2 Under exceptional circumstances, C3D may request bidders to extend the period of validity of their offers, to which the bidder may refuse without risk of forfeiting his Bid Bond.
- 14. The Bid Bond may be executed if:

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- 14.1 The bidder withdraws his bid within the period of validity established in the bid form, or
- 14.2 In the event that the bid is accepted and the bidder does not sign the contract in accordance with subparagraph 25.1.

D. SUBMISSION OF BIDS

- 15. Envelopes shall be labeled as follows:

Licitación Nr. C3D/089/91 [Bid No. C3D/089/91]
 Sobre [envelope] "(Relevant Letter)"
 NOMBRE DE LA EMPRESA PROPONENTE [NAME OF THE RESPONDENT FIRM]

- 16. Closing date for submission of bids

- 16.1 Bids must be received in the offices of C3D in La Paz no later than 11:30 hours on September 19, 1991.

- 17. MODIFICATION AND WITHDRAWAL OF BIDS

- 17.1 Bidders may not modify their bids once they have been submitted, although they may withdraw their bids prior to opening. In the event a bid is withdrawn following the opening of bids, the bidder shall forfeit his Bid Bond.
- 17.2 The advice of withdrawal of bid shall be submitted in writing prior to or at the time such action is taken.

E. Opening and evaluation of bids

- 18. With regard to the opening ceremony

- 18.1 Envelopes "A" and "B" shall be opened in the presence of representatives of those bidders wishing to attend at 16:30 hours on September 19, 1991 in the offices of C3D in La Paz.
- 18.2 At the time bids are opened, the names of the bidders shall be announced, together with bids withdrawn, and compliance or noncompliance with necessary guarantees, as well as anything else which C3D, at its discretion, deems advisable.
- 18.3 Subsequently, once the technical evaluation has been performed, envelopes "C" submitted by firms obtaining a score of 70 or more shall be opened in a separate ceremony to be staged for that purpose.

- 19. Clarification of bids

- 19.1 In order to facilitate the examination, evaluation and comparison of bids, C3D may, at its discretion, request a bidder to clarify his bid. The request for clarification and the corresponding response shall be made in writing (via letter, fax or telex) and no changes in prices and/or any other parameters involved in the grading of bids shall be requested, offered or allowed.
20. Preliminary examination
- 20.1 Arithmetic errors shall be corrected as follows. If there is a discrepancy between the unit price and the total price resulting from multiplying the unit price by the corresponding amount, the unit price shall prevail and the total price shall be corrected.
- 20.2 Prior to proceeding to the detailed evaluation in accordance with subsection 18, C3D shall determine whether each bid is essentially in compliance with the bid documents as responding, without differences of substance, to all provisions and conditions contained in those documents.
- 20.3 C3D, in coordination with the entity, may ignore minor errors of form or omission in accordance with the bid documents or irregularities contained in a bid, providing that the bid does not depart significantly from the above-mentioned bid documents and providing that the position of another bidder is not affected thereby.
21. System for evaluating and comparing bids
- 21.1 Bids which are in compliance with legal requirements, are submitted within the time stipulated, and are accompanied by the Bid Bond shall be evaluated in accordance with the following parameters:

1.	Quality of proposal (Scope of work, work method and work plan)	15
2.	Technical capacity - Experience of the firm - Qualifications and experience of executive personnel - Qualifications and experience of professional and executive personnel	70
3.	Operating capacity - organic structure - Financial capacity	<u>15</u>
TOTAL		100 points

21.2 Selection of proposals

Envelope "C" submitted by firms obtaining a score of 70 or more out of the total score possible shall be opened and negotiators will be carried out with the firm submitting the lowest bid.

F. ADJUDICATION OF CONTRACT

22. Right of the Entity to modify amounts at the time of adjudication

22.1 The Entity reserves the right to increase or decrease the service areas to be consigned without any modification to unit prices or other stipulations or conditions. (These modifications shall not exceed 10%).

23. Right of the Entity to accept or reject any or all bids

23.1 The Entity reserves the right to accept or reject any bid as well as to call off the bid process entirely and reject all bids at any time prior to adjudication of a contract, without incurring any responsibility with respect to the bidder or bidders affected by such a decision or any obligation to disclose the reason therefor.

24. Advice of adjudication

24.1 The Entity shall be responsible for notifying the bidder(s) selected.

25. Signing of the contract

25.1 Beginning with the date of receipt of the advice of adjudication, the selected bidder shall have a period of 15

days in which to sign the Contract (which period may be extended by the E.M.A.), toward which end it will be necessary to submit a Performance Bond in an amount equal to 10% of the total amount awarded, together with the following documentation:

25.1.1

For national firms

25.1.1.1 Legal charter, duly legalized by the competent notary public.

25.1.1.2 Notarized power of attorney issued to the legal representative of the firm.

25.2

The selected bidder shall be responsible for having the contract protocolized by the government notary.

25.3

Noncompliance by the selected bidder with the provisions of paragraph 25.1. shall be sufficient grounds for declaring the adjudication null and void and proceeding to execute the Performance Bond.

The specifications of the weighing equipment installed at the transfer plant and at the sanitary landfill are provided in detail in Annex No. 1.

9.2 COMPUTER SYSTEM FOR PROCESSING THE INFORMATION OBTAINED

The data relative to the weighing operation shall be transmitted automatically via micro-computer, to be located at the site of the scale, so that the data obtained with respect to the weight and tare of each vehicle can be accumulated at that point.

The computer system shall be programmed so as to cross-tabulate the information obtained upon the arrival and departure of the vehicles and thus obtain the corresponding data with respect to the weight of the garbage transported for each truck upon arriving at the landfill. It should be possible to cross-tabulate this information against the various variables involved in the program and the information generated should provide totals for all weighing operations carried out daily.

The proposal should contain a description of the computer program to be used for calculating accrued weight data and for issuing the weight tickets which are to be delivered to the truck drivers following each weighing operation.

The computer equipment shall be supplied by the Inspector and shall consist of a well-known system, with components of the highest quality. The Inspector shall clearly identify in his proposal the type of equipment to be used and shall specify the technical characteristics of each of the components of the weighing system. Respondents shall include in their proposals the manufacturers catalogs specifying the technical and operating characteristics of each component of the equipment.

The computer system shall include the printer(s) required for printing weight tickets to be issued to the driver of each vehicle assigned to transporting garbage at the time the weighing and taring operations are performed.

At the conclusion of the contract, the equipment used to weigh vehicles shall become the property of the E.M.A. or such entity as might replace it.

The system to be installed shall be compatible with the scales currently in operation at the transfer plant and sanitary landfill.

Refer to Annex No. 1, which contains the specifications of the weighing equipment in each of the above facilities.

9.3 ENERGY CONTROL SYSTEM

The Inspector shall install a system for controlling current or voltage fluctuations and thus ensure the proper functioning of the weighing and computer equipment. Likewise, a UPS unit shall be supplied which will ensure a continuous flow of the electric current required for the operation of the electronic weighing system and of the computer system which will record the weights.

9.4 ALTERNATIVE WEIGHING SYSTEM

In addition to the electronic weighing system, there shall also be a manual weighing system to be used in the event that the electronic system or mechanical system of any of the scales should break down.

Proposals shall contain a clear description of the procedures to be used and the security measures to be implemented in the event of a breakdown of any of the components of the weighing system.

9.5 FACILITIES

The equipment making up the weighing and taring system shall be installed at the entrance to the sanitary landfill and transfer plant in accordance with indications provided by the Empresa Municipal de Aseo, in the buildings assigned for that purpose in each of the following sites: 1) the Kantutani Transfer Plant, located on Avenida Costanera s/n, and 2) the New Mallasa Sanitary Landfill located at the Mallasa National Park.

10. PERSONNEL

10.1 LEVELS OF PERSONNEL

The Supervisory Firm shall be staffed with the following minimum levels of personnel:

- 1 Director General
- 1 Director of supervision of garbage collection, street sweeping and cleaning, and garbage transportation services
- 1 Director of supervision for the contract covering intermediate and final disposal of garbage
- 10 Supervisors for the garbage collection and street sweeping service (4 for each zone)
- 6 Scale operators (a greater number may be provided in accordance with the shifts to be worked)
- 1 Employee in charge of community relations
- 4 Supervisors for the final garbage disposal system (1 for each shift)
- 4 Supervisors for the operation of the transfer plan (1 per shift)
- 4 Customer service employees to respond to claims.

