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**Report No. 1
Tender Evaluation
Criteria**

**Solid Waste and Public
Clean-Up Project
Governorate of Alexandria,
Egypt**

**USAID Contract LAG-I-
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April 19, 2000

Prepared for
Governorate of Alexandria, Egypt
and
United States Agency for
International Development

Prepared by
Abt Associates Inc.
The Institute for Public-Private
Partnerships

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REPORT NO. 1
TENDER EVALUATION CRITERIA

Solid Waste and Public Clean-Up Project
Governorate of Alexandria, Egypt

INTRODUCTION

The Tender Evaluation Committee (TEC) appointed by the Governorate of Alexandria (GOA) has been given the responsibility of evaluating all tenders received for the solid waste and public clean-up project. The TEC will select that firm or firms whose proposed plan offers the highest probability of fulfilling the waste management and other public clean-up objectives of the GOA in both a cost effective and environmentally responsible manner.

The purpose of this document is to provide the TEC with a tool for facilitating and standardizing their evaluation of multiple complex and detailed tenders. The goal therefore of the Technical Assistance Providers (TAP) has been to develop and format technical and financial evaluation criteria and supporting rationale in a manner, which will assist the TEC in providing an equitable and transparent comparison of competing tenders.

TECHNICAL EVALUATION CRITERIA

The process for the TEC evaluation of tenders is described in Section 2-9-1 of the *Book of Conditions and Specifications*. The process will begin with the opening of the envelope comprising the technical tender. The *Book of Conditions and Specifications* requires the inclusion of several documents in the technical tender envelope. To assist the TEC in the process of ascertaining if all required documents are included, the TAP has provided Table 1, Technical Evaluation Checklist.

The technical tenders that include the documents required in Table 1 will then be submitted for review by the TEC. The Committee will attach major importance to the tenderer's technical and operating potential and their effectiveness as revealed through the plan of work submitted.

To facilitate the work of the TEC, the proposed technical evaluation criteria are provided in a format that adopts the nomenclature assigned to each service to be provided by the contractor as listed in Section 5-2 of Article –5 of the *Book of Specifications and Conditions*. Technical evaluation criteria accompany each requirement prescribed in these, as well as Sections 4-3, Work Plan and 5-4, Supervision and Reports. While a concerted effort has been made to incorporate all of the major requirements prescribed in each of these sections, the TEC should be aware that the minor and less well-defined requirements might not have been addressed.

All of the services to be provided (with the exception of closing the existing dumps) under the Solid Waste and Public Clean-Up Project Contract are included within the following service categories described in Section 5-2:

- 5-2-1 Wastes Collection Services
- 5-2-2 Sweeping and Cleansing Services
- 5-2-3 Collecting Medical Wastes Collection Service
- 5-2-4 Industrial Wastes Collecting Service
- 5-2-5 Rehabilitation, Outfitting, and Operation of Existing Composting Facilities
- 5.2-6 Establishment, Outfitting, and Operation of the Center for Treatment of Medical Wastes
- 5-2-7 Establishment, Outfitting, and Operation of the Sanitary Landfill
- 5-2-8 Closure of the Existing Dumps

The Detailed Specifications of Services imposes clear technical requirements for plans that address the types and levels of services desired in each of these service areas. The suggested criteria can be used by the TEC to assist it in evaluating the extent to which these and other major service requirements have been met, and thereby facilitate comparison between competitors for each service category.

In order to facilitate the TEC's review, a technical weighting and scoring system has been included as Table 2 at the end of this report. The TEC should review the weighting and scoring system and define weighting values for each of the requirements and service categories prior to beginning the evaluation process discussed on Page 24 of this report.

5-2-1 Waste Collection Services

First: Household and Domestic Waste Collecting Service --

5-2-1.1 Requirement: *Wastes shall be collected from public places accessible to wastes and garbage removing trucks, within containers, receptacles, or plastic bags, or any other receptacles not contradicting with other conditions of the contract.*

1. Has the tenderer selected trucks on a zone by zone basis that maximizes the ability to collect at each dwelling (apartment) unit rather than waste pooling sites?
2. Do the types, styles, and sizes of all containers or receptacles specified facilitate proper usage, provide sanitary storage, and minimize potential for littering?
3. Does the work plan for the preparation stage indicate how the tenderer will employ, train and satisfactorily house the necessary work force, purchase and receive trucks and containers, rehabilitate/construct new running centers, and train administrative staff within the six month time period allowed?

4. Does the execution stage work plan describe the collection system management framework the number, type, and capacity of trucks to be deployed and their prescribed routes, and the level of labor force, by zone and district?
5. Does the execution work plan prescribe and justify the use of any transfer sites that may reduce transportation costs, traffic impacts, and/or air emissions?
6. Does the organizational framework facilitate efficient record keeping and monthly reporting of the kinds and quantities of domestic wastes collected through the use of state of the art data processing and transmitting equipment?
7. Does the work execution plan propose performance standards and monitoring for customer relations and quality of service?
8. What tracking or monitoring mechanism will be used to ensure that collection personnel are following proper procedures?
9. What measures and equipment will be used to reduce collection noise impacts, especially during nighttime hours?
10. Do the equipment and labor force tables adequately address how the tenderer will respond to both the summer and the expected two percent annual increase in population and waste generation?
11. Does the structure of the work plan encourage the greatest practicable amount of participation by local firms?
12. Does the work plan adequately address the requirement to employ not less than fifty percent of the present Governorate collection work force, bear the cost of wages, and social, risk, and meal allowances?
13. Do the preparation and execution work plans contain a strategy to optimally integrate and utilize the equipment, vehicles, and spare parts that are purchased from the GOA?
14. In summary, how well does the domestic waste collection work plan proposed improve cost-effectiveness and system efficiency, protect public and environmental health, and respond to citizen and GOA needs?

5-2-1.2 Requirement: *In those places that are not accessible to collection trucks, wastes shall be placed by individuals in the waste pooling sites provided by the contractor in the work plan and approved by the GOA.*

1. Has the tenderer selected collection vehicles that will minimize the need for residents to carry waste to centralized pooling sites?
2. Where deemed appropriate, are the containers specified for the pooling sites of adequate size, usability, and functionality to optimize legitimate usage and minimize insect, rodent, odor, and litter problems?

3. Does the work plan reflect an adequate degree of acquaintance with streets and housing conditions to identify those areas requiring waste pooling sites, and the appropriate levels of manpower and equipment to service them in accordance with the specifications?

5-2-1.3 Requirement: *Containers shall be emptied without leaving any traces of wastes on the ground.*

1. Do the types of trucks specified facilitate transfer of waste from containers into the truck body without spillage or blowing of material?
2. Does the work plan ensure that worker training and supervision will emphasize instructions to pick up any loose material present or that they spill?
3. Does the management framework proposed in the work plan facilitate the oversight required to maximize compliance with this example setting (to the public) specification?
4. Does the work plan include a strategy for working with the informal sector to minimize the scattering of wastes that results from their sorting through pooling site containers?
5. Does the tenderer have a strong environmental record that demonstrates commitment to solving environmental issues?

