

2.2

**ORGANISATIONAL CHARTS OF MAJOR
DEPARTMENTS IN NCC**

The Town Clerks Department

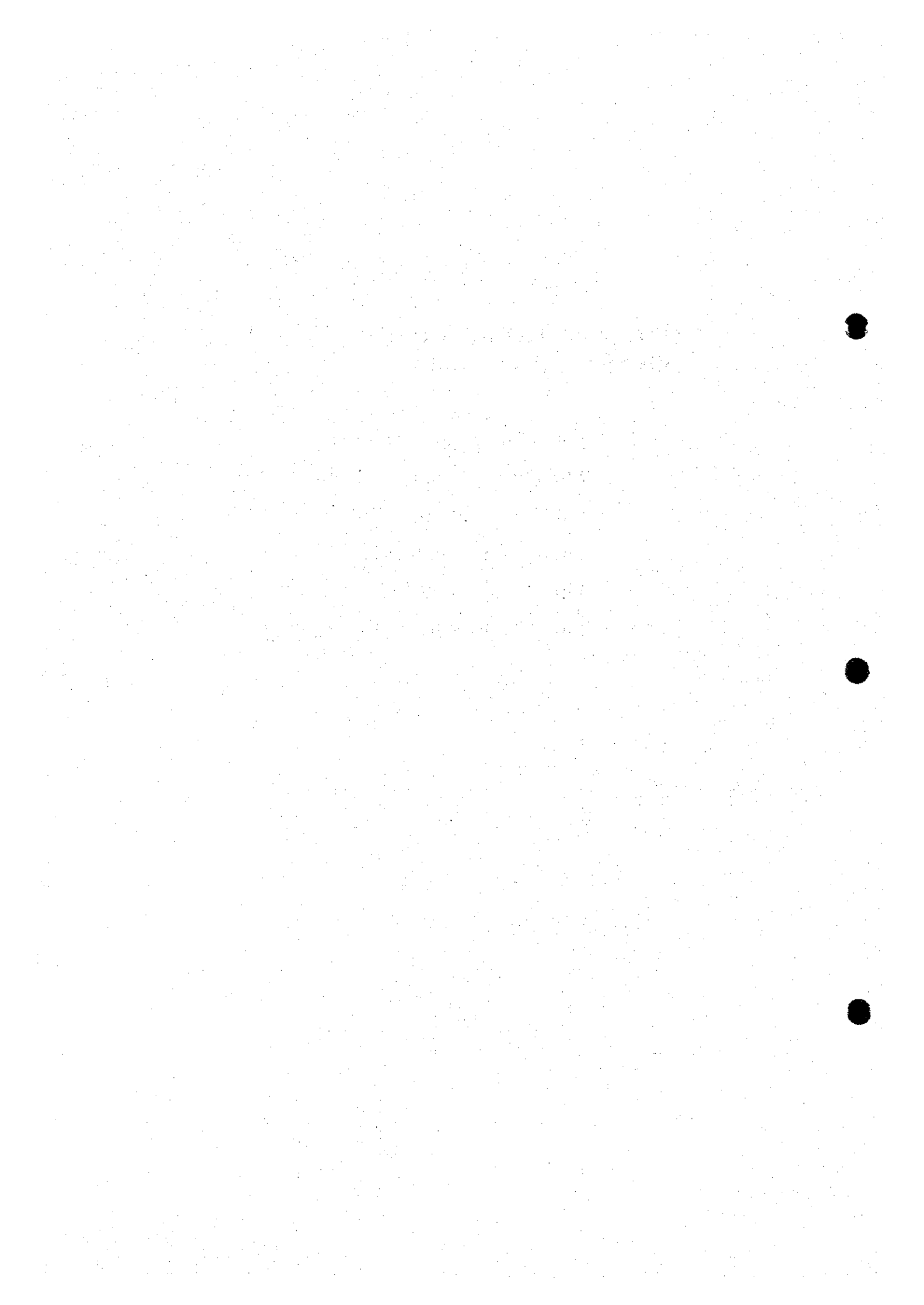
The City Treasurer's Department

The Department of Public Health

The City Inspectorate

The Department of Water and Sewerage

The City Engineers Department



TOWN CLERK'S DEPARTMENT

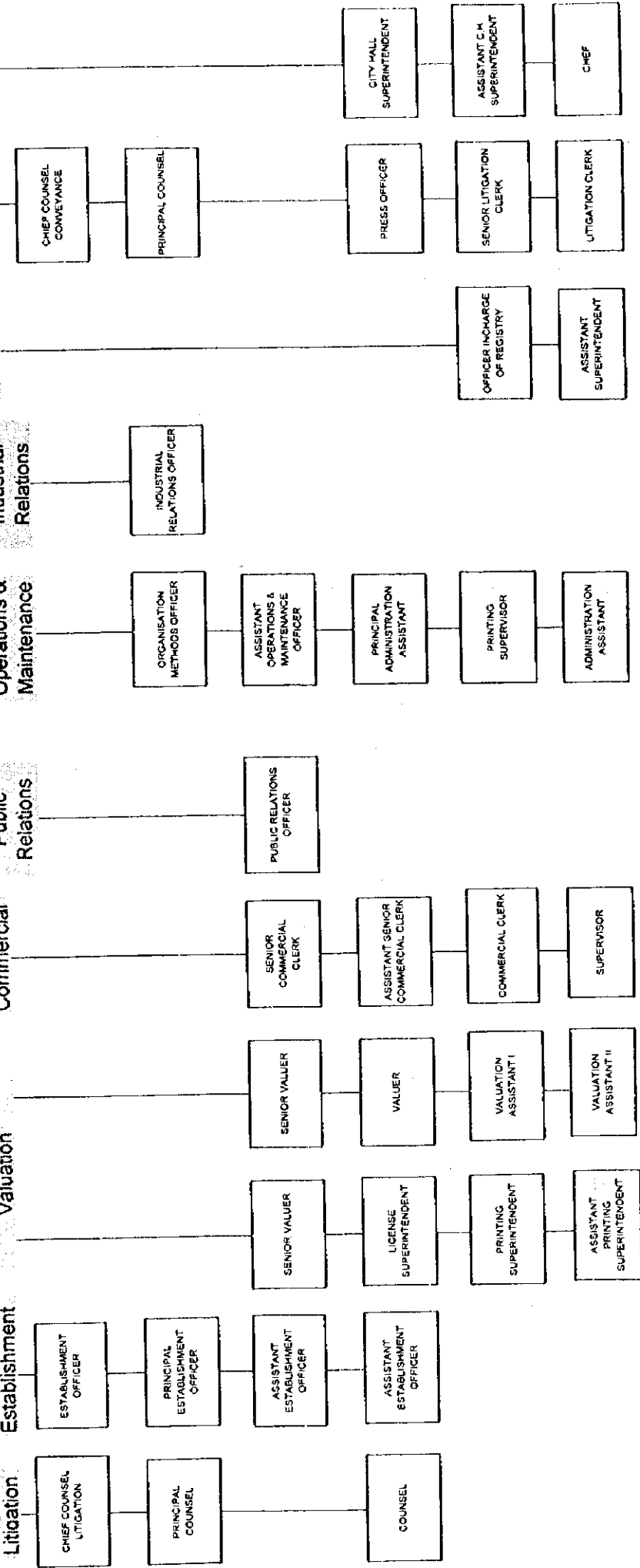
TOWN CLERK

DEPUTY TOWN CLERK

ASSISTANT TOWN CLERK (A)

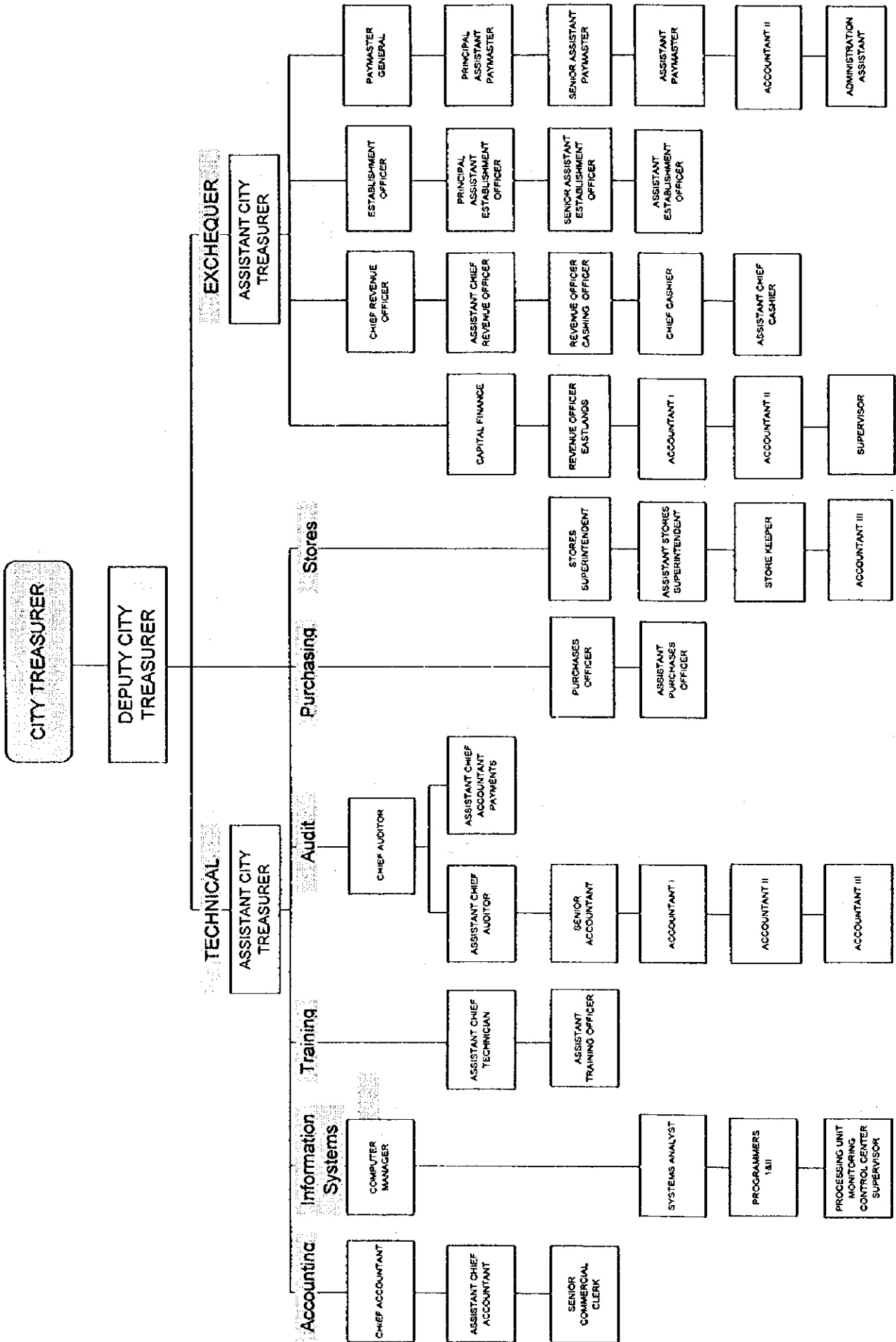
ASSISTANT TOWN CLERK (B)

Litigation Establishment Valuation Commercial Public Relations Operations & Maintenance Industrial Relations Registry Conveyance