The above-mentioned personnel shall carry out their assignments in accordance with the shifts or work days adopted by the garbage collection and street sweeping firms and by the firm charged with the operation of the sanitary landfill and transfer plant.

Administrative personnel shall be defined by the Contractor in his proposal, together with any additional personnel considered advisable in the area of operations.

Respondents shall include in their proposals an organization chart of their organization which shall identify the functions and provide the names of the responsible individuals in each area.

10.2 PERSONNEL REQUIREMENTS

10.2.1 Director general of supervision

Shall be a civil or sanitary engineer, with not less than four years experience in projects involving earth moving or transportation systems and/or experience in providing urban sanitation services. Shall have experience in managing long term-projects and, preferably, experience in managing relations between the Government and Contractors, as well as broad experience in business administration.

10.2.2 Director of supervision for garbage collection and street sweeping

Shall be a civil or sanitary engineer with a minimum of two years professional experience in the area of sanitary engineering or transportation.

10.2.3 Director of supervision for intermediate and final garbage disposal

Shall be a civil or sanitary engineer, with not less than five years experience in earth moving and, preferably, experience in managing contracts between the Government and private entities.

10.2.4 Supervisors of the garbage collection and street sweeping service

May be civil or industrial engineers, with any type of professional experience, providing they have obtained their corresponding university degree.

10.2.5 Scale operators

As a minimum, shall have high school degrees as well as any other studies and shall have worked in any capacity for a period of at least two years.

10.2.6 Supervisors of the intermediate and final disposal of garbage

Shall be professional civil engineers with a minimum of one year experience in earth moving.

No special requirements shall apply to the remaining personnel.

11. OPERATION OF SUPERVISORY SERVICES

1.1 STREET SWEEPING AND CLEANING AND COLLECTION OF WASTE

In order to ensure compliance with the objectives established with respect to implementation of the Supervision Services, the monitoring operation shall be carried out in accordance with the following parameters:

11.1.1 Supervision of conditions prior to the operations of each work day

11.1.1.1 Review of vehicles

The Supervisors shall carry out continuous inspections of all equipment prior to initiation of services in order to substantiate the following:

- a) Cleanliness and sanitary condition of each vehicle, both on the outside of the vehicle itself as well as in the inside of the compactor.
- b) Mechanical operation of the vehicle and of the compacting unit.
- c) General condition of the machinery.
- d) Cleanliness of the street sweeping equipment.
- e) Status of safety lights and other industrial protection and safety devices.
- f) Number and type of units placed into service.
- g) Other aspects as necessary.
- h) Quality of repairs made, if applicable

11.1.1.2 Review of personnel

- a) Verification of the total number of employees and assignments, by unit of equipment and activity to be carried out.

- b) Status of uniforms and general appearance of personnel.
- c) Verification of the proper use of industrial protection and security devices.
- d) Others as considered necessary.

11.1.2 Parameters for evaluating work and monitoring operations during service delivery

In order to monitor the performance of the company charged with providing garbage collection services, the following checks shall be made, although this list shall not be consider exhaustive:

- 11.1.2.1 Compliance with the frequency of service established for each zone.
- 11.1.2.2 Compliance with the established hours of operation.
- 11.1.2.3 Compliance with the micro-routes established by the Contractor.
- 11.1.2.4 Total coverage of the micro-routes established by the Contractor.
- 11.1.2.5 Behavior of personnel with respect to the general public during service delivery.
- 11.1.2.6 Verification of the amount and type of mechanical breakdowns occurring in the vehicles.
- 11.1.2.7 Proper use of security measures.
- 11.1.2.8 Proper use of uniforms and other work gear by workers, during the process of service delivery.
- 11.1.2.9 Effective coverage provided by the service.
- 11.1.2.10 Follow-up and analysis of the time and stops involved in the micro-routes, travel times between the starting point of the micro-route and the end point of that route at the unloading site.

11.1.3 Monitoring carrying out in the zone subsequent to service delivery

Monitoring controls carried out in the zone shall be based on the following parameters:

11.1.3.1 General situation prevailing the zone. The Supervisor shall verify that total coverage has been provided in the zone in which service was provided.

11.1.3.2 Supervision of the quality of service by means of a general observation of the zone and its overall appearance following garbage collection or street cleaning activities.

This type of monitoring activity shall be carried out following each garbage collection cycle, by means of general sweeps to be taken of the area.

11.1.3.3 In the unloading zone, the Supervisor shall observe the type of garbage unloaded and the humidity present in that garbage. This test shall be carried out using random sampling methodology and shall be performed at different times and on different days, a minimum of six times per month.

11.2. WEIGHING PROCEDURE

11.2.1 Installation of the weighing system

The procurement and installation of the weighing system equipment shall be carried out by the Inspecting Firm during the term to be established in the proposal for that purpose. This term shall in no case exceed the date projected for initiation of operations by the firm to be contracted to provide garbage collection and street sweeping and cleaning services.

The following parameters shall apply to the operation of the weighing system:

11.2.2 Hours of operation

The scale shall be in operation 24 hours a day, seven days a week, unless the hours of operation of the garbage collection companies make it possible to use other hours of operation. The weighing service shall not be interrupted for any reason or under any circumstance.

11.2.3 Scale operators

Each scale shall be operated by at least one operator during each working day. Working days may not exceed the maximum established in the relevant labor laws.

11.2.4 Weighing and Taring Procedure

The scale operators shall not weigh more than one truck at the time. In no case shall two or more vehicles be weighed together.

Each vehicle shall be weighed at the time of its arrival in order to obtain its gross weight. The actual weight of the garbage shall be obtained by comparing the weight on arrival with the established tares.

In order to determine the tare, the truck shall be weighed empty at least once a week, as soon as unloading has taken place. This operation shall be carried out on the same scale on which the truck has been weighed during normal operation. This provision shall not prevent the Empresa Municipal de Aseo from deciding at any time that the tare weight of the vehicles is to be determined on a daily bases or following each individual weighing operation.

No prior notification shall be provided to the companies charged with garbage collection and street sweeping as to when the tare weight is to be determined.

The tare weight for each truck to be used to calculate the periodic billing shall be that weight which is the result of the simple average of the weight obtained during the weighing operations of a given month.

The weighing system shall issue a weight ticket in triplicate which shall contain the above mentioned minimum data, as follows: weight on arrival, tare, net weight, arrival and departure times, date, company, route, type of vehicle, vehicle identification (registration and internal number assigned by the company), and type of service, as well as any other data considered necessary.

The operator of the weighing system shall deliver a copy of the ticket to the driver of the vehicle, and that copy shall be attached to the bill presented by the garbage collection companies. The ticket shall be signed by the scale operator and shall bear the seal of the inspection firm selected.

The inspection firm shall provide special forms for issuing weight tickets. These forms shall be numbered in order to avoid the possibility of fraud. The respondent shall include in his proposal a type of paper offering additional security factors.

11.2.5 Maintenance

The maintenance and calibration of the scales shall be carried out by the Inspector, who shall contract specialized firms to provide this type of service. The maintenance and calibration of the scales shall be performed at least once per month; the Supervision

Firm shall invite representatives of the firms being supervised to be present during the calibration operation.

The maintenance of electric col, electronic and computer equipment making up the weighing system shall be for the account of the Inspector, who shall perform this activity by means of contracts to be signed with firms specializing in maintenance of this type.

The firms which the Inspector contracts to carry out maintenance and calibration of the scales and electrical, electronics and computer equipment shall have no less than two years of experience in providing services similar to those being contracted.

The Inspector shall be responsible for the proper functioning of the weighing equipment.

11.3 PERIODIC REPORTS

11.3.1 Statistics

The Supervisor shall prepare on at least a monthly basis the information described below, although this list is not to be considered exhaustive:

11.3.1.1 Total tonnage weighed on the scales, classified by transporting firm or entity as well as accumulated daily total tonnage.

11.3.1.2 Accumulate weekly tonnage, classified by transporting firm or entity as well as an accumulated weekly total.

11.3.1.3 Accumulated monthly tonnage, classified by transporting firm or entity as well as an accumulated total of the amount transported per month by all firms.