5-2-1.4 Requirement: *It is absolutely forbidden to place any waste or objects inside or on the truck that might lead to scattering on the ground.*

1. Does the tenderer's work plan recognize that this requirement essentially precludes scavenging or storage of materials anywhere other than in the enclosed cargo area of the truck body?
2. Will the tenderer's supervisory framework facilitate identification of violations of this requirement and consider making non-compliance possible grounds for dismissal or other sanctions?

5-2-1.5 Requirement: *Collection teams shall report any incident that might have caused damage to third party property.*

1. Are the collector and/or supervisor's trucks to be equipped with radios to expedite emergency communication?
2. Will formal accident reporting forms be available on every truck?
3. Will management oversight facilitate identification of any violation of any reporting requirements and consider them as possible grounds for dismissal?

5-2-1.6 Requirement: *The contractor shall have waste carrying area of each collection truck washed at least once per week.*

Has the tenderer made management and equipment provisions in the preparation and execution work plans necessary to both facilitate and ensure compliance with the once per week washing schedule?

1. Has the tenderer indicated that it will be included in the truck driver job description or be performed by washing specialists?
2. Does the work plan include adequate provisions for the control and treatment of truck wash water that will ensure the protection of the environment surrounding washing facilities?

5-2-1.7 Requirement: *Waste collection trucks shall be closed and covered.*

1. Does the tenderer's work plan demonstrate every reasonable effort to maximize the procurement and implementation of fully enclosed compaction type vehicles and provide for closure/coverage of any open trucks that can be justified?
2. Does the work plan describe a supervisory and monitoring plan that appears to ensure worker compliance with this requirement?

5-2-1.8 Requirement: *The contractor is responsible for container placement and shall submit his proposal to the GOA indicating the sizes and kinds of containers that are suitable for different uses.*

1. Do the preparation and execution stage work plans suggest that detailed studies of the local conditions and nature of wastes in each district of the GOA have provided the basis for all decisions regarding number, type, and size of containers? Provision of assumptions, basic data and methodology used to develop container requirements should be included in order to judge the probability of compliance with performance specifications.
2. Do the proposed work plans include container procurement and delivery strategies, as well as inventory, maintenance, and replacement schedules that will ensure container placement compliance with all prescribed preparation and execution time schedules?

5-2-1.9 Requirement: *The contractor shall submit a program for monitoring, controlling, washing, sterilizing, and otherwise maintaining the containers to ensure their preservation and long useful service.*

1. Does the tenderer's work plan include container specifications that can be reviewed to assess container durability and life expectancy taking into account their expected level of usage and the local environmental conditions?
2. Has the tenderer specified containers that can withstand the exposure to marine atmosphere and the high organic content of the Alexandria waste stream?
3. Will sanitation and maintenance occur at the point of container placement or at a central facility, and in either case, have adequate wash water control procedures been described?

4. Does the tenderer's work plan rely on usage of any insecticides or other cleaning agents that might be harmful to employees or the public?
5. Does the proposed washing frequency take into account the nature of the wastes that will be placed in the container and its location relative to pedestrian traffic, households, and/or commercial businesses?
6. Does the work plan contain provisions to increase the sanitation frequency during the summer months?
7. Does the track record of the tenderer document commitment to minimizing environmental impacts associated with his operations?

5-2-1.10 Requirement: *The contractor shall take into consideration the population increase in the summer season.*

1. Do the preparation and execution work plans for the summer months reflect an in depth understanding of the nature, volume, and specific locations of the increases?
2. Does the execution work plan provide for allocation of a sufficient increase in the number of drivers, trucks, maintenance personnel, and containers?
3. How does the work plan address enlistment and phase in/out of the appropriate level of temporary labor, equipment, tools, drivers, administration, and management?

Second: Collecting Different Wastes and Garbage--

5-2-1.11 Requirement: *The contractor shall provide adequate numbers of trucks, equipment, and containers to collect oversized furniture, appliances, building debris, automobile parts, and any other rubble thrown on sidewalks or streets.*

1. Does the proposal provide a detailed work plan for allocating the appropriate level of labor and vehicular resources to provide expeditious collection of oversized furniture, appliances, building and yard debris, and automobile parts?
2. Will the vehicles selected by the tenderer to provide this service be able to drive to dwelling units located on any type of road or street?
3. Have provisions been made for lifting/loading articles that cannot be safely loaded manually?
4. Have appropriate provisions been made at transfer sites and the sanitary landfill for receiving and handling these materials?
5. Will the administrative organization and policies proposed by the tenderer facilitate requests for service, expedite scheduling, and provide for accurate record keeping and reporting of the types and quantities of each type of special waste collected?

6. Has the tenderer demonstrated a commitment to divert any of the materials from disposal through reuse, repair, or recycling programs?

5-2-2 Sweeping and Cleansing Services

First: Mechanical Sweeping Service --

5-2-2.1 Requirement: *The contractor shall provide mechanized sweepers in adequate sizes and capacities with proven abilities in previous projects for all main streets and autostrads.*

1. Do the tenderer's preparation and execution work plans for procuring and deploying the appropriate number, type, sizes, and routing of mechanized sweeping trucks per shift account for the nature of the wastes and the unique street conditions found in each zone?
2. Does the mechanized sweeping fleet management structure facilitate deployment, oversight, a high level of work performance, accurate record keeping and reporting, responsiveness to complaints, and overall high performance in every zone?
3. Does the tenderer have sufficient purchasing, operational, and maintenance experience with each type of equipment selected under similar street layout, litter levels, and weather conditions to justify its application in Alexandria?
4. Has the tenderer selected equipment suitable to accommodate the large size, weight, and number of objects found in the streets and roadways of Alexandria?
5. Does the tenderer's equipment maintenance program include parts inventory, preventative maintenance schedules, and replacement plans for each type of mechanized sweeping equipment selected?
6. Does the preparation work plan include adequate staffing and training of new equipment operators and maintenance personnel within six months to operate and maintain sweepers efficiently and safely without potential risks to public safety and property?
7. Does the work plan describe proposed performance standards, and the tracking mechanisms that will be used to ensure that sweeper operators follow proper procedures?
8. Does the work plan propose innovative approaches for reducing sweeping noise impacts, especially during night shifts?
9. Does the work plan for mechanized street sweeping encourage the greatest practicable amount of participation by local firms and local employment opportunities?
10. Does the work plan include provisions to use the mechanized sweepers as an additional means of promoting GOA clean-up project objectives through use of signs attached on the sides of the street sweepers?

5-2-2.2 Requirement: *The contractor shall clearly indicate in the plan of work the itineraries and accompanying schedules of the mechanized sweeping trucks on detailed maps of the GOA.*

1. Are the proposed schedules and itineraries realistic and based on careful studies of conditions in each zone and do they specify quantifiable expected results that maintain street cleanliness at a level acceptable to the Governorate?
2. Has the tenderer proposed management framework and record keeping systems that will allow timely identification and implementation of itinerary and schedule changes to accommodate increased or decreased service needs?
3. Has the tenderer taken into account the vehicular and pedestrian traffic patterns unique to Alexandria in a manner that will optimize sweeping efficiency without compromising the safety of Alexandria drivers and pedestrians?
4. Does the tenderer's plan of work include special provisions to accommodate the increased impediments and service needs of religious and other holidays and the summer tourist influx?