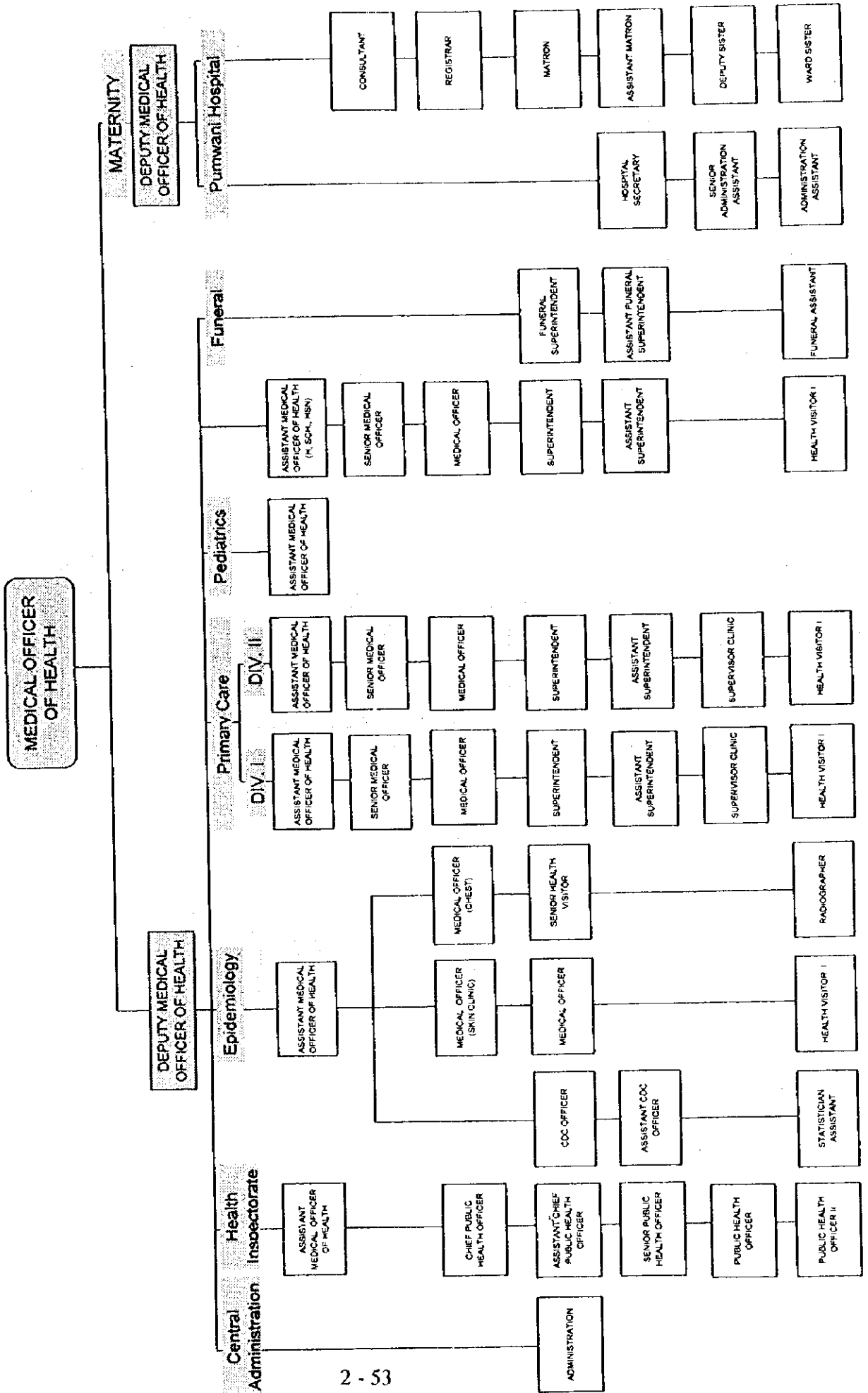
Data Book 2

CITY TREASURER'S DEPARTMENT

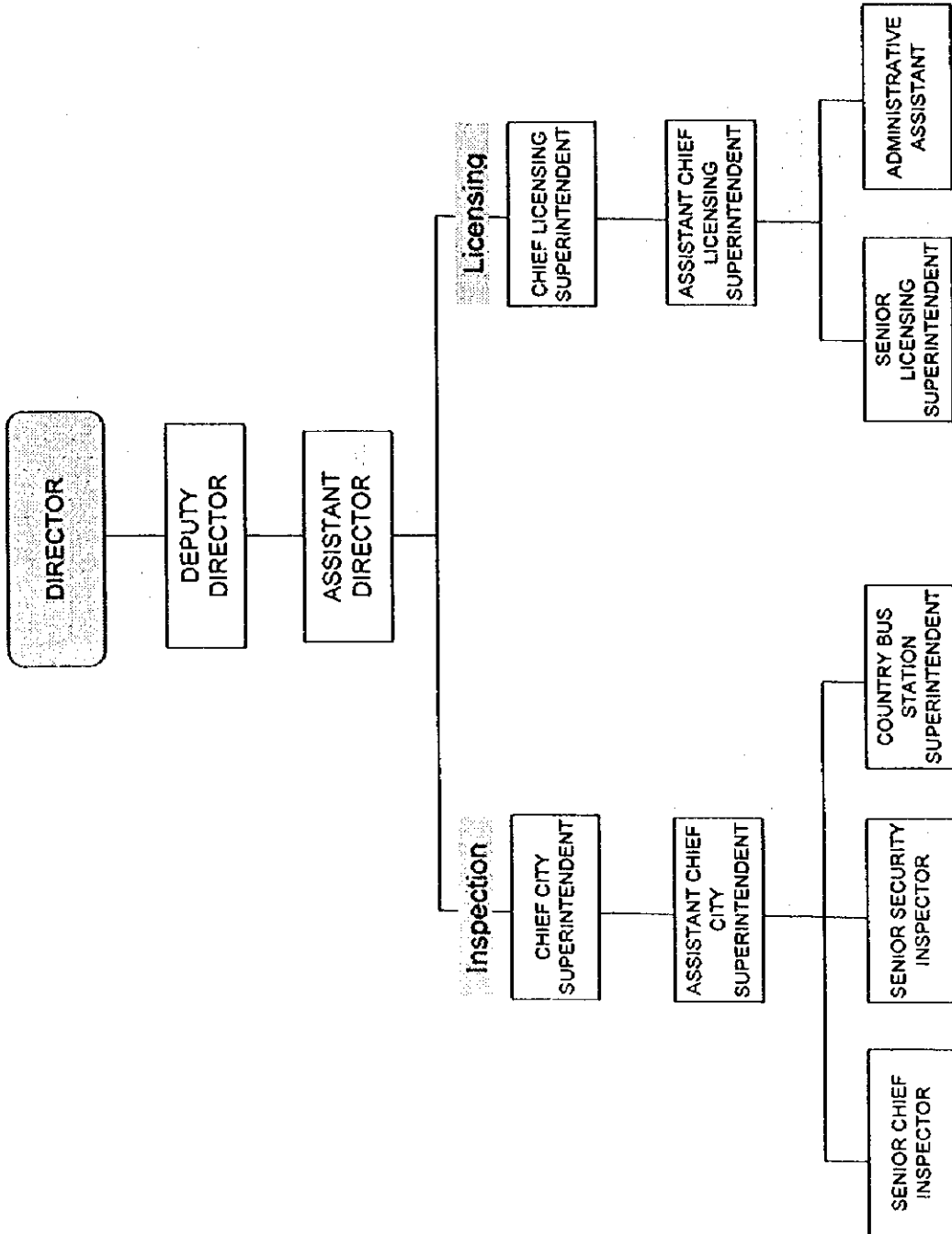


DEPARTMENT OF PUBLIC HEALTH

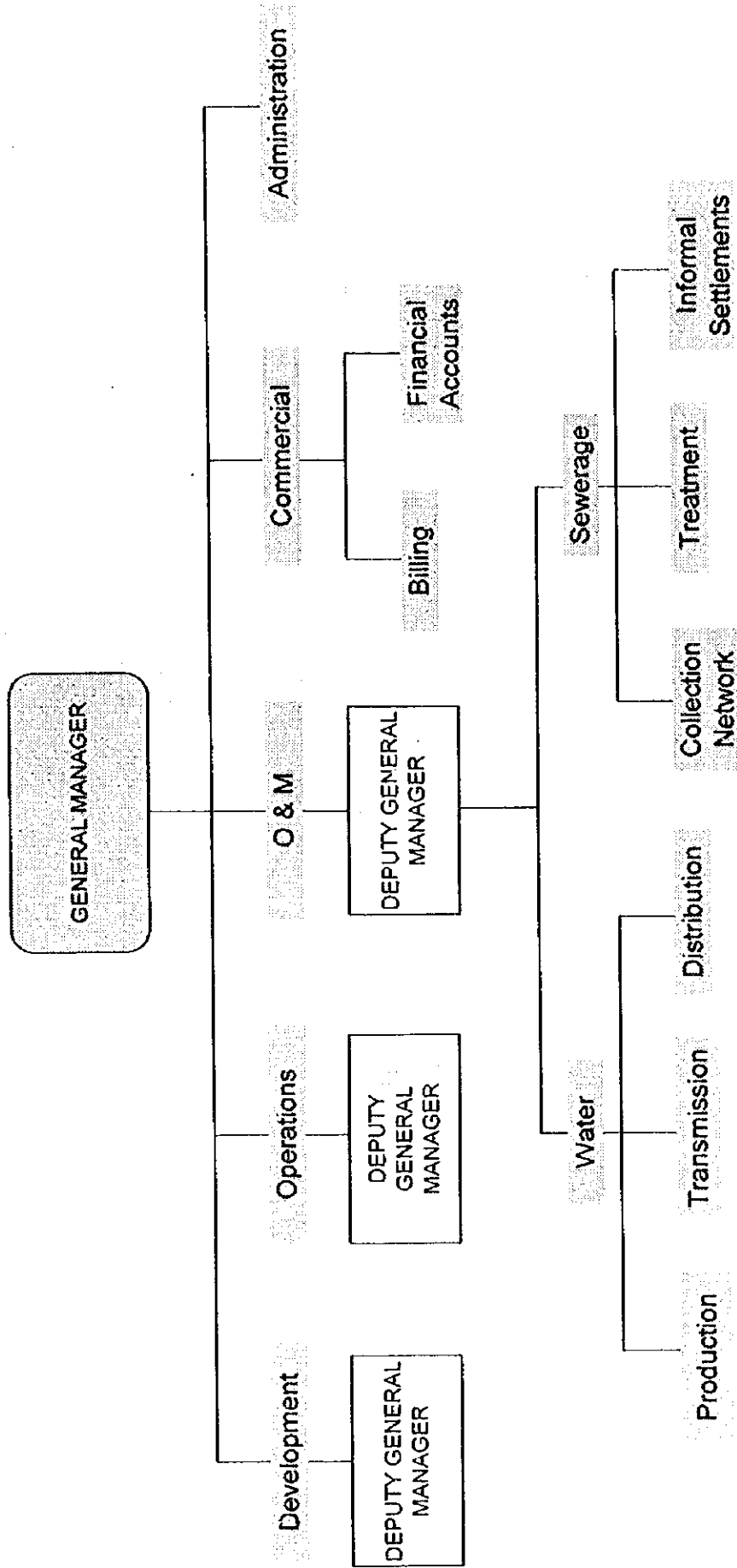
Data Book 2



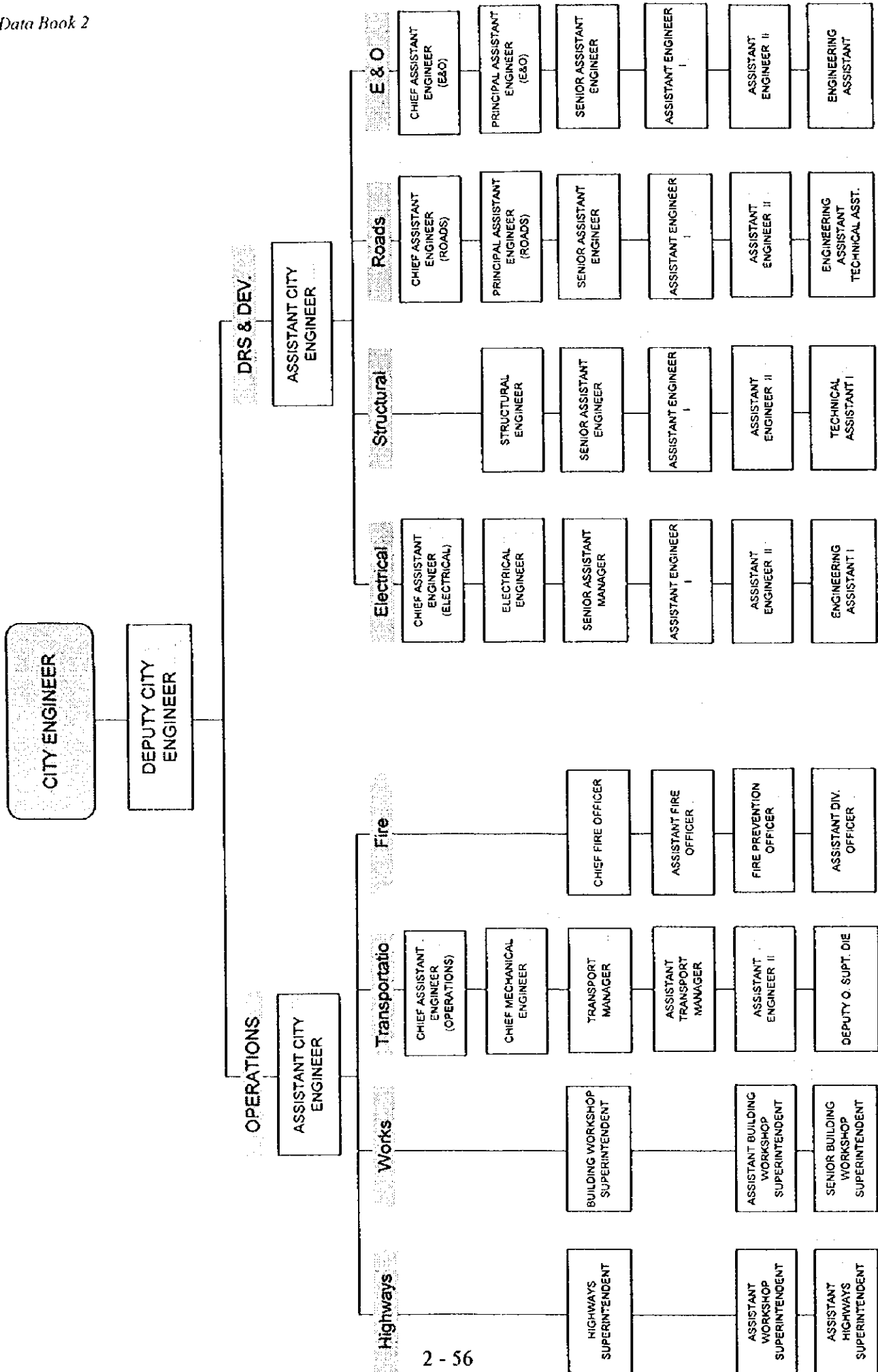
CITY INSPECTORATE



DEPARTMENT OF WATER AND SEWERAGE



CITY ENGINEER'S DEPARTMENT



2.3

**ORGANISATION CHARTS OF THE SIX
DISTRICT OFFICES IN THE CLEANSING
SECTION**

Central District

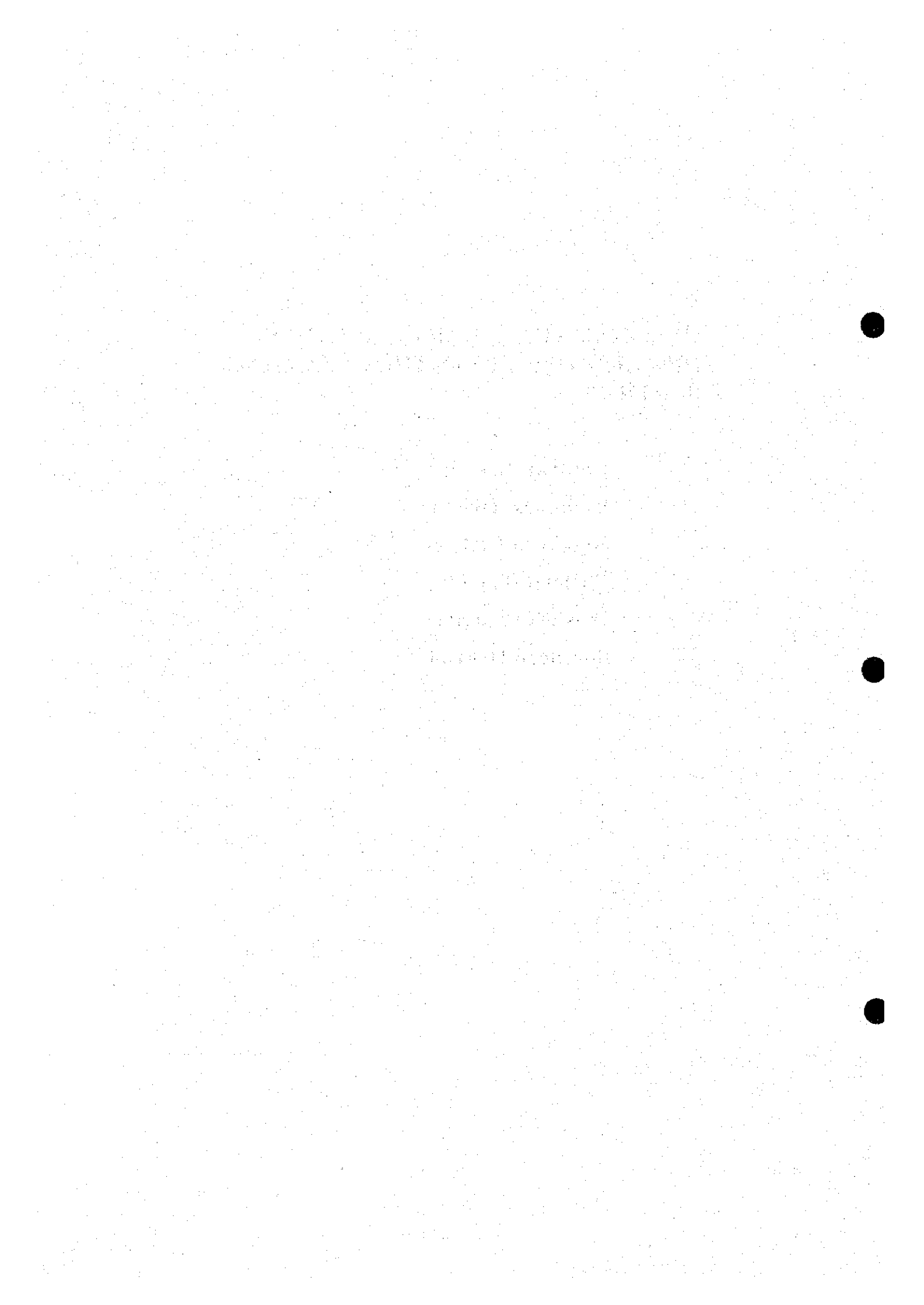
Embakasi District

Northern District

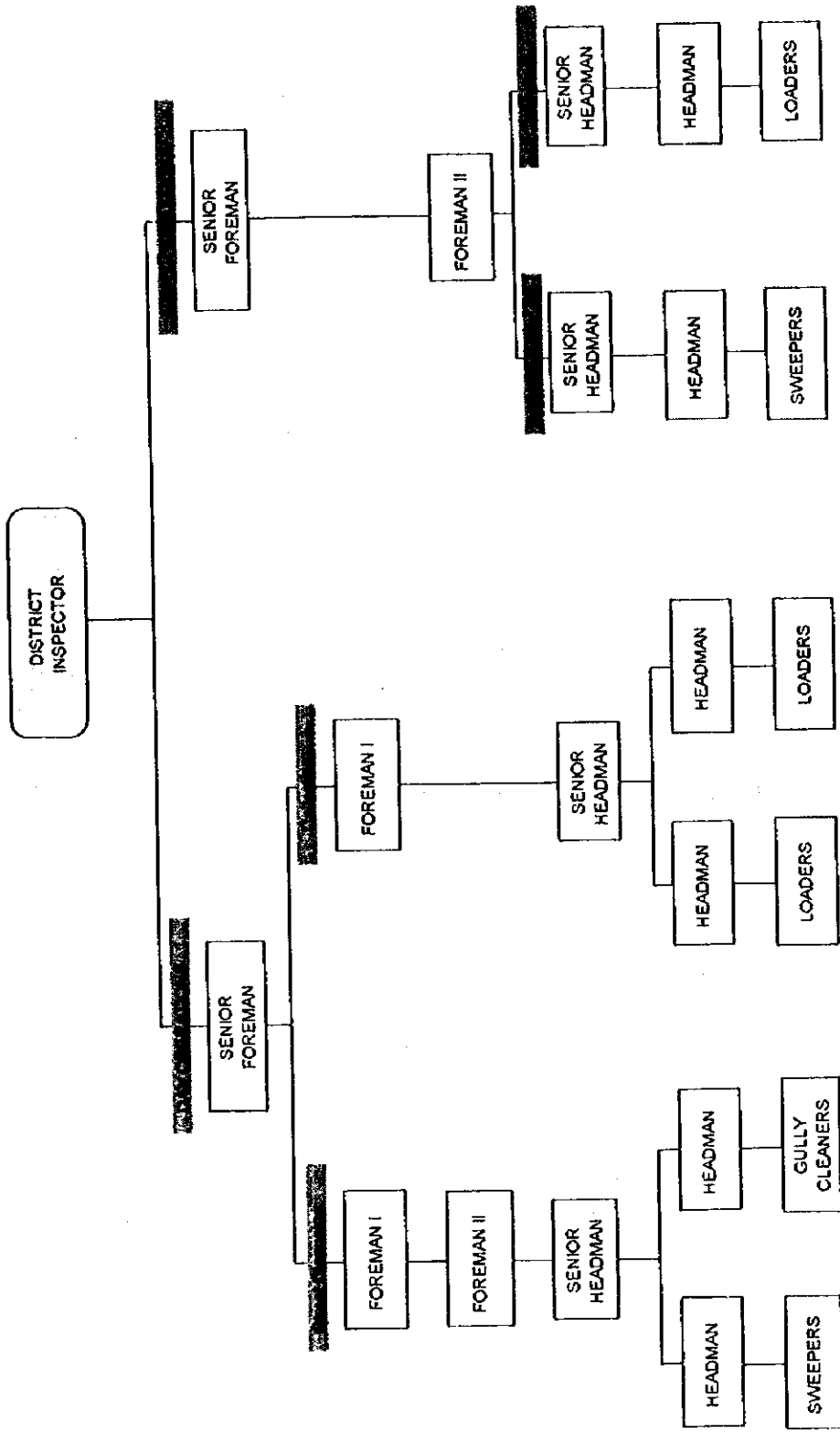
Eastern District

Western District

Southern District



CLEANSING SECTION - CENTRAL DISTRICT



CLEANING SECTION - CENTRAL DISTRICT

1000
1000
1000

DAY OPERATIONS

1000
1000
1000

Street Cleaning

Collection

NIGHT OPERATIONS

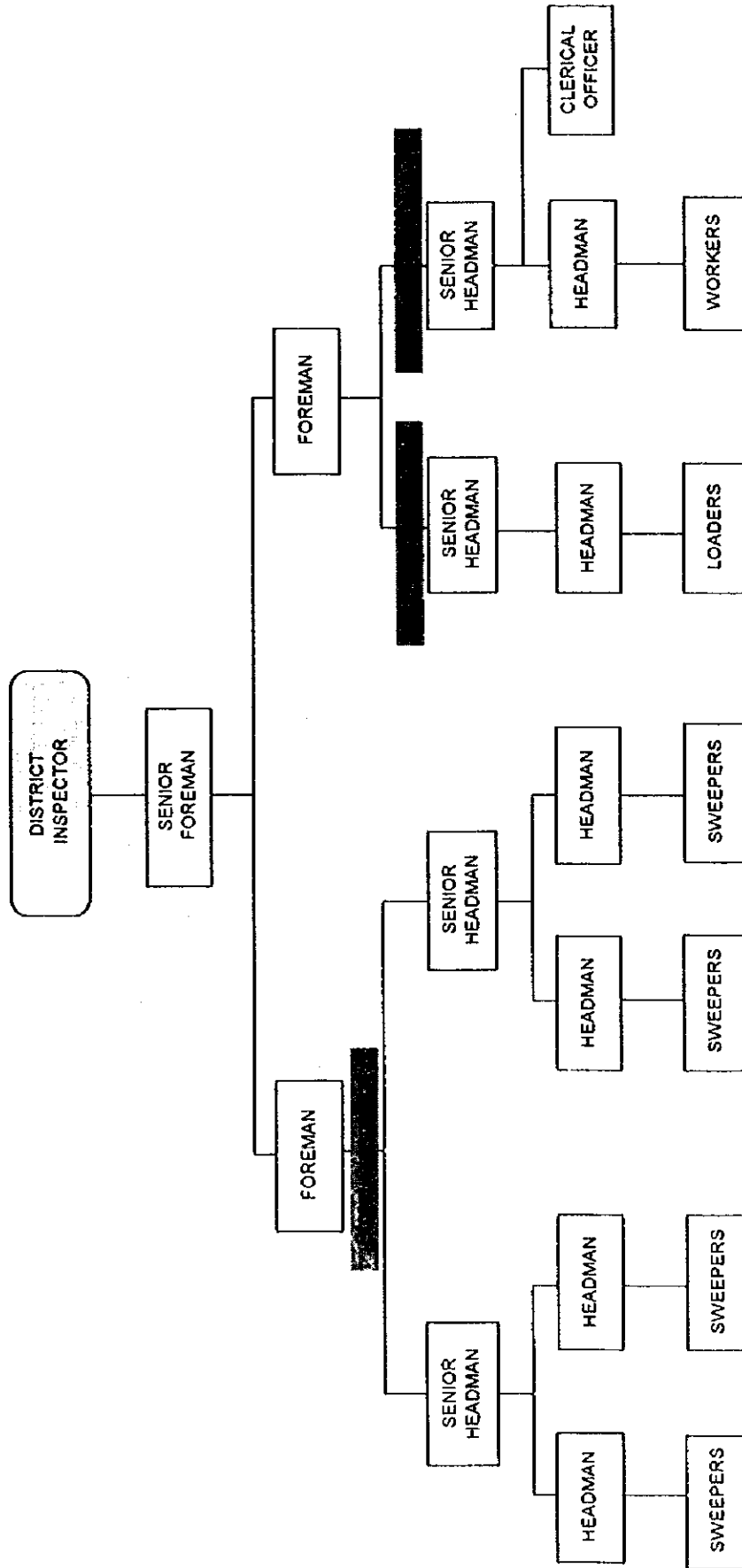
1000
1000
1000

Street Cleaning

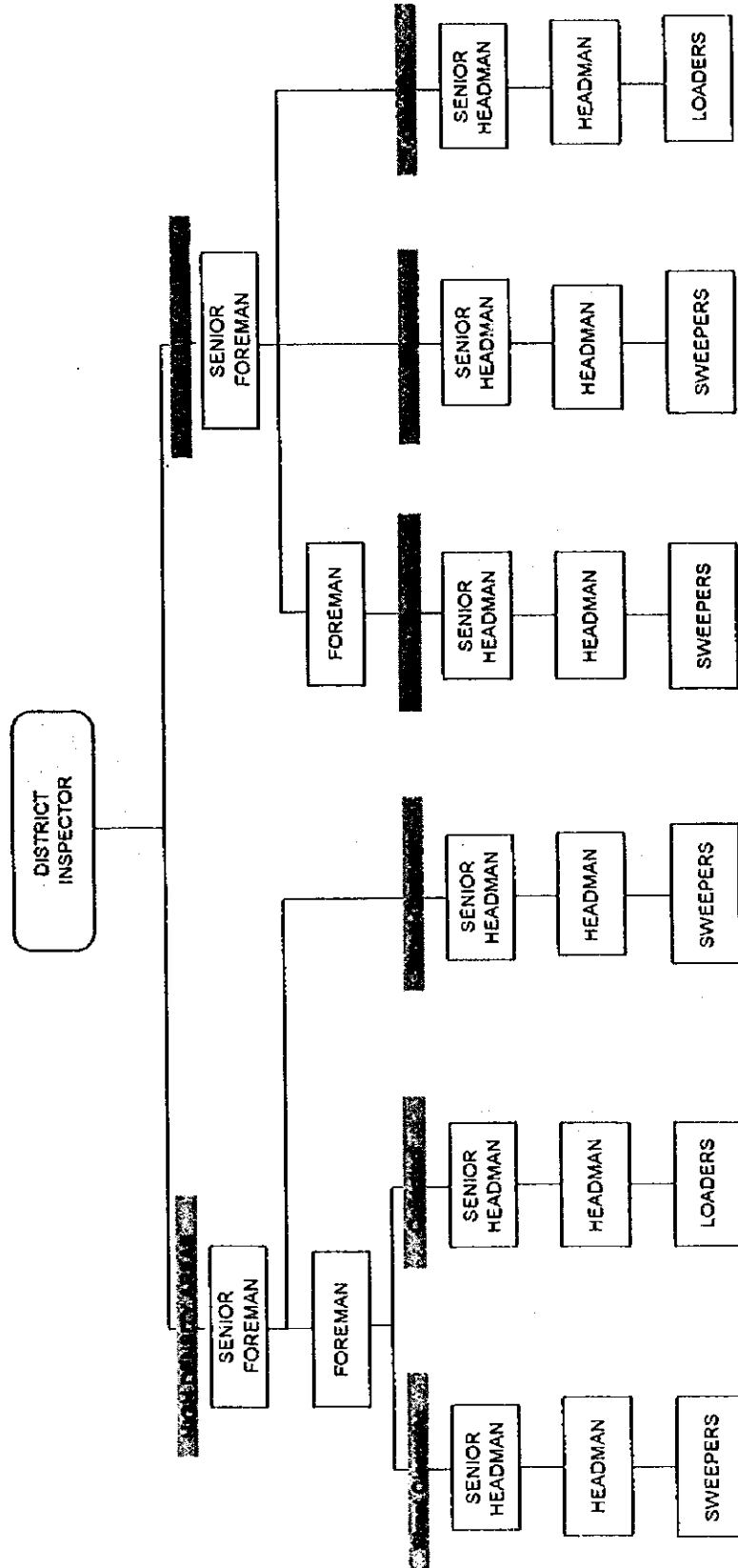
Collection



CLEANSING SECTION - EMBAKASI DISTRICT



CLEANSING SECTION - NOTHERN DISTRICT



CLEANSING SECTION - NORTHERN DISTRICT



HIGH DENSITY AREAS

1. [Illegible text]

2. [Illegible text]

3. [Illegible text]

4. [Illegible text]

5. [Illegible text]

Street Cleanings

[Illegible text]

Collection

[Illegible text]

Street Cleanings

[Illegible text]

Street Cleanings

[Illegible text]

Street Cleanings

[Illegible text]

Collection

[Illegible text]

LOW DENSITY AREAS

1. [Illegible text]

2. [Illegible text]

3. [Illegible text]

4. [Illegible text]

5. [Illegible text]

Street Cleanings

[Illegible text]

Collection

[Illegible text]

Street Cleanings

[Illegible text]

Street Cleanings

[Illegible text]

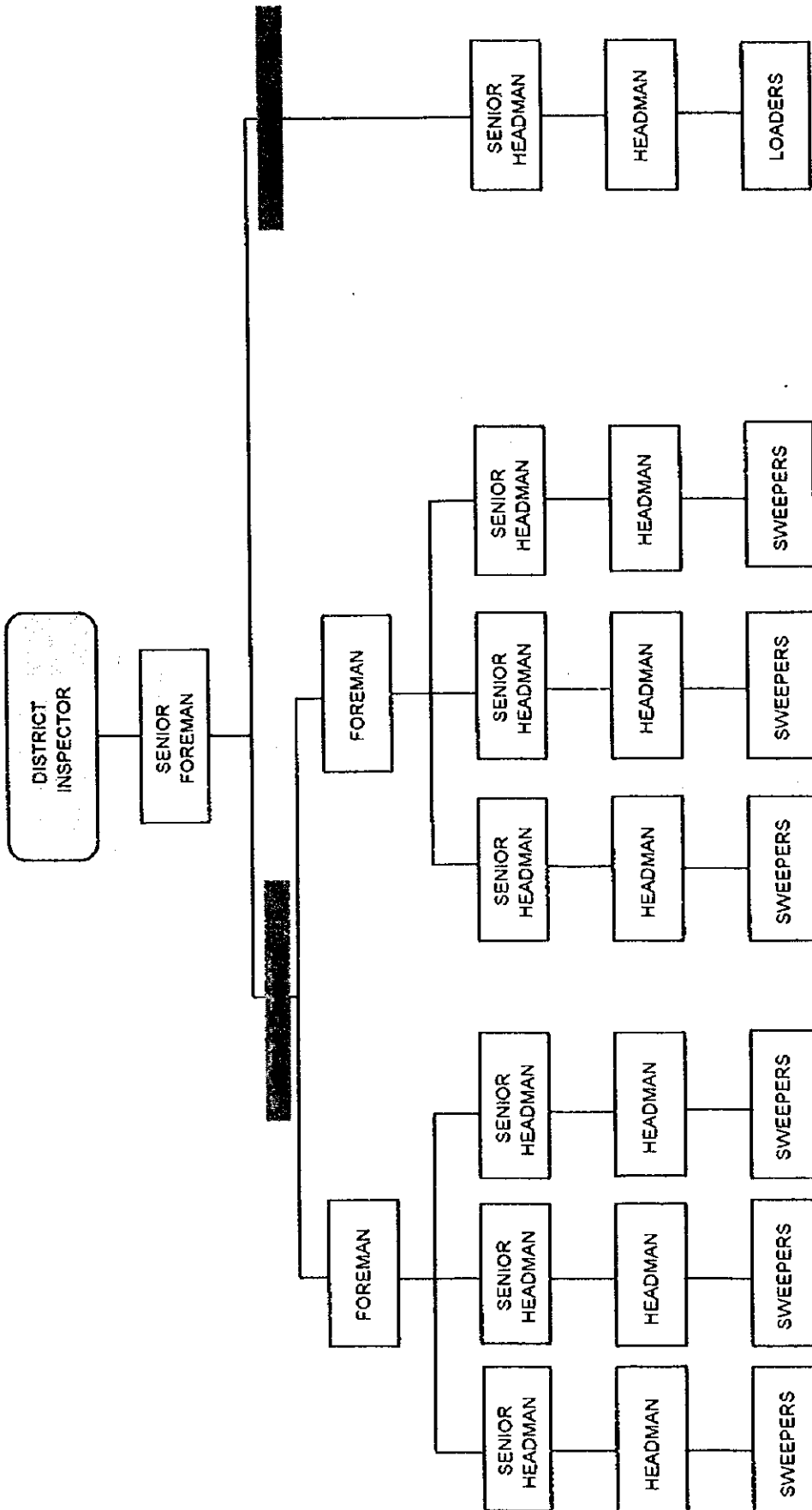
Street Cleanings

[Illegible text]

Collection

[Illegible text]

CLEANSING SECTION - EASTERN DISTRICT



STREET ORIENTATION

1. Street Name

2. Direction

Street Orientation

Collection

3. Date

4. Time

5. Location

6. Street Name

7. Direction

8. Date

9. Time

10. Location

11. Street Name

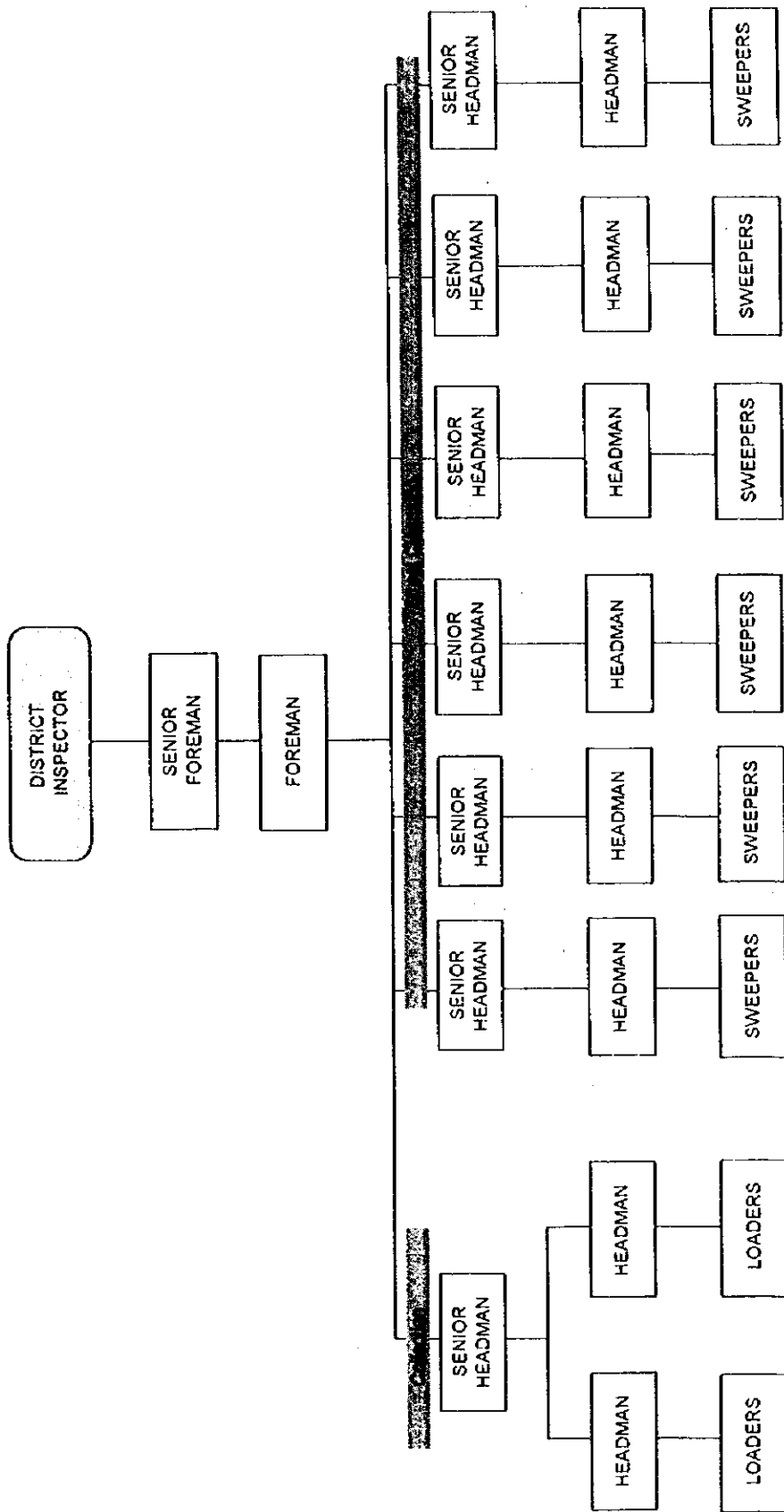
12. Direction

13. Date

14. Time

15. Location

CLEANSING SECTION - WESTERN DISTRICT



CLEANSING SECTION - WESTERN DISTRICT

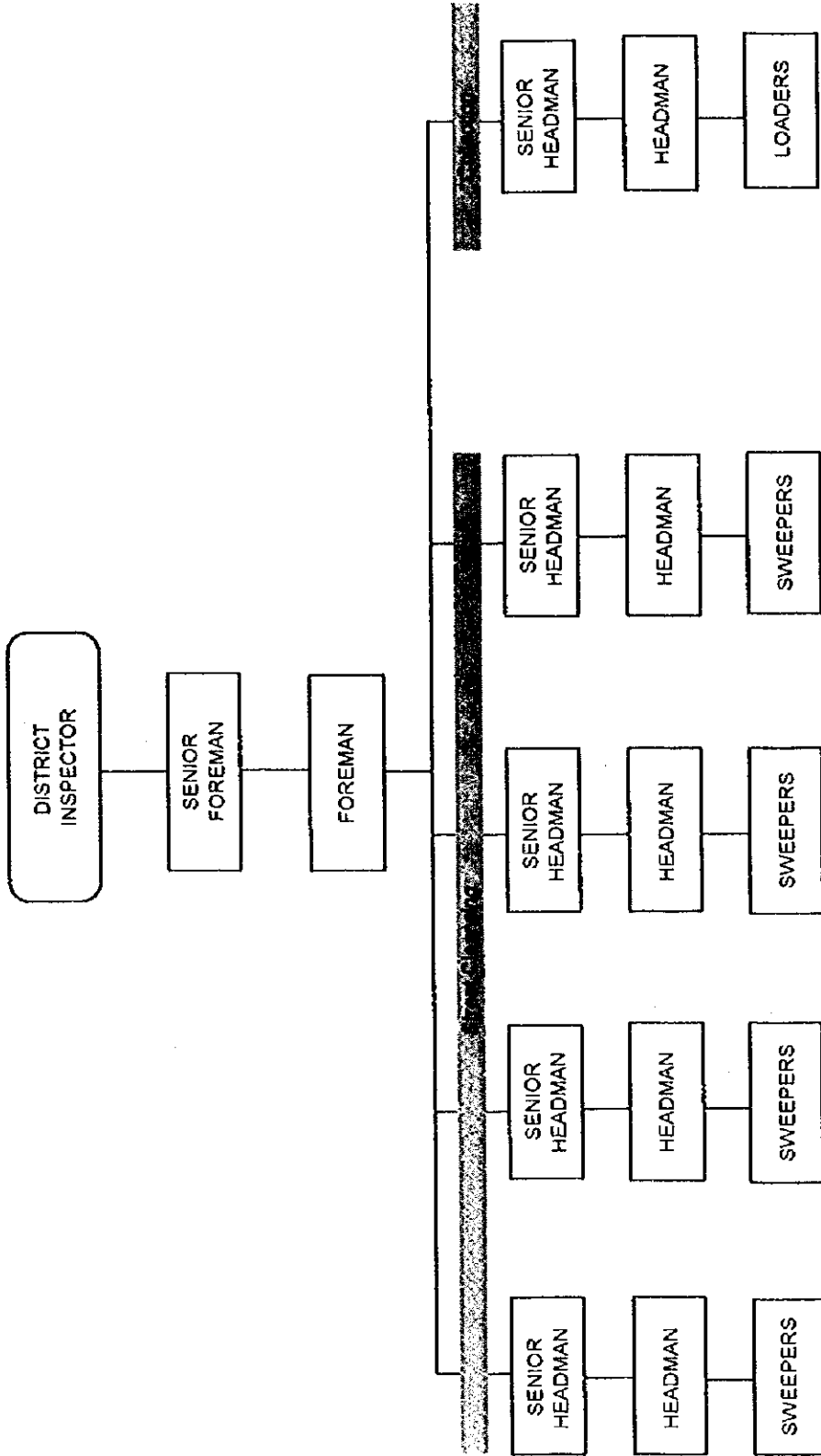
1. [Illegible]
2. [Illegible]
3. [Illegible]
4. [Illegible]
5. [Illegible]

Collection

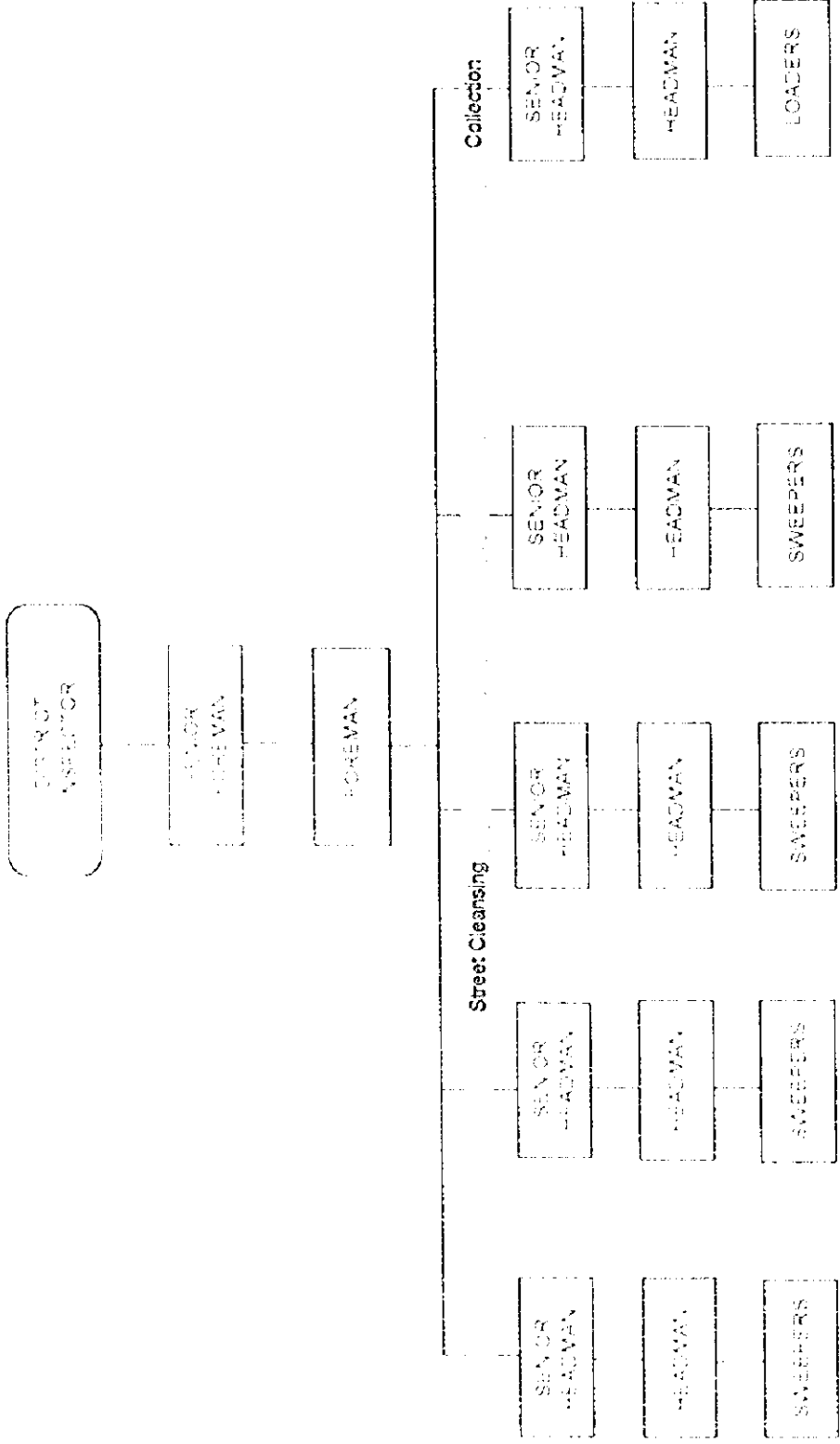
Super Cleaning

[Extremely faint and illegible text, likely a list of items or a report]

CLEANSING SECTION - SOUTHERN DISTRICT

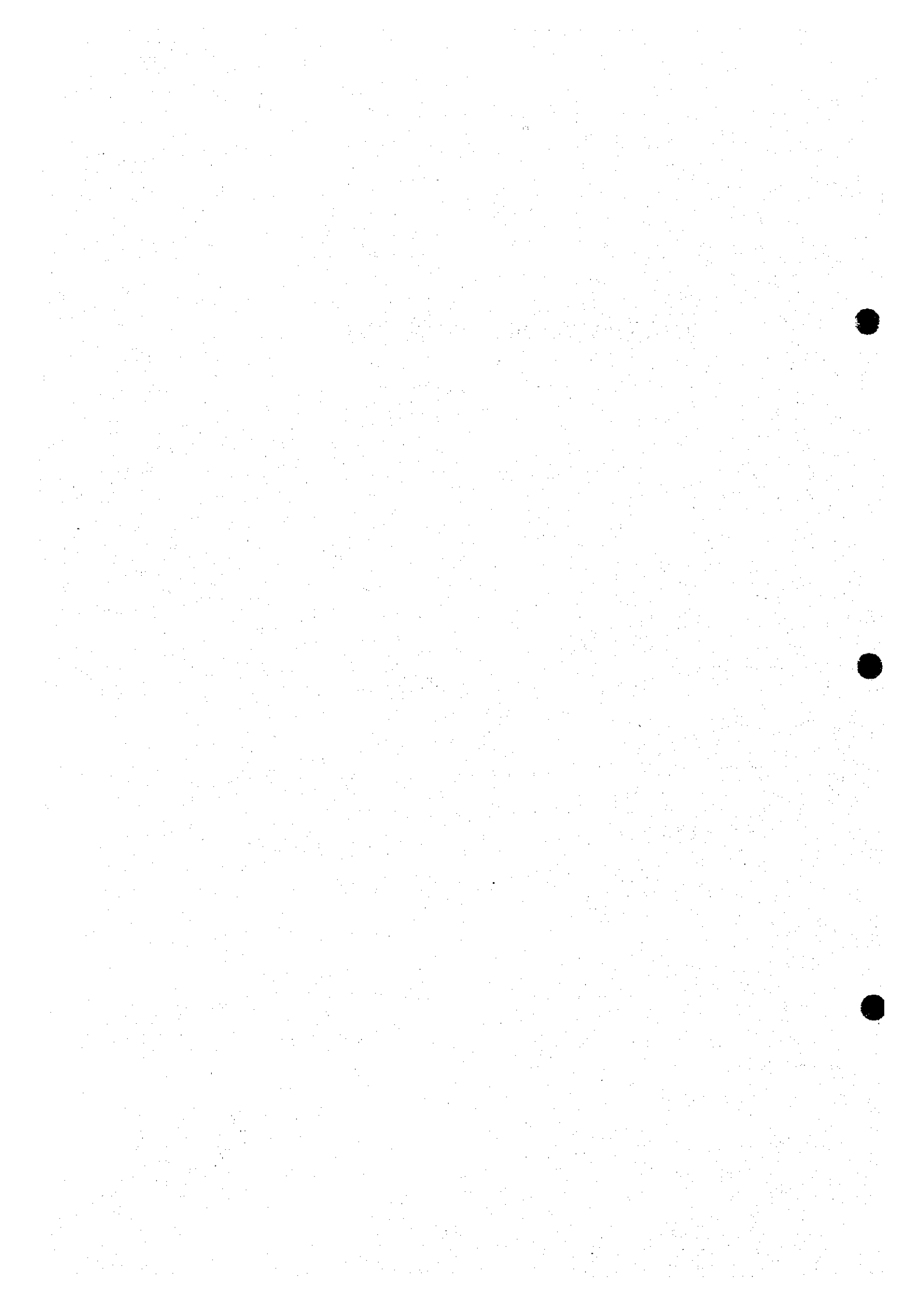


CLEANSING SECTION - SOUTHERN DISTRICT



2.4

THE TRANSPORTATION UNIT



The Transportation Unit

The Transportation Unit is headed by a Transportation Officer of Senior Forman rank who is supported by the Deputy Transportation Officer of Forman I rank. The Deputy is in turn assisted by a Forman II (maintenance) and a Senior Headman (administration).

The Forman II supervises the Drivers who are organised by vehicle type and are allocated day by day to basis Districts by the Transport Officer with the assistance of the Deputy Superintendent Operations. The Forman II also manages 7 mechanics and motor vehicle electricians at Kaloleni Depot. The mechanics and electricians are seconded from the City Engineer (CED) and only carry out routine maintenance.

The Senior Headman manages a small administration unit of three Headmen. The unit provides support for:

1. preparation of daily and weekly vehicle utilisation reports;
2. recording all vehicle movements into and out of Kaloleni Depot;
3. managing vehicle breakdowns;
4. tracking vehicles that have been passed for maintenance to the City Engineers Main Depot;
5. recording fuel use;
6. managing the transport store;
7. recording morning roll call;
8. payroll preparation and recording leave; and
9. maintaining personnel records.

Spare parts are controlled by the Chief Mechanical Engineer of the CED, not by the Transportation Unit, although the cost of spare parts is carried in the DoE's budget. The CME also authorises payment for these items. The DoE has no control over whether its money is properly and effectively spent on spares.

If there are any problems with vehicles the TO co-ordinates with the Chief Mechanical Engineer eg for major maintenance and sometimes for the transfer of vehicles to the Section.

TRANSPORTATION UNIT

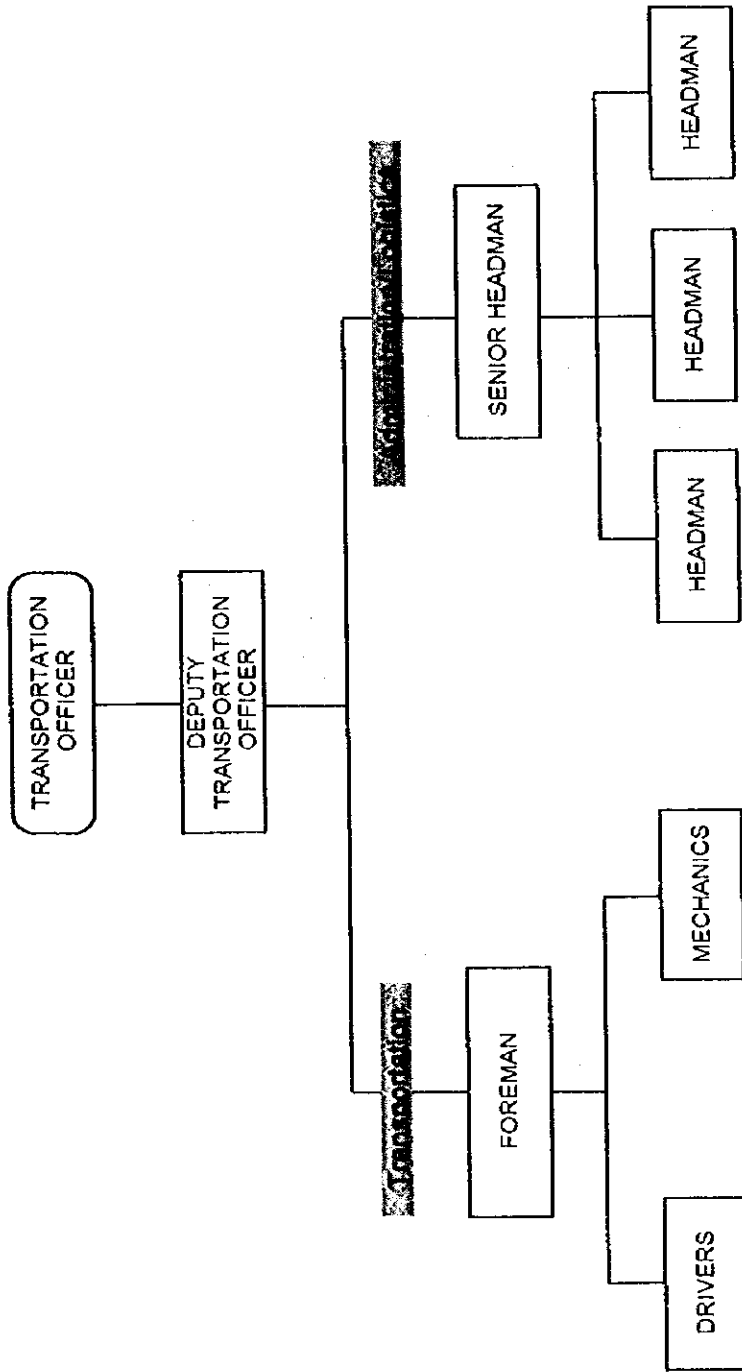


Figure 2.4-1 Organisational Chart for the Transportation Unit

TRANSPORTATION UNIT

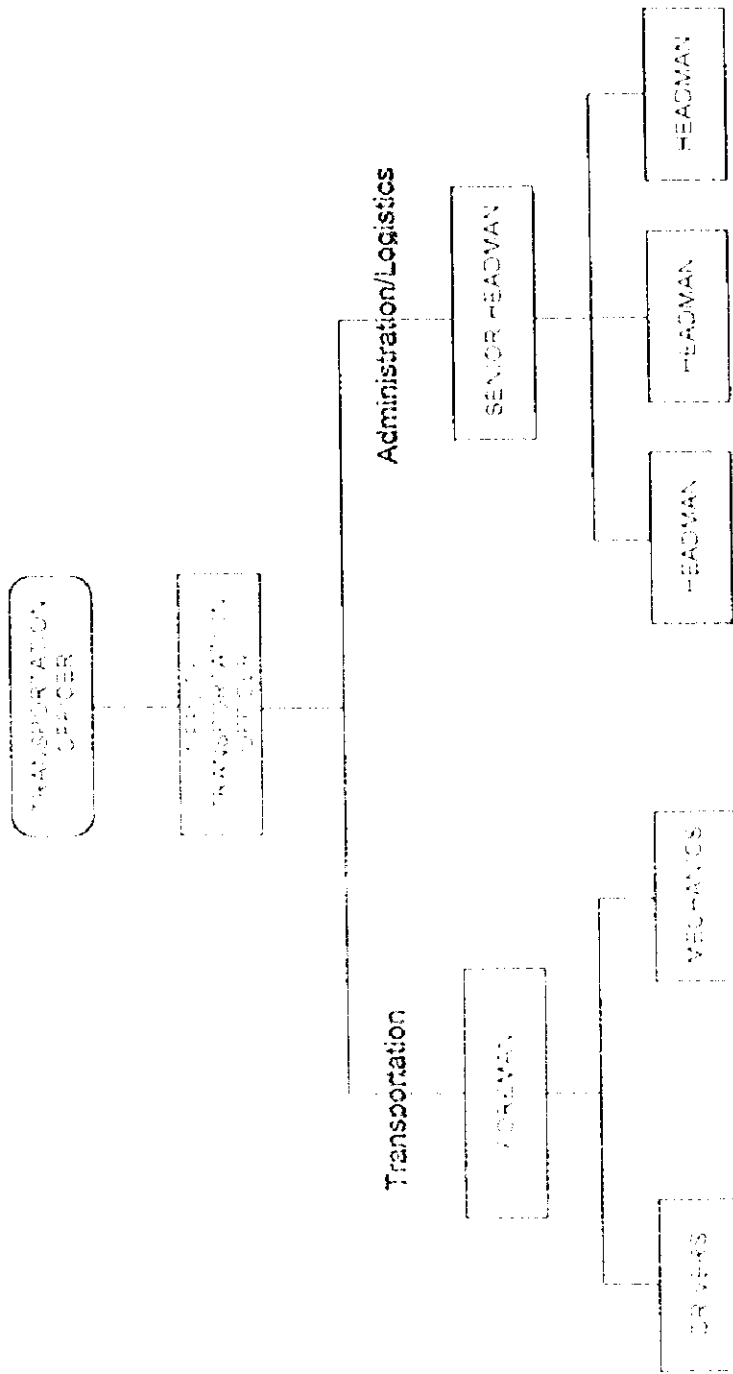
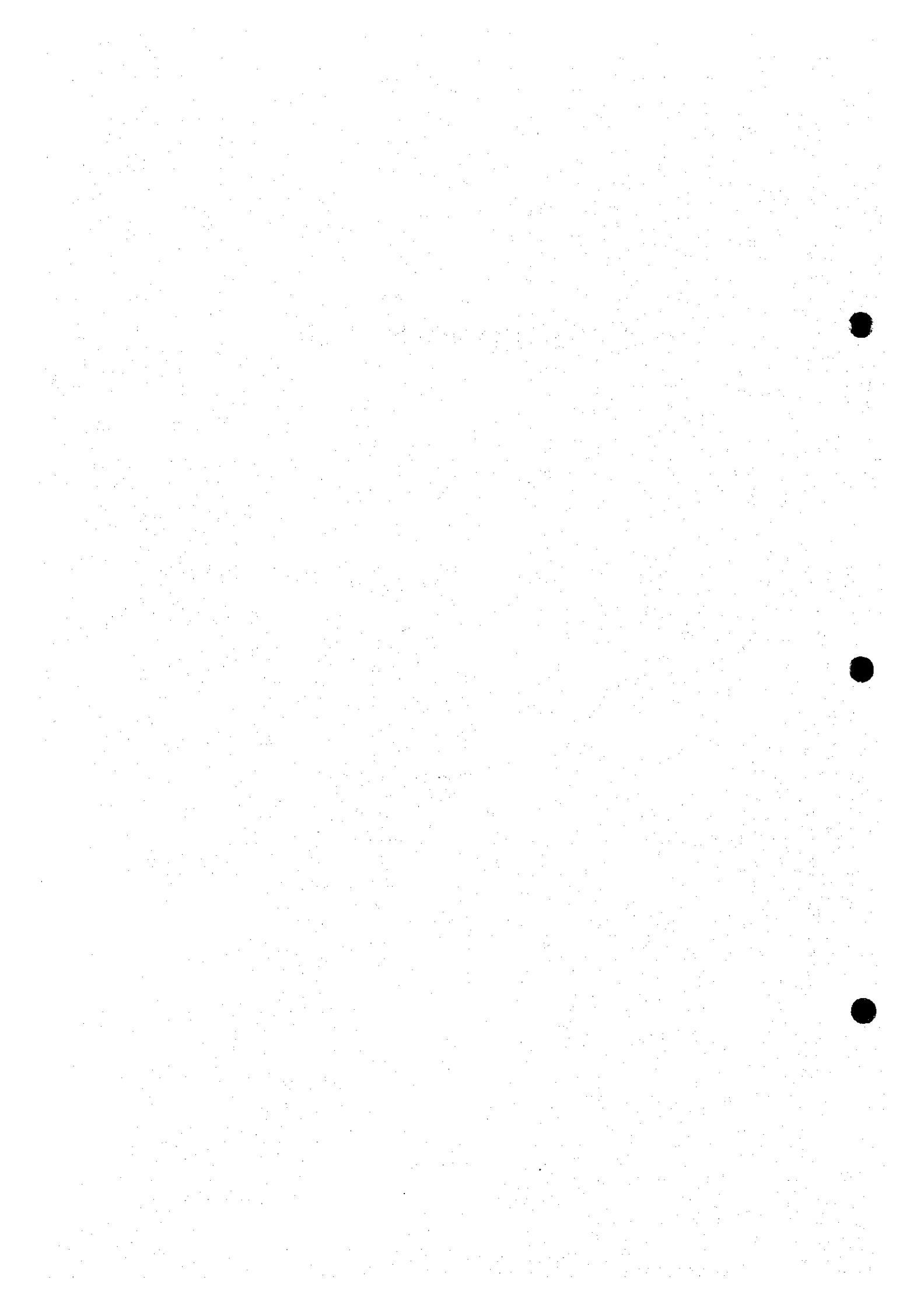


Figure 2.4-1 Organisational Chart for the Transportation Unit

2.5

THE ADMINISTRATION SECTION



The Administration Section

The Administration Section which was set up in February 1997 is headed by an acting Senior Administrative Officer who reports directly to the Deputy Director. The Section provides a mixture of administration services to the DoE.

1. interpreting and disseminating information to the Department on Council and Committee minutes and resolutions;
2. personnel administration, eg processing leave approvals, maintaining personnel records for all members of staff. But it has no responsibilities for recruitment, appraisal, promotion or discharge, ie no human resources management role;
3. assists in the preparation of daily, weekly and monthly operational performance and activity reports for the Cleansing and Parks Sections;
4. billing but not the collection of special waste charges, eg special collections. The City Treasurer collects these fees from each District Office;
5. secretarial services to the Director and the Deputy Director;
6. records all procurement requisitions for non spares items; and
7. maintains records of all waste bins which have been distributed to citizens and businesses.

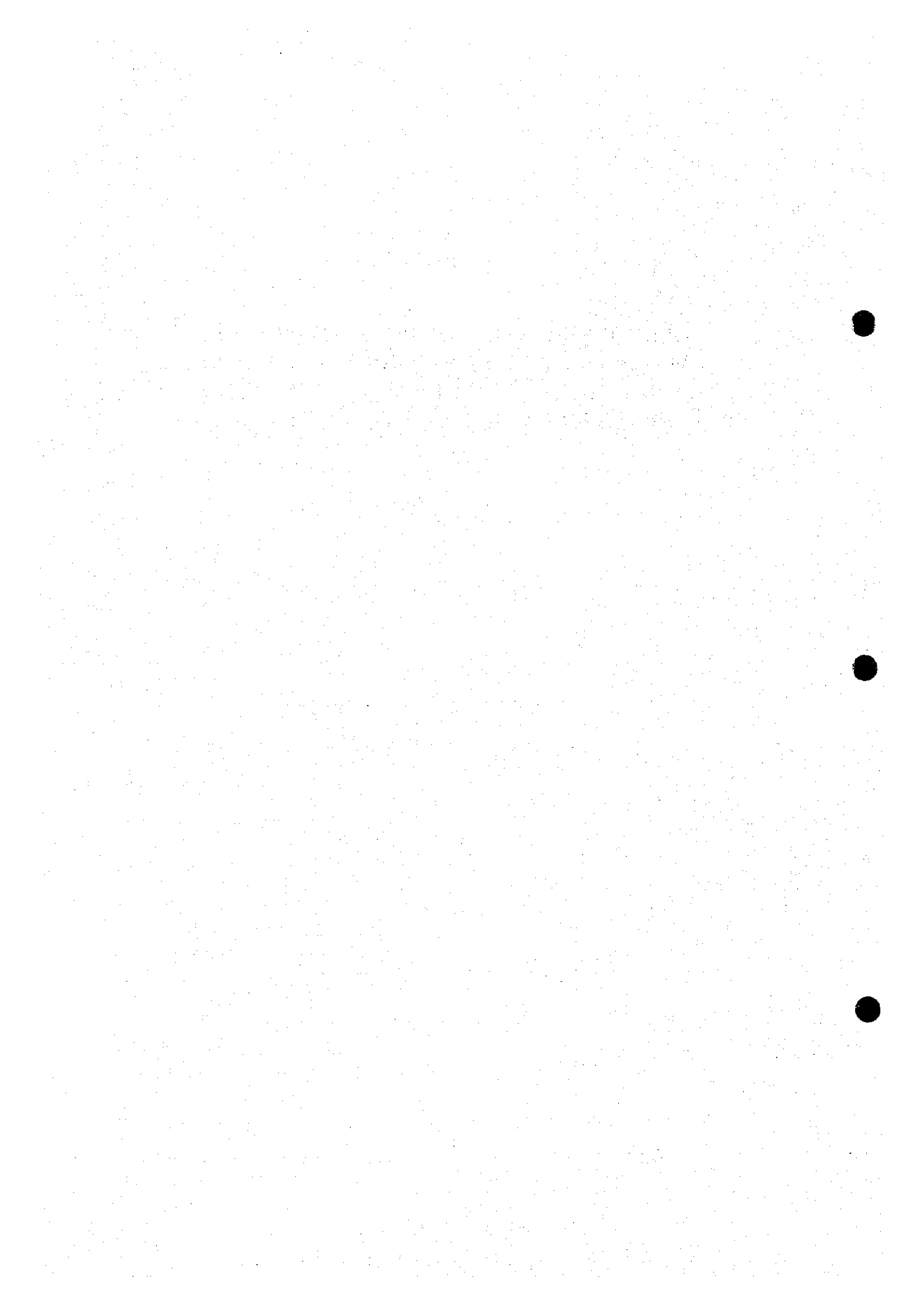
22

23

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2.6

**RESPONSIBILITIES OF SENIOR OFFICERS,
MANAGERS, SUPERVISORS AND MANUAL
WORKERS AT THE CLEANSING SECTION,
DEPARTMENT OF ENVIRONMENT**



Responsibilities of Senior Officers, Managers, Supervisors and Manual Workers at the Cleansing Section, Department of Environment

1 Senior Management

Director of the Department of the Environment

Policy and Planning 70%

At the moment the DoE has few formalised policies and no mission statement. Furthermore the Department does not prepared annual operational or financial plans. Planning is limited to specific operational or organisational issues, eg creating a new district or PSI in collection services.

The Director is responsible for all policy formulation and planning within the DoE. He is also responsible for implementing the Department's policies which have been approved by the Council.

Policy formulation involves a large amount of the Director's time preparing reports for and sitting on the Head's of Department meetings and giving advice to and attending the following NCC Committees:

1. General Purposes Committee
2. Environmental Committee
3. Finance Committee
4. Staffing Committee

The General Purposes Committee considers only major policy formulation and decisions. Currently the main policy issues the Director is dealing with are:

1. contracting out collection services for the Central Business District to the private sector;
2. reorganising the DoE to include enforcement and other proposed sections; and
3. management of veterinary and hospital waste, eg by contracting it out to the private sector.

The Director also has to attend full Council meetings as a formality since he is Head of his Department. Committees and the Full Council meet monthly.

The Heads of Department meeting acts as a clearing house for inter departmental issues, eg eg staffing matters and overall Council Policy matters.

MOLG 5%

The Director reports to the ministry through the Town Clerk on a number of issues. The Ministry makes requests for information and reports from the Director. These are mostly made on an ad hoc basis at the request of the Permanent Secretary (PS). The main contact in the Ministry is with the PS.

Financial

The Director approves the annual budget preparation on behalf of the Department. He is not involved in the preparation of the annual budget return which goes to the City Treasurer.

Only the Director coordinates and discusses financial issues with the Treasurer. These are primarily concerned with obtaining funds for large expenditures.

Daily Operational Management

The Director is not involved in day to day supervision of operations. His responsibilities are to ensure he is kept informed and reviews the Section's daily work plan and performance report. He is also obtains weekly and monthly Section performance reports. He uses these reports advise and inform the Environmental Committee and to the Head's of Department meetings on the Sections performance.

Unnecessary and routine tasks

The Director's time is taken up with a substantial amount of unnecessary procedural tasks. These include:

In particular - Responsibilities not delegated down because responsibilities and accountability not designated to subordinate officers.

Other routine items which take up his time are:

1. signing all purchase requisitions. Spends a lot of time doing this. The Director has to approve and review every purchase requisition and every purchase order which the Department raises. He cannot delegate this.
2. staff transfers;
3. taking decisions and carrying out responsibilities that subordinate officers should make but are cannot make decisions, ie overmanaging subordinate officers because they do not have management skills or proper authority delegated to them. The culture is to follow and wait for instructions from senior officers rather than take

responsibilities. For example difficult vehicle allocation decisions or making decisions about borrowing staff from other districts to work in the central district. There is no management culture in the Department;

4. coordination and communication with other Departments because senior officers do not communicate with other departments because they lack the necessary weight, authority and accountability and procedures are not established. This wastes a lot of time and is highly inefficient.

For example chasing the Chief Mechanical Engineer on overdue vehicle maintenance or on purchasing spare parts.

5. Sometimes gets involved on payroll problems eg where staff have not been paid, want an advance or for payroll errors. He has to resolve the problem with the City Treasurer.

Human Resource management 5%

Currently the DoE is not recruiting staff except in scales 1 to 9 because there is an embargo on the recruitment of staff in scales 10 to 18 by the MOLG. The embargo was initiated in February 1995. Regular appraisals of staff are not carried out in the DoE except for promotions.

Recruitment: The director has no authority or powers to recruit but he is expected to recommend staff for appointment.

Appraisal and promotion: the director does not carry out staff appraisals or appraisals for promotions.

Disciplinary actions: the director has no powers of discharge. He must prepare a written report to the Council or the PSC via the MOLG (scales 1 to 9) as appropriate on disciplinary matters. The Council or the PSC decide on the disciplinary measures necessary on the advice of the DoE.

The director approves leave authorisations.

Public Relations 10%

A substantial amount of time is in dealing with the public, NGO's and the press and the media. The Director as the head of the DoE is personally responsible to represent the DoE in all the requirements of public representation and communication and interface with the general public and other public organisations.

Deputy Director of Department of the Environment

He has similar responsibilities to the Director. Like the Director the Deputy Director is not involved in the day to day supervision of operations.

Policy and Planning ??%

The Deputy Director assists the Director in policy formulation and implementation of the Department's policies and in major planning organisational or operational changes. This involves a considerable amount of time assisting the Director in the preparation of reports for the Head's of Department meetings and the Council Committees.

MOLG 5%

The Deputy Director also assists the Director to prepare reports for MOLG on a number of issues.

Financial

The Deputy Director is involved in the joint preparation of the annual budget return which goes to the City Treasurer with the Superintendent and the Deputy Superintendent.

Like the Director, the Deputy Director also coordinates and discusses financial issues with the Treasurer. These are primarily concerned with obtaining funds to spend on the service.

Daily Operational Management

The Deputy Director is not involved in day to day supervision of operations. His responsibilities are to review the Section's daily performance report and compare it to daily work plan to check for implementation. He also amends the reports as necessary. He also reviews the weekly and monthly performance reports.

Unnecessary and routine tasks 20%

Like the Director the Deputy Director's is also time is taken up with a substantial amount of unnecessary procedural tasks. These include:

Other routine items which take up his time are:

1. checking the returned roll calls;
2. signing all purchase requisitions.
3. taking decisions and carrying out responsibilities that subordinate officers should make but are cannot make decisions, ie overmanaging subordinate officers because they do not have management skills;

4. coordination and communication with other Departments because his subordinate officers do not communicate with other departments because they lack the necessary weight, authority and accountability and procedures and precedence are not established. This wastes a lot of time and is highly inefficient.

Human Resource management 5%

Recruitment: The Deputy Director has no authority or powers to recruit but he is expected to recommend staff for appointment.. He only recommends staff for appointment. Interviews levels between 1 to 9 are not set and are ad hoc. Interviews for 10 to 18 for recruitment and promotion are rarely organised.

Appraisal and promotion: the deputy director does not carry out staff appraisals or appraisals for promotions.

Disciplinary actions: the deputy director has no powers of discharge. He must prepare a written report to the Council or the PSC via the MOLG (scales 1 to 9) as appropriate on disciplinary matters. The Council or the PSC decide on the disciplinary measures necessary on the advice of the DoE.

The director approves leave authorisations for scales 14 and above. All others are approved by the Superintendent.

No payroll responsibilities. These are delegated to the Superintendent.

Public Relations 10%

A substantial amount of time is in dealing with the public, NGO's and the press and the media. The Director as the head of the DoE is personally responsible to represent the DoE in all the requirements of public representation and communication and interface with the general public and other public organisations.

Assistant Director of Department of the Environment

Two new posts but vacant.

No job description yet.

Cleansing Superintendent

The Cleansing Superintendent is the most senior person in post in the Cleansing Section.

Policy and Planning

No policy or planning role.

Financial

No financial responsibilities other than the annual budget preparation. Jointly prepares resourcing and cost data for the annual budget with the Deputy Director and the Deputy Superintendent Operations. This is prepared after the DoE gets the annual budget allocation from the Treasurer.

Daily Operational Management

Daily management of all the Cleansing Section's operations.

Each day he obtains and reviews the:

1. daily Section Work Plan and Performance Report prepared by the Deputy Cleansing Superintendent Operations for collection and haulage and street sweeping.
2. Vehicle Allocation Plan prepared by the Deputy Cleansing Superintendent Operations and the Transportation Officer;
3. 2 Divisional staff reports detailing staff attendance; and
4. visits Kaloleni to jointly plan the days operations with the Deputy Cleansing Superintendent Operations. He does not decide on the vehicle allocation.

After this he prepares a daily summary of the collection service which is passed to the Deputy Director and the Director. He also prepares a weekly and monthly report on collection and a monthly report on staffing and staff allocation.

The Superintendent is not involved in the day to day supervision of actual work undertaken. He deals with higher level problems.

Inspection

High level monitoring of day to day activities of the district inspectors, eg visits district offices. Maybe twice a week the Superintendent actually goes to physically inspect a situation eg illegal dumping.

Human Resource

Administration of HR for leave, training and appraisal

Recruitment: No authority or powers to recruit. Only recommend staff for appointment.

Appraisal and promotion: carries out staff appraisals but only for promotions for all scales below him. Regular appraisals of staff are not carried out except for promotions.

Disciplinary actions: no powers of discharge. Must prepare a written report to Opiyo.

Approves leave authorisations.

Gets involved on payroll problems eg where staff have not been paid, want an advance or for payroll errors.

Other

Requisition and procurement of tools and equipment. Responsible for authorising all minor assets and small tools from stores but not vehicle spare parts - these are the responsibility of the City Engineer Department.

All requisitions are countersigned by the Deputy Director and the Director.

2 Middle Management

Deputy Cleansing Superintendent Operations

Policy and planning

He has no policy or planning role.

Financial

Jointly prepares resourcing and cost data for the annual budget with the Superintendent and the Deputy Director. This is prepared after the DoE gets the annual budget allocation from the Treasurer.

Operational planning - 60%

Responsible for daily operational planning for both of the Sections Divisions ie for all districts. Planning day to day activities and operations of all the districts. This involves:

1. reviews the daily work plans - the next days operating plan - and the daily performance reports - the actual days performance - prepared by each District Head and submitted to him each evening. Compares outturn performance with planned and identifies any significant differences;
2. adjusts and approves the daily plans with the District Inspectors each morning. He does not get involved in the allocation of staff. This is the District Inspector's responsibility;
3. reviews the daily vehicle allocation plan prepared by the Transportation Officer. Decides the days vehicle allocation with the Transportation Officer. Since there are so few vehicles the allocation is based on the relative needs of the Districts as detailed in the daily work plans and performance reports;
4. summarises the District plans, performance reports and the vehicle allocation plan into a Section Plan which he reports to the Superintendent and to Deputy Director by 9 am every morning;
5. assists and reviews the implementation of the District Inspectors planned work by visiting their offices; and
6. coordinates with the Chief Mechanical Engineer (CME) the City Engineers Department on major maintenance problems. If a maintenance of a vehicle at the City Engineers Main Depot is very slow then Mr Opiyo will also discuss the matter with the CME.

Maintenance

All routine repairs are carried out at the Kaloleni Depot. Vehicles requiring major repairs are sent to the City Engineers Main Depot. The Chief Mechanical Engineer in the City Engineers Department is responsible for all major repairs on the DoE's vehicles. However the CME never reports to the TO or to Mr Wamiri at the DoE on the status of vehicles being repaired or what spare parts have been requisitioned or ordered. Also the CME authorises payment for any items that have to be purchased. This is unacceptable since the cost of repairs is included in the DoE's not the City Engineers budget.

Monitoring of operations

Physical monitoring/inspection of some sites locations eg collection and illegal dumping problems. Maybe one per day.

Human resource management and development - 10%

Recruitment: No authority or powers to recruit. Only recommend staff for appointment.

Appraisal and promotion: carries out staff appraisals but only for promotions for all scales below him. Regular appraisals of staff are not carried out except for promotions.

Disciplinary actions: no powers of discharge. Must prepare a written report to Opiyo.

Approves leave authorisations. He is involved on payroll problems eg where staff have not been paid.

Reporting 20%

Responsible for the preparation of the daily, weekly and monthly operational reports. The reports contain:

1. numbers of staff working
2. equipment used
3. quantity of waste collected
4. areas covered and not covered
5. frequency of collection

Deputy Cleansing Superintendent Administration

The duties are very similar to those of the Deputy Cleansing Superintendent Operations. The Deputy Cleansing Superintendent Administration is Head of one of the Cleansing Sectors into two Divisions comprising three districts.

Assistant Cleansing Superintendent

There are 2 posts of Assistant Cleansing Superintendent. One is vacant and the other is filled by an acting Assistant Cleansing Superintendent. His responsibilities are research, development as well as daily operational planning.

District Inspectors

There are 6 District Inspectors.

Management role

Each District Inspector manages his district's daily operations and his personnel but does not directly supervise work in the field. At the current time his work is characterised by day to day crisis management of services.

Policy and Planning

No planning or policy role in the Section. They want more involvement in Policy.

Financial

No responsibilities or involvement in the budgetary planning or monitoring.

Approves the monthly payroll, including overtime payments and bonuses for all his District staff.

Daily Operational planning

DIs receive and assess the daily work plans (includes street cleansing) and the performance reports prepared by the Headmen and their Senior Headmen.

Each DI edits and modifies the work plans and then prepares a District work plan and performance report which is passed to the Deputy Superintendent Operations. Their Administration files all reports.

DIs instruct and direct the Senior Headmen on the daily operational plan including the allocation of staff. This is done before the Deputy Superintendent Operations has reviewed and approved the daily work plan. The Deputy Superintendent will only adjust the daily work plan if there are significant reasons.

The DIs advise the Deputy Superintendent Operations and the Transport Officer on their daily needs for vehicle allocation each day but are not involved in making the decision which is the responsibility of Deputy Superintendent Operations and the Transport Officer.

The DIs meet with the Deputy Superintendent Operations two or three times a week to jointly plan the collection services and vehicle allocation needs.

Monitoring of operations

DI's carry out some spot inspections of the Section's collection and street cleansing activities and operations - typically once or twice a week.

Human resource management and development

The DIs have no role in recruitment other than making recommendations. They do not interview recruits.

The DIs are supposed to carry out annual appraisals on their subordinate staff but in practice they do not. This is because the appraisal system at NCC has broken down.

The DIs recommend appraise staff seeking a promotion.

The DIs are involved in cases of staff discipline, but have no powers to sanction staff. They are responsible to maintain payroll records and to approve leave authorisations.

Stores and Purchasing

Responsible for requisitioning and managing minor assets and small tools stores but not vehicle spare parts - these are the responsibility of the City Engineer Department.

The DIs raise and approve stores requisitions for small tools stores. The DIs pass the requisition to the Cleansing Superintendent for approval.

The DIs are also responsible for recording the allocation of tools to workers.

Community Participation

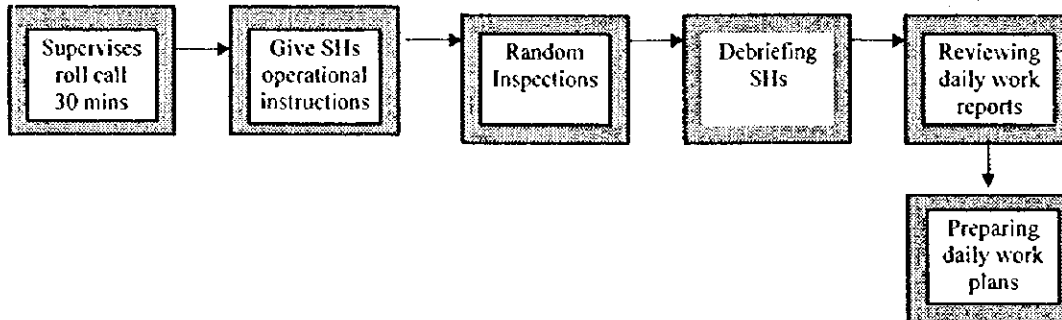
The DIs have an important role to play in co-ordinating their District's activities with those of NGOs and other community groups. For example joint campaigns to clean up waste. Another responsibility is to provide technical knowledge and know how to NGOs and Community Groups.

Coordination has to be initiated through one of the 8 District Officers of the Nairobi Provincial Administration. To do this the District Officer will call a "baraza" or meeting with the community leaders and representatives.

The District Head also has a limited role to play in managing complaints and other enquiries from the public. Serious complaints are referred to the Deputy Director.

Senior Forman -

The Senior Forman is the Deputy to the District Inspector and will perform his duties in his absence. The typical daily schedule of a Senior Forman is:



Senior Forman manage the districts daily operations but does not directly supervise the front end work.

Operational planning

Daily: The Senior Forman is involved in the daily operational planning. He plans next days operations for all his headmen using each Headman's work plan and daily activity or performance report. He jointly prepares with his DI a summarised District daily work plan and daily performance report.

Assist his DI each morning to instruct and direct the Senior Headmen on the days' operational plan.

Weekly/monthly: The Senior Forman assists his DI to prepare the weekly and monthly performance reports.

He assists the DIs to prepare the weekly and monthly performance report.

Monitoring of operations

The Senior Forman carries out daily random/spot inspections of collection and street sweeping services.

Human resource management and development

He only approves leave on behalf of his DI.

He does not carry out any recruitment, promotion or disciplinary responsibilities of any kind. He has no training responsibilities but will assist to formulate training needs as appropriate.

Senior Forman have no payroll approval responsibilities.

Forman I and Forman II -

Forman I and II carry out very similar duties. They often act as the DIs' watchdogs in the field.

Operational role

Forman I and II collect the daily work plans and performance reports from the Senior Headmen and pass them onto the Senior Forman. About 50% of their time is spent in supporting their Senior Forman in daily operational planning.

The Forman also supports the Senior Forman in directing and instructing the Senior Headmen about the days operations.

Neither Forman I or II directly supervise the work in the field.

Often Formen are responsible for areas which are distant from the District Offices and need independent management and stronger coordination which Senior Headmen cannot provide.

Operational monitoring

Forman I and II sometimes have specific inspection responsibilities - otherwise ad hoc.

Human resource management and development

Forman I and II have no personnel or human resource development or training responsibilities.

Reporting

No reporting responsibilities.

3 Supervisors and Manual Labourers

Senior Headman - PHT II

Senior Headmen are assigned responsibilities either for street cleansing or collection. They work entirely in the field and their prime responsibilities are to supervise and monitor the activities of the Headmen and manual workers.

Typically a Senior Headman will manage about 4 -8 Headman.

Operational role

Senior Headmen are directly involved in the supervision and operational planning of the work in the field. Each day each Senior Headman assesses and reviews their Headmen's performance reports. In the case of collection services it is usually the Senior Headmen who prepare the work plans. For street cleansing the Headmen always prepare their work plans.

Once he has approved them he passes them to the most usually to the Senior Forman or the Forman as appropriate.

Each day the Senior Headmen are instructed by their DIs, Senior Formen or their Forman on the day's operational plan.

If he has collection responsibilities he normally works in the field. If he carries out street cleansing responsibilities he does not work in the field.

Monitoring of operations

When they are not directly supervising work in the field they monitor the activities of their headmen.

Human resource management and development

Other than approving leave they have no human resource management responsibilities or training responsibilities.

Senior Headmen approve overtime and bonus payments monthly, the daily staff attendance or the master roll and the monthly payroll. The Senior Headmen pass the payroll directly to the DI.

Reporting

Other than daily reporting on work plans and daily performance there are no other reporting responsibilities.

Headman - PHT III

Headmen are in charge of each collection team or street cleansing team. Generally Headmen are effective at their work. If he is in charge of a collection team he will typically supervise one driver and 4/5 loaders. If he is in charge of a street cleansing team he will typically supervise about 15 people.

Operational role

Collection: Headmen directly supervise the work in the field as leaders and members of their collection and street cleansing teams. He works as a member of the collection team. He does not drive it or load it but ensures that the manual workers are doing their work properly.

The Headman records the areas ie the streets visited and any problems. On the basis of this he prepares his daily operational report or performance report. These reports are sent to his Senior Headmen each day who prepares the work plan from it. Both reports move upwards to his DI. The Senior Headmen instruct them on their daily operational plan.

The headmen are responsible for the daily roll call each morning. The "collection" Headmen come to the DIs office every day for debriefing.

Street Cleansing: The Headmen prepares both daily performance reports and work plans.

Monitoring of operations

No monitoring role at all.

Human resource management and development

Each headmen is responsible for receiving requests for leave from his subordinates and for monitoring and reporting all his subordinates' leave. Otherwise he has no other role.

Manual Labourers

Collection Loaders -

The loaders are supervised by their headmen and are organised into teams by vehicle. They collect and load waste into the collection vehicles.

Sweepers -

The sweepers are supervised by their headmen and are organised into teams by location.

4 The Transportation Unit

The Transport Officer

The Transport Officer is responsible for managing the Transportation Section. His main responsibilities are to:

1. ensure that vehicles are properly allocated to the districts each day. The Transportation Officer jointly decides on the daily allocation with the Deputy Superintendent Operations;
2. be responsible for preparing the daily vehicle allocation plans and performance reports;
3. reviews the daily reports;
4. review the daily staff roll call report; and
5. carry out very general human resource management responsibilities eg approves leave. But no recruitment, promotion or disciplinary responsibilities. He does not deliver training but formulate training needs.

The Deputy Transport Officer

The Deputy Transport Officer assists the Transport Officer to:

1. allocate vehicles to the districts each day. Jointly decides the daily allocation with the Deputy Superintendent Operations;
2. assists in the preparation of the daily and monthly vehicle allocation plans and performance reports;
3. monitor vehicle maintenance;
4. managing and supervising the logistics of accidents to vehicles;
5. general personnel administration, including managing the staff clocking on; and
6. reviews vehicle allocation plans and vehicle performance reports.

Forman - PHT 1

The Forman's main responsibilities are:

1. supervise the drivers and mechanics subordinate to him;
2. ordering all spare parts and tyres for maintenance at the Kaloleni depot and following up on orders;
3. ordering and collecting fuel and other consummables for the unit;

4. ordering all other stores for the Unit;
5. following up on vehicles that are being repaired at the City Engineers main depot;
6. obtaining reports from drivers and recording when they log in and out of Kaloleni;
and
7. assists in the preparation of reports.

Senior Headman - PHT II

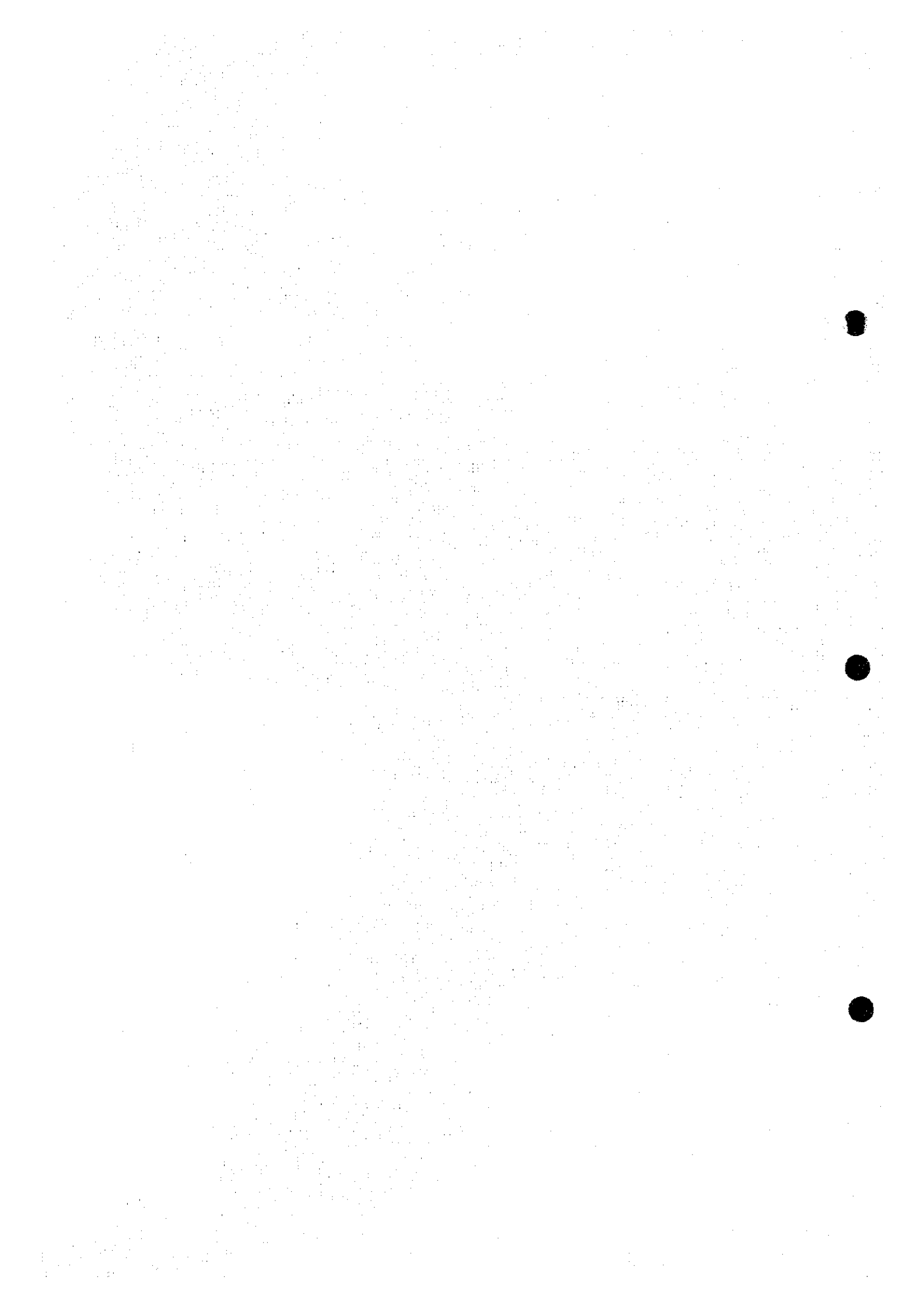
The Senior Headman manages a small administration unit of three Headmen (PHT III). He and his team provide logistical support to the Unit by:

1. preparing daily, weekly and monthly vehicle utilisation reports;
2. recording all vehicle movements into and out of Kalaleni Depot.
3. managing vehicle breakdowns;
4. tracking vehicles that have been passed for maintenance or service to the City Engineers Main Depot;
5. recording fuel use;
6. managing the transport store;
7. recording morning roll call;
8. payroll preparation;
9. maintain personnel records; and
10. recording leave.



2.7

**DAILY MANAGEMENT AND PLANNING OF
OPERATIONS - COLLECTION AND STREET
CLEANSING**



Daily Management and Planning of Operations - Collection and Street Cleansing

Daily Operations are managed from the Cleansing Section's Kaloleni Depot where the Deputy Superintendents are based.

No weekly or monthly operational plans are produced. Only daily plans are prepared. Weekly operating plans were prepared until recently which set weekly targets for the same data as the Daily Plans, eg numbers of trips, areas covered etc. They were discontinued because services can only be planned on a day by day basis.

The planning and the recording of performance starts at the bottom of the Section with the Headmen. They prepare Daily Work Plans and Daily Performance reports for their beats from their daily logs.

The Daily Work Plan and Daily Performance Report are sent to District Inspectors who with the help of the Senior Forman summarise them into a Daily District Report and later a Weekly District Report using the same data categories. Box 3 gives details of the data recorded in the Daily Work Plans and the Daily Performance Report.

Box 3 - The Daily Work Plan & Daily Performance Report

The Daily Work Plan details the next days operations for:

1. areas to be covered for waste collection;
2. numbers of trips for collection;
3. areas to be covered for street sweeping; and
4. numbers of staff working per truck and by sweeping teams.

The Daily Performance Report record data on:

1. areas covered by waste collection;
2. streets swept and manholes/gullies cleared;
3. numbers of staff working, also analysed per truck and by sweeping teams;
4. log of vehicles times in and out;
5. vehicles operating and the numbers of trips;
6. differences between planned services and performance; and
7. any problems encountered.

The Daily District Report is sent to the Deputy Superintendent Operations (DSO) who is the key officer responsible for planning the days collection and street cleansing operations. The DSO approves the 6 separate District plans after consultation with the District Inspectors.

The DSO then prepares a Daily Section Report containing a Daily Work Plan and a Daily Performance Report of the previous day's activities. These are sent to the Cleansing Superintendent who reviews them and passes them upwards to the Deputy Director who disseminates them to the:

1. Director DoE;
2. the Town Clerk; and
3. the Mayor.

The DSO also prepares Weekly and Monthly Performance Reports for the Section. These contain the same data categories as the Daily Performance Reports:

In addition to this a Daily District and Section Staffing Reports are prepared. From these the Superintendent prepares a monthly staffing report.

Daily Vehicle Allocation Plan and Performance Reports are produced by the Transportation Officer. These are reviewed by the Deputy Superintendent Operations.

A complete set of operational reports produced by the Section is given in Table 2.6-1 below.

Table 2.6-1 Operational Reports Produced within the Cleansing Section

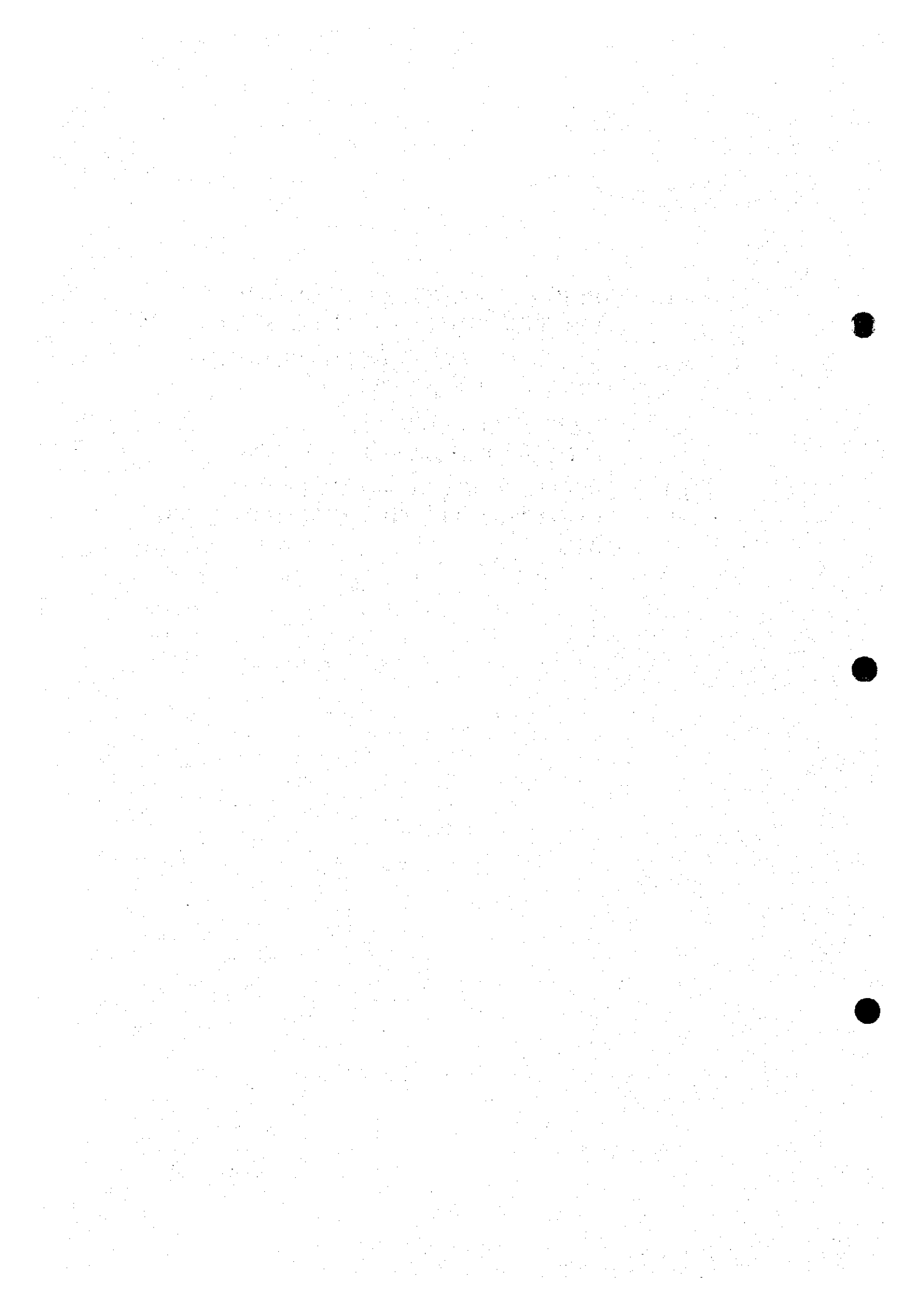
Report	Who Prepares	Who receives
Operational Reports		
Headmens' Daily Operational Reports 1. Work Plan 2. Performance Report	Headmen. (Senior Headmen only review).	}District Inspectors, }Senior Headmen and }Senior Forman
Daily District Report 1. Work Plan 2. Performance Report	District Inspector & Senior Forman	}Dep. Superintendent }Superintendent
Daily Section Report 1. Work Plan 2. Performance Report	Deputy Superintendent (Operations)	}Superintendent }Dep. Director }Director }Mayor(1) & }Town Clerk(1)
Weekly District Report	District Inspectors & Senior Forman	}Dep. Superintendent }Superintendent
Weekly Section Report	Deputy Superintendent (Operations)	}Superintendent }Dep. Director }Director
Monthly Section Report	Deputy Superintendent (Operations)	}Superintendent }Dep. Director }Director & }Environmental }Committee
Human Resources		
Daily Staff Report 1. District 2. Section	District Inspectors & Senior Forman Superintendent	Dep. Superintendent }Dep. Director }Director
Monthly Section Staff Report	Superintendent	}Dep. Director }Director
Vehicle Allocation		
Daily Vehicle Allocation 1. Plan; and 2. Performance Report	Transportation Officer. Deputy Superintendent (Operations) reviews	}Dep. Director }Director }Mayor(1) & }Town Clerk(1)

Note (1): used by these officers for dealing with complaints from the public.

DATA BOOK 3

LEGAL STUDY

- 3.1 PUBLIC HEALTH ACT - DETAILED PROVISIONS OF SECTIONS 118 AND 126**
- 3.2 NCC'S BY - LAWS WITH INDIRECT RELEVANCE TO SWM**
- 3.3 NATIONAL ACTS WHICH HAVE INDIRECT RELATION TO SWM**
- 3.4 POWERS OF ENFORCEMENT CONTAINED IN THE PUBLIC HEALTH ACT**



3.1 Public Health Act - Detailed Provisions of Sections 118 and 126

Section 118 defines what constitutes a nuisance (to health) liable to be dealt with under the Act and covers solid wastes,

These include:

1. any street, road or part thereof, any stream, pool, ditch, gutter, watercourse, sink, water-tank, cistern, water closet, earth-closet, privy, urinal, cesspool, soakaway pit, septic tank, cesspit, soil pipe, waste pipe, drain, sewer, garbage receptacle, dustbin, dung pit, refuse pit, slop-tank, ashpit, or manure heap so foul or in such a state or so situated or constructed as in the opinion of the medical officer of health to be offensive or to be injurious or dangerous to health;
2. any accumulation or deposit of refuse, offal, manure or other matter whatsoever which is offensive or which is injurious or dangerous to health;
3. any accumulation of stones, timber or other material of such in the opinion of the medical officer of health is likely to harbour rats or other vermin.
4. any area of land kept or permitted to remain in such a state as to be offensive or liable to cause any infections, communicable or preventable disease or injury or danger to health; and
5. any act, emission or thing which is, or may be, dangerous to life, or injurious to health.

In addition to these powers, Section 126 of the Act gives the Minister power to make rules on a diverse range of responsibilities of local authorities, including:

1. the inspection of land, dwellings, buildings, factories and trade premises, and for securing the keeping of the same clean and free from nuisance and so as not to endanger the health of the inmates or the public health;
2. the periodical cleansing and white-washing or other treatment of dwellings and the cleansing of land attached thereto and the removal of rubbish or refuse thereon;
3. the drainage of land, streets, or premises, the disposal of offensive liquids and the removal and disposal of rubbish, refuse, manure and waste matters;
4. the establishment and carrying on of factories or trade premises which are liable to cause offensive smells or effluvia, or to discharge liquid or other material liable to cause such smells or effluvia, or to pollute streams, or are otherwise liable to be a nuisance or injurious or dangerous to health, and for prohibiting the establishment or carrying on of such factories or trade premises in unsuitable localities or so as to be a nuisance or injurious or dangerous to health; and
5. the inspection of the district of any local authority by that local authority to ascertain whether the land and buildings thereon are in a state to be injurious or

dangerous to health, and the preparation, keeping and publication of such records may be required.

3.2 NCC's By-Laws with Indirect Relevance to SWM

There are five sets of by-laws enacted by Nairobi City Council under the provisions of the Local Government Act may have indirect relevance to SWAM. These relate to trading licenses and are:

1. The City of Nairobi (Restaurant, Eating House and Snack Bar) By-Laws 1961, L.N. 674/1961.
2. The City of Nairobi (Slaughter-house) By-Laws, 1966, L.N. No. 3 25/ 1 966.
3. The City of Nairobi (Hairdressers and Barbers) By-Laws 1 979, L.N. No. 146 of 1 970.
4. The City of Nairobi (Food Shops and Stores) By-Laws 1958, L.N. No. 384/1956.
5. The City of Nairobi (Hawkers) By-Laws 1963, L.N. No. 748/1963.

Other by-laws exist but are of only marginal relevance to SWM.

The remaining five by-laws follow the same format. Each imposes licence requirements on operators. The Council is given power to refuse to issue or renew a licence or to cancel the licence if, inter alia;

"the premises are, in the opinion of the medical officer of health not in good repair or not provided with adequate sanitary arrangements, or do not conform with the reasonable requirements of MOH or with the provisions of the By-Laws or are in such a condition as to be dangerous to health or liable to favour the spread of disease."

Whereas these By-Laws do not expressly make provision for SWM, requirements relating to SWM which are imposed by the MOH would most likely be considered as reasonable and failure to comply would lead to the loss of a licence.

(1) Evaluation of NCC's By-Laws

The five remaining By-laws do not deal specifically with SWM. They contain a general power in NCC to cancel a licence if premises are, in the opinion of the MOH, not provided with adequate sanitary arrangements or are in such a condition as to be dangerous to health or liable to favour the spread of disease. Only by implication can SWM be read into these provisions.

(2) Enforcement mechanisms NCC's the By-Laws

The City of Nairobi (Food Shops and Stores By-Laws 1958, L.N. 384/1958 contains a power to refuse to renew a licence if, inter alia: the premises to which the application relates are, in the opinion of the medical officer of health, not provided with adequate sanitary arrangements, or do not conform with the provisions of the by-laws.

Further, the Council may, by written notice to the licensee, cancel any licence if it appears to the Council on the advice of the medical officer of health, that the premises to which the licence applies or any part thereof are in such a condition as to be dangerous to health or liable to favour the spread of disease.

Where a licence has been canceled under these provisions the Town Clerk shall not issue or transfer to the holder of the canceled licence any further licence in respect of the same premises without first obtaining the approval in writing of the medical officer of health.

The By-laws have a general penalty of a fine not exceeding 1000/= or imprisonment for a term not exceeding three months or to both such fine and imprisonment. Finally, any licensee who, within a period of two years, is twice convicted of offenses against the By-laws shall be liable, in addition to any other penalty which may be imposed to have his licence canceled by the court and such court may -

- (i) debar such licensee from obtaining another licence for such period, not exceeding one year, as the court may think fit.

The City of Nairobi (Restaurant, Eating House and Snack Bar) By-Laws 1961, L.N. 674/1961 contains a power (Art. 8) to cancel a licence if, in the opinion of the medical officer of health, such premises are in such a condition as to be dangerous to health or liable to contribute to the spread of disease or do not comply with any of the provisions of three by-laws, and he so advises the town clerk. There is a right of appeal against the cancellation of a licence (S.8). Article 34 imposes a penalty of a fine not exceeding 1000/= or imprisonment for a term not exceeding one month or both.

The City of Nairobi (Slaughterhouse) By-Laws 1966, L.N. 325/66 provides that the Th i B -L 1966 Council may cancel any licence -

- (a) if it appears to the Council on the advice of the Medical Officer of Health, that the premises to which the licence applies, or any part thereof, are in such a condition as to be dangerous to health or liable to favour the spread of disease; or
- (b) if the licensee is convicted of any offence against these by-laws on two or more separate occasions within any period of two years.

Where a licence has been so canceled the Town Clerk shall not issue or transfer to the holder of the canceled licence any further licence nor issue any

further licence in respect of the same premises without first obtaining the approval in writing of the

medical officer of health. Article 29 of the By-Laws impose a penalty of a fine not exceeding two thousand shillings or imprisonment for a term not exceeding six months or both.

Finally the City of Nairobi (Restaurant, Eating House and Snack Bar) By-Laws 1961, L.N. 674/1961 also gives power to cancel a licence if, in the opinion of the medical officer of health, such premises are in such a condition as to be dangerous to health or liable to contribute to the spread of disease or do not comply with any of the provisions of the By-Laws, and he so advises the Town Clerk. Where a licence has been so canceled the Town Clerk shall not issue any further licence in respect of the same premises without first obtaining the approval in writing of the Medical Officer of health.

3.3 National Acts which have Indirect Relation to SWM

There are a number of National Acts which have indirect relevance to SWM. These are described and evaluated.

(1) Description of the Legislation

The Water Act, Ca 472

Section 158(1) provides that "any person who, by any act or neglect, causes any source of water supply, the water from which is used or is likely to be used for human consumption or domestic purposes, or for manufacturing food or drink for human consumption, to become polluted, or to be likely to be polluted, shall be guilty of an offence. The section provides further that the Act does not prohibit or restrict the disposal of effluents in any area which the Minister may, by order, from time to time, specify.

Section 158(2) stipulates that any person who, willfully, without authority throws or conveys, or causes or permits to be thrown or conveyed, any rubbish, dirt, refuse, effluent, trade waste or other offensive or unwholesome matter or thin into or near to anybody of water in such manner as to cause, or be likely to cause, pollution thereof shall be guilty of an offence.

The penalty stipulated is that in the case of a first offence a fine of up to 5000/= or in default nine months imprisonment and, in the case of a second or subsequent offence to a fine of up to 10,000/= or in default to imprisonment of up to 12 months.

Further Rule 77 of the Water (General) Rules provide that any person who deposits, or causes or allows to be deposited, into any body of water or any tributary thereof, any sawdust, any vegetable or mineral refuse, the effluent from a sheep or cattle dip, factory, premises of work, any sewage or sewage effluent or any other matter or thing of any kind which is harmful to the fish,

fish life, the fry or ova of fish, or fish food contained in such body of water shall be guilty of an offence.

The Land Planning Act, Cap 303

This statute provides for planning the use and development of land. The Development and Use of Land (Planning) Regulations 1961 have been made under these regulations.

Regulation 10 provides that no person shall carry out development without the consent of the local authority. "Development" is defined as "the making of any material change in the use or density of any buildings or land or the subdivision of any land ..." For the avoidance of doubt the Act stipulates that "the deposit of refuse, scrap or waste materials on land involves a change of use thereof."

The Physical Planning Act, 1996

This Act aims to replace the Land Planning Act, Cap 303, above. Like the Land Planning Act it gives power to local authorities to control development authorising various activities, including waste disposal.

The 1996 Act introduces a requirement for Environmental Impact Assessment. Under section 36 it stipulates that -

"if, in connection with a development a local authority is of the opinion that proposals for industrial location, **dumping sites**, sewerage treatment, quarries or other development activities will have injurious impact on the environment, the applicant shall be required to submit together with the application an environmental impact assessment report."

The Government Lands Act, Cap 280

Section 143 of the Government Lands Act stipulates that "a person who without lawful authority of the Commissioner (of Lands) deposits or causes to be deposited upon unalienated Government land **any rubbish, refuse, offal, manure, earth or any matter whatsoever** whether rubbish or otherwise, shall be guilty of an offence and liable to a fine not exceeding Kshs.3000/= and all expenses incurred in the removal of such matter may be recovered from that person as a civil debt recoverable summarily upon the complaint of the Commissioner."

The Medical Practitioners and Dentists Act, Cap. 253

This statute is relevant to the management of hospital waste.

Section 4 constitutes the Medical Practitioners and Dentists Board. Section 15(5) gives the Board power to authorise the use of premises for the purpose of the private practice of medicine. Before determining an application for authorization the Board considers an Inspection Report which looks into, among other things, the incineration facilities for the disposal of the hospitals pathogenic waste.

The Scrap Metal Act, Cap 503

This statute makes provision for the control and regulation of dealings in scrap metal. It prohibits dealing in scrap metal without a dealers' licence for which the issuing authority is the police.

The statute prohibits a licensed dealer from storing or dealing in any scrap metal elsewhere than at the premises specified in his licence unless he has the written permission of the licensing officer to do so.

The Use of Poisonous Substances Act, Cap 247

Under this statute provision may be made by regulations for the purpose of protecting persons against risks of poisoning by poisonous substances arising from the storage, transport, sale and disposal of poisonous substances.

No rules have been made so far in exercise of this power. If made such rules may require persons engaged in the disposal of poisonous substances to be registered or licensed.

The Food, Drugs and Chemical Substances Act, Cap 254

Section 24 provides that any person who uses or disposes of any chemical substances in a manner likely to cause contamination of food or water for human consumption or in a manner liable to be injurious or dangerous to the health of any person shall be guilty of an offence.

The Penal Code, Cap 63

Section 191 states that any person who voluntarily corrupts or fouls the water of any public spring or reservoir so as to render it less fit for the purpose for which it is ordinarily used is guilty of a misdemeanour.

The Factories Act, Cap 514

Section 13 of this statute stipulates that every factory shall be kept clean and free from effluvia arising from any drain, sanitary convenience or nuisance. Additionally it states that accumulations of dirt and refuse shall be removed daily by a suitable method from the floors and benches of workrooms and from the staircases and passages.

The Radiation Protection Act, Cap 243

Section 8 provides that no person shall dispose of any irradiating device or radioactive material except under and in accordance with a licence issued under the Act. Section 12 states that the licensee shall be responsible for ensuring that exposure to ionising radiation resulting from its disposal shall be kept as low as reasonably practicable below prescribed limits.

Section 12 requires the owner of the facility to appoint a person experienced in radiation health and safety officer within the facility to ensure inter alia, that proper care is taken of radiation wastes if they appear in the course of the use

of radiation sources and that the wastes are only disposed of in accordance with the licence granted for that purpose.

Section 14 provides for inspection of disposal premises by the Chief Radiation Protection Officer. There is a two year imprisonment as the penalty for operating without a licence.

Finally, the statute gives the Minister power to make rules for prescribing -

1. methods of disposing of radioactive waste products from any source; and
2. the method of treatment or disposal of any vessel vehicle, package or container that has been used to convey, hold or store any irradiating device or radio-active material.

Other Statutes

There are various other statutes of SWM which are relevant to the issue but contain no provisions on SWM. These include -

1. The Pharmacy and Poisons Act, Cap 244.
2. The Pest Control Products Act, Cap 346.
3. The Kenya Bureau of Standards Act, Cap 496.

(2) Evaluation of the Legislation

(a) Fragmentation of Responsibilities

In the Water Act the responsible authority is the Minister in Charge of Water. The Land Planning Act and the Physical Planning Act 1996 place responsibility on local authorities in their capacity as planning authorities. The Government Lands Act places responsibility on the Commissioner of Lands. The responsible authority under the Medical Practitioners and Dentists Act is the Medical Practitioners and Dentists Board. The responsible authority under the Scrap Metal Act is the Commissioner of Police. The responsible authority under the Penal Code is also the Commissioner of Police. The responsible authority under the Factories Act is the Factories Inspectorate. The responsible authority under the Radiation Protection Board. The responsible body under the Food, Drugs and Chemical Substances Act is the Public Health (Standards) Board of the Ministry of Health.

This myriad of institutions leads to institutional disfunction, with conflicting responsibilities, overlaps in jurisdiction and a lack of clarity as to the institution with primary responsibility for SWM. At worst this may lead to action not being taken as no institution feels compelled to take action.

(b) Lack of Comprehensiveness in the Legislation

The provisions contained in the Water Act are also focused only on the protection of water from pollution, particularly where the water is to be used for human consumption. Other objectives of SWM such as cleanliness and public health are absent.

The Land Planning Act and the Physical Planning Act 1996 deal with SWM only in the context of the use of land for disposal purposes. Where a disposal facility is not in issue this statutes do not come into play. Thus they do not provide for collection, transport or recycling.

The Government Lands Act aims at protecting unalienated Government from unauthorised deposits of waste. Its scope is therefore restricted to only unalienated Government land and does not extend to other public places, private premises or landfill sites.

The Medical Practitioners and Dentists Act focuses on only one issue in the entire SWM cycle, that is, the setting up of incineration facilities for pathogenic hospital waste. It does not focus on the management of other solid wastes, even from hospital facilities.

The Scrap Metal Act deals also with one issue only, the control of dealerships in scrap metal. It does not cover other waste materials or control the entire waste management cycle, even in relation to scrap metal. Thus it does not require recycling or minimisation of the generation of scrap metal.

The Use of Poisonous Substances Act aims at protecting persons against risks arising from the disposal of poisonous substances. its remit does not extend to protecting the environment from similar risks, even though this may be a very serious problem.

The Food, Drugs and Chemical Substances Act focuses on protecting food or water for human consumption. It does not extend to general cleanliness or to environmental protection,

The Penal Code focuses only on the pollution of water of a public spring or reservoir.

The Factories Act limits its remit to SWM within the workplace. It does not extend to activities outside of the workplace, such as street cleansing, transport or collection of solid waste.

Finally the Radiation Protection Act is concerned also only with the issue of radiation. It does not extend to other solid waste management issues.

(c) Wastes are not properly classified

The Water Act control "acts or omissions", and "offensive or unwholesome matter" likely to cause pollution of water. Whereas this is

wide enough to cover all categories of waste, no provision is made for the extent of risk prevented by different types of waste.

The Land Planning Act and the Physical Planning Act 1996 refer to "refuse, scrap or waste materials." It is only by implication that hazardous waste can be read into this definition.

The Government Lands Act refers to "rubbish, refuse or any matter whatsoever." There is no conception of different waste categories.

The Medical Practitioners and Dentists Act does not itself refer to wastes. Only in the Inspection Report is a question on waste management concluded.

The Scrap Metal Act does not refer to scrap metal as wastes. It is only by implication that the concept of waste management

The Use of Poisonous Substances Act does not make reference to SWM or to wastes. Its focus is on protecting persons against risks of poisoning arising from handling poisonous substances. One of the activities to which it refers is that of disposal of poisonous substances. It does not deal with wastes as such, except by implication, or with non-poisonous substances or wastes.

The Food, Drugs and Chemical Substances Act does not deal with wastes directly. It makes provision for disposal of chemical substances. By implication it can be said that this is a waste management provision relating to chemical substances. It does not deal with non-chemical substances.

The Penal Code does not refer expressly to wastes. It simply makes it an offence to corrupt or foul water. Conceivably wastes could be one source of such pollution, and is therefore covered by this statute.

The Factories Act refers to "dirt and refuse". It does not make any specific reference to hazardous wastes.

Finally the Radiation Protection Act refers to "radiation wastes". It does not cover non-radiation wastes.

3.4 Powers of Enforcement contained in the Public Health Act

The Public Health Act also contains wide powers of enforcement. **Part IX** deals with nuisances and provides the procedure for dealing with nuisances in **Sections 119-124**.

The first step is the notice to remove the nuisance.

The local authority, or medical officer of health, if satisfied of the existence of a nuisance, shall serve a notice on the author of the nuisance or, if he cannot be found,

on the occupier or owner of the dwelling or premises on which the nuisance arises or continues, requiring him to remove it within the time specified in the notice, and to execute such work and do such things as may be necessary for that purpose, and if the local authority or medical officer of health think it desirable, specifying any work to be executed to prevent a recurrence of the said nuisance.

If the person on whom a notice to remove a nuisance has been served fails to comply with any of its requirements within the time specified, the local authority or