

محافظة القليوبية

REVIEW AND ANALYSIS OF EXISTING SOLID WASTE MANAGEMENT LAWS AND REGULATIONS

GOVERNORATE OF QALYUBIYA

Prepared for:

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ACRONYMS

EEAA	Egyptian Environmental Affairs Agency
EEPP	Egyptian Environmental Policy Program
GOE	Governorate of Egypt
GOQ	Governorate of Qalyoubiya
MoH	Minister of Housing (subsequently the Minister of Housing and Public Utilities and currently the Minister of Housing, Utilities and Urban Communities)
MoHPU	Minister of Housing and Public Utilities (currently the Minister of Housing, Utilities and Urban Communities)
MoI	Minister of Irrigation (subsequently the Minister of Public Works and Water Resources and currently the Minister of Water Resources and Irrigation)
MoJ	Minister of Justice
MoLA	Minister of Local Administration Decree (currently the Minister of Local Development)
MoMRA	Minister of Municipal and Rural Affairs (currently the Minister of Local Development)
USAID	United States Agency for International Development

LEGAL REFERENCES

Law 4/1994	Law Number 4 of 1994, Environmental Law
Law 38/1967	Law Number 38 of 1967 General Public Cleaning
Law 43/1979	Law Number 43 of 1979, Local Government System
Law 48/1982	Law Number 48 of 1982, Protection of the Nile and its Canals
Law 84/1968	Law Number 84 of 1968, Concerning Public Ways
Law 89/1998	Law Number 89 of 1998, Tenders for Procurement of Goods and Services
Law 101/1996	Law Number 101 of 1996, major amendments to Law 106/ 1976
Law 106/1976	Law Number 106 of 1976, Building Construction
Law 137/1981	Law Number 137 of 1981, Labor Law
Law 140/1956	Law Number 140 of 1956, Occupation of Public Ways
Law 155/1999	Law Number 155 of 1999, Traffic Law
MoF 1367/1998	Minister of Finance Decree Number 1367 of 1998: Executive Regulations for Law 89/1998

MoH 134/1968	Minister of Housing Decree Number 134 of 1968: Executive Regulations for Law 38/1967
MoHPU 268/1996	Minister of Housing and Public Utilities Decree 268 of 1996: Executive Regulations for Law 106/1976 as amended by Law 101/1996
MoI 8/1983	Minister of Irrigation Decree Number 8 of 1983: Executive Regulations for Law 48/1982
MoJ 1353/1996	Minister of Justice Decree Number 1353 of 1996, Delegating Authority to Local Administrative Units for Law 4/1994
MoJ 3137/1976	Minister of Justice Decree Number 3137 of 1976, Delegating Authority to Local Administrative Units for Law 38/1967
MoLA 707/1979	Minister of Local Administration Decree Number 707 of 1979: Executive Regulations for Law 43/1979
MoMRA 395/1956	Minister of Municipal and Rural Affairs Decree Number 395 of 1956: Executive Regulations for Law 140/1956
PD 272/1982	Presidential Decree Number 272 of 1982, Transferring the Jurisdiction of the Ministry of Housing to Local Administrative Units
PM 338/1995	Prime Minister's Decree Number 338 of 1995: Executive Regulations for Law 4/1994

SECTION 1

INTRODUCTION

The Governorate of Qalyoubiya (GOQ) is entering into contracts with private companies to provide solid waste management and cleaning services. The Solid Waste Technical Assistance Project, a component of the USAID-funded Egyptian Environmental Policy Program (EEPP), is assisting the GOQ in successful implementation of its privatization program. This support is provided by a team of specialists under the direction of Abt Associates Inc.

One condition for success of solid waste management privatization in Qalyoubiya is adequate enforcement of existing solid waste management laws and regulations. The EEPP acknowledges the importance of this condition by including it in one of the Policy Measures to be achieved by its Government of Egypt (GOE) counterparts:

“Policy Measure 4.1. Governorates establish monitoring and enforcement mechanisms in support of GOE policy to privatize solid waste management systems.”

The Governorate will need to establish, staff, and fund a contract monitoring unit and develop, approve, and initiate enforcement strategies for the existing solid waste management laws and regulations to achieve this Policy Measure.

PURPOSE

The purpose of this report is to review and analyze existing solid waste management laws and regulations, assess the status of current enforcement efforts, and recommend actions that the Governorate can take to improve enforcement. The recommendations in this report are general in nature and are designed to facilitate decisions by the Governorate about enforcement strategies. Once those decisions have been made, a subsequent report will provide details for implementation.

This report has been developed in close cooperation with the legal and technical staff in the Governorate. As a result, the information presented reflects the “on-the-ground” situation. Participation of Governorate staff has also ensured that the recommendations are within the capability and authority of the Governorate.

SCOPE

The laws and regulations that are the subject of this report are those dealing specifically with the management of municipal solid waste¹ and construction and demolition debris². The GOQ’s solid waste management privatization program includes non-hazardous industrial waste and infectious medical waste. Non-hazardous industrial waste has chemical and physical characteristics similar to those of municipal solid waste, so it is included in this

¹ Municipal solid waste is solid waste from individuals, households, residences, commercial establishments, governmental buildings, and institutions (schools, universities, mosques, churches, museums, etc.) and other wastes with similar chemical and physical characteristics.

² Construction and demolition debris is solid waste resulting from the construction, remodeling, repair, and demolition of structures, roads, sidewalks, and utilities.

report as a component of municipal solid waste; however, infectious medical waste is not included in this report because another EEPP program is addressing it.

Law Number 4 of 1994 classifies infectious medical waste as hazardous waste. Another EEPP program supports the Egyptian Environmental Affairs Agency (EEAA) in the implementation of Law Number 4 of 1994, and one component of that program is working with EEAA and the Ministry of Health and Population to develop a national strategy for the management of medical waste and a “code of conduct” for handling medical waste. These activities build upon previous work in the same area funded by the Danish International Development Agency, and include an assessment of the legal and regulatory issues associated with infectious medical waste management.

The laws and regulations dealing with contracting will also affect success of the privatization program. A separate report will address those laws and regulations.

STRUCTURE

This report is divided into six sections.

- Section 1, Introduction
- Section 2, Review of Existing Laws and Regulations
- Section 3, Analysis of Existing Laws and Regulations
- Section 4, Implementation of Laws and Regulations
- Section 5, Analysis of Existing Implementation
- Section 6, Recommendations

SECTION 2

REVIEW OF EXISTING LAWS AND REGULATIONS

The principal law and regulations governing solid waste management in Egypt are Law Number 38 of 1967 on General Public Cleaning and its executive regulations (issued by Minister of Housing Decree Number 134 of 1968). The Environment Law (Law Number 4 of 1994) and its executive regulations (issued by Prime Minister Decree Number 338 of 1995) also contain some provisions governing general solid waste management.

Several other laws address solid waste in specific situations, but do not have general provisions governing solid waste management. For instance, Law Number 48 of 1982 on the Protection of the Nile and Its Canals prohibits dumping solid waste in the Nile River and its canals, and Law Number 140 of 1956 on the Occupation of Public Ways and Law Number 84 of 1968 Concerning Public Ways prohibit dumping solid waste on roads or in public squares.

This section of the report reviews the solid waste management laws and regulations that are currently in effect in Egypt. The report only addresses national laws and regulations, as the GOQ has not issued any Governorate decrees concerning solid waste management. The authors drew heavily upon previous reports (listed in Appendix A), as well as copies of the laws and regulations (listed in Appendix B) during preparation of this report.

LAW NUMBER 38 OF 1967, GENERAL PUBLIC CLEANING

Law Number 38 of 1967 on General Public Cleaning (Law 38/1967) is the primary law governing the management of solid waste in Egypt. It was enacted in 1967 and replaced all previous laws dealing with solid waste including Law 97 of 1956 on Organization of Garbage Collection and Transfer, Law 159 of 1953 on Cleaning Public Squares, Streets and Highways, and Law 151 of 1947 on Cleaning Fences and Unused Areas. Since 1967, it has been amended four times³.

In 1968, the Minister of Housing issued the executive regulations for the law (MoH 134/1968). Although the law and its executive regulations deal primarily with solid waste, they also address wastewater and fencing of open areas. A copy of the law and its executive regulations are included in Appendix C of this report.

Solid Waste Management Provisions

Law 38 of 1967 and its executive regulations prohibit placing solid waste anywhere except in an area designated by the local council.⁴ This prohibition applies to treatment and disposal of solid waste as well as to temporary placement in an undesignated container.⁵ Article 1 of MoH 134/1968 defines solid waste as solid garbage or residuals generated by individuals, residential units, non-residential buildings such as governmental and institutional buildings, companies, factories, commercial establishments, animal pens, butcheries, markets, public areas, parks, and means of transportation.

³ Law 31/1976, Law 209/1980, Law 177/1981, Law 129/1982.

⁴ Law 38/1967 Article 1; MoH 134/1968 Articles 5 and 16.

⁵ Law 38/1967 Article 2; MoH 134/1968 Articles 5 and 6.

The law and its regulations require the local government authority responsible for general cleaning or a contractor licensed by the local authority⁶ to collect, transfer, and dispose of solid waste in accordance with the specifications in the executive regulations as well as those of the local council.⁷ The specifications in the executive regulations are shown in Table 1. If a local authority contracts solid waste services, the contractor is responsible for the actions of the garbage collectors it hires.⁸

Law 38/1967 authorizes the local council to impose a fee on building inhabitants of not more than two percent of their rent to fund solid waste management.⁹ This fee, along with all fines¹⁰ collected for violation of Law 38/1967, must be placed in a general cleaning fund established by the local council. The fund must be used for general cleaning. These funds can be augmented by funds from the general budget to insure adequate funding for solid waste management.

Law 38/1967 also requires owners of open land to remove accumulated waste and keep the land clean.¹¹ The executive regulations authorize the local authority to remove solid waste from open land at the owner's expense, if the owner does not do so within 15 days after notification.¹²

Local Enforcement Authority

Article 11 of Law 38/1967 authorizes implementation of the law by competent employees in local government, as identified by decree from the Minister of Justice. In 1976, the Minister of Justice issued Decree Number 3137 (MoJ 3137/1976), which identified the following local government employees as having authority to enforce Law 38/1967.

- 1) Governorate housing administrators.
- 2) Governorate health department administrators.
- 3) Engineering Division administrators for town and district councils.
- 4) Municipal organization administrators and engineers.
- 5) Governorate or local unit general manager for urban environmental protection.
- 6) Governorate health affairs representatives working in environmental protection.
- 7) Physicians at health offices and units in towns, districts, and village units.
- 8) Environmental protection monitors in local units.
- 9) Heads of village units in rural areas.
- 10) Technical personnel supervising cleaning services in local units.
- 11) Cleaning and draining monitors and supervisors.

Article 1 in Presidential Decree Number 272 of 1982 (PD 272/1982) transferred jurisdiction for general cleaning from the Ministry of Housing to local administrative units.

⁶ Law 38/1967 Article 6; MoH 134/1968 Articles 5, 9, and 14.

⁷ Law 38/1967 Articles 3 and 5; MoH 134/1968 Articles 5, 6, 7, and 9.

⁸ MoH 134/1968 Article 8.

⁹ Law 38/1967 Article 8.

¹⁰ Law 38/1967 Article 9.

¹¹ Law 38/1967 Article 2.

¹² MoH 134/1968 Articles 22 and 23.