5-2-2.3 Requirement: *The contractor shall use vacating and dumping stations to supply water for, and allow dumping of, the mechanized sweepers to minimize long travel distances.*

1. Does the tenderer's plan of work provide practical justification for the number, type, size, and location of these stations that takes into account the nature and volumes of litter expected in each zone?
2. Does the preparation work plan address how the tenderer will procure the equipment, supplies and manpower, and complete construction of the dumping stations within the six-month implementation time period?
3. Is the plan for collection and transfer of wastes dumped at the stations adequate to preclude offensive odors, attraction of rodents and/or insects or any other nuisances associated with prolonged storage?
4. Are the stations integrated into the universal service plan in a way that will optimize their utility by supporting other cleansing activities?

Second: Manual Sweeping and Garbage Pick-up Service --

5-2-2.4 Requirement: *The contractor shall set forth a clear plan determining the itineraries of manual sweeping and garbage pick-up workers taking into account the nature of the districts, streets, and commercial or residential density.*

1. Is the determination of the number, placement, and routing of the manual sweepers based on detailed studies of the particular conditions existing in each of the zones and have the decisions been made with the objective of complimenting the mechanized service?
2. Does the execution work plan provide a management framework that will optimize labor supervision, provide efficient sweeping tools and equipment, and use modern data processing techniques for recording and reporting the compatibility of performance with requirements?

3. Does the preparation work plan contain a strategy for integrating at least 50 percent of the current sweeping force with an appropriate number of additional sweepers, and how they are to be recruited, equipped, trained, housed, compensated, and managed?
4. Have the manual sweeping activities been integrated with waste collection and/or mechanized sweeping in each zone in a way that will optimize overall street sweeping and washing performance and cost effectiveness?
5. Does the work execution plan address the management and administrative procedures required for provision of monthly reports to the GOA that include detailed information on the miles of streets swept and/or washed, the quantity of street sweepings collected, and overall compliance with contract technical and operational requirements?
6. Does the work plan describe what tracking or monitoring mechanism will be used to ensure that sweeping personnel are following proper procedures?
7. Does the work plan propose performance standards for the quality of service?

5-2-2.5 Requirement: *The contractor shall render the manual sweeping and garbage pick-up service seven days a week on main roads and highways, six days per week on internal roads and passageways, and during all ordinary work hours in open commercial markets seven days per week.*

1. Does the tenderer's work plan provide adequate details regarding deployment of a sufficient number of manual sweepers to achieve and maintain street cleanliness in every zone on a daily basis?
2. Does the work plan illustrate that the tenderer is fully aware of, and has taken into account the dense foot and vehicular traffic that must be contended with in the open commercial markets?
3. Have adequate provisions been made for aesthetic and sanitary storage of accumulated sweepings until they can be removed?
4. Does the work execution plan assure recognition of the special importance of cleaning the open general commercial markets and allocate the resources required to have sweepers on duty throughout the ordinary working hours seven days per week?

5-2-2.6 Requirement: *The contractor shall provide additional teams for manual sweeping and picking up garbage within the scope for houses of worship, public gardens, hotels, and restaurants on Fridays, Sundays, and religious holidays.*

1. How does the tenderer propose to assess the need, obtain, and deploy the level of increased staff necessary to service those locations experiencing increased visitation, use, and generation of street litter?
2. Has the tenderer allowed for the increased travel time required during these periods to provide service and remove collected material to transfer stations or the disposal site?

5-2-2.7 Requirement: *The contractor shall submit in his proposal the determination of places and spots where garbage baskets should be placed.*

1. Does the tenderer's proposal include adequate justification for the number, type, size, and location of garbage baskets that takes into account the historical and expected future volume of pedestrian traffic in each service sector?
2. Has the tenderer responded to the desire of the GOA to widely promote garbage basket usage (versus littering) by offering baskets that motivate and facilitate their usage through their positioning and invitation to use?
3. Do the work preparation and execution plans include provisions to aggressively promote increased public usage of the garbage baskets through attractive signage on baskets, sweeper uniforms, and collection trucks?

5-2-2.8 Requirement: *The contractor shall provide sweeping and garbage pickup workers attractive uniforms and the necessary tools to enable them to perform their work most satisfactorily.*

1. Do the tools proposed to equip manual sweepers facilitate performance of their work with increased worker safety and morale, and reduced injury rates?
2. Are the tools selected appropriate to accommodate the street layout, vehicular traffic habits, pedestrian volumes, and littering habits unique to Alexandria?
3. Will all manual sweepers be provided adequate training and supervision, multiple uniform styles to accommodate seasonal variations in weather, and compensation/benefits that motivates high performance and long-term employment?
4. Does the work plan describe the tracking and monitoring mechanism to be used to ensure that sweepers follow proper procedures and perform their duties as directed?

Third: Beach Clean-Up--

5-2-2.9 Requirement: *The contractor shall maintain all areas of sand beaches clear of any wastes and scattered garbage by using suitable tools and containers, garbage pickup work teams, and mechanical combing machines.*

1. Has the tenderer conducted a detailed survey of all public beaches to support the type of tools; number, type, and size of containers; and type of combing machines selected, and have they cited previous experience using the same?
2. Does the execution work plan provide a management structure, employee supervision procedures, record keeping, and reporting procedures that have the potential to achieve and maintain the cleanliness specifications of the contract?
2. Has the tenderer demonstrated the experience required utilizing the tools, containers, and combing machines in similar applications?

3. Does the execution plan address how accumulated beach clean up wastes will be aesthetically and safely stored, and how they will be expeditiously removed to the transfer stations or disposal sites?

5-2-2.10 Requirement: *The contractor shall take into consideration increased beach usage during weekend holidays, feasts, official holidays, and June through September, and shall lay a plan to perform the cleansing works daily during these periods to ensure a high level of cleanliness.*

1. Does the preparation work plan for these increased usage periods demonstrate a comprehensive understanding of the types and volumes of wastes that are generated on each Alexandria beach?
2. Does the work execution plan include increased deployment of manpower and equipment sufficient to accommodate the increased service requirements expected?
3. Will the increased level of service be provided in a manner that will not impede public usage of beach areas or jeopardize public safety?

Fourth: Cleansing the Tunnels and Bridges--

5-2-2.11 Requirement: *The contractor shall submit a work plan providing for the machines and equipment necessary for maintaining the cleanliness of tunnels and bridges.*

1. Does the tenderer have sufficient experience under similar conditions cleaning tunnels and bridges using the same machines, equipment, and cleaning techniques proposed in their work plan?
2. Does the execution work plan describe a management and supervisory framework, labor force numbers and skills, vehicles and equipment types and numbers, work shift scheduling, and work record keeping and reporting that appear capable of maintaining all bridges and tunnels at the level of cleanliness desired by the GOA?
3. Does the work execution plan address logistics for safe application, containment, and removal of all cleaning liquids, and removal of any solid residue?
4. Does the work plan ensure that public health and safety will not be compromised by the cleaning techniques proposed?
5. Will cleaning be done on work shifts and at times when the impact on traffic flow will be minimized?