11.3.1.4 Average number of tons collected daily over a period of one month based on the following formulas:

Tonnage collected per firm during the month

Total days worked during the month

Tonnage collected by the firm in one month

Total number of days actually worked during the month

11.3.1.5 Average for each day of the week, for each month, in accordance with the following formula:

$$\frac{\text{Total number of tons picked up on Mondays}}{\# \text{ of Mondays in the month (or Tuesdays, etc.)}}$$

The same formula shall apply to every day of the week on which garbage collection and street sweeping services are provided

11.3.1.6 Value of the tonnage per month and increments.

11.3.1.7 Average load of each type of vehicle determined in accordance with the following formula:

$$\frac{\text{Total number of tons transported by each type of vehicle}}{\# \text{ of vehicles of each type}}$$

11.3.1.8 Average daily arrivals of vehicles at the sanitary landfill or final disposal site based on the following formula:

$$\frac{\text{Total tons transported by the company}}{\text{Total number of arrivals of vehicles of that company at the plant or landfill.}}$$

All of the previously mentioned indicators shall be included on historic summaries, which should also contain a comparison of differences with respect to prior periods.

11.3.2. Efficiency indicators

Efficiency indicators shall be applied monthly and reports shall include historic trends of those indicators. In additions to those mentioned below, the Supervisor may submit other indicators as deemed advisable by the Supervisor or the manager of the E.M.A.

The indicators are as follows:

11.3.2.1 $\frac{\text{Total number of workers used}}{\text{Average tons per day}}$

11.3.2.2 $\frac{\text{Average tons per day}}{\text{Total number of workers used}}$

- 11.3.2.3 Number of operating workers

 Number of administrative workers
- 11.3.2.4 Number of vehicles used per day

 Average number of tons per day
- 11.3.2.5 Number of workers x hours worked

 Average tons collected per day
- 11.3.2.6 Kilograms collected per route

 Number of stops made during each collection
 route
- 11.3.2.7 Number of street sweeping bags used by each
 worker.
- 11.3.2.8 Number of blocks swept by each worker.
- 11.3.2.9 Gallons of fuel used per truck per working day.
- 11.3.2.10 Tires consumed per month.
- 11.3.2.11 Kilometers traveled per vehicle per working day.
- 11.3.2.12 Average tons collected per day

 Number of workers x hours worked per day
- 11.3.2.13 Unloading time at the transfer plant, by type of
 vehicle.
- 11.3.2.14 Others as deemed necessary.

11.3.3 Other Reports

The Empresa Municipal de Aseo may, at any time, request any other type of statistical or efficiency report, which shall be prepared by the Supervisor at no additional cost.

Likewise, every month the Supervisor shall submit to the manager of the Empresa Municipal de Aseo a general evaluation of contract implementation, which should include relevant statistics, efficiency indicators and an assessment of the degree of compliance with the various obligations established for the entities charged with garbage collection and street sweepings.

In order to evaluate the claims presented, the Supervisor shall prepare a detailed report of claims received during the month and the actions taken on each. A report shall be prepared with on the performance of the customer service staff in dealing with these claims.

In addition, the Supervisor shall submit a report whose purpose shall be to indicate the degree to which user complaints are based in fact or unfounded.

11.4 MONITORING OF BILLING PROCEDURE

The Supervisor shall be responsible for verifying each bill or account for collection submitted by the Contractors being supervised to the Empresa Municipal de Aseo. The latter shall not pay any invoice which does not bear the concurrence or approval of the Supervisor.

However, a period of ten working days is established to allow the Inspector to approve or object to the invoices submitted by the firms charged with providing garbage collection and street sweeping services. If, once this period has expired, the Inspector has not approved or objected in writing to the invoice or bill for collection, such invoice or bill for collection shall be understood to have been approved and the period established for the E.M.A. to make payment shall begin.

Should a delay greater than ten working days in reviewing the invoices submitted be the fault of the Inspector, the latter shall be responsible for all costs incurred by the parties as a result of errors not detected by the Supervisor.

In those cases in which the Supervisor detects differences or inconsistencies in the billing, he may submit the objections which he deems relevant, within a period of ten working days. All objections shall be submitted in writing. Once these objections have been corrected, the Inspector shall have a period of only five working days to approve the invoice or present new, justified objections.

In verifying the billing, the Supervisor shall compare the weight tickets submitted by the firm charged with providing garbage collection and street sweeping services or the entity in charge of the sanitary landfill and transfer plant with those obtained by the operator of the weighing system.

For billing purposes, days shall begin at 00:00 hours and end at 24:00 hours. This period of time shall be the basis for submitting bills.

The Inspector shall be responsible for all unjustified payments made to Contractors, when occurring as a result of negligence or errors in reviewing or approving the billing.

11.5 SUPERVISION OF THE MALLASA SANITARY LANDFILL

Monitoring with respect to the implementation of the contract covering the operation of the final disposal site(s) shall be carried out in accordance with the following parameters:

11.5.1 Supervision of Operations

11.5.1.1 Access roads and unloading zones

The Supervisor shall supervise the proper maintenance of the roads providing access to the final disposal site. These roads shall be provided with the materials agreed to in the contract and maintenance shall be carried out in accordance therewith. The unloading zone shall be kept in optimum operating conditions, in order to ensure speedy unloading of the vehicles.

11.5.1.2 Expansion and compacting

The Supervisor shall continuously monitor the operation involving the expansion and compacting of unloaded waste, which shall be carried out in accordance with the plan previously submitted and approved.

The Supervisor shall take whatever measures are required to ensure that the operating firm in charge of final garbage disposal carries out the compacting operation in accordance with the technical specifications contained in the plan contained in Annex No. 2.

11.5.1.3 Covering of the landfill

The Supervisor shall substantiate and verify the characteristics of the cover being applied to the compacted garbage. Such cover shall comply with the technical specifications contained in the plan, especially as regards the quality of the cover material and the thickness of the layer of material to be placed on top of the compacted garbage.

11.5.1.4 Leached liquids and rain water

The Supervisor shall monitor the proper construction of systems for conveying any liquids which have leached and/or seeped into the ground. Such systems shall be constructed in accordance with technical specifications contained in the sanitary landfill plan and care must be taken to ensure their continuous operation.

In order to properly control the amount and characteristics of these liquids, the Supervisory Firm shall take daily measurements of the volume of leached materials produced and at least once a month shall carry out chemical and biological analyses showing the organic and inorganic content of the leached materials.

The Inspector shall ensure that the Contractor-operator of the landfill operates in a technically correct manner the system for diverting and controlling the rain water and/or natural water occurring in the area of the landfill.

In addition, the Inspector shall monitor the proper functioning of the systems used for eliminating leached materials in accordance with the technical design contained in Annex No. 2.

11.5.1.5 Machinery and equipment

The Inspector shall ensure that the Contractor has and properly uses the machinery and equipment included in the proposal submitted as well as that which the Empresa Municipal de Aseo has leased to the Contractor. In the event that the machinery is not used properly, the Inspector shall immediately so advise the Empresa Municipal de Aseo so that the latter may proceed to impose the corresponding fines.

11.5.1.6 Control cell and measurement of gas levels

The Inspector shall verify compliance with controls carried out by means of the control cell and in addition shall ensure that the various measurements of gas levels set forth in the landfill operations manual are properly carried out.

11.5.2. Reports

The Inspector shall be responsible for submitting to the Empresa Municipal de Aseo all reports required with regard to the proper implementation of the contract covering the operation of the sanitary landfill and transfer plant.

The Inspector shall submit at least bimonthly a report containing as a minimum the following information:

- 11.5.2.1 Brief description of contract implementation.
- 11.5.2.2 Special or remarkable events occurring during the period.
- 11.5.2.3 Statistics with respect to the total tonnage received at the landfill, by day, unit of time and average.
- 11.5.2.4 Statistics on the arrival of vehicles at the landfill, by day, unit of time and average.
- 11.5.2.5 Statistics on the volume of leached materials.
- 11.5.2.6 Yield rates for the machinery.
- 11.5.2.7 Historical comparison of statistics.
- 11.5.2.8 Production of gas.