Table 1. Solid Waste Management Specifications in the Executive Regulations for Law 38 of 1967 (MoH 134/1968)

Component	Article	Specification
Storage containers	6	<ul style="list-style-type: none"> • Suitable capacity for the waste generated. • Hard metal or similar material and void of holes. • Tight cover and two handles. • The local authority may provide detailed specifications or model names. • Containers must be kept inside the building they serve except at the time of garbage collection. • They must be kept clean and washed after each use.
Collection containers	12	<ul style="list-style-type: none"> • Containers used by garbage collectors must be: <ul style="list-style-type: none"> - Made of resistible material. - Void of holes to prevent spillage. - Kept clean. • The local authority can make specifications that are more detailed.
Collection vehicles	14	<ul style="list-style-type: none"> • Adequate capacity. • Good working condition and void of holes. • Tight cover. • Lined with galvanized tin or zinc or other suitable material as determined by the local authority. • Parked, washed and sanitized at designated garages. • Not used for any other purpose.
Construction and demolition debris collection vehicles	15	<ul style="list-style-type: none"> • Good working condition. • Tight cover to prevent spillage.
Spillage	16	<ul style="list-style-type: none"> • Contractor must remove any spillage during transfer.
Protective clothing for garbage collectors	10	<ul style="list-style-type: none"> • Garbage collectors must be provided clothing suitable to provide health protection, as specified by the local council.
Collection frequency	11	<ul style="list-style-type: none"> • The local council shall determine the period and time for waste collection.
Garbage sorting	13	<ul style="list-style-type: none"> • Only allowed in designated areas. • Prohibited in vehicles.
Land disposal	17	<ul style="list-style-type: none"> • Sufficient size and located where there is easy traffic flow. • 250 meters downwind from the nearest residential unit. • Fenced, with a gate suitable for truck access. • Adequate sanitary facilities for workers. • Suitable water source for dust control and fire fighting. • Garbage heaped in piles with slopes of 1:2 or put in ditches, depressions, or abandoned canals. • Compacted, covered with 15 cm of earth, and sprayed with water.
Composting	17	<ul style="list-style-type: none"> • Suitable place provided for sorting waste and removing glass, tin, rubber, rocks, and other non-organic waste. • Prohibit use as animal food unless meeting conditions set by the competent local council.
Incineration	17	<ul style="list-style-type: none"> • Complete burn. • No air pollution. • Prohibit use as fuel in hearths unless meeting conditions set by the competent local council.

Penalties

Article 9 of Law 38/1967 contains the penalties for violation of the law. It establishes a fine up to LE 100 for violating the terms of the law, although fines can be higher if authorized by other laws. If wastes are deposited in an undesignated area,¹³ Article 9 authorizes local authorities to require the violating party to remove the wastes or to pay for the costs of their removal. A violator can resolve a claim made against him or her via administrative reconciliation with the local authorities by removing the violation and paying an LE 10 fine within 24 hours of notification. If the violator is a place of business and the violation poses a threat to public health, the local authorities can ask a judge to seize the violator's business until the violation is removed.¹⁴ The judge can terminate the seizure in response to a protest by the violator even before the case is settled. In all incidences, the seizure shall be terminated upon removal of the violation.

LAW NUMBER 4 OF 1994, ENVIRONMENT LAW

Law Number 4 of 1994 on the Environment (Law 4/1994) is the over-riding environmental law for Egypt. Article 3 of the Presidential Decree issuing Law 4/1994 repeals all provisions of other laws running counter to the provisions of Law 4/1994. One article in Law 4/1994 addresses general solid waste management¹⁵ and another addresses the management of construction and demolition debris.¹⁶ The provisions of these two articles are discussed below. In addition, two articles deal with solid waste management on ships and offshore platforms,¹⁷ and five articles address hazardous waste management.¹⁸ This report does not address the provisions for ships, offshore platforms, and hazardous waste management, as they do not affect implementation of Qalyoubiya's solid waste management privatization program.

Prime Minister Decree Number 338 of 1995 issued the executive regulations for Law 4/1994 (PM 338/1995). The executive regulations contain two articles addressing general solid waste management¹⁹ and one article addressing the management of construction and demolition debris.²⁰ The provisions of these articles are discussed below. Appendix D contains the full text of the general solid waste management components in Law 4/1994 and its executive regulations.

Law 4/1994 and its executive regulations also contain provisions requiring environmental impact assessment of establishments,²¹ control of air and noise emissions from establishments,²² and worker safety.²³ These provisions apply to solid waste management facilities such as recycling and composting plants, medical waste treatment facilities, and sanitary landfills. They are not addressed in this report because of their general nature, but

¹³ A violation of Article 1 of Law 38/1967.

¹⁴ Law 38/1967 Article 9.

¹⁵ Law 4/1994 Article 37.

¹⁶ Law 4/1994 Article 39.

¹⁷ Law 4/1994 Articles 67 and 68.

¹⁸ Law 4/1994 Articles 29 through 33.

¹⁹ PM 338/1995 Articles 38 and 39.

²⁰ PM 338/1995 Article 41.

²¹ Law 4/1994 Articles 19 through 23; PM 338/1995 Articles 10 through 19.

²² Law 4/1994 Articles 34 and 35; PM 338/1995 Articles 34 and 35.

²³ Law 4/1994 Articles 43 and 44; PM 338/1995 Articles 45 and 46.

the GOQ will have to insure that they are addressed during the development and implementation of the solid waste management privatization program.

Solid Waste Management Provisions

Similar to Law 38/1967, Law 4/1994 and its executive regulations prohibit disposing or treating garbage and solid waste anywhere except in an area designated by the local authorities.²⁴ However, this prohibition goes beyond that in Law 38/1967 in that it prohibits burning of solid waste. The law states that the executive regulations shall contain specifications for solid waste treatment and disposal sites, and the executive regulations clarify that the prohibition is absolute for open burning, but allows incineration, provided it meets the specifications in the regulations (Table 2).²⁵ Neither Law 4/1994 nor its executive regulations define garbage or solid waste.

Article 39 of the executive regulations for Law 4/1994 promulgates some specifications for solid waste containers and collection vehicles. These specifications are shown in Table 2.

Both the law and its executive regulations address the management and disposal of construction and demolition debris. They require all persons involved in exploration, excavation, construction and demolition to take necessary actions, as specified in the executive regulations, to safely store, transport, and dispose of wastes generated by those activities.²⁶ Article 41 of the executive regulations contains the specifications and requires local authorities to incorporate them into permits for exploration, excavation, construction and demolition (Table 2).

Local Enforcement Authority

Local authorities are empowered to enforce Law 4/1994 and its executive regulations. The articles in Law 4/1994 and its executive regulations that address general solid waste management identify local or municipal authorities as responsible for:

- Designating sites for treatment, burning and disposal of solid waste (in agreement with EEAA).²⁷
- Granting permission (in conjunction with EEAA) for transporting infectious medical waste to hospitals for incineration.²⁸
- Implementing the specifications for solid waste containers and collection vehicles.²⁹
- Incorporating construction and demolition debris requirements into permits for exploration, excavation, construction and demolition and designating sites for disposal of those wastes.³⁰

²⁴ Law 4/1994 Article 37; PM 338/1995 Article 38.

²⁵ PM 338/1995 Article 38. Article 38 also provides for a three-year transition period during which non-medical solid waste could be burned under special conditions, but the transition period expired in 1998, so those provisions are no longer relevant.

²⁶ Law 4/1994, Article 39; PM 338/1995 Article 41.

²⁷ Law 4/1994 Article 37; PM 338/1995 Article 38.

²⁸ PM 338/1995 Article 38.

²⁹ PM 338/1995 Article 39.

³⁰ PM 338/1995 Article 41.

Table 2. Solid Waste Management Specifications in the Executive Regulations for Law 4 of 1994 (PM 338/1995)

Component	Article	Specification
Solid waste incinerator	38	<ul style="list-style-type: none"> • Located at a site agreed to by local authorities and EEAA. • Located outside of residential or industrial areas. • Located downwind and at least 1,500 meters from populated areas. • On a site with sufficient space to store garbage prior to incineration. • Capacity to burn the garbage within 24 hours of arriving at the site. • Equipped with air pollution control devices to meet air emissions standards in Annex 6 of the regulations.
Infectious medical waste incinerator	38	<ul style="list-style-type: none"> • Located where the waste is generated or at a centrally located hospital. • Especially designed for medical waste incineration. • Large enough to incinerate all medical waste generated without causing a storage problem at the medical facility. • Equipped with air pollution control devices to meet air emissions standards in Annex 6 of the regulations.
Infectious medical waste transport	38	<ul style="list-style-type: none"> • Transported in sealed containers. • The sealed containers must be incinerated with the waste.
Storage containers	39	<ul style="list-style-type: none"> • Suitable capacity for the waste generated between regularly scheduled collections. • Tight cover. • Kept clean.
Collection vehicles	39	<ul style="list-style-type: none"> • Kept clean.
Construction and demolition debris management	41	<ul style="list-style-type: none"> • Stored on-site in a manner that does not obstruct movement of people or traffic or cause a safety concern. • Covered while stored to prevent air pollution, if liable to be dispersed by the wind. • Transported in vehicles licensed for such transport and meeting the following requirements: <ul style="list-style-type: none"> - Fitted with a special box or airtight cover to prevent spillage or dispersal during transportation. - Provided with special loading and unloading equipment. - Fitted with working lights and all required safety equipment. - Well-maintained to meet all safety requirements. • Disposal sites must be: <ul style="list-style-type: none"> - At least 1.5 kilometers from residential areas. - Below grade of the surrounding area. - Leveled at or below grade after disposal.

Article 104 of Law 4/1994 states that inspectors of administrative authorities who have the capacity of judicial officers in matters relating to the environment shall be authorized to enforce the provisions of Law 4/1994 and its executive regulations. In 1996 the Minister of Justice issued Decree Number 1353 (MoJ 1353/1996) authorizing several local government authorities to enforce Law 4/1994, including governor's deputies, town mayors, district and village heads, and the managers of environment offices in the governorates.

Article 103 of Law 4/1994 gives every citizen and organization concerned with the protection of the environment the right to report violations of the law to competent authorities. Article 65 of the executive regulations reiterates this right and goes on to require the Ministry of Interior to form a police force specialized in environmental protection to enforce the provisions of the law. The Ministry of Interior, however, has not yet established the environmental police force.

Penalties

Articles 86 and 87 of Law 4/1994 contain the penalties for violation of the general solid waste management provisions of the law. The penalty for disposing, treating, or burning solid waste in an undesignated area is a fine from LE 1,000 to LE 20,000, and in the case of recidivism, the penalty is the fine plus imprisonment.³¹ These penalties are higher than those in Law 38/1967. Article 3 of the Presidential Decree promulgating Law 4/1994 authorizes local authorities to impose these higher penalties.³² Article 9 of Law 38/1967 also states that higher fines can be imposed if authorized by other laws.

The penalty for violating the provisions for management of construction and demolition debris is a fine from LE 500 to LE 1,000.³³ The court is given authority to suspend a violator's license and, in the case of recidivism, to revoke the license.

The penalties for violation of Law 4/1994 can be more severe if so prescribed by other laws.³⁴ In the case of solid waste management, however, the fines in Law 4/1994 are higher than in any other laws.

LAW NUMBER 48 OF 1982, PROTECTION OF THE NILE AND ITS CANALS

Law Number 48 of 1982 (Law 48/1982) is the law for protection of the Nile and its canals. The executive regulations for Law 48/1982 were issued by Minister of Irrigation Decree Number 8 of 1983 (MoI 8/1983). The law and its executive regulations primarily focus on wastewater discharges to the Nile and its canals, but also contain articles that include solid waste.