Fifth: Cleansing the Statues, Memorials, and Fountains--

5-2-2.12 Requirement: *The contractor shall perform cleaning works for statues, memorials, and fountains existing within the scope of the contract once a month with the stands and bases of marble and tile statues being cleaned every two weeks.*

1. Has the tenderer demonstrated sufficient experience doing similar work in similarly sized metropolitan areas?
2. Does the work plan demonstrate that the tenderer has performed a detailed investigation and inspection of the number, type, size, and condition of all statues, memorials, and fountains in the GOA?
3. Does the execution plan include information addressing water supply needs, types of cleaning agents to be applied, hours of cleaning, logistics of wash water and residue removal, and any impositions on public visitations?

Sixth: Removal of Dead Animal Bodies--

5-2-2.13 Requirement: *The sweeping teams shall immediately remove the dead animal bodies they find on the roads and streets.*

1. Does the work execution plan include provisions for animals too large for manual removal, odor control, sanitizing procedures, protection of public health, and expedited removal to the transfer stations or disposal sites?
2. Will sweepers be provided with formal training, specific safe handling instructions, and the communication capabilities to expedite sanitary and safe dead animal removal?

5-2-3 Medical Waste Collection Services

5-2-3.1 Requirement: *The contractor shall provide transport of medical wastes from hospitals, dispensaries, laboratories, and other medical activities to the medical waste treatment center and shall provide a plan for collecting all medical waste that includes safety instructions, collection methods, description of the containers to be used, the means of transport, and protective tools and clothing.*

1. Does the tenderer have a proven track record in the specialized field of collecting medical wastes in a similarly sized metropolitan area and under similar conditions?
2. Do the work preparation and execution plans suggest that the tenderer has conducted a comprehensive survey of the sources of medical wastes to ascertain storage location and practices, and a reasonable estimate of the types and quantities of medical wastes that will require collection?
3. Do the work preparation and execution plans propose procurement and allocation of appropriate management skills and framework, adequate levels of labor training and deployment, specialized collection vehicle routing, proposed containerization techniques, and adequate safety clothing and equipment to expect execution of this service in a manner that achieves performance objectives without compromising worker and public health?
4. Does the work plan address each element of the above requirements in adequate detail as well as the training of medical facility and collection truck workers, and plans for cleaning of the collection vehicles?

5. Does the work execution plan include employment of state of the art data processing equipment and medical waste tracking procedures that will expedite instantaneous and summary monthly reporting to the GOA on the quantities, types and ultimate disposition of all medical wastes collected from each generator?

5-2-3.2 Requirement: *The contractor shall submit to the GOA a table indicating the kinds and specifications of boxes and bags to be used in collecting medical wastes.*

1. Has the tenderer provided adequate justification for the types of bags and boxes specified based both on the criteria of price and performance?
2. Will the tenderer offer appropriate bags and boxes for sale to all medical waste generators at prices that will motivate their widespread purchase and use?

5-2-4 Industrial Waste Collection Service

5-2-4.1 Requirement: *The contractor shall carry out a comprehensive survey of industrial zones to determine the quantities and kinds of wastes resulting from these areas.*

1. Do the work preparation and execution plans suggest that a survey was conducted in the comprehensive manner required to accurately identify adequate resources to perform this service in each sector as prescribed?
2. Do the work preparation and execution plans include lists of the number, size and type of containers; how they will be procured and distributed; and how often they will be serviced for the price proposed for the entire period of the contract?
3. Has the tenderer made an allowance for use of waste containers already in use at some industries?
4. Has the tenderer taken into account the specialized storage and transportation needs associated with special industrial wastes such as fine metal and chemical powder and dust?
5. Has the tenderer addressed how he will communicate with each industry to determine what constitutes a “suitable” container and collection schedule that meets the needs of the industry without negatively impacting operations or worker safety?
6. Does the execution plan prescribe employment of modern data processing and information transmitting equipment that will expedite efficient service provision, operations management and inventory control, container distribution, and reporting of types and quantities of industrial waste collected to the GOA on a monthly basis?

5-2-4.2 Requirement: *Household and domestic waste from industrial sites shall be stored in separate containers and collected by compaction trucks seven days per week.*

1. Does the work execution plan address procedures for truck drivers to follow that will ensure identification and reporting of violations of mixing industrial and household/domestic wastes?

2. Does the work execution plan address the proposed means to ensure that hazardous wastes are not included with either the household/domestic or industrial wastes?

5-2-5 Rehabilitation, Outfitting, and Operation of Existing Composting Facilities

First: Determination of Services--

5-2-5.1 Requirement: *The contractor shall identify in the charts attached to the tender documents what services he will provide and the machinery and equipment he will supply for rehabilitation, operation, and maintenance of the three existing composting facilities.*

1. Do the preliminary drawings submitted demonstrate that adequate research and inspection of the existing facilities, equipment and operations has been conducted to justify the rehabilitation plan proposed?
2. Do the work preparation and execution plans demonstrate sufficient experience in the operation of composting facilities similar in size and proposed processing technique, for the type of incoming waste found in Alexandria?
3. Does the work plan include detailed descriptions of the number, qualifications and fields of specialization of the labor force prescribed, the methods proposed for their recruitment and training, and their safety and security?
4. Is the length of time proposed to rehabilitate each composting facility provided and will rehabilitation require diversion of wastes?
5. Does the composting process proposed result in optimal usage of the facilities (i.e., maximizing the quantity/value of waste recovered at an acceptable cost)?
6. Does the work plan describe in detail the equipment and processing techniques that will be used for odor control?
7. To what extent does the tenderer optimize the integration of the skills and experience of existing management and technical personnel into the new operations?
8. Does the work execution plan for operation and maintenance appear to be capable of keeping the plant in production at least 90 percent of the time?
9. Does the execution plan state how much of each waste stream type will be diverted to each facility and what levels of recovery will be guaranteed at each?
10. Does the work execution plan prescribe operations that will apply manufacturing principals to ensure that output quality is given a high priority in order to maximize the value and total revenue received?
11. Has the tenderer conducted a comprehensive investigation of material markets and determined that long-term arrangements can be made for the sale of each of the materials to be recovered?

12. To what extent has the work plan for rehabilitation been structured to encourage the greatest practicable amount of participation by local firms and employment opportunities for local skilled and unskilled labor?

Second: Weighing the Wastes and Result of Sorting Works--

5-2-5.2 Requirement: *Wastes shall be weighed before entering each composting facility and all rejects and resulting wastes after treatment shall also be weighed.*

1. Does the work execution plan adequately address monitoring and recording techniques of the types, sources, and amounts of incoming wastes received and an automated record keeping system to account for and produce daily and monthly reports on each input/output stream at each composting facility?
2. Does the work plan include a practical contingency to maintain weights of all incoming and outgoing material on those occasions when the existing scales are inoperable?
3. Will the tenderer implement and utilize a state of the art processing system control and information management technology that will expedite positive changes in plant operations based on changes identified from equipment monitoring and the mass balancing of various input and output flows?