11.6 SUPERVISION OF TRANSFER PLANT OPERATION

- 11.6.1 The Inspection of the transfer plant operations shall be carried out in accordance with the following functions:
 - 11.6.1.1 Supervision of the appropriate continuous cleanliness of the transfer plant.
 - 11.6.1.2 Supervision of the unloading times of the garbage collection trucks.
 - 11.6.1.3 Supervision and monitoring of the time required by the tractor trailers to transport garbage.
 - 11.6.1.4 Supervision of the maintenance provided to vehicles and other equipment used in transfer plant operations.
 - 11.6.1.5 Supervision of the way in which truck traffic is organized and managed so as to facilitate unloading.

11.6.2 TRANSFER PLANT STATISTICS

The Inspector shall keep statistics on transfer plant operations in such a way as to allow the efficiency of the operation and management of the plant to be measured. Some of these statistics are as follows:

- 11.6.2.1 Average number of arrivals of loaded trucks at the plant.
- 11.6.2.2 Average time required for unloading.
- 11.6.2.3 Average waiting time involved in unloading.
- 11.6.2.4 Average number of trailers departing the plant daily.
- 11.6.2.5 Average number of tons of garbage transferred at the plant.
- 11.6.2.6 Other statistics as deemed appropriate.

PUBLIC BID
No. C3D/089/91

CHAPTER II
TECHNICAL SPECIFICATIONS

CHAPTER II

TECHNICAL SPECIFICATIONS

1. OBJECTIVES AND PURPOSE

The object of this contracting process will be to procure SUPERVISORY SERVICES with respect to the implementation and proper compliance with the contracts to be signed between the EMPRESA MUNICIPAL DE ASEO ("E.M.A.") and the firms which are to provide the following urban sanitation services:

- 1.1 Street sweeping and cleaning, and solid waste collection and transportation to intermediate or final disposal sites in two areas of the city.
- 1.2 Operation and maintenance of the final disposal site for municipal garbage -- the MALLASA SANITARY LANDFILL -- and the operation, monitoring and maintenance of the intermediate disposal site for municipal garbage -- the KANTUTANI TRANSFER PLANT.

The SUPERVISORY SERVICES to be contracted will involve the monitoring and supervision of all aspects of the services covering garbage collection, street sweeping and cleaning, and transportation and intermediate and final disposal of garbage as contracted by the Empresa Municipal de Aseo.

The inspection services contract ~~which is to be executed~~ is directly related to the contracts ~~to be executed~~ for services covering street sweeping, sanitation activities in public areas, and waste collection, as well as for the operation and maintenance of the Mallasa sanitary landfill and the Kantutani transfer plant. Accordingly, the validity and implementation of this contract will depend on the validity and implementation of the latter two contracts.

2. RESPONDENT FIRMS

This bid competition is open to NATIONAL firms satisfying the requirements set forth in these bid conditions and in the relevant legislation.

Such firms shall comply with the following special requirements:

- 2.1 Have proven prior experience in the implementation of transportation engineering projects or proven prior experience in engineering projects involving earth moving and/or the collection, transportation and final disposal of garbage.
- 2.2 Have proven experience in providing supervisory and auditing services with regard to construction projects.

2.3 Submit service records and curriculum vitae in accordance with the forms contain in Chapter III for each of the individuals who are to work on the project.

2.4 Have sufficient financial capacity to successfully implement the contract.

3. PRICES AND FORM OF PAYMENT

Payment shall be made on a monthly basis, and in calculating costs the following factors shall taken into account:

3.1 STAFF

STAFF	NUMBER	COST PER MONTH	TOTAL COST
DIRECTOR GENERAL	1		
DEPUTY DIRECTOR FOR COLLECTION AND SWEEPING	1		
DEPUTY DIRECTOR FOR LANDFILL AND TRANSFER PLANT	1		
SUPERVISORS OF SWEEPING AND GARBAGE COLLECTION	10		
SUPERVISORS FOR THE LANDFILL AND TRANSFER PLANT	8		
SCALE OPERATORS (BY SHIFTS)	6		
ADMINISTRATIVE STAFF	TO BE DETERMINED BY RESPONDENT		
OTHER STAFF	TO BE DETERMINED BY RESPONDENT		
CUSTOMER SERVICE PERSONNEL	4		

The number of operating or administrative staff submitted in the proposal shall be broken down by the respondent in terms of their respective costs, in the same way as in the preceding table.

3.2 EQUIPMENT

EQUIPMENT TO BE USED	AMOUNT	MONTHLY COST
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SUPERVISORY VEHICLES

MOBILE RADIO EQUIPMENT

WEIGHING AND STATISTICAL SYSTEM

OTHER EQUIPMENT PROPOSED BY THE RESPONDENT (describe)

Any other equipment to be used shall be broken down in terms of cost in the same way as in the preceding table.

Any other equipment included in the proposal as well as any other cost-generating item shall be described by the respondent, together with its respective cost.

Respondents shall indicate in their proposal all other costs being contemplated, including any administrative expense, and the percentage of projected profit.

A unit price analysis shall be submitted based on the human and physical resources to be used. This analysis shall be submitted in the following format:

ITEM	NUMBER	COST PER MONTH	%
MANAGEMENT STAFF			
OPERATING STAFF			
ADMINISTRATIVE STAFF			
TRANSPORTATION EQUIPMENT			
RADIO EQUIPMENT			
COMPUTER EQUIPMENT			
OTHER EQUIPMENT			
ADMINISTRATIVE EXPENSE			
OTHER EXPENSES			
PROFITS			
TOTAL DE GASTOS			100%

185

3.3 CURRENCY OF PAYMENT

Monthly payment shall be made in the legal currency of Bolivia, although the cost of each item shall be submitted in United States dollars and payment shall be effected at the rate of exchange prevailing on the date that the invoice is submitted.

4. TERM OF THE CONTRACT

The Supervision contract shall have a term equal to that of the contract to be audited, beginning as of the date on which the contracts to be audited are signed. That is to say, such term shall begin at the time of the signing of the contracts covering garbage collection, street sweeping and transportation of garbage and/or the operation of the sanitary landfill and transfer plant.

As established above, the signing, execution and duration of this contract shall be entirely dependent on the execution and duration of the contracts to be audited or supervised.

Notwithstanding the preceding, during the so-called "implementation" of the contracts for garbage collection, street sweeping and operation of the sanitary landfill and transfer plant, the activities and staff to be used by the Inspector shall conform to the activities of the other companies. Accordingly, the overall implementation of the Supervisory Services shall only begin at such time as the firms to be supervised actually commence work.

5. OBLIGATIONS AND PRINCIPAL TASKS OF THE SUPERVISOR

In addition to the obligations set forth in the contracts to be supervised by the Inspector or Auditor, the latter shall have the following general obligations:

- 5.1 Submit reports to the Empresa Municipal de Aseo, or such entity as might replace it, at a rate of at least one report per month, containing a detailed description of progress achieved in implementing the contracts being supervised as regards technical-operational, administrative and economic aspects.

The form in which such reports are to be submitted shall be agreed upon at the time of the signing of the contract between the Empresa Municipal de Aseo and the firm selected in accordance with this bid procedure.

- 5.2 Inform the General Manager of the Empresa Municipal de Aseo, or such entity as might replace it, in writing with respect to any abnormality or instance of noncompliance by the Contractors in implementing the contract, as well as any damage suffered by any machinery or equipment, or any damage caused to third parties by the equipment or staff of the Contractor.

~~INTERFERING WITH~~

- 5.3 Supervise the way in which the contracts are being implemented, without [becoming involved in] the autonomy of the Contractors, and oversee strict compliance with each and every one of the obligations incurred by the Contractors being audited.
- 5.4 Collaborate with the Municipality, the Empresa Municipal de Aseo and the Contractors to ensure the proper implementation of the contract.
- 5.5 Operate and provide maintenance to the weighing equipment and the weighing system in general, in accordance with the provisions contained in these bid conditions and in the contract.
- 5.6 Review and approve the bills submitted by the Contractors and authorize payment of such bills in accordance with the provisions of each contract.
- 5.7 Recommend any modifications or corrective measures necessary to ensure the proper implementation of the contract.
- 5.8 Monitor the proper maintenance of the vehicles and other equipment used by the Contractors, and especially those owned by the Empresa Municipal de Aseo.
- 5.9 Monitor the subcontracting of sanitation micro-enterprises and verify that the companies charged with providing garbage collection and street sweeping services effect prompt payment to such micro-enterprises.