Solid Waste Management Provisions

Both Law 48/1982 and its executive regulations prohibit the disposal of solid waste in the Nile and its canals without permission of the Ministry of Irrigation.³⁵ The executive

³¹ Law 4/1994 Article 87.

³² That article states that the provisions of Law 4 shall take precedence over all other laws dealing with the same violations.

³³ Law 4/1994 Article 86.

³⁴ Law 4/1994 Article 101.

³⁵ Law 48/1982 Article 2; MoI 8/1983 Article 2. The Ministry of Irrigation was subsequently renamed to the Ministry of Public Works and Water Resources and is currently named the Ministry of Water Resources and Irrigation.

regulations extend this prohibition to the temporary or permanent placement of solid wastes on the banks of the Nile and its canals.³⁶ The executive regulations define solid wastes as solid materials (including refuse, garbage, sweeping materials, dry rubbish, fractured stones, construction and demolition debris, and workshop scraps) generated by individuals, residential units, non-residential units (governmental, commercial, industrial, tourist), and means of transportation.³⁷

Local Enforcement Authority

Article 19 of Law 48/1982 authorizes Irrigation Engineers in the Ministry of Irrigation to enforce the law within their jurisdictions. Article 13 assigns the Water Police of the Ministry of Interior with the responsibility to assist the implementing authorities in identifying violations of Law 48/1982, informing violators, and removing the causes of violations.

Article 89 of Law 4/1994 increases the penalties for violation of Article 2 of Law 48/1982 (see next section). This increase in penalties is incorporated directly into Law 4/1994 rather than as an amendment to Law 48/1982. As a result, those authorized to enforce Law 4/1994 can also enforce Article 2 of Law 48/1982.³⁸ In the case of local authorities, this includes governor's deputies, town mayors, district and village heads, and the managers of environment offices in the governorates.

Penalties

Article 16 of Law 48/1982 establishes a penalty for violating Article 2 of up to one year in prison and a fine from LE 500 to LE 2,000. In the case of recidivism, the penalty can be doubled. In addition to paying the penalty, the violator must remove or rectify the violation within a period determined by the Ministry of Irrigation. If the violator fails to remove the violation within the allotted time, the Ministry is authorized to remove it at the violator's expense.

Article 89 in Law 4/1994, reduces the lower limit of the fine for violation of Article 2 of Law 48/1982 to LE 200, increases the upper limit of the fine to LE 20,000, provides for imprisonment only in cases of recidivism, and does not provide for doubling fines in the cases of recidivism. The article contains the same language as in Article 16 of Law 48/1982 authorizing the Ministry of Water Resources and Irrigation to require removal or rectification of the violation or to do so itself, at the expense of the violator. The article does not state that it is an amendment to the penalties in Law 48/1982, but Article 3 of the Presidential Decree issuing Law 4/1994 repeals all provisions of other laws running counter to the provisions of Law 4/1994. Therefore, the penalties for Article 2 of Law 48/1982, stipulated in Article 89 of Law 4/1994, are the penalties that are currently in effect.

LAWS CONCERNING PUBLIC WAYS

Two laws concerning public ways (highways, streets, and squares) contain restrictions on solid waste management and disposal – Law Number 140 of 1956, Occupation of Public Ways (Law 140/1956) and Law Number 84 of 1968, Concerning Public Ways (Law 84/1968). Law Number 106 of 1976 on Building Construction (Law 106/1976), as amended

³⁶ MoI 8/1983 Article 2.

³⁷ MoI 8/1983 Article 1, Definition 12.

³⁸ EEAA. Guide Document for Solid Waste Systems in Egypt. Solid Waste General Department, EEAA, Ministry of Environmental Affairs, Cairo, Egypt. April 2001, page 75.

by Law Number 101 of 1996 (Law 101/1996), does not contain specifications for the management of construction wastes, but it does contain a funding mechanism that can be used by local authorities to enforce Laws 140/1956 and 84/1968.

Solid Waste Management Provisions

Law 84/1968 prohibits placing solid wastes on public ways.³⁹ The law applies to all of the highways and main streets in Qalyoubiya, but does not apply to other roads inside the boundaries of towns that have local councils, as do all of the towns to be served by the solid waste privatization program in Qalyoubiya.

Law 140/1956 and its executive regulations, issued by Minister of Municipal and Rural Affairs Decree Number 395 of 1956 (MoMRA 395/1956), deal primarily with granting licenses for occupation of public ways within the borders of areas with local councils. One of the activities that require a license is placement of construction and demolition debris in a public way.⁴⁰ The executive regulations for the law contain specifications for the management of construction and demolition debris, which allow placing the debris on the street only in manner that does not obstruct the flow of traffic.⁴¹ The law also allows the competent administrative authority to charge a fee for occupation of public ways, and those fees are set in the executive regulations.⁴²

Local Enforcement Authority

Article 21 of Law 140/1956 authorizes the Minister of Municipal and Rural Affairs and the Minister of Justice to enforce the law. Article 16 of that law authorizes the Minister of Municipal and Rural Affairs to specify the competent authorities for enforcement of the law's provisions. Article 1 in PD 272/1982 transferred jurisdiction for enforcement of Law 140/1956 and Law 84/1968 to local administrative units.

Penalties

Violation of Law 140/1956 and its executive regulations carries a fine from LE 100 to LE 300, plus the violator is required to pay five times the occupation fee, two times the cost of court fees, and the cost to remove the debris. If the violator does not remove the debris, the local authority is authorized to do so at the expense of the violator. In addition, the governor can suspend the violator's construction and demolition license until the violation is removed, if he or she determines that the violation poses a clear danger to public health and safety. If the violator refuses to pay the penalties, he or she can be imprisoned for up to one month and his fines can be increased to from LE 300 to LE 1,000.

Violation of Law 84/1968 carries a penalty of imprisonment for up to one month and a fine of not more than LE 100.⁴³ The law also authorizes the implementing authority to remove the obstruction at the violator's expense plus an administrative fee of 15 percent of the cost of removal.⁴⁴

³⁹ Law 84/1968 Article 13.

⁴⁰ Law 140/1956 Article 2.

⁴¹ MoMRA 395/1956 Article 11.

⁴² Law 140/1956 Article 7; MoMRA 395/1956 Articles 1 and 25.

⁴³ Law 84/1968 Article 13

⁴⁴ Law 84/1968 Article 15.

Law 106/1976 is the general law concerning construction activities. Article 6 of the law requires individuals who receive a construction permit to pay a non-refundable fee of one percent of the value of the construction to the governorate to cover expenses incurred by the governorate during or after construction. Article 4 of the executive regulations for the law, issued by Minister of Housing and Public Utilities Decree 268 of 1996 (MoHPU 268/1996), allows the governorate to keep the revenues collected from the one percent fee in a special fund and to use that fund to finance several activities including removal of construction and demolition debris left by violators of the law. Thus, Law 106/1976 and its executive regulations do not have specifications for the management of construction and demolition debris, but they do create a financial mechanism for allowing enforcement of the provisions of Laws 140/1956 and 84/1968.

OTHER LAWS AND REGULATIONS

Law Number 137 of 1981, Labor Law

Law Number 137 of 1981 (Law 137/1981) requires employers to inform employees of the dangers associated with handling solid waste and requires employers to provide safety equipment and training to employees handling solid waste. This law is enforced the Ministry of Manpower.

Law Number 155 of 1999, Traffic Law

Article 72 of the Traffic Law (Law 155/1999) states that any vehicle driver who throws from his or her vehicle garbage, waste, or any other item that pollutes the public ways shall be fined not less than LE 50 or more than LE 500. In addition, the driver's license of the violator can be suspended for 30 to 60 days. Enforcement authority for this law lies with the Traffic Police in the Ministry of Interior.

General Egyptian Penal Law

In addition to the specific laws referenced above, the General Egyptian Penal Law contains two articles prohibiting littering. Article 377 provides for a fine up to LE 100 for throwing wastes on public roads. Article 378 provides for a fine up to LE 50 for throwing wastes on vehicles, buildings, gardens, animal pens, and fenced land, or throwing objects into Nile or its canals that will obstruct navigation. Enforcement authority for the Penal Law lies with the Ministry of Justice and the Egyptian Courts.

SECTION 3

ANALYSIS OF EXISTING LAWS AND REGULATIONS

The information presented in the previous section of this report identifies a significant number of laws governing solid waste management. Current laws and regulations address most of the critical components of solid waste management including collection, transportation, treatment, and disposal.

Local authorities in Qalyoubiya are authorized to enforce the principal solid waste management laws and regulations:

- Law 38/1967.
- The solid waste components of Law 4/1994.
- The littering and obstruction provisions of Law 140/1956 and Law 84/1968.
- Article 2 of Law 48/1982.⁴⁵

Their authority either is established in the individual laws or has been subsequently granted via other laws or decrees. The authority to enforce other laws prohibiting littering, including Article 72 of the Traffic Law (Law 155/1999) and Articles 377 and 378 of the General Egyptian Penal Law, is not granted to local authorities. However, this does not prohibit local authorities in Qalyoubiya from enforcing against disposal of waste on public ways or littering as these actions also violate Law 38/1967 and Law 4/1994, which prohibit dumping solid waste in undesignated areas.⁴⁶ Indeed, enforcement authority for Law 38/1967 and Law 4/1994 is sufficient for management of solid waste, in that violations of the solid waste components of the other relevant laws (140/1956, Law 84/1968, and Law 48/1982) are also violations of the “undesignated dumping” provisions of Law 38/1967 and Law 4/1994.

For effective implementation of the solid waste management privatization program, the GOQ will need to be able to enforce two general categories of regulations.

- Those governing the behavior of the contractors regarding collection, transport, treatment, and disposal of solid waste.
- Those governing the behavior of citizens regarding management of solid waste.

This section of the report looks at the legal requirements in these two areas. The next section will address the current enforcement of these requirements by the Governorate.

⁴⁵ This authority comes via Article 89 of Law 4/1994 that, among other things, establishes a fine for violating Article 2 of Law 48/1982. Article 2 of Law 48/1982 includes the prohibition of dumping solid waste in the Nile and its canals.

⁴⁶ Law 38/1967 Articles 1, 2, and 3; MoH 134/1968 Articles 5 and 16; Law 4/1994 Article 37; PM 338/1995 Article 38.

LEGAL REQUIREMENTS FOR COLLECTION AND DISPOSAL CONTRACTORS

The Qalyoubiya Governorate will not rely upon legal enforcement to address the behavior of contractors regarding collection, transport, treatment, and disposal of solid waste under the solid waste privatization program. The contracts prescribe that behavior, which in all cases meet the legal requirements and in many cases exceed them. The GOQ will enforce these contractual obligations via contract management, specifically through the monitoring, payment, and penalty provisions of the contracts. Table 3 shows the solid waste management laws and regulations that the Qalyoubiya Governorate will enforce via contract management.