Third: Lands and Installations--

5-2-5.3 Requirement: *The contractor shall assume the maintenance of the sites delivered to him by the GOA at his own expense and shall keep them in good condition during the whole contract period.*

1. Does the proposed work plan convey a cooperative style and specify a good faith process for working with the GOA to develop a mutually acceptable and practical definition of “good condition”?
2. Do the work preparation and execution plans include procurement of proficient maintenance equipment and skilled labor?
3. Are maintenance schedules proposed that are capable of maintaining each composting facility at a high level of performance while optimizing the useful life of all equipment and leaving them in a mutually acceptable definition of good condition?
4. Does the tenderer’s work plan yield a level of confidence that he will make necessary capital improvements to optimize composting facility performance rather than choose the alternative of minimizing investment and operating at a minimally acceptable performance level?

Fourth: Services Execution Conditions--

5-2-5.4 Requirement: *The contractor shall assume the operation and maintenance of composting facilities and all equipment and installations related thereto in his total responsibility and at his own expense.*

1. Has the tenderer indicated any intent to take exception to these terms especially as it relates to liability for any existing conditions?

5-2-5.5 Requirement: *The installations shall remain in a condition of total cleanness.*

1. Does the work plan provide a detailed and practical plan for maintaining all health and safety conditions, as well as compliance with all pertinent GOA and EEAA environmental regulations in force at the present time?
2. Does the work plan adequately address control and treatment of dust, wastewater, and odor?

5-2-5.6 Requirement: *The time for receiving wastes shall include all times between Saturday morning and Thursday evening, and the contractor shall guarantee the provision of a minimum limit of services acceptable by the GOA on Fridays and feast days.*

1. Does the minimal level of services offered in the tenderer's work execution plan accommodate the needs of the manual sweeping and waste collection operations that will be collecting increased quantities of wastes on those same days?
2. Does the reduced level of service have any deleterious effects on any machinery and equipment maintenance or treatment process continuity requirements?

5-2-5.7 Requirement: *The contractor shall notify the GOA immediately of any sudden stoppage of work and cooperate with it in getting the composting facility back on line.*

1. Does the work execution plan make adequate provisions for expediting communication with the GOA and in developing internal procedures to facilitate their implementation?
2. Does the management framework proposed by the tenderer provide clear lines of responsibility for notification and problem resolution procedures?

5-2-6 Establishment, Outfitting, and Operation of the Center for Treatment of Medical Waste

5-2-6.1 Requirement: *The contractor shall submit for approval by the GOA special specifications and designs for establishment and outfitting a medical waste treatment center to be located at the sanitary landfill.*

1. Do the preliminary drawings and accompanying work plan suggest that the tenderer has the necessary experience in the design, construction, and operation of medical waste treatment facilities?

2. Does the tenderer have a proven track record of performance in compliance with all applicable environmental, safety, and health regulations?
3. Does the design include the application of state of the art operational and emission control system technologies to optimize performance and compliance with environmental regulations?
4. Has the tenderer conducted the research necessary to ascertain if two combustion units, each with a capacity of 5 tons per day is enough to handle the daily generation of all medical waste in the GOA, with adequate built in redundancy to allow for the inevitable downtime associated with system malfunction and scheduled maintenance?
5. Does the tenderer's design and work plan provide assurance of construction and operation of a medical waste treatment system with combustion and emission control technology that has a proven track record, will yield a positive environmental impact assessment (EIA), and meet all EEAA and GOA regulatory requirements?
6. Does the work preparation plan contain adequate capital and a proposed procurement and construction schedule for the project that includes, at a minimum, the following:
 - Consulting engineering services.
 - Legal, financial, and insurance advice.
 - Siting studies.
 - Permitting.
 - Subsurface soil testing and land surveys.
 - Payment and performance bonds.
 - Liability and force majeure insurance.
 - Construction costs.
 - Start up costs.
 - Performance testing costs.
 - Miscellaneous long-term bond issuance costs.
7. Do the design and work execution plans proposed address receiving, storage, material handling, combustion, air and water emission controls, ash handling and removal, and an operations and maintenance plan that give priority to worker health and safety?
8. Does the proposed system meet the requirements specified in Section 5-3-2-2, including the following:
 - A double combustion chamber.
 - Medical waste exposure to a temperature of 1100 degrees centigrade for not less than two seconds for burning gases.
 - Automated ash handling.
 - Electrostatic precipitators.

- An emissions stack not less than two and one half times the height of the nearest building.
9. Does the work preparation plan address the need to develop an aggressive “marketing” plan in cooperation with the GOA to provide assurances to neighboring residents, institutions, commercial businesses, and industry that the medical waste incinerator does not pose any threat to their health or safety?

5-2-6.2 Requirement: *The contractor shall take all necessary precautions to carry out the installation and outfitting works according to the time schedule approved by the GOA.*

1. Does the schedule submitted in the work plan allow sufficient time for, design, equipment procurement, excavation and development, building erection, equipment installation, landscaping, pre-testing, and debugging?
2. Does the schedule take into account possible delays due to landfill remediation work, equipment vendor backlogs, postponement of hearings and meetings for permitting, holidays and religious festivals, and other unforeseen circumstances caused by inclement weather?

5-2-6.3 Requirement: *The contractor shall provide the specialized administrative agency, machinery, and equipment necessary to operate the medical waste treatment facility for six days per week.*

1. Does the work execution plan contain a practical strategy for recruiting and training of the number of personnel with the specialized skills required to manage and to operate the medical waste treatment facility cost effectively and in compliance with all GOA and EEAA applicable regulations on a six-day per week basis?
2. Do the machinery, equipment, and treatment systems proposed have a long-term proven track record under the direct management of any member of the team proposed for Alexandria?
3. Does the work plan address recognition of the need for a comprehensive preventative maintenance program on all system components to perform at an acceptable level of utilization and environmental compliance?
4. Does the work execution plan place the special emphasis needed on protection of worker health and safety through ongoing training, monitoring, and implementation of strict material handling and processing procedures?

5-2-7 Establishment, Outfitting, and Operation of the Sanitary Landfill

Requirements pertaining to the establishment, outfitting and operation of the sanitary landfill are contained in Sections 5-2-7, 5-3-1, and 5-3-3. For the purpose of facilitating the work of the TEC, the requirements and associated evaluation criteria have been consolidated and reorganized under the headings of Design, Installation, and Operation.