6. FUNCTIONS OF THE SUPERVISORY FIRM

The functions of the Supervisory Firm shall include, but not be limited to, the following for purposes of assisting it in carrying out its obligations:

- 6.1 Supervise compliance with all contractual obligations incurred by the companies contracted by the Empresa Municipal de Aseo to provide street sweeping and cleaning and garbage collection services as well as services covering the intermediate and/or final disposal of garbage.
- 6.2 Supervise the proper functioning of the machinery and equipment of the firms being supervised.
- 6.3 Monitor the proper physical appearance of the personnel providing street sweeping and cleaning services and garbage collection and transportation services.
- 6.4 Monitor the proper maintenance of the administrative facilities of the Contractors providing the garbage collection and street sweeping and cleaning services.

- 6.5 Monitor compliance with the hours of operation and frequency of garbage collection and street sweeping services.
- 6.6 Monitor the staff and equipment to be used by the Contractors being supervised to ensure that they use the minimum amounts required.
- 6.7 Supervise compliance with the micro and micro-routes established by the Contractor by performing continuous inspection.
- 6.8 Supervise and monitor the quality of the services provided in each of the respective stages of such services.
- 6.9 Supervise the proper state of cleanliness of all equipment and facilities.
- 6.10 Carry out selective tests to determine the composition, content, type and humidity of the waste being transported and/or unloaded in the intermediate or final disposal sites by the Contractor Firms being supervised.
- 6.11 Monitoring of street cleaning operations.
- 6.12 Monitoring, verification and approval of periodic billings by the Contractors being supervised.
- 6.13 Monitoring of the efficiency of the garbage collection vehicles in their routes by measuring the time taken and stops made in collecting garbage as compared to the total amount of garbage collected.
- 6.14 Monitoring, management and operation of the vehicle weighing and tare system, which shall include the weighing of the vehicles themselves and performing the tare weight operations at least four times per month.
- 6.15 Preparation of daily, weekly and monthly statistics as deemed advisable, as well as development of efficiency indicators and as indicated in these bid conditions as well as any other indicators which the Empresa Municipal de Aseo deems necessary.
- 6.16 Management and monitoring of claims submitted by the public, in coordination with the E.M.A., which Claims shall be communicated to the corresponding companies in accordance with procedures to be established for that purpose, which ~~procedures~~ should conform to the technical specifications and the contracts signed.
- 6.17 Monitoring of proper follow-up actions by the companies being supervised with respect to claims submitted by the public.
- 6.18 Monitoring and verification of compliance with community information and education programs.

- 6.19 Inform the Empresa Municipal de Aseo with respect to any instance of noncompliance with contractual obligations and make suggestions with regard to those cases in which imposition of a fine may be advisable.
- 6.20 Provide preventive maintenance to the weighing equipment and make repairs as necessary.
- 6.21 Verify proper compliance with the programs designed to provide maintenance and repairs service to the equipment owned by the Empresa Municipal de Aseo and leased to the Contractor.
- 6.22 Verify that the garbage collection firms are providing appropriate technical advisory services to the micro-enterprises performing manual garbage collection services. Likewise, the Supervisor shall verify compliance with the conditions of the contracts signed between the micro-enterprises providing manual garbage collection services and the firms contracted to provide garbage collection and street sweeping services.
- 6.23 Carry out financial analyses of the economic aspects of the contracts.
- 6.24 Monitor and verify the progress of the sanitary landfill operation in accordance with the plan which the Contractor is charged with following.
- 6.25 Monitoring and verification of infrastructure projects to be constructed at the sanitary landfill by the Contractor-Operator as part of the final garbage disposal service.
- 6.26 Management and consolidation of statistics relating to the operation of the sanitary landfill and transfer plant.
- 6.27 Monitoring of the proper and continuous cleanliness of the transfer plant.
- 6.28 Monitoring of the operation of the transfer plant, in accordance with the obligations of the Contractor-Operator.
- 6.29 Preparation of statistics on the operation and efficiency of the transfer plant.
- 6.30 Verification of the proper handling of the equipment owned by the Empresa Municipal de Aseo and leased by the Contractor firms.
- 6.31 Verify proper compliance with all of the industrial safety standards established in the contract and by law.
- 6.32 All other functions necessary to properly audit or supervise the contracts.

6.33 Deliver a copy of each weight ticket prepared during the day to the Contractor in charge of the transfer plant and sanitary landfill.

7. FACILITIES AND EQUIPMENT REQUIRED FOR SUPERVISION

7.1 FACILITIES

In order to properly carry out the supervisory services, the Inspector shall have his own physical facilities and, in addition, facilities to be provided by the Contractor(s) charged with providing urban sanitation services, which shall be located at the operating headquarters of the firms charged with providing garbage collection and street sweeping and cleaning services, as well as services to be provided at the intermediate and final disposal sites.

7.2 EQUIPMENT

In order to properly implement the supervisory system, the Supervisor shall have as a minimum the equipment listed below:

7.2.1 Communications Equipment

The communications system shall facilitate contact between service inspectors and the offices of the Supervisor located at the facilities of the service providers, as well as at the headquarters of the Supervisor. Such communications system should therefore be portable and should facilitate the establishment of contact at any time and from any point in the city.

The transmitting and receiving frequency or channel shall be obtained in accordance with the standards and procedures governing such matters. The receiving and transmitting frequency to be used shall be for the exclusive use of the Inspector.

7.2.2 Transportation equipment

In order to properly provide inspection services, the Inspector shall have as a minimum motor vehicles able to travel unimpeded through all of the streets and avenues of the city, regardless of time of day or weather conditions prevailing at the time.

Such equipment shall be of the latest model available at the time work is begun, shall have an odometer reading of zero and shall be equipped with four-wheel drive.

The number of vehicles shall be sufficient to enable each of the inspectors working on a given work shift, and performing field activities necessary for supervising the service contracts, to travel to their job sites.

Respondents shall include in their proposal any other transportation equipment they consider necessary.

8. OTHER EQUIPMENT

In addition to the communications and transportation equipment required to carry out the supervision of the garbage collection, street sweeping and cleaning, and sanitary landfill and transfer plant services, the Inspector shall provide photographic equipment which will allow him to record any necessary event. Such photographic equipment should have the capability to print the date and time on each photograph taken.

The Inspector shall have equipment for measuring the humidity content of the garbage or, alternatively, shall obtain this type of service by contracting with specialized entities of proven reliability and accuracy.

9. WEIGHING SYSTEM AND EQUIPMENT

The Inspector shall procure and provide the equipment required for weighing the vehicles, and shall charge the cost of such equipment to the contract. Such equipment shall consist mainly of the following elements:

9.1 ELECTRONIC SYSTEM FOR REGISTERING VEHICLE WEIGHT

This system shall operate without the intervention of a human operator, preferably by means of magnetic cards or similar devices having the ability to record data for each truck, which should include as a minimum the following: vehicle weight, company to which it belongs, garbage collection route, date and time, vehicle identification (vehicle registration and internal number), type of service, type of vehicle, and vehicle tare, which shall be determined on the basis of weight taken upon departure and the net weight of the load.

The system to be installed shall be compatible with the scales and auxiliary equipment currently in operation at the transfer plant and sanitary landfill.

The scale installed at the transfer plant is a 1990 Kubota brand, model SP 23. It has a capacity of thirty (30) tons and measures 3.000 meters x 10.500 meters, i.e., three meters by ten and one half meters.

X The scale installed at the sanitary landfill is a 1990 _____. It has a capacity of fifty (50) tons and measures _____ meters x _____ meters, i.e., _____ meters by _____ meters.

PUBLIC BID
No. C3D/089/91

CHAPTER III
BID SUBMISSION FORMS

LETTER OF TRANSMITTAL AND COMMITMENT

Messrs.
C3D/Empresa Municipal de Aseo
Calle Pinilla # 262
La Paz, Bolivia

Messrs. C3D:

In response to the convocation notice published on August 13, 1991 with regard to participation in the National Public Bid covering a contract to provide supervisory or auditing services with respect to a contract involving garbage collection, street sweeping and cleaning, and transportation of the garbage to the intermediate and/or final disposal site and for operation of the transfer plant and sanitary landfill, the firm and/or consortium of firms known as.....

..... is pleased to submit, through our legal representative, Mr., a bid containing all of the information required, which has been prepared wholly in compliance with the instructions, technical specifications and other documents making up the terms and conditions of the bid.

The individual signing this letter of transmittal and commitment states as follows:

1. That he confirms having examined, studied and made use of the documents delivered by C3D/E.M.A. with regard of the submission of bids, and in particular the Convocation Notice, Instructions to Bidders, Technical Specifications, and Bid Submission Forms, as well as the clarifications and modifications provided subsequently. He expressly states his agreement with said documentation.
2. That he vouches for the veracity and accuracy of all information submitted in this bid.
3. That he authorizes C3D and/or the Empresa Municipal de Aseo to carry out all inquiries necessary to verify the truthfulness of the statements and documents submitted and to obtain clarification and information with respect to the experience, technical capability, economic solvency and other necessary information regarding the firm and/or consortium of firms submitting this proposal.
4. That neither the municipality of La Paz, the Empresa Municipal de Aseo or C3D shall assume any responsibility whatsoever for any error or omission of the bidder, nor for any commitments which the latter may have acquired in the course of preparing this proposal.
5. That he unconditionally accepts the procedure established by the Agency and by the E.M.A. for carrying out the Bid, which shall conclude with the corresponding adjudication, with the understanding that no claims whatsoever shall be allowed.

6. That by submitting this proposal he accepts his obligations as bidder and, in the event that he is selected as awardee of the contract which is the object of this bid, that he will proceed to execute said contract, a draft of which has been received and accepted by the bidder, together with the bid documents.
7. That he agrees to legalize the partnership or consortium of firms, in the event that it is not already legalized, prior to signing the respective contract.
8. That by virtue of the appointment and/or power of attorney granted to him, he has full and sufficient authority to execute the necessary proceedings in this bid process, and accredits the legitimacy of his intervention by means of the duly legalized appointment or power of attorney attached hereto.

SIGNATURE:

Place and date

Legal Representative

CHAPTER III
EMPRESA MUNICIPAL DE ASEO
BID SUBMISSION FORM (No. 1)

BID No. C3D/089/91

DESCRIPTION	AMOUNT	MONTHLY COST	TOTAL COST
Director General		1	
Deputy Director for Garbage Collection and Street Sweeping		1	
Deputy Director for Landfill and Transfer Plant		1	
Supervisors for Street Sweeping and Garbage Collection		10	
Supervisors for Landfill and Transfer Plant Operations		8	
Scale Operators (by shift)		6	
Administrative Personnel		To be determined by the respondent	
Other Personnel		To be determined by the respondent	
Customer Service and Claim Personnel		4	
	TOTAL		

AMOUNT: _____
(Amounts in currency and words)

NAME AND SIGNATURE OF RESPONDENT:

195

CHAPTER III
EMPRESA MUNICIPAL DE ASEO

BID No. C3D/089/91

FORM No. 2 EQUIPMENT

EQUIPMENT TO BE USED	AMOUNT	MONTHLY COST
Supervisory Vehicles		
Mobile Radio Equipment		
Computer System for Weighing and Statistics		
Other Equipment Proposed by the Respondent: (describe)		

TOTAL

AMOUNT: _____

(Amounts in currency and words)

NAME AND SIGNATURE OF RESPONDENT:

CHAPTER III
EMPRESA MUNICIPAL DE ASEO

BID No. C3D/089/91

FORM No. 3 PRICE ANALYSIS

EQUIPMENT TO BE USED	NUMBER	MONTHLY COST	%
Management Personnel			
Operating Personnel			
Administrative Personnel			
Transportation Equipment			
Radio Equipment			
Computer Equipment			
Other Equipment			
Administrative Expenses			
Other Expenses			
Profits			
TOTAL EXPENSES			100%

AMOUNT: _____

(Amounts in currency and words)

NAME AND SIGNATURE OF RESPONDENT:

PUBLIC BID

No. C3D/089/91

ANNEXES

TECHNICAL SPECIFICATIONS

BIDDER:

Page: 39 of 44

CHARACTERISTICS AND REQUISITE
TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS OFFERED (TO
BE FILLED IN BY THE BIDDER)

ITEM No. VIII. TRUCK SCALE

Truck Scale

A. Amount
1 unit

One unit

a) Name of equipment: truck scale

Truck scale

Capacity: 300 t.

30 Tons

Dimensions of the loading
platform (mm) 3.000 x 10.500

3.000 x 10.500 mm.

Minimum Increment (Kg):

10 Kgs.

Complete
Accuracy (Kg) approx. 10

10 Kgs.

Number of piezoelectric cells:
4

4

Indicator: digital indicator
with sections of fluorescent
indicators tubes. Capability
to print and externally
transmit signals.

Complies (see model SP 23)

Other functions:

Complies

1. Automatic plating from 0.

Complies

2. Equilibrium detection.

Complies

3. Overload detection, etc.

Source of energy: 100V CA =
approx. 10%, 50/60, 30VA

100 V CA + 0, - 10%, 50/60 HZ 30VA

Complementary material:

1. 30,000 tickets

30,000 tickets

2. Sets of tools

1 set

3. Paper recording tape

1 sheet

b) - Brand:
- Model:
- Year of manufacture

KUBOTA
SP 23
1990

TECHNICAL SPECIFICATIONS

BIDDER:

Page: 40 of 44

CHARACTERISTICS AND REQUISITE
TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS OFFERED (TO
BE FILLED IN BY THE BIDDER)

- c) Manuals: the following are to be provided with each unit:
- One item, operating manual in Spanish.
 - One item, repair manual in Spanish.
 - One item, spare parts catalog

All manuals and catalogs will be provided in accordance with requirements.

Note: The manuals and catalogs must fully describe all parts and systems making up the equipment being proposed.

Agreed

Spare parts catalog of the equipment being proposed.

Included

(signature)
REPUESTOS MAQUINARIA AUTOMORES Y EQUIPOS

ITEM No. VIII
TRUCK SCALE

TECHNICAL SPECIFICATIONS

(Continued)-

Page: 41 of 44

ITEM	DESCRIPTION	NUMBER	UNIT PRICE	TOTAL PRICE
VIII	Truck Scale	1	11,500,000	11,500,000
	Total price ex works			10,000,000
	Total FOB port of export (Incoterms 1980)			10,382,200
	Freight and insurance to La Paz			1,117,800
	Total CIF customs in La Paz			11,500,000

Amount: Eleven million five hundred thousands 00/100 Japanese yen

(Amount and currency of quotation in words)

Country of Origin: JAPAN

Date of delivery: CIF customs La Paz 210 days
FOB Japan: 145 days following execution of Contract.

Estimated shipping weight Total 7.050 Kgs.

Estimated shipping dimensions: Total 18 M³

Guarantee period offered: One year

(Signature)
REPUESTOS MAQUINARIA AUTOMOTORES Y EQUIPOS
REMAQ, S.R.L.

0042

ITEM VIII TRUCK SCALE

SPARE PARTS LIST

	NAME	UNIT	UNIT PRICE	AMOUNT
1.	Main P.C.B.	1 pc.	Y 200,000	Y 200,000
2.	Analogue P.C.B.	1 pc.	140,000	140,000
3.	Display P.C.B.	1 pc.	100,000	100,000
4.	Power P.C.B.	1 pc.	80,000	80,000
5.	Load cell BMLS-20T	1 pc.	300,000	<u>300,000</u>
			CIF LA PAZ	<u>Y 820,000</u>

(Signature)
REPUESTOS MAQUINARIA AUTOMOTORES Y EQUIPOS
REMAQ S.R.L.

REMAQ
S.R.L.

REPUESTOS, MAQUINARIA, AUTOMOTORES Y EQUIPOS

LA PAZ, BOLIVIA

ADDITION TECHNICAL SPECIFICATIONS FOR ITEM VIII

Type of platform : A)M-LC-1D (of the type without pit)
B)M-LC-3D (of the type without pit)

Size of platform : 3 x 10.5 m

Indicator and printer : Weight printer, Model SP-23

Capacity : 30,000 Kg

Minimum graduation : 10 Kg

Pass accuracy : 10 Kg

Weight sensor : Short beam load cell, Model BM-LS-20T

Number of load cells : 4 units

Environmental conditions : Platform -20- +5°C
less than 90% R.H.
SP-23, -5- +40°C
less than 85% R.H.

Electric current : 100 Vac, = 10%, 50/60 Hz

Other specifications

Equipment Supplied

1. Platform 1 set (MLC-1D or 3D)
2. Weight printer 1 unit
3. Emrra de cierra 1 piece
4. Load cell 4 pieces
5. Junction box 1 piece
6. Load cell cable 30 m

7. Accessories
 - 1) Tools 1 set
 - 2) Print cards pieces (30.000)
 - 3) Tractor-fold paper 1 sheet
 - 4) Inked ribbon 1 piece
 - 5) Bellows 3 pieces
 - 6) Touch-up paint 1 jar

8. Marine export packing
 - 1) Foundation drawings
 - 2) Installation manual
 - 3) Operating manual

Recommended spare parts

- | | |
|------------------------------------|---------|
| 1. Load cell | 1 piece |
| 2. Printed circuit cards for SP-23 | |
| Main card | 1 piece |
| Analog card | 1 piece |
| Monitor card | 1 piece |
| Power card | 1 piece |

(signature)

REPUESTOS, MAQUINARIA, AUTOMOTORES Y EQUIPOS
REMAQ, S.R.L.

APPENDIX I

EVALUATION CRITERIA

EVALUATION CRITERIA

GARBAGE COLLECTION, SWEEPING AND STREET CLEANING, AND GARBAGE TRANSPORTATION SERVICES

1. EXPERIENCE

The experience will be evaluated in terms of executed contracts as well as those still in progress. The evaluating criteria are outlined below:

A. Completed Contracts

For evaluating purposes, the bidding companies will present a certificate expedited by the official entity. The following parameters will be considered:

1. Average daily tonnage collected,
2. Total tonnage collected in the last 30 years,
3. Total amount of completed contracts,
4. Total work days.

In case one of the bids is presented by a consortium, all the contracts completed by each of the member companies of the consortium will be taken into account when grading the consortium's experience.

B. Contracts in Progress

For the purpose of analyzing the current collection and sweeping contracts, the bidding companies will present a certificate expedited by the official entity for whom the services are being performed.

The grading distribution for each of the bidding companies will be performed in the following manner:

1. Total number of daily tonnage for contracts in progress,
2. Total projected tonnage,
3. Total amount of existing projects,
4. Size of serviced population and number of stops,
5. Type of service performed (residential, commercial, industrial, hospital etc)
6. Maintenance plan

II. FINANCIAL STRENGTH AND CAPABILITY

The bidding companies will present their financial statements or balance sheets for the last three years. Statements should have a final date of December 31, 1990. These statements should be broken down on a yearly basis.

The analyses will be carried out taking into account the financial strength and capability needed to develop the contract proposed. In the case of bids presented by consortia comprised of various companies, the balance sheets for each company will be analyzed separately with a total tally of indicators performed at the end, according to the degree of participation of each of the companies in the consortium.

The factors to be analyzed are:

- A. Liquidity,
- B. Solvency,
- C. Liabilities,
- D. Acid test,
- E. Working capital,
- F. Dead Asset ratio.

III. TECHNICAL PROPOSAL

The technical analysis will be performed on the basis of the following: A. Personnel; B. Equipment; C. Organization and Service Planning; D. Mechanical Maintenance Program.

A. Personnel

1. Administrative Structure

In this area we will analyze the organizational structure and quantity of personnel presented by the bidding company. The parameters to be taken into account are:

- a. Total Administrative Personnel

Total Operations, Maintenance & Supervision Personnel
- b. Total Personnel

Total Projected Collection Tonnages (daily)

- c. Total Personnel X Hours per day

Total daily tonnage to be collected
- d. Organizational chart proposed

2. Personnel Integration

The following parameters will be considered:

- a. Personnel integration plan
- b. Hiring Priority for HAM/Saneamiento personnel,
- c. Personnel Training Program
- d. Possibilities for technology transfer
- e. Uniforms for operations personnel

3. Qualifications of Senior Management

Both experience and academic background (and/or training) of senior management will be taken into consideration. In addition, we will analyze creativity and the innovative spirit of personnel, as well as its capacity to adapt to new circumstances. Within the experience parameters prior contracts for senior management in areas similar or related to the service in question will be analyzed. Training will be evaluated on the basis of academic/professional backgrounds of proposed senior personnel, with particular emphasis on coursework related to Urban Cleaning and/or Solid Waste. The innovative spirit of personnel will be measured by studying its capacity to develop creative solutions to existing problems.

B. Equipment

The equipment proposed will be classified into: Collection Equipment, Sweeping Equipment and Street Cleaning Equipment.

1. Collection Equipment

- a. Total load capacity
- b. Compaction Capabilities
- c. Specifications for the chassis and compaction "box"
- d. Quantity and capacity of Fixed and Roll-on/off containers proposed.

- e. Other types of equipment proposed and any technical modifications needed for use in La Paz.
- f. Total quantity of working and stand-by equipment

The analysis of the collection equipment will differentiate between EMA equipment and bidders' additional equipment proposed.

2. Sweeping Equipment

a. Mechanical Sweeping (if proposed by bidder)

- (1) Type of sweeping equipment to be used
- (2) Equipment manufacturer and spare parts availability in Bolivia
- (3) Necessary modifications to proposed equipment for use in La Paz
- (4) Stand-by equipment

b. Manual Sweeping

- (1) Design of proposed equipment
- (2) Material for production of proposed equipment
- (3) Amount of equipment to be used
- (4) Amount of equipment on stand-by

3. Additional Street Cleaning equipment proposed

- (1) Amount of equipment
- (2) Special use for proposed equipment
- (3) Type of equipment
- (4) Standby equipment

C. Service Structure and Planning

The team will evaluate the organizational aspect of the services proposed with the following parameters as a basis:

- 1. Collection and sweeping service schedules, per zone.
- 2. Collection schedules during peak traffic hours
- 3. Number of trips to disposal sites per vehicle, per day
- 4. Total daily and evening routes, per zone
- 5. Sweeping service plan and design

6. System for collection and gathering of garbage resulting from manual sweeping
7. Program for the use of fixed and roll-on/off containers
8. Container maintenance and cleaning program
9. System proposed for the collection of industrial and other special waste
10. Microenterprise training program
11. Community education and information campaign design
12. Sweeping plan
13. Takeover plan
14. Residential collection plan
15. Internal supervision system
16. Microenterprise integration plan
17. Other items related to collection and sweeping

D. Mechanical Maintenance Plan

Special attention will be given to the evaluation of mechanical maintenance planning. Factors to be taken into account are:

1. Maintenance plan for bidder-owned vehicles
2. Maintenance plan for EMA-owned vehicles
3. General preventive maintenance schedule
4. Fuel and lubricant supply system
5. Daily equipment cleaning system
6. On-route emergency maintenance system
7. Maintenance subcontracting plan (if applicable)
8. Other aspects related to maintenance

IV. Cost Proposal (Price)

The evaluation of the cost proposal will be made on the basis of price per ton collected and the total price of the contract presented in each bid, as determined by the total amount of tons projected by the bidder.

Additionally, the rental fees proposed for each vehicle will be considered.

EVALUATION CRITERIA

OPERATION OF TRANSFER STATION AND LANDFILL

I. Experience

The experience of the firms will be evaluated with the following parameters in mind:

A. Characteristics and Experience of Senior Management

The experience and training of senior management will be analyzed, as well as the innovative spirit of personnel and its capacity to adapt to unusual circumstances. Within the experience parameter we will analyze prior work performed by senior management in areas similar to the object of the bid. The training component will be evaluated taking into account the academic background and coursework of candidates for each management position, with special emphasis on the organization of urban cleaning and/or solid waste management entities. We will measure the innovative spirit of management personnel by studying its capability to develop creative solutions to existing problems.

The experience of senior management will be measured according to the following:

1. Type of engineering work performed
2. Length of each engagement
3. Relevance of previous experience to transport and land movement disciplines
4. Length of experience in management of transfer stations and landfills.

B. Experience of the Firm

1. Previous engagements where land movement has been performed
2. Management and operation of landfills as described in the certifications requested
3. Management and operation of transfer stations as described in the certifications requested
4. Contracts for transportation of goods
5. General handling of garbage and solid waste

In the case of bids proposed by joint ventures (asociaciones accidentales), the experience will be analyzed for each of the firms which comprise the joint venture.

II. Financial Capability

This parameter must be analyzed in a manner that will allow us to study the financial indicators of the firm from a historical perspective. With this in mind, we requested financial statements for the last three years ending the 31st of December of 1990. These shall be presented on a yearly basis.

The analyses will be carried out taking into account the financial strength and capability needed to implement the proposed contract. In the case of bids presented by consortia comprised of various companies, balance sheets for each company will be analyzed separately with a total tally of indicators performed at the end, according to the degree of participation of each of the companies in the consortium.

The factors to be analyzed are:

- A. Liquidity
- B. Solvency
- C. Liabilities
- D. Acid test
- E. Working capital,
- F. Dead Asset ratio.

III. Technical Proposal

A. Transfer Station Operations

1. Organization of unloading of collection vehicles (general traffic plan).
2. Organization of load and transport vehicles
3. Transfer station traffic plan
4. Proposal for organization during peak hour traffic
5. Cleaning and maintenance systems for station facilities, trailers and other equipment
6. Trailer routes
7. Time studies for unloading at, and transportation to the landfill
8. Neighbor relations proposal
9. Possibilities for technology transfer

10. Organization and quantity of personnel proposed
11. Environmental protection system

B. Landfill Operations

1. General work plan
2. Control and supervision systems
3. Organization of vehicle unloading
4. Emergency plan
5. Additional equipment
6. Environmental protection plans
7. Personnel structure
8. Quantity of personnel
9. Personal and workplace safety plan
10. Other aspects related to the landfill operation

C. Mechanical Maintenance

1. Maintenance plan for bidder-owned vehicles
2. Maintenance plan for EMA-owned vehicles
3. General preventive maintenance schedule
4. Fuel and lubricant supply system
5. Emergency repair and maintenance system
6. Maintenance subcontracting plan (if applicable)
7. Other aspects related to maintenance

IV. Cost Proposal (Price)

The evaluation of the cost proposal will be made on the basis of price per ton collected and the total price of the contract presented in each bid, as determined by the total amount of tons projected by the bidder.

Additionally, the rental fees proposed for each vehicle will be considered.

EVALUATION CRITERIA

SUPERVISION OF GARBAGE COLLECTION SERVICES, SWEEPING AND STREET CLEANING, AND TRANSPORTATION AND DISPOSAL OF SOLID WASTE

I. QUALITY OF THE PROPOSAL

The evaluation points presented below correspond to the methodology used for proposals.

The following parameters should be considered:

A. Equipment to be utilized

1. Proposed field work vehicles
2. Proposed communications equipment
3. Proposed hardware systems
4. Proposed software
5. Additional equipment for the weighing of residues/solid wastes
6. Other proposed equipment

B. Proposed Workplans

1. Workplan for the supervision of collection and sweeping operations.
2. Workplan for the supervision of landfill operation.
3. Workplan for the supervision of the transfer station operation.
4. Reports and information systems regarding the implementation of the contracts.

II. TECHNICAL CAPABILITIES

In this area of the evaluation, we will analyze the experience and training of proposed personnel.

A. Senior Management

We will analyze the training and experience of senior management of the bidder, or bidders in the case of a consortium. The experience of each senior manager will be analyzed based on projects previously performed in areas similar or related to the service in question.

We will analyze the training of senior management in terms of their respective academic backgrounds and

coursework. Special consideration will be given to prior training in institutional organization in the field of sanitation and/or solid waste.

B. Professional and Technical Personnel

We will analyze the training of the technicians and other professionals to be incorporated into the firm.

At the same time, we will verify that each individual presented in the proposal complies with the requisites set-forth in the bid document for each specific title.

C. Experience of the Firm

We will analyze the various types of projects performed by the firm and their relevance to the services in question.

Special attention will be focused on the firm's experience in the area of contract supervision, with preference given to those projects related to the services placed under bid.

We will study the experience of the firm in the implementation of engineering works related to the movement of land and/or transport engineering.

III. OPERATIONS

The following areas will be analyzed:

A. Financial Capability

1. Liquidity
2. Solvency
3. Working capital
4. Acid test

B. Organizational Structure

1. Organizational/operational flow chart
2. Operational structure of the firm
3. Internal control system
4. Additional organizational elements

APPENDIX J

LIST OF INTERVIEWS

List of Interviews

Municipality of La Paz:

Mayor of La Paz, Mr. Ronald Mac Lean Abaroa
Senior Technical Officer, Mr. Guido Loayza
Senior Administrative Officer, Mr. Jaime Larrazábal
Senior Cultural Affairs Officer, Mr. Carlos Rosso
Director of Urban Cleaning, Mr. Sergio Arenas
Director of Human Resources, Mr. Luis Salamanca
Director of Communications, Mr. Enrique Eduardo
Director of Urban Improvement, Mr. Valdivia

Lawyers: Bufetes Asociados

Dr. Rodolfo López del Solar
Dr. Luis Fernando Palza Fernández

Contracting Agency: Caisse des Dépôts et Développement (C3D)

Resident Director, Mr. Hugo de la Rocha Cardozo
Manager Goods and Services, Mr. Horacio Paz Soldán

Embassy of Japan:

Mr. Jorge Omoya
Mr. Atsushi Kamishima, Third Secretary

PR Companies:

ECCO Publicidad, Director General, Mrs. María Angélica de Calvo
GUIÓN Publicidad, General Manager, Mr. Mauricio Quiroga

Survey Company: Encuestas y Estudios

General Manager, Luis Alberto Quiroga

ASOBUR:

General Manager, Mr. Gastón Mejía
Other ASOBUR members

APPENDIX K

MAINTENANCE FORM

**CITY OF PHOENIX
DAILY VEHICLE CHECK LIST**

DATE _____

X DEFECTS ONLY

Operator _____ Trailer # _____
Equip # _____ Miles/Hours # _____

X DEFECTS ONLY

Equip Status _____ Up On _____
PM Due _____ Yes No _____
Emission Due _____ Yes No _____

BEFORE ENGINE START							
	S	M	T	W	T	F	S
Coolant Level/Cap							
Engine Oil							
Power Steering Fluid							
Belts/Hoses/Wiring/Etc.							
Brake Fluid							
Batteries/Holddowns/cables							
Hydraulic fluid							
Air Filter							
Fluid Leaks							
PM Sticker							
Registration/Plates/ State Emission Certification							
Fire Ext., Flare, First Aid Kit*							
Accident Packet							

AFTER ENGINE START							
	S	M	T	W	T	F	S
Gauges							
Fuel Level							
Horn *							
Wiper Operation *							
Heater/Air Conditioner Operation							
Seats/Seat Belts *							
All Lights *							
Tire/Wheels/Lug Nuts							
Mirrors *							
Body Damage							
Auto Transmission Fluid							
Close Air Tanks							
Clutch Free Play 1/2" - 1 1/4"							
Heavy Equip./PTO & Related Functions							
Back up Alarm *							
Steering Check (Rolling) *							
Brake Check (Rolling) *							

TRAILERS							
	S	M	T	W	T	F	S
Truck/Trailer/hitch *							
Elect Connector/Lights *							
Tires/Wheels/Lug Nuts *							
Breakaway Switch/Battery *							
Wheel bearing Oil/Caps							
Tie Downs/Flamps *							
Registration/Plates							

AUXILIARY ENGINE							
	S	M	T	W	T	F	S
Oil Level							
Coolant Level/Cap							
Belts/Hoses/Wiring/Etc.							
Hydraulic Fluid							
Battery							
Check Engine Operation							

I certify that all required checks have been made and noted defects reported.

OPERATOR

Operation of this unit with defects requires supervisor's approval. I authorize the use of this vehicle with the noted defects.

FOREMAN or SUPERVISOR

* End of SMS Checklist on Reverse