Table 3. Legal Requirements to be Enforced Via Contract Management

Requirement	Applicable Laws/Regulations
Provide and maintain containers that meet container specifications	Law 38/1967: Articles 2, 3 MoH 134/1968: Article 5, 6, 7, 12 PM 338/1995: Article 39
Provide and maintain collection vehicles that meet vehicle specifications	Law 38/1967: Article 3 MoH 134/1968: Article 7, 12, 14 PM 338/1995: Article 39
Collect waste at frequency specified	Law 38/1967: Article 3 MoH 134/1968: Article 7, 11 PM 338/1995: Article 39
Provide workers with protective clothing	Law 38/1967: Article 3 MoH 134/1968: Article 7, 10 Law 137/1981
Prohibit sorting in the street by collectors	Law 38/1967: Article 3 MoH 134/1968: Article 7, 13
No spillage on public ways	MoH 134/1968: Articles 12, 14, 16 Law 84/1968: Article 13
Dispose of collected waste in designated location	Law 38/1967: Articles 1, 3 MoH 134/1968: Article 5, 7, 16 Law 4/1994: Article 37 PM 338/1995: Article 38 Law 48/1982: Article 2 MoI 8/1983: Article 2 Law 84/1968: Article 13
Build and operate treatment and disposal facilities in accordance with specifications	Law 38/1967: Article 3 MoH 134/1968: Article 7, 17 Law 4/1994: Articles 19-23, 34, 35, 37 PM 338/1995: Articles 10-19, 34, 35, 38

LEGAL REQUIREMENTS FOR CITIZEN BEHAVIOR

Success of the privatization program will depend upon citizen compliance with solid waste management laws and regulations as well as contractor compliance. For the program to result in a cleaner Qalyoubiya, citizen behavior regarding the handling of solid waste must be controlled. There are four illegal activities in particular that the Governorate will have to monitor and prosecute:

- Littering.
- Dumping solid waste in undesignated areas.

- Burning garbage.
- Setting garbage out in undesignated containers.

These behaviors can be largely controlled through effective public communications programs, but control may also require legal enforcement. Table 4 identifies the legal requirements governing these four activities.

The GOQ has legal authority to enforce compliance with laws and regulations governing all four of the activities identified in Table 4. The fines for violating these laws and regulations can be as high as LE 20,000, as they can be enforced under Law 4/1994. Burning garbage can only be enforced under Law 4/1994, which has a fine from LE 1,000 to LE 20,000. The other activities could also be enforced under Laws 38/1967 and Law 84/1968, which have maximum fines of LE 100, but even if the lower fine were imposed, it would be sufficient to deter most citizens from violating the law.

Table 4. Legal Requirements for Citizen Behavior Regarding Municipal Solid Waste

Activity	Law or Regulation	Prohibition
Littering	Law 38/1967: Articles 1, 2, 3 MoH 134/1968: Article 5	Put garbage, dirt, and residuals in undesignated location.
	Law 4/1994: Article 37 PM 338/1995: Article 38	Dump garbage and solid waste in undesignated location.
	Law 48/1982: Article 2 MoI 8/1983: Article 2	Dump solid waste in or on the banks of the Nile and its canals without a permit.
	Law 84/1968: Article 13	Place wastes in public ways.
	Law 155/1999: Article 72	Throw waste from vehicle onto public ways.
Dumping garbage in an undesignated area	Law 38/1967: Articles 1, 2, 3 MoH 134/1968: Articles 5, 16	Put garbage, dirt, and residuals in undesignated location.
	Law 4/1994: Article 37 PM 338/1995: Article 38	Dump garbage and solid waste in undesignated location.
	Law 48/1982: Article 2 MoI 8/1983: Article 2	Dump solid waste in or on the banks of the Nile and its canals without a permit.
	Law 84/1968: Article 13	Place wastes in public ways.
Burning garbage	Law 4/1994: Article 37 PM 338/1995: Article 38	Burn garbage and solid waste.
Placing garbage in undesignated containers	Law 38/1967: Articles 2, 3 MoH 134/1968: Articles 5, 6	Set garbage out in containers not in compliance with specifications.
	PM 338/1995: Article 39	Placing garbage in containers without tight covers.

The Governorate will need to change the behavior of private operations as well as the behavior of individuals for successful implementation of the privatization program. In particular, the Governorate will have to be able to effectively enforce the laws and regulations governing three activities:

- Scavenging.
- Unlicensed collection of solid waste.

- Management of construction and demolition activities.

The contracts between the GOQ and the contractors give the contractors exclusive rights to collect and dispose of solid waste in the area served, as well as ownership of the solid waste, once it has been placed in containers for collection. To safeguard that right, the Governorate will have to be able to enforce laws against scavenging and unlicensed collection. Several articles in Law 38/1967 and its executive regulations (MoH 134/1968) prohibit these activities (Table 5). As these laws and regulations are only present in Law 38/1967 and its executive regulations, the penalty for violation is limited to a fine of no more than LE 100. However, the law does have provisions for seizing vehicles used in the violation.⁴⁷

Table 5. Legal Requirements for the Behavior of Private Operations Regarding Municipal Solid Waste

Activity	Law or Regulation	Prohibition
Scavenging	Law 38/1967: Articles 3, 6 MoH 134/1968: Article 13	Sort garbage on the street.
Collecting garbage without a license	Law 38/1967: Articles 3, 6 MoH 134/1968: Articles 5, 7, 9, 14	Collect garbage without a license.

Management of construction and demolition debris is not included in the privatization program. Proper handling of these waste materials will be dependent upon enforcement of existing laws and regulations. Four laws give the Governorate of Qalyoubiya the authority to regulate the management of construction and demolition debris (Table 6), and a fifth law, Law 106/1976, gives the Governorate a mechanism to ensure compliance, at least for all legally sanctioned construction and demolition activities.

Table 6. Legal Requirements for the Behavior of Private Operations Regarding Construction and Demolition Debris

Activity	Law or Regulation	Prohibition
Accumulation of construction and demolition debris	PM 338/1995: Article 41	Obstruct the movement of traffic and people.
	Law 84/1968: Article 13	Place wastes in public ways.
	Law 140/1956: Article 2 MoMRA 395/1956: Article 11	Place construction and demolition debris in public ways.
Illegal transport of construction and demolition debris	Law 38/1967: Article 3 MoH 134/1968: Article 15	Haul construction debris in a vehicle not in compliance with specifications.
	Law 4/1994: Article 39 PM 338/1995: Article 41	Haul construction debris in a vehicle not licensed to do so by local authority.

⁴⁷ Law 38/1967 Article 9.

SECTION 4

IMPLEMENTATION OF LAWS AND REGULATIONS

The primary function of local administration in Egypt is to implement public policy as established by central government. As described in the previous sections of this report, local administration has authority to enforce the laws and regulations governing solid waste management. In addition to the authorizations in the solid waste management laws and regulations, Law 43 of 1979, Local Government System Law (Law 43/1979) empowers local authorities to establish institutions and manage public services such as solid waste management and public cleaning.⁴⁸ This section of the report identifies how the GOQ exercises that authority. The information presented in this section comes from interviews with officials in the GOQ at the governorate and city levels (Appendix E).

GOVERNORATE STRUCTURE

Law 43/1979 establishes the basic structure of local administration in Egypt. The units of local administration are the governorate (*mohafza*), district (*markaz*), urban quarter (*hay*), town (*medina*), and village unit (*wahdat qarya*). The GOQ is divided into seven districts and two urban quarters:

- Districts: Kafr Shukr, Banha, Tokh, Shebin El Qanatir, El Qanatir El Khairiya, Khanka, and Qalyub.
- Urban Quarters: Shubra El Kheima West (Number 1) and Shubra El Kheima East (Number 2).

One-quarter of the total population of Qalyoubiya live in the two urban quarters of Shubra El Kheima.

The districts are further divided into towns and village units (Figure 1). There are eight towns in Qalyoubiya (Table 2). Seven of the towns are the capitals of the seven districts, and in each case share the same name as the district. The other is Qaha, located in the Tokh district. The area outside of the towns is divided into 46 village units (Table 2). Each village unit is composed of the main village and a number of satellite villages or rural residences surrounding the main village. Every piece of land in the governorate is uniquely located in an urban quarter, a town, or a village unit. The solid waste privatization program is concerned only with the urban quarters and the towns, so this report does not address the administrative structure of village units.

Each district, urban quarter, and town is managed by a chief (*rais*) often referred to as the mayor. The mayor of a district, appointed by the Prime Minister, also serves as the mayor of the district capital. The Governor appoints mayors of the urban quarters and towns that are not district capitals. All of the mayors sit on the Executive Council for the Governorate, and report to the Governor.

⁴⁸ Law 43/1979 Article 2.

Figure 1: Local Administration Organizational Structure in Qalyoubiya

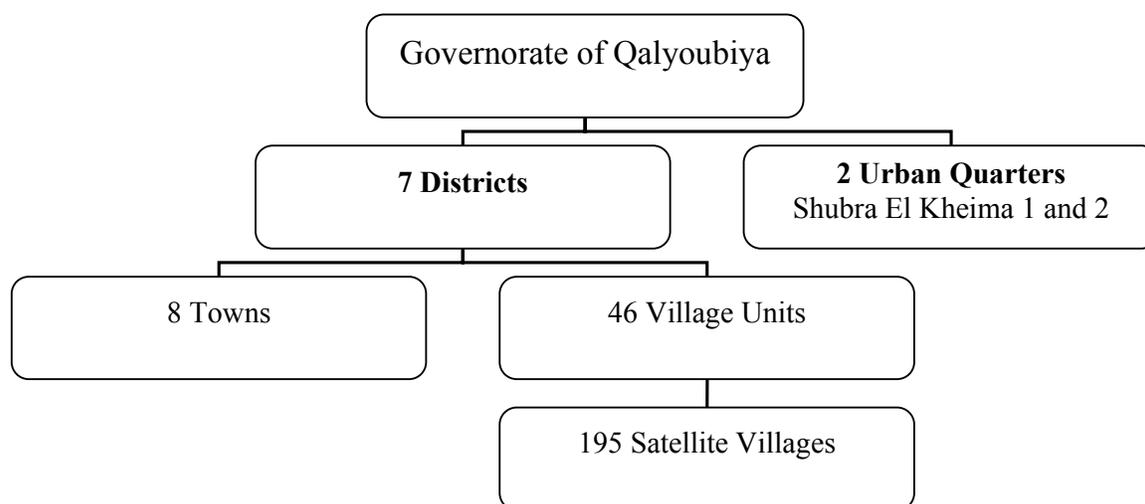


Table 7. Local Administrative Units in Qalyoubiya

District or Urban Quarter	Towns	Village Units	Satellite Villages
Kafr Shukr	1	5	22
Banha	1	7	40
Tokh	2	10	49
Shebin El Qanatir	1	8	36
El Qanatir El Khairiya	1	4	17
Khanka	1	6	14
Qalyub	1	6	17
Shubra El Kheima, West (1)	NA	NA	NA
Shubra El Kheima, East (2)	NA	NA	NA
Total	8	46	195

NA = Not Applicable, Urban Quarters do not contain towns, village units, or satellite villages.