Design Requirements and Evaluation Criteria--

5-2-7.1 Requirement: *The contractor shall submit a design including preliminary drawings for approval by the GOA that shall take into consideration that its capacity shall be adequate for a period of 15 years and the necessity of observing all environmental requirements and conditions in a manner leaving no effect on the areas around the sanitary landfill and groundwater.*

1. Has the tenderer conducted the research and analysis on waste generation in the GOA required to produce a reasonable estimate of the volume of space that sanitary landfill operations will require, and the procedures that will be followed to produce optimal buried waste density?
2. Do the design and preliminary drawings submitted address the following minimal requirements prescribed in the technical specifications that will be necessary to “leave no effect on the areas around the sanitary landfill and groundwater”:
 - The type and thickness of the bottom liner and liner material(s) to be used.
 - Cell bottom height above the high groundwater elevation.
 - The plan for walls, fencing, and landscaping.
 - The plan for leachate collection and treatment.
 - The plan for gas monitoring, collection, and control/use.
 - The number, type, sampling frequency, and location of groundwater monitoring wells.
 - The type, depth, and application plan for final cover material, grasses and trees.

5-2-7.2 Requirement: *The contractor shall carry out an Environmental Impact Assessment (EIA) study and obtain approval of the study from the EEAA.*

1. Does the tenderer have professional staff with experience in the procurement and/or performance of EIA studies and has the cost and time required been adequately addressed in the work preparation plan?
2. Does the proposed design include selection of an isolating layer material that will ensure groundwater protection and enhance the production of an EIA acceptable to both the GOA and the EEAA?

Installation Requirements and Evaluation Criteria--

5-2-7.3 Requirement: *The contractor shall take the following steps construction of the sanitary landfill.*

- 1) *Locate and prepare area for first cell.*
 - *Excavate to approved design depth.*
 - *Level cell floor.*
 - *Install synthetic or bentonite clay liner.*

- 2) *Install leachate control and treatment system.*
 - *Install leachate collection system.*
 - *Construct leachate treatment plant.*
 - *Install groundwater monitoring wells.*
- 3) *Install road network.*
 - *Entrance road from main highway to scalehouse.*
 - *Inner roads to first cell and ancillary support areas.*
 - *Roads to monitoring sites.*
- 4) *Install gas monitoring, collection, and control/use system.*
 - *Install gas migration detection system.*
 - *Install gas collection system.*
 - *Install gas processing system.*
- 5) *Construct surface water control system.*
- 6) *Establish separate burial cells for special wastes.*
 - *Slaughter house wastes.*
 - *Ash from medical waste treatment center.*
- 7) *Landscape entrance and fence entire site.*
- 8) *Construct support buildings.*
 - *Office/scale house.*
 - *Space for employee check in and clean up, breaks, eating, tools, protective clothing, and training.*
 - *Maintenance and service building.*
 - *Power generation.*
 - *Fire fighting equipment.*
- 9) *Install scales and supporting facilities.*
 - *Minimum 60-ton capacity.*
 - *Minimum 20 meters in length.*
 - *Computerized recording of data including truck number, material type, and source.*
- 10) *Install outgoing truck wheel washing area.*

11) *Erect guidance signage.*

- *At entrance from highway.*
- *At the scales.*
- *Directions along internal roads to operating cell.*
- *Identification of potential hazards for safety.*
- *Identification of support facilities and monitoring sites.*

1. Does the work preparation plan adequately address each of the above installation requirements through the provision of coordinated and detailed plans and schedules for recruitment of specialized administrative and engineering personnel, procurement and installation of equipment, building construction, and site improvement?
2. Does the work execution plan contain any revisions or additions that have the potential to improve performance or better achieve the GOA's environmental protection objectives for the sanitary landfill?

Operational Requirements and Evaluation Criteria--

5-2-7.4 Requirement: *The contractor shall receive waste and perform the following operations twenty hours per day and seven days per week:*

- 1) *Transportation from the composting facilities within twenty-four hours of processing.*
- 2) *Receiving, weighing, and recording all data relevant to waste type, source, and means of transport.*
- 3) *Burying in prepared cells prepared as previously specified in layers not to exceed four meters in height and one hundred meters in width.*
- 4) *Covering all disposed waste with a layer of earth not less than 15 centimeters in thickness.*
- 5) *Continued extension of the leachate and gas collection networks as needed.*
- 6) *Continue groundwater monitoring and gas migration detection.*
- 7) *Treat wastewater resulting from decomposition on a continuous basis.*
- 8) *Maintain a supply of materials and spare parts as necessary for carrying out the required works.*
- 9) *Reporting detailed information on the quantities and kinds of waste delivered to the sanitary landfill and progress achieved in the cells and supporting leachate and gas control networks.*

1. Does the work execution plan demonstrate adequate landfill construction and operating experience in similar climates with similar types and quantities of wastes sufficient to perform each of the above required activities?

2. Does the work execution plan address the recruitment and training of equipment operators and laborers, the implementation of computerized data recording and reporting procedures, procurement and inventory of parts and supplies, and support for the environmental monitoring (i.e., groundwater and gas sampling) schedule proposed?
3. Does the work plan describe efficient sanitary landfill site supervision and recording/reporting of detailed information regarding ongoing compliance with each of the required activities so that any remedial efforts required might be expedited?
4. Does the work plan contain revisions or additions to the above requirements that have the potential to increase sanitary landfill operations efficiency, disposal volume conservation, or compliance with GOA and/or EEAA environmental protection objectives?
5. Does the work plan provide a description of the selection criteria and the number and types of mobile equipment that will be used in the compaction and covering of all wastes received?

5-2-8 Closure of Existing Dumps

While the tender document includes no specifications for this activity, the work plan for closure of the existing dumping sites should include detailed descriptions of the following execution steps:

- A schedule outlining the steps to be taken to close the existing dumps and the time frame in which they will be closed.
- Method of stabilizing and consolidating the existing waste mass into the smallest practical volume.
- Development of a final grading plan, which includes the removal of all waste from water sources near or adjacent to the dump.
- Mobilization and demobilization of equipment needed to properly close the three existing dumpsites.
- The type of gas venting layer and monitoring system to be used following site closure.
- Application of a low permeability cover to maintain a final cover on the landfill capable of supporting vegetation.
- A vegetation schedule and application rate plan that specifically describes the vegetative material to be used to maintain the final cover.
- A final cover maintenance plan.

Ranking the Technical Acceptability of Technical Tenders

The TEC is assigned the task of ranking the technical acceptability of each tender submitted.

This requires judging how well the tender complies with the technical requirements set forth in the tender document. The TAP has provided Table 2, Technical Evaluation Scoring Spreadsheet to assist the TEC in their performance of this task.

The tender includes requests for provision of several separate and distinct services. The tender includes multiple requirements that the tenderer must address in preparation, execution, and evacuation work plans. While the GOA would desire that all requirements for all services be met in full, some are more important than others in accomplishing the objectives of the solid waste and public clean-up project. Thus, to produce a defensible

quantitative ranking of the technical acceptability of competing tenders a four-step process including prioritization of services and requirements is required:

- Weight the relative importance of each of the solid waste and public clean-up services being contracted.
- Weight the relative importance of each technical requirement established for each service.
- Judge the level of acceptability of the tender response to each technical requirement.
- Calculate the individual and aggregate technical scoring for each service.

Weighting Services by Relative Importance--

It will be necessary for the TEC to develop consensus on relative weights to attach to each of the services to allow a productive evaluation of the tenders. These weights will act as a measure of their priority or relative importance. For example, the tender document has explicitly stated that it attaches the utmost importance to the following services:

- Manual sweeping of the open commercial markets.
- Beach cleaning in the summer months.
- Use of modern data processing and communication technology.
- Promotion of the cleanup campaign to increase citizen awareness and participation.

One weighting option to consider might be to simply rank the eight service activities one through eight. While simple to apply, this method has the disadvantage of assuming that differences between consecutively ranked services are equal: in this case one-eighth of the total, or 12.5 percent.

A more flexible and discriminating method is to allocate the weight over a base of 100 points. Its share of the 100 points then represents the relative priority of each service to each other, and the total. In this case any service can be awarded any share of the points, and more than one service could be assigned the same weight if the person assigning weights feels that two services deserve the same priority.

Weighting the Relative Importance of Technical Requirements--

Since the tender document contains several requirements for each service that the tenderer must address, the second step in the ranking process requires weighting the relative importance of each. While all are important to the GOA, some are surely to be judged more important than others. This relativity can be quantified using a process identical to that used to weight the relative importance of services. Allocating 100 (or some other number if preferred) points among all of the service specific requirements will produce the weighting desired. The column, Requirement Weight, in Table 2 provides space for the weights assigned.

Judging Level of Response Acceptability-

Next, the technical criteria are applied to measure the extent to which each technical response complies with the technical requirement. The extent of compliance with the requirement can be expressed as a "level of acceptability". In this case scores of 0 to 3 could be assigned as follows:

- 3 for very acceptable.
- 2 for moderately acceptable.
- 1 for marginally acceptable.
- 0 for unacceptable.

The results of the exercise can be recorded in the column titled Acceptability Scores in Table 2.

Calculating Total Scores--

The overall technical score for each tenderer can now be calculated and the data recorded on Table 2 as follows:

- Multiply the Requirement Weight by the Acceptability Score to yield the Requirement Acceptability Score for each requirement.
- Add individual Requirement Acceptability Scores to produce a total score for the service.
- Multiply the total score achieved for each service by the service weight of that service assigned earlier to yield the total service score.
- Add the eight service scores given to each tender to produce the overall technical acceptability score for each tender.

Comparing the individual total technical scores provides a measure of the relative probability of successful GOA solid waste and public clean-up system performance. Then the overall technical acceptability scores can be interpreted as the relative probability of successful GOA clean-up service performance.

FINANCIAL EVALUATION CRITERIA

The tender document stipulates that the financial evaluation of the tenders will be completed after the technical evaluation has identified which proposals are technically acceptable. As discussed above, each technically acceptable tender will have a technical score assigned to it by the TEC.

The financial envelopes containing the total annual price and the price schedules for the individual services are to remain sealed until completion of the technical evaluation. The Financial Envelopes Opening Committee (FEOC) will open the financial envelopes of all technically acceptable tenders in a meeting with those contractors submitting them. The financial envelopes should contain the following information:

- The total price tendered expressed in Egyptian Pounds annually.
- A certified bank check for one million Egyptian Pounds as a bid bond.
- Price lists completed fulfilled and stamped according to the attached forms included in the tender documents.

During the financial analysis phase, the FEOC should also assign a financial score to each tender based on the financial criteria defined in the tender document, as well as other criteria the committee deems relevant. Technical criteria are not considered in this phase of the analysis.

The first phase of financial analysis should consider the total annual price quoted in each tender. During the second phase, the FEOC should analyze more carefully the prices of individual services quoted in the price schedules of each proposal. The FEOC might want to consider separating some of the services (unbundling) and selecting more than one contractor. This method of unbundling may lower the overall cost of the solid waste and cleaning project. Some suggested guidelines for each phase are summarized in the following sections.

First Phase of Financial Analysis: Total Annual Price

The financial analysis phase begins by examining the total annual price quoted in each of the technically acceptable tenders. The FEOC should rank the proposals from lowest to highest annual price. At this point the FEOC should address a few basic, but important, issues:

- Do the tenders for total annual price exceed the total annual amount allocated to pay for solid waste and public cleaning services requested in the tender documents?
- Are there significant differences in total annual price quoted by the technically acceptable tenderers?

If all tenderers offer annual prices that exceed the total annual amount allocated for solid waste and public cleaning services in the GOA, the FEOC must decide whether any of the tenders are financially feasible. Can specific levels of a particular service in any of the tenders be modified to lower the annual price? Can the modifications to the level of service be addressed through clarifications with the bidding firms?

The FEOC should be aware that the language of the tender document allows firms significant technical flexibility in service delivery. The tenders will vary widely in the level of technology, capital-labor mix, and quality of service proposed for particular services. This will lead to significant variations in price for that service, and lead to significant variations in total annual price. The resulting problem for the FEOC is that they may not be comparing tenders that are comparable in terms of the quality of service delivery. Thus, it may be difficult for the FEOC to always separate the financial evaluation from the technical nature and evaluation of the tenders. *Clarifications from individual tenderers may be necessary to modify levels of service and price for particular services in order to reach the technically and financially optimal levels of service for the GOA.*

There may be a correlation between technical competence, as measured by the previously assigned technical scores, and the total annual prices that are quoted. The tenderer with the higher technical scores may also be higher priced due to the level of service that will be provided. However, technical scoring should not a factor in this phase of the analysis. Combined scores that consider both technical and financial merit should be considered in the final evaluation phase.

The tender document specifies that the tenders submitted to the GOA include all expenses such as insurance, shipping, customs, clearance, transport, etc. The FEOC should verify that none of the tenders contain any language exempting the tenderer from these types of costs.

Second Phase of Financial Analysis: Individual Service Prices

The second phase of the financial evaluation requires detailed and analysis of the individual service price tables that are a required part of each tender. Several tables have been attached to facilitate the comparison of all prices offered. Table 3, Financial Analysis Checklist, is attached as a facilitating tool for accomplishing the preliminary task of ascertaining the completeness and accuracy of each price table. Tables 4 through 12 are provided to facilitate comparison of prices offered for each of the service activities. Table 13 provides a price summary for each of the eight service categories identified in the tender documents.

Price Table Completeness and Accuracy-

The initial financial analysis of the individual price tables should include, but not necessarily be limited to, checking them for completeness and accuracy as follows:

- Have all services have been n priced?
- Are prices entered in the price tables with no erasures or deletions?
- Are all prices expressed in Egyptian Pounds?
- Is the total annual price for all services equal to the sum of the individual prices included in the price tables?

- If the total annual price for all services is not equal to the sum of the individual prices included in the price schedules, then the individual prices should be used and the total price changed to reflect the sum of the individual prices.
- The committee should evaluate the percentage increase in prices that each tenderer has specified for population and inflation increases throughout the contract period.
 - Each tender should define how the price of service should be increased every three years to account for inflation and population growth.
 - Do the 3-year increases in price requested reflect an appropriate increase based on the estimated 2 percent annual growth in population and forecasts of inflation?
 - Are requested price increases fixed in advance or tied to variables that measure inflation and/or population growth?

Comparison of Prices-

An important aspect of the FEOC's work in this financial phase of the evaluation process is to compare prices of specific services among the tenders as given in the price tables. All prices must be entered numerically and also be written out. If discrepancies occur, the tender document specifies that the written figure be considered correct. However, the FEOC may want to consider clarification of prices with the tenderer based on the following.

- If there are significant discrepancies between prices of competing tenders to provide a specific service, the FEOC should carefully examine and compare technical details of the firms with respect to that service.
 - Does the tender with the higher price include services that are not required?
 - Can clarifications with the tenderer result in a lower price for that service while providing the same level of service as the lower priced tenderer?
 - Do the tenders with the lowest prices provide an adequate level of service?
 - Can the lower-priced tenders provide the service with the technical resources devoted to that service?
- Price performance measures and benchmark comparisons should be made for solid waste and public cleaning services for each technically acceptable tender. These comparisons should consider the following:
 - Compare the price per ton of waste collected from residential, commercial, industrial, and medical waste sources.
 - Compare prices of each bidding firm for each of the service categories required in the tender documents.

- Compare residential, commercial, industrial, and medical waste collection for each of the 18 service zones described in the tender documents.
- Compare the price for the removal of other wastes, such as automobiles and dead animals. Have special fees been associated with the collection and disposal of these wastes or are they included in the annual price of the tendered services.
- Compare the price per kilometer per day for street cleansing:
 - Compare each tender for the total amount of streets cleaned using mechanical and manual methods, and then evaluate the price on that basis.
 - Compare the price of each tender for each of the eighteen zones described in the tender documents.
- Compare the price per feddan per day for beach cleaning.
- Compare the price per ton for medical waste collection and treatment.
- Compare the price per ton received and transferred at transfer stations to be used by the tenderers. The total number of transfer stations may vary, which will result in different prices for the collection and transfer of waste services.
- Compare the price per ton for the disposal of waste at the sanitary landfill.
 - Is the tenderer's preparation and execution work plans similar in scope or are there significant differences? It may be advantageous to review the technical evaluation to determine the level of service being offered by each tenderer.
 - Are the tenderers disposing of the same quantities of waste at the sanitary landfill? If a tenderer is disposing higher quantities of waste, then the unit price per ton should be lower than a tenderer disposing of a smaller quantity.
- At what times of the day are specific services being completed? Can efficiency improvements and related price savings be achieved by allowing some services to be completed during night and early morning shifts?
- For each specific service that is priced, rank the tenders from highest to lowest priced. This ranking can be done by using Tables 4 through 13. Are there any tenderers whose price is significantly less than the other tenderers? If so, try to understand why their cost is so low. Is service provision adequate?
- Is capital devoted to a service sufficient to ensure adequate service provision and meet performance requirements of the tender documents? Are sufficient labor resources deployed? The FEOC should request clarification from the tenderer to clarify its concerns with the prices.

- If a low price for a particular service appears legitimate, and that firm offering the low price is not the lowest tenderer for total annual price, is unbundling this service worth considering?
- Can any price saving ideas from one tender be used to reduce the price of other tenderers through clarification questions to these tenderers?
- Are there any tenderers whose price is significantly more than the other tenderers? If so, try to determine why their price is higher.

There is the possibility that all tenders will be priced above the funds available for payment of solid waste and public cleaning services described in the tender documents. The FEOC may want to discuss unbundling the services with the higher ranked technical and financial tenders, even though this option was not discussed in the tender documents.

Another possibility is that a tenderer that is technically less qualified will provide a price within the GOA's funding ability. The FEOC should guard against recommending or selecting a tenderer who is not technically qualified to provide the services. The services to be provided will most likely not meet the level desired by the GOA, and will result in minimal improvement to the existing solid waste and public cleaning system.

WEIGHTING OF EVALUATION CRITERIA

It is unlikely that the tender that is awarded the highest score for technical score will also offer the lowest total annual price. To address this likelihood the TEC and the FEOC must have agreed upon a process for weighting the technical and financial scores in a manner that reflects the relative priorities of the GOA. To do this requires asking the question; "How much potential reduction in service quality are we willing to accept per unit of cost savings?" If maximizing the probability of achieving clean-up objectives far outweighs the objective of low cost, then the technical score should be heavily weighted relative to the financial score. Conversely, if funding

for the clean-up project cannot be increased beyond the amount currently budgeted, the financial score will have to be assigned a higher relative weight.

In the case where financial and technical criteria are considered of equal importance, merely multiplying the technical score by the financial score can identify the winning tenderer. In this case, a tenderer who had a technical score ten percent below a single competitor, but a financial score twenty percent above, would obtain a higher combined score and be the selected tenderer. If the technical and financial scores are not equally weighted then the scores must be multiplied by the weighting factors and then added together for final comparison.

TABLE 1: TECHNICAL ENVELOPE CHECKLIST

TENDERER IDENTIFICATION: _____

Item	Description	Yes	No
1	Is the Bank Letter of Guarantee provided?		
2	Are work plans provided for each of the services requested?		
3	Is the implementation time schedule provided for all services?		
4	Is a copy of the Letter of Qualification provided?		
5	Is the official authorization for signature properly certified?		
6	Is a valid copy of the Commercial Registration provided?		
7	Is a valid copy of the subscription certificate provided?		
8	Is the sealed copy of the Book of Conditions and Specifications included?		
9	Is the tenderer's Pre-Qualifications Certificate included?		
10	Is the Financial Proposal provided in a separate sealed envelope?		

TABLE 2: TECHNICAL EVALAUTION SCORING SPREADSHEET						
Requirement Number	Service Category/Requirement Summary	Requirement Weight	Acceptability Score	Requirement Score	Service Weight	Technical Score
5-2-1	WASTE COLLECTION SERVICE					
	First: Household and Domestic Waste Collecting Service					
5-2-1.1	Wastes shall be collected from accessible public places					
5-2-1.2	Wastes shall be collected from pooling sites					
5-2-1.3	Containers shall be emptied without spillage					
5-2-1.4	No material storage outside truck or in cab					
5-2-1.5	Teams shall report any property damage					
5-2-1.6	Collection trucks shall be washed weekly					
5-2-1.7	Collection trucks shall be closed and covered					
5-2-1.8	Contractor is responsible for container placement					
5-2-1.9	Pooling containers shall be maintained and cleaned					
5-2-1.10	Plan for increasing service in summer					
	Second: Collecting Different Wastes and Garbage					
5-2-1.11	Contractor shall collect rubble and other oversized items					
Waste Collection Service Score						

TABLE 3: FINANCIAL ANALYSIS CHECKLIST

TENDERER IDENTIFICATION: _____

Item	Description	Yes	No
1	Are prices entered with no erasures or deletions?		
2	Are prices entered for every service?		
3	Is the total price quoted in Egyptian Pounds?		
4	Are the prices written in letters and numbers in the price tables?		
5	Does the sum of the individual costs in the price tables equal the total annual price?		
6	Is the formula for the 3-year price increases specified and explained?		