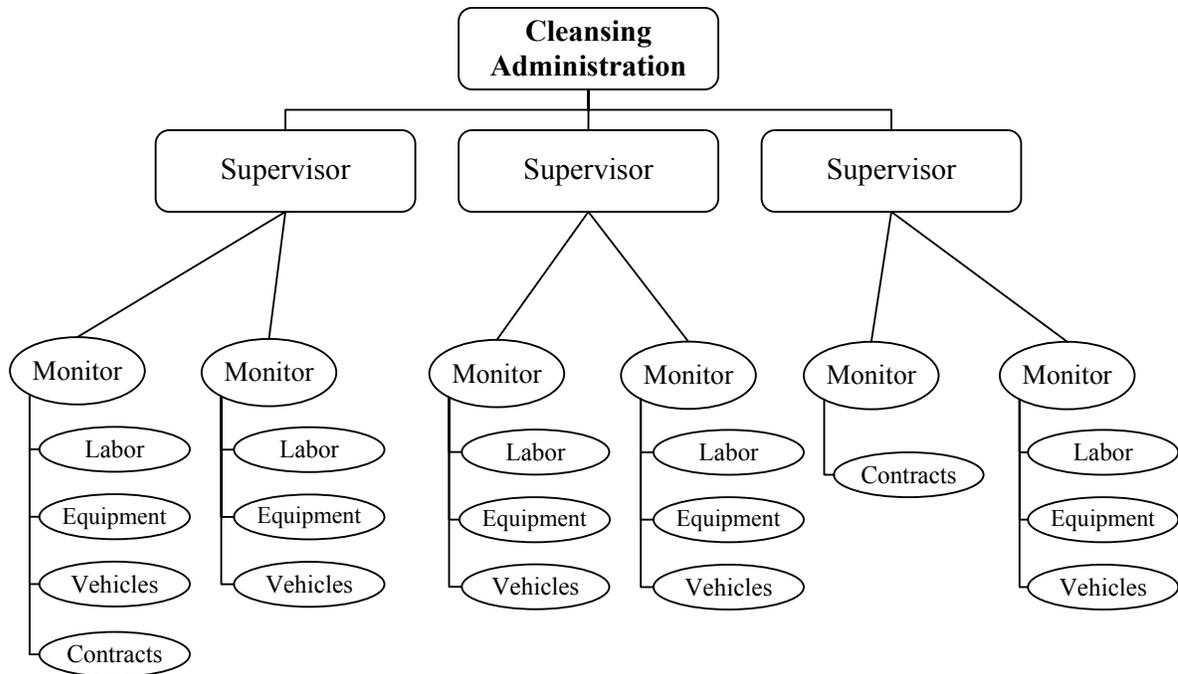
Under the mayors are several functional administrative departments, including the Cleansing Administration. The Cleansing Administration is the local government authority responsible for general cleaning. In some towns, the Director of the Cleansing Administration reports directly to the mayor. In other towns, the Director may report to a Deputy Mayor or to the Chief of the Engineering Department, but all towns have a Cleansing Administration responsible for solid waste management and street cleaning.

In addition to providing or managing solid waste services, the Cleansing Administration enforces Law 38/1967. MoJ 3137/1976 gives authority to enforce the provisions of Law 38/1967 to technical personnel supervising cleaning services in local units and cleaning monitors and supervisors. All of these positions are in the Cleansing Administration.

Figure 2 shows a typical organization chart for a Cleansing Administration in Qalyoubiya. Typically, an urban quarter or town is divided into several areas in which cleansing activities are managed. The town of Tokh, for instance, has eight management areas, whereas Shubra

El Kheima West has only two management areas. A Supervisor who reports to the Director of the Cleansing Administration manages each area. Under each Supervisor are Monitors who oversee the work of government street sweepers and garbage collectors and monitor the services provided by private contractors.

Figure 2. Cleansing Administration Organization



The Cleansing Administration is responsible for enforcing Law 38/1967. Other town or quarter departments are responsible for enforcing other laws and regulations with solid waste management provisions:

- The Environmental Management Unit enforces Law 4/1994.
- The Road or Engineering Department enforces Law 140/1956 and Law 84/1968.
- The Housing, Construction, or Engineering Department enforces Law 106/1976.

PROCEDURES FOR CITIZEN VIOLATIONS

The Cleansing Administration in each town or urban quarter in Qalyoubiya has its own procedures for enforcing solid waste management laws; however, all of them focus on Law 38/1967, as that is the law for which the Cleansing Administration is responsible. In the event of garbage burning, which is a violation of Law 4/1994 rather than Law 38/1967, the Cleansing Administration may make a referral to the Environmental Management Unit, which has local responsibility for Law 4/1994.

Citations for violations of the provisions of Law 38/1967 and its executive regulations (MoH 134/1968) can be written by:

- Mayor.
- Deputy Mayor.
- Chief of the Engineering Department (if the Cleansing Administration falls under the Engineering Department).
- Director of the Cleansing Administration.
- Cleansing Supervisors (in some towns).

Usually the Director of the Cleansing Administration and his or her Supervisors handle enforcement. Enforcement generally begins when a Monitor or Supervisor in the Cleansing Administration observes a violation. If a Monitor observes a violation, he or she contacts the Supervisor. In some towns, the Supervisor will use the information to write a citation. In other towns, the Supervisor passes the information on to the Director of the Cleansing Administration who writes the citation.

Once a Supervisor or Director is informed about a possible violation, he or she must secure the necessary information to process the violation. In particular, he or she must record the type of violation, date and location of the violation, and name and address of the violator. If the Supervisor or Director does not know the name and address of the violator, he or she may ask the violator for identification. Although Supervisors and Directors of the Cleansing Administration are not legally authorized to require a violator to produce his or her identification card, most violators cooperate when asked to produce identification.

The GOQ has no standard form on which to report the violations of Law 38/1967. In Tokh, they use a form created for several laws, including Law 38/1967. In Benha, they use a form for Law 140/1952, crossing out the reference to Law 140/1952 and replacing it with the reference to Law 38/1967. The Cleansing Administrations in Shubra El Kheima East and West do not use a form, but have the Supervisors record the necessary information on a piece of paper and give it to the Director of the Cleansing Administration.

Enforcement of the law can also begin with a complaint from a citizen about a possible violation. In this case, the complaint usually comes to the Mayor's office and the Mayor forwards it to the Director of the Cleansing Administration for follow up.

The Director of the Cleansing Administration receives the necessary information from the Supervisors and sends it to the town or urban quarter financial office for processing. The financial office makes a determination about the amount of the penalty, using Law 38/1967. At this point, again, the procedures vary from town to town. In some towns or urban quarters, the financial office sends a notification to the violators informing them that they have violated the law, must remove the violation, come to the financial office, and pay the fine. In other towns or urban quarters, the financial office sends the information to the police, and the police notify the violator.

Upon receiving a notice, a violator can respond by removing the violation and paying an LE 10 fine within 24 hours, in which case the GOQ will terminate its enforcement action. The

violator pays the fine to the financial office. If the violator fails to respond within 24 hours, he or she can still correct the violation and pay the fine to the financial office, provided the citation has not been referred to the District Attorney. The financial office will usually increase the fine to LE 100 if the violator pays the fine after the 24-hour period. If the violation occurs in one of the towns that sends violation notices through the police, the violator must present the receipt for the fine to the police to terminate the enforcement action.

If the Cleansing Administration has used its own equipment to remove the violation, the violator is also required to pay the cost of the removal in addition to the fine. This is one mechanism that some of the towns use to increase the cost of a violation.

If the violator does not respond to the notification, the Cleansing Administration or the police will refer the citation to the District Attorney. Upon receiving a notice of violation, the District Attorney issues a criminal order to the violator requiring him or her to comply with the penalties (pays the fine, pay expenses, remove the violation, etc.). The violator can comply with the order and end the enforcement action, or protest the criminal order to the courts. If the violator ignores the criminal order, the District Attorney can take the case to court.

The courts are crowded with many cases, so it can often take up to one year after the violation has occurred for the court to rule on the case. If a violation goes to court, the judge may decide to try the case under Law 4/1994 instead of Law 38/1967, in which case the fine can be greater than LE 100. If the judge decides to try the case under Law 4/1994 instead of Law 38/1967, he or she must notify the defendants of the change.

PROCEDURES FOR PRIVATE OPERATION VIOLATIONS

The procedures for littering, burning, scavenging, unlicensed collection, and illegal by private operations are the same as those for violations by citizens. However, the procedures differ for the handling of construction and demolition debris.

Construction and Demolition Debris

All construction and demolition activities require a permit (Law 106/1976). The permit contains requirements for the management and removal of construction and demolition debris. The individual with the permit is required to remove construction and demolition debris and dispose of it in a designated area. Depending upon the town or urban quarter, the Housing, Construction, or Engineering Department issues and monitors construction and demolition permits.

The Cleansing Administration becomes involved in legal procedures involving construction and demolition debris only if the other department is not enforcing the permit requirements or if the individual undertaking construction or demolition does so without a permit. In these cases, the Cleansing Administration handles the violation as disposal in an undesignated area and applies the same procedures used for private citizen violations.

SECTION 5

ANALYSIS OF EXISTING IMPLEMENTATION

An effective program for implementation of solid waste management laws and regulations has the following characteristics:

- Delegation of enforcement authority to field personnel.
- Well defined procedures including deadlines and consequences.
- Standardized forms for reporting violations.
- Administrative remedies.
- Fines set at levels that deter illegal activities.
- The ability to move problem enforcement actions into the criminal legal system.

It is difficult to assess the GOQ against these criteria, as enforcement of solid waste management laws varies from town to town. Some of the towns have nearly all of these components, while others have few. As the GOQ implements the privatization program, it will need to standardize enforcement procedures. This will be particularly true if the new Contract Monitoring Unit will be responsible for enforcement.

The Supervisors in the Cleansing Administrations have authority to enforce Law 38/1967 as per MoJ 3137/1976, and they exercise that authority in several towns and urban quarters. However, they do not have direct authority to enforce the solid waste sections of Law 4/1994; hence, they cannot cite individuals for burning garbage. The Supervisors can only refer cases of garbage burning to the Environmental Management Units. This limitation in authority should be addressed when the Contract Monitoring Unit is developed.

Similarly, the Supervisors are not authorized to enforce Law 140/1956 and Law 84/1968. This limitation, however, is less critical than the limitation on enforcement authority for the solid waste sections of Law 4/1994, because the requirements of these laws can be enforced under the restrictions on “dumping in undesignated areas” of Law 38/1967.

Some of the officials interviewed during the preparation of this report were concerned about the slow legal process of Law 38/1967 if a case goes to court. Waiting up to one year for resolution of a violation does not encourage immediate response from the citizenry to notification of violation. Well-defined and aggressively applied administrative procedures will help eliminate the need to go to court, and thus improve the citizen compliance. Shubra El Kheima West recently initiated an aggressive administrative enforcement program against disposal in undesignated areas, which has resulted in a marked increase in street cleanliness.

SECTION 6

RECOMMENDATIONS

The GOQ will have to take several actions to improve enforcement of solid waste management laws and regulations including:

- Provide high-quality and dependable solid waste collection.
- Delegate citation authority to field personnel.
- Increase the number of personnel responsible for enforcing the law.
- Standardize enforcement procedures.
- Train enforcement personnel.
- Develop and implement a public awareness program informing citizens of their legal responsibilities and associated penalties for violations.
- Improve coordination and communication between the enforcement personnel and personnel from other relevant departments in the Urban Quarters.

The GOQ has already begun to take some of these actions, particularly those dealing with the provision of dependable, high-quality solid waste collection and increasing the number of personnel responsible for enforcing the laws and regulations. This is being accomplished via the privatization of solid waste management and the creation of the Contract Monitoring Unit. Implementation of the privatization program will provide solid waste services to all of the citizens of the towns and urban quarters in Qalyoubiya, thus removing the need for some of them to resort to illegal means of waste disposal such as dumping and burning.

Creating the Contract Monitoring Unit (CMU) will increase the number of enforcement personnel. Once the GOQ privatizes solid waste services and creates the CMU, Monitors in the City offices of the CMU⁴⁹ will replace the Supervisors in the Cleansing Administrations. Currently there are from two to seven Supervisors in each town or urban quarter. In the CMU, there will be from two to 13 Monitors in each City office, thus significantly increasing the number of enforcement personnel in the field.

Once the GOQ creates the CMU, the City Monitors and the City Supervisors (the Monitors supervisors) will need to receive authorization to write and serve citations for violations of Law 38/1967 and the solid waste provisions of Law 4/1994.⁵⁰ The Governor may be able to grant this authority for Law 38/1967 via a Governor's decree, if Monitors and Supervisors are deemed included in the list of enforcement authorities in the Minister of Justice Decree 3137 of 1976. However, a new decree from the Minister of Justice will be necessary to authorize the Monitors to enforce the solid waste provisions of Law 4/1994. It may be wise to have one decree from the Minister of Justice authorizing the Monitors and Supervisors to enforce both laws.

⁴⁹ Collection and Cleaning Monitors and Medical and Industrial Monitors.

⁵⁰ Law 4/1994 Articles 37 and 39; PM 338/1995 Articles 38 and 41.

The City Monitors and Supervisors will also need the authority to take necessary enforcement actions such as the authority to require citizens to show them identification and the authority to seize unlicensed vehicles and associated equipment. Decrees from the Ministry of Justice may be necessary to grant these authorities to the City Monitors and Supervisors.

GOQ needs to standardize the procedures it uses to enforce Law 38/1967 and the solid waste provisions of Law 4/1994. The Monitors should use one standard form to report violations. The GOQ may want to use the system currently in use in the Governorate of Cairo, whereby the monitors write the forms in duplicate in the field, giving the original to the violator as a citation and sending the duplicate to the financial office through their supervisors.

The GOQ also needs to strengthen its administrative procedures so that cases can be resolved administratively at the town or urban quarter level, rather than being elevated to the police and the courts.

Monitors will need to receive training in how to write and serve citations properly once they are authorized to do so. The job descriptions for the Monitors include the responsibility to inform citizens and businesses of potential violations of laws and regulations and to report observed violations.⁵¹ The Monitors will need to receive general training on the requirements of Laws 38/1967 and 4/1994 and their executive regulations and specific training in how to write, serve, and process citations. The CMU City Supervisors will also need to participate in the training so that they will be able to properly process citations written by the Monitors they supervise.

The GOQ may also want to investigate the efficacy of creating an incentive program for Monitors to encourage them to pursue enforcement. Incentives could take the form of performance review criteria or cash rewards. Care must be taken in designing an incentive program to avoid creating a system that penalizes Monitors who effectively educate the people in their areas about the requirements of the laws and rewards those who just write citations.

Educating people about the importance of obeying the laws may be more effective in changing their behavior than merely writing citations, and a Monitor who educates the people rather than writes citations may be able to produce a cleaner area than a Monitor who just writes citations. Incentive programs that focus on results, such as the cleanliness of the Monitors area, may be more effective at gaining compliance with laws than one that focuses on the number of citations issued.

Training should also be provided to local police, so that they can understand the requirements of Laws 38/1967 and 4/1994 and their executive regulations. The training should also stress the importance of processing complaints in a timely manner so that problems can be resolved before becoming a public nuisance.

Public awareness must be a critical component of the enforcement program. Enforcement can change behavior, but it is reactive and often negative. Public awareness is a proactive and positive mechanism for changing behavior. The CMU should include awareness of solid waste rules and the penalties for violating those rules in its public awareness and communications programs.

⁵¹ Management Structure for the Contract Monitoring Unit Governorate of Qalyoubiya, prepared for the GOQ, EEPP, and USAID by Abt, Associates et al., October 3, 2002.

Finally, the GOQ needs to create mechanisms for coordination between the CMU City offices and the town or urban center departments responsible for the management of construction and demolition debris. The CMU will have 62 Monitors in the field every day. These Monitors could assist the relevant departments in enforcing permit requirements for the management of construction and demolition debris under Laws 106/1976 and 140/1956. They could also help the relevant departments identify unlicensed construction and demolition activities.

In summary, to effectively enforce solid waste management laws and regulations, the GOQ will need to:

- Privatize solid waste services in the towns and urban quarters, thus creating legal alternatives to dumping and burning.
- Create the Contract Monitoring Unit and hire City Monitors.
- Issue a decree (or arrange for the Ministry of Justice to issue a decree) authorizing the CMU Monitors and City Supervisors to write and serve citations for violations of Law 38/1967 and the solid waste requirements of Law 4/1994 and their executive regulations, including the authority to ask for identification and seize unlicensed vehicles and associated equipment.
- Standardize the procedures for enforcing violations of Law 38/1967 and the solid waste requirements of Law 4/1994, including standardizing citation forms and the processing of those forms.
- Develop administrative procedures to resolve violations at the town or urban quarter level, rather than elevating them to the police and the courts.
- Train CMU City Supervisors and Monitors in how to write, serve, and process citations.
- Develop incentives for Monitors to secure compliance with solid waste management laws in their areas.
- Train police in the requirements of Laws 38/1967 and 4/1994 and their executive regulations.
- Incorporate awareness of solid waste rules and the penalties for violating those rules into the CMU's public awareness and communications programs.
- Develop and implement procedures for coordination between the CMU City offices and the town or urban quarter departments responsible for managing construction and demolition permits, to improve management of construction and demolition debris.

These recommendations will be discussed with the GOQ, and a subsequent report will elaborate the procedures for their implementation.

APPENDIX A

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APPENDIX B

LIST OF LAWS AND REGULATIONS REVIEWED IN THIS REPORT

National Laws and Regulations

Law Number 140 of 1956, Occupation of Public Ways (Law 140/1956)

Minister of Municipal and Rural Affairs Decree Number 395 of 1956: Executive Regulations for Law 140/1956 (MoMRA 395/1956)

Law Number 38 of 1967 General Public Cleaning (Law 38/1967), as amended by: Law 31/1976, Law 209/1980, Law 177/1981, and Law 129/1982

Minister of Housing Decree Number 134 of 1968: Executive Regulations for Law 38/1967 (MoH 134/1968)

Law Number 84 of 1968, Concerning Public Ways (Law 84/1968)

Law Number 43 of 1979, Local Government System (Law 43/1979), as amended by Law 9/1989 and Law 84/1996

Minister of Local Administration Decree Number 707 of 1979: Executive Regulations for Law 43/1979 (MoLA 707/1979)

Law Number 137 of 1981, Occupational Safety (Law 137/1981)

Law Number 48 of 1982, Protection of the Nile and its Canals (Law 48/1982)

Minister of Irrigation Decree Number 8 of 1983: Executive Regulations for Law 48/1982 (MoI 8/1983)

Law Number 4 of 1994, Environmental Law (Law 4/1994)

Prime Minister's Decree Number 338 of 1995: Executive Regulations for Law 4/1994 (PM 338/1995)

Law Number 106 of 1976, Building Construction (Law 106/1976)

Law Number 101 of 1996, major amendments to Law 106/1976 (Law 101/1996)

Minister of Housing and Public Utilities Decree 268 of 1996: Executive Regulations for Law 106/1976 as amended by Law 101/1996 (MoHPU 268/1996)

Law Number 89 of 1998, Tenders for Procurement of Goods and Services (Law 89/1998)

Minister of Finance Decree Number 1367 of 1998: Executive Regulations for Law 89/1998 (MoF 1367/1998)

Law Number 155 of 1999, Traffic Law (Law 155/1999)

Presidential Decree Number 272 of 1982, Transferring the Jurisdiction of the Ministry of Housing to Local Administrative Units (PD 272/1982)

Minister of Justice Decree Number 3137 of 1976, Delegating Authority to Local Administrative Units for Law 38/1967 (MoJ 3137/1976)

Minister of Justice Decree Number 1353 of 1996, Delegating Authority to Local Administrative Units for Law 4/1994 (MoJ 1353/1996)

APPENDIX C

LAW NUMBER 38 OF 1967, GENERAL PUBLIC CLEANING

Article 1

Placing garbage, waste, rubbish, or wastewater in places other than those specified by the local council shall be prohibited.

Article 2

Building inhabitants and owners and managers of public shops, amusement parks, industrial and commercial facilities, and other facilities that cause nuisance or pose dangers to health and safety and the like, shall place all types of garbage, waste, and rubbish in specified containers and empty them according to the conditions and specifications set forth in the executive regulations of this law.

If the specified containers are not present, the local council shall provide them and collect the price of the containers from the violators through administrative means.

If a building has specially designed openings for receiving the wastes, and those openings are connected by pipes to a special room or rooms for storing waste, the openings, pipes and rooms shall conform to the conditions specified by the local council.

Owners of open land, whether fenced or not, shall remove accumulated wastes and dust from these areas and keep them clean.

Article 3

All processes for the collection, transport, and disposal of garbage, waste, and rubbish, as well as transporting and storing materials that may fall from transport vehicles or spill from storage areas, shall observe the conditions and specifications set forth in the executive regulations of this law.

Article 4

Committing any of the following actions is prohibited:

- a. Bathing or washing house wares, clothes, vegetables, or other items in fountains and public waterways except those designated for such purposes.
- b. Defecation in places other than those designated for this purpose.
- c. Washing animals, carts, or vehicles in places other than the pens or places designated for such purposes.
- d. Herding cattle or other animals through roads and streets other than those designated for such purposes by the local council. A herd is more than three animals.

- e. Leaving livestock and poultry in squares, roads, streets, passageways, and lanes whether public or private, as well as at buildings entrances, terraces, and balconies.¹

Article 5

Owners of buildings located where there is no wastewater network must install sanitary facilities to collect wastewater according to the conditions set forth in the executive regulations of this law and at the location approved on by the competent authority. In case of violation, the competent authority is authorized to correct or construct the necessary facilities at the expense of the owner in accordance with the conditions set forth in the executive regulations of this law.

Owners of places with septic tanks must pump them when they are full during the time of day specified by the local council. The local council may voluntarily, or at the request of the lessee, perform this action at the expense of the owner and collect the costs through administrative means.

In all cases, the processes of collecting, pumping, transporting and disposing of wastewater, as well as the behavior of the workers, shall observe the conditions specified in a decree to be issued by the local council.

Article 6

Practicing waste collection or septic tank pumping is prohibited without the required license from the local council according to the conditions and regulations issued by a decree by the council.

Article 7

Owners of unfenced and open or deserted land that the local council deems to be dangerous to public health or to detract from the beauty of the city or town shall fence the land in the time specified by the local council and in accordance with the conditions determined in the executive regulations for this law. If the owner does not fence the land within the specified time, though notified about it, the local council is authorized to fence it at the expense of the owner and collect the costs through administrative means.

Article 8

The local council is authorized to impose an obligatory fee of not more than two percent of the rental value on the occupants of buildings. The collected fees shall be allocated for public cleaning activities.

In each local council where this fee is imposed, a cleaning fund shall be established. All fees collected shall be put into the cleaning fund as well as fines and other payments collected via administrative reconciliation as specified in paragraph 3 of Article 9 of this law and other funds allocated by the local council for public cleaning activities.

¹ Added as an amendment by Law Number 31 of 1976.

Article 9²

Without prejudice to any more severe penalties imposed by other laws, the fine for violating the provisions of this law or its executive regulations shall be no more than LE 100.

The competent administrative authority shall obligate the violator to remove the causes of the violation in a time period specified by the authority. If the violator does not remove the causes within the specified time period, the authority shall remove the causes at the expense of the violator and collect the costs through administrative means. Administrative reconciliation is applicable to crimes that violate Articles 1 and 4 of this law.

The action against a violator shall be cancelled if the violator pays LE 10 within 24 hours from officially recording the citation and notifying the violator.³

The competent administrative authority is authorized to ask a summary judge to order the seizure of a shop that dumps wastes in front of it, if the waste poses a clear danger to public health. Seizure shall be accomplished by sealing the shop until the action against it is settled. The competent judge may cancel the seizure at any time upon the protest of the owner of the shop prior to settlement of the action. In all cases, the seizure shall be terminated upon removal of the violation.

Article 10

The provisions of this law apply to cities and villages as designated in a decree by the competent governor. This decree shall enter into force 30 days after its publication in the official gazette.

Article 11

Law no. 151 for the year 1947 concerning fencing open areas and keeping them clean, and law no.159 for the year 1953 concerning cleaning squares, roads, and streets and waste collection and transport control, and the laws amending them, as well as any regulations in violation to the provisions of this law, shall be cancelled.

² Article 9 has been amended three times by Law Number 309 of 1980, Law Number 177 of 1981, and Law Number 129 of 1982. Before the amendments, the fine for violation of the law and its executive regulations was limited from LE 0.10 to LE 5, and the action against a violator could be concluded if the violator paid a fine from LE 0.25 to LE 0.50 within a 48 hour period.

³ Translator's note: this paragraph defines the procedures for "administrative reconciliation" referred to in the previous sentence.

Article 11 bis⁴

Competent employees of the local units, who are assigned by a decree from the Minister of Justice in coordination with the Minister of Local Administration, shall be regarded as investigation officers for the enforcement of the provisions of this law.

Article 12

This law shall be published in the official gazette and it shall take effect from the date of its publication. The executive regulations of this law shall be issued by a decree by the Minister of Housing and Utilities after the consent of the Minister of Health.⁵

This law is signed and sealed by the State's seal, and shall be implemented as one of its laws.

Issued at the Presidency of the Republic on the 23rd of Gomady 1st, 1387 (August 29, 1967).

⁴ Added as an amendment by Law 31 of 1976. Minister of Justice Decree Number 3137 of 1976 subsequently identified the following as investigation officers:

- 1) Governorate housing administrators.
- 2) Governorate health department administrators.
- 3) Engineering Division administrators for town and district councils.
- 4) Municipal organization administrators and engineers.
- 5) Governorate or local unit general manager for urban environmental protection.
- 6) Governorate health affairs representatives working in environmental protection.
- 7) Physicians at health offices and units in towns, districts, and village units.
- 8) Environmental protection monitors in local units.
- 9) Heads of village units in rural areas.
- 10) Technical personnel supervising cleaning services in local units.
- 11) Cleaning and draining monitors and supervisors.

⁵ The words "after the consent of the Minister of Health" were added as an amendment by Law 31 of 1976.

**EXECUTIVE REGULATIONS FOR LAW 38/1967
MINISTER OF HOUSING DECREE NUMBER 134 OF 1968**

**Chapter 1
Definitions**

Article 1

Garbage, waste, and rubbish are all solid or liquid wastes generated by individuals and residential units, nonresidential units (such as governmental and institutional buildings, companies, factories, and various types of stores), camps, pens, slaughterhouses, markets, public areas, amusement parks, and others, as well as those generated by means of transportation, and all other, which if stored in an undesignated area, may cause sanitary damage, fire outbreaks, or harm the appearance or cleanliness of a city or town.

Article 2

Wastewater is the water which, when dumped in places other than the ones specified, causes damages, nuisance, bad odors, or harms the appearance or cleanliness of a city or town.

Article 3

Garbage collector is any person who does not for the authority responsible for general cleaning activities, collecting, transporting, or disposing of garbage, waste, and rubbish whether solid or liquid from the locations specified in Article 1 of this decree, whether for his or her own benefit or for the benefit of a contractor.

Article 4

Contractor is any natural or legal person entitled by the authority responsible for general cleaning activities to collect and transport wastes from the locations mentioned in Article 1 of this decree to designated locations, using his or her workers.

**Chapter 2
Waste Collection and Disposal**

Article 5

The authority responsible for general cleaning activities is authorized to collect garbage, waste, and rubbish from the buildings and areas described in Article 1, and transport them to the locations designated for disposal. The authority may entrust some or all of these activities to one or more contractors according to the conditions and specifications determined by the competent local council.

In order to accomplish this, the authority is authorized to:

- a. Determine the designated locations for placing and dumping garbage, waste, and rubbish. However, if this authority does not designate these locations, the inhabitants of buildings must store their garbage, waste, and rubbish in containers specified for that purpose until they are collected or emptied by the garbage collector belonging to the contractor or by the authority responsible for general cleaning activities.

- b. Place litter baskets in streets, squares and other areas. Dumping garbage, waste, and rubbish in places other than the designated litter baskets is prohibited.

Article 6

The containers specified for keeping garbage, waste, and rubbish must be made of metal or similar material, without holes to prevent spillage of wastes and liquids, with tight covers, with two handles, and be of a capacity suitable for the amount wastes of to be stored.

The authority responsible for general cleaning activities must provide detailed and binding specifications or models for waste containers. This authority is authorized to require owners of stores and other units to purchase these containers for the price specified by the competent local council. These containers must be kept clean and must be washed after each use. The building inhabitants and areas identified in Article 1 must keep these containers inside the residential units or the stores and should not place them outside except at the time when the garbage collectors pass by to empty the containers or when they are being dumped at areas or into vehicles designated for this purpose.

Article 7

The contractor is required to provide waste collection and transport the collected waste to the locations specified by the competent authority for disposal, in compliance with the conditions and specifications provided for in this decree. Otherwise, the competent authority shall do so at the expense of the contractor.

Article 8

The contractor responsible for waste collection, transport, and disposal shall be responsible to the authority responsible for general cleaning activities for the behavior and actions of his or her garbage collectors while they are conducting activities connected with the contractor's operation, including the means they use for waste collection and transport.

Article 9

The competent local council is authorized to determine the minimum number of licenses to be awarded to contractors and garbage collectors in each area of the city. The local council is authorized to establish rules to ensure the commitment of contractors and garbage collectors to their work. The contractors and garbage collectors are not allowed to work in any area except those identified in their licenses.

Article 10

Precautions necessary to provide health protection for the garbage collectors must be taken to prevent their direct contact with the wastes. To that end, they should be provided with protective clothing meeting the specifications determined by the local council.

Article 11

The local council shall determine the period and time for waste collection according to local conditions.

Article 12

The garbage collector must use a container of resistible material without holes, to prevent spillage of any of its contents, while transporting garbage, waste, and rubbish. This container should be kept clean at all times and should conform to the detailed specifications prescribed by the competent local council.

Article 13

Sorting garbage, waste, and rubbish is not allowed in areas other the ones specified.

Article 14

Waste transport should not be performed except by vehicles of the authority responsible for general cleaning activities, the contractor, or another authorized person. The transport vehicles must meet the following conditions:

- 1) To be of sufficient capacity and in good working condition.
- 2) To be without holes or openings, to prevent spillage.
- 3) To have a tight cover.
- 4) To be lined with gallivanted tin or zinc or any similar material acceptable by the authority responsible for general cleaning activities.

The contractor must notify the local council about the address of the garage where the vehicles are stored and the number and date of the license for the garage. These vehicles must be washed and sanitized regularly according to health instructions. These vehicles must not be used for any other purpose, or be stored or cleaned in any other location.

Article 15

Any vehicles that is licensed for transporting construction and demolition wastes such as sand, gravel, dust, or any other dispersible material, shall be in good working condition and shall have a tight cover that prevents spillage of any of its contents during transport.

Article 16

Garbage, waste, and rubbish shall be transported to the locations designated by the competent authority. The contractor must remove any spillage that occurs during transport.

Article 17

Taking into consideration the specifications prescribed by the competent authorities concerning public or private dumps, the following conditions and specifications should be observed:

- a. The location should be in an area with easy access to means of transportation, downwind from residential areas as much as possible, no less than 250 meters far from any residential unit, and of sufficient capacity for the amount of wastes to be disposed.

- b. The site should be fenced with a suitable material of no less than 1.80 meters in height.
- c. The fence should have a gate of suitable size to allow the passage of the waste transport vehicles.
- d. The site should be supplied with a suitable water source for waste spraying and fire fighting.
- e. The site should be equipped with enough bathrooms and showers for workers cleanliness.
- f. The garbage should be heaped in suitable piles with slopes of at most 1:2 or in ditches, compacted, covered with earth of at least 15 centimeters thickness, and sprayed with water.
- g. If the garbage is to be processed into organic compost, a suitable location for sorting and removing glass, tin, rubber, rocks, and other materials, should be provided. If drainage water or wastewater will be used to spray the compost, a suitable location should be prepared for this.
- h. In case of disposing wastes by incineration, the site should be equipped with one or more incinerators of suitable capacity for the complete burning of the wastes. No dispersible materials should result from the process of incineration that may cause air pollution, taking into consideration sorting the wastes prior to incineration.
- i. Garbage, waste, and rubbish may be disposed of through sanitary dumping in depressions or abandoned canals, by placing them in layers to be compacted and covered with earth of at least 15 centimeters thickness.
- j. Garbage, waste, and rubbish must not be used to feed animals or burned in open hearths, except in compliance with the conditions required by the competent local council.

Chapter 3 **Pumping, Transporting, and Disposing Liquid Wastes**

Article 18

The authority responsible for general cleaning activities is authorized to designate the locations for dumping wastewater and liquids. Dumping wastewater and liquids in other places is prohibited.

Article 19

The authority responsible for general cleaning activities is authorized to take over wastewater networks serving residential units and stores, as well as the pumping of wastewater generated by buildings not connected to the public wastewater network and transport of said wastewater to designated locations for disposal. The competent authority may assign one or more contractors to provide pumping and transport activities according to the specifications and conditions determined by the competent local council. In this case, the contractor must provide the containers, equipment and vehicles necessary for pumping, transport, and

disposal according to the conditions determined by the local council. The contractor must transport to and dispose of wastewater and liquids in the locations specified by the competent authority, otherwise this authority shall execute transport and disposal at the expense of the contractor.

The contractor shall also be responsible for executing the conditions specified by the local council concerning the workers involved in this process.

These conditions and obligations shall be issued by decree of the competent local authority.

Article 20

Liquid waste drainage methods at the buildings where there is no sewage network must observe the following conditions:

- a) If the soil at the location of the building is rocky or impermeable, wastewater shall be drained into a storage tank of enough capacity for the volume of wastewater generated in the building. This tank shall have one inspection opening or more of at least 60 x 60 centimeters, easy to reach in order to pump the content of the reservoir. This inspection opening may be outside the building or in the street close to the building.
- b) If the soil at the location of the building is permeable to water, wastewater has to be discharged into a treatment tank with a capacity of no less than 2 cubic meters and no more than 30 cubic meters. The reservoir may have 2 or 3 compartments, but the first compartment should not be less than 50 percent of the capacity of tank. The liquid depth in the tank should not be less than 1.20 meters at the outlet. The capacity of the tank must be sufficient to hold the amount of wastewater generated by residential buildings for a 24-hour period, and in public buildings and stores for a period of 12 hours. The tank must also have an additional capacity of 50 percent of the necessary liquid capacity to store sludge.
- c) The walls and roofs of the storage or septic tank should be built of brick, concrete or stone or any other suitable material according to the technical requirements, and its roof should have one inspection opening or more, covered with a double locked cover. The tanks should be placed in open areas at locations that can be easily reached for periodic inspection and pumping, provided that they are at least 15 meters away from any drinking water source.

Article 21

The competent authority at the local council shall notify owners of buildings where there is no sewage network or sanitary drainage systems for wastes from washrooms, to install the necessary drainage methods in the locations approved by this authority, in accordance to the conditions determined in this decree within the specified time period.

Chapter 4 Fencing Open Areas

Article 22

For any open or abandoned area that the local council decides should be fenced or from which waste should be removed, the responsible authority should notify the concerned person

and give him or her a deadline to take action of no more than 15 days for removing dust and wastes and 3 months for fencing. The notification should state clearly the conditions and specifications for the fence and the costs that the concerned person will be charged for waste removal and fencing in the event that the he or she does not do so within the deadline.

Fences are required to be built of brick, stone, or any other similar material without holes and must surround the open or abandoned area on all sides. Fences should be no less than 1.80 meters high, with a gate that must be securely closed when not in use.

Article 23

The notification mentioned in the previous two articles should be delivered in a registered letter with acknowledgment. If the notification does not reach the concerned persons because of their absence, refusal to receive the notification, or not knowing their residence, the notification should be left at the police station of the precinct in which the land is located. If the deadline specified in the notification by the competent administrative authority for the completion of the required jobs by the concerned persons is exceeded without completion of the work, the authority is authorized to execute the required work at the expense of the owner and notify him or her for payment in the specified period.

Article 24

This decree shall be published in “Alwaqae Almisryia” and applies from the date of publication. Written in 14 The Alqeda., 1387 (February 13, 1968).

APPENDIX D
SOLID WASTE MANAGEMENT COMPONENTS OF
LAW NUMBER 4 OF 1994, ENVIRONMENTAL LAW

Preliminary Part
Chapter One
General Provisions

Article 1

In the application of the provisions of this Law, the following words and expressions shall have the meanings hereby assigned to them:

- 21. Waste Management:** Collecting, transporting, recycling and disposing of waste.
- 22. Waste Disposal:** Processes that do not extract or recycle waste such as composting, deep subterranean injection, discharge to surface water, biological treatment, physio-chemical treatment, permanent storage or incineration.
- 23. Waste Recycling:** Processes that allow the extraction or recycling of waste, such as using it as fuel, or extracting metals and organic materials or soil treatment or oil re-refining.

Part Two
Protection of Air Environment from Pollution

Article 37

It is prohibited to throw, treat or burn garbage and solid waste except in special sites designated for such purpose, which are far from residential, industrial or agricultural areas as well as from waterways. The executive regulations of this Law shall determine the specifications and conditions of such sites and their minimum distance from the areas referred to hereinabove.

Local units shall, in agreement with the EEAA, designate the sites for burning, throwing or treating garbage and solid waste according to the provisions of this article.

Article 39

All organizations and individuals shall be held, when carrying out exploration, excavation, construction or demolition works or when transporting the resultant waste or debris, to take the necessary precautions to secure the safe storage or transportation thereof to prevent loose particles from escaping into the air, in accordance with the provisions of the executive regulations.

Part Four
Penalties

Article 86

Whoever violates the provisions of article 36 of this Law shall be fined a sum of not less than two hundred Egyptian Pounds and not more than three hundred Egyptian Pounds. As to

violations of the provisions of article 39 of this Law, these shall be punishable by a fine of not less than five hundred Egyptian Pounds and not more than one thousand Egyptian Pounds. The court may order the suspension of the license for a period of not less than one week and not more than six months, and in case of recidivism, the court may revoke the license.

Article 87

Whoever violates the provisions of article 42 of this Law by using loudspeakers with a volume exceeding the permissible levels of sound intensity shall be punished by a fine of not less than one hundred Egyptian Pounds and not more than five hundred Egyptian Pounds and the machines and equipment used in the violation shall be confiscated. Violators of the provisions of articles 38, 41, 69, and 70 of this Law shall be punished by a fine of not less than two hundred Egyptian Pounds and not more than twenty thousand Egyptian Pounds.

The fines imposed on those who violate the provisions of articles 35, 37, 40, 43, 44, or 45 of this Law shall be not less than one thousand Egyptian Pounds and not more than twenty thousand Egyptian Pounds. The same fine shall apply in respect of the non-compliance of the manager in charge of the establishment with the requirement to ban smoking in closed public places in violation of the provisions of paragraph 1 of article 46 of this Law.

Anyone who smokes while using public transportation in violation of the provisions of paragraph 2 of the said article shall be fined a sum of not less than ten Egyptian Pounds and not more than fifty Egyptian Pounds.

In case of recidivism, the penalty shall be imprisonment and the fine provided for in the preceding paragraphs.

Article 89

Any person who violates the provisions of article 2,⁶ the last paragraph of article 3, or articles 4, 5, and 7 of Law Number 48 of 1982 concerning the protection of the River Nile and waterways from pollution, and of the decrees issued in implementation thereof shall be fined a sum of not less than two hundred Egyptian Pounds and not more than twenty thousand Egyptian Pounds.

In case of recidivism, the penalty shall be both imprisonment and the fine provided for in the previous paragraph.

In all cases, the violator shall be held to remove or rectify the violating works by the date determined by the Ministry of Public Works and Water Resources. If the violating works are not removed or rectified by the due date, the Ministry of Public Works and Water Resources shall have the right to take procedures to remove or rectify the violation by administrative means, at the expense of the violator, without prejudice to the right of the Ministry to revoke the license.

⁶ Law 48 of 1982, Article 2 includes the prohibition from dumping solid waste into the Nile and its canals.

Final Provisions

Article 103

Every citizen and organization concerned with the protection of the environment shall have the right to report any violation of the provisions of this Law.

Article 104

Inspectors of administrative authorities concerned as well as the inspectors of the Environmental Affairs Agency (EEAA) who have the capacity of judicial officers in matters relating to the environment shall be held, each in his field of competence, to report to the authority to which they belong any violation of the provisions of this Law and the authorities concerned shall then take the necessary legal procedures.

SOLID WASTE MANAGEMENT COMPONENTS OF EXECUTIVE REGULATIONS FOR LAW 4/1994 PRIME MINISTER DECREE NUMBER 338 OF 1995

Part Two

Protection of Air Environment from Pollution

Article 38

It is prohibited to dump, treat or burn garbage and solid waste - other than infectious waste left over from medical care in hospitals and health centers - except in special sites, designated for such purpose, far from inhabited, industrial or agricultural areas as well as from waterways, in accordance with the specifications, conditions and minimum permissible distances from such areas as indicated hereunder:

- 1) It is strictly forbidden to burn any waste other than the infectious waste referred to in paragraph 1 of this Article in residential or industrial areas and such waste shall be incinerated in special incinerators having the following specifications:
 - A) They shall be downwind in the populated areas.
 - B) They shall be at a distance of at least 1,500 meters from the nearest residential area.
 - C) The capacity of the incinerator or incinerators shall be adequate to burn the garbage transported thereto within 24 hours.
 - D) The incinerator shall be sited in a place with an adequate space to receive the expected garbage according to the nature of activities in the urban area and the number of its inhabitants.
- 2) In case of extreme necessity, and within a transition period not exceeding three years from the date of publication of these Executive Regulations, garbage shall be allowed to be burned uncovered, subject to the following conditions:
 - A) With a prior permit from the EEAA and the Civil Defense Department, incineration shall be carried out under the supervision of both the municipal authority units and the Civil Defense Department.

- B) That the place where the garbage is incinerated stands at a minimum distance of 1.5 kilometers from populated, industrial and downwind areas.
- C) The municipal authorities shall allocate a site to receive the garbage after carrying out an integrated study on the topography and nature of the area, and the quantity of waste requiring to be disposed of every 24 hours, which site shall be:
- At a lower contour level than the surrounding area.
 - Of an area adequate for storing the garbage intended to be transported and for carrying out other operations normally effected on the site, such as sorting and any other related operations.
 - Supplied with a water source for emergency cases and other necessary uses.
 - Supplied with the necessary equipment for storing, sifting and disposing of ashes by burying them so that they will not be dispersed in the air or leak into the underground water.
- 3) Infectious waste from hospitals and health centers shall be burned on site in incinerators especially designed for that purpose and capable of absorbing the collected quantities without congestion or storing near the incinerator. In case of necessity, and with the approval of the competent municipal authorities and the EEAA, the waste of such units may be transported to the nearest hospital equipped with one or more incinerators, provided they can absorb the waste transported thereto. Such waste shall be transported in sealed containers that do not allow the dispersal of their contents in the air and the containers are incinerated together with their contents.
- 4) In all cases, the incinerators shall be fitted with adequate technical methods to prevent the dispersal of ashes or the emission of gases except within the permissible limits as prescribed in Annex (6) of these Executive Regulations.
- 5) Municipal authorities, in agreement with the EEAA, shall allocate sites where solid garbage shall be dumped, treated or incinerated according to the provisions of this Article.

Article 39

Collectors of garbage and solid waste shall be held to maintain the cleanliness of garbage bins and vehicles, the continual cleanliness of which shall be one of the conditions set to ensure the safety and solidity of garbage transport means.

Garbage collection bins shall be tightly covered to prevent them from giving off offensive odors or from becoming a source for the proliferation of flies and other insects or a focus of attraction for stray animals. The garbage they contain shall be collected and transported at suitable intervals in keeping with the conditions of each area, provided the quantity of garbage at any one time in any of these bins shall not exceed its capacity. The competent municipal department shall control the implementation of the provisions of this Article.

Article 41

All organizations and individuals shall be held, when carrying out exploration, excavation, construction or demolition works, or when transporting the resultant waste or debris, to take necessary precautions to secure the safe storage or transportation thereof. The authority granting the building or demolition license shall indicate these requirements in the license in the manner set forth below:

- 1) That on-site storage of waste or debris be undertaken with due regard to the requirements of safety and the unobstructed movement of traffic and people. Waste liable to dispersal shall be covered to avoid air pollution.
- 2) That waste or debris resulting from excavation, demolition and construction works be transported in special containers or receptacles on trucks equipped and licensed for this purpose and meeting the following conditions:
 - Fitted with a special box or an airtight cover to prevent loose particles of waste and debris from escaping into the air or dropping on the road.
 - Provided with special loading and unloading equipment.
 - In good condition according to the rules of safety, solidity and lights and fitted with all safety equipment.
- 3) That the sites assigned to receive the transported waste be located at a minimum distance of 1.5 kilometers from residential areas, that they are at a lower contour level, and that they are leveled after being filled in with the waste.
- 4) That the municipal authorities designate the sites to which the waste shall be transported. Such waste may not be transported to or disposed of in other than the sites designated and licensed for that purpose by the municipal authorities concerned.

APPENDIX E
INDIVIDUALS INTERVIEWED

Abd El Mageed Saad, Mayor, Tokh

Mohamed Seif El-Din, Mayor, Shubra El Kheima West

Abd El Masseih Shenoda, Deputy Chief, City Council, Benha

Arafa Abd El Gawad, Deputy Mayor, Benha

Attia Mahmoud Attia, Chief, Legal Affairs Division, Qalyoubiya Governorate

Ahmed Diaa El Din, Director, Financial Department, Benha

Gamal Fuad, Director, Cleaning Administration, Shubra El Kheima East

Hamdy Abd El Aziz, Director, Cleaning Administration, Benha

Maher Yousef, Program Administrator, Contract Monitoring Unit, Qalyoubiya Governorate

Mohamed Anany, Member, Popular Council

Mustafa Rushdi, Director, Cleaning Administration, Shubra El Kheima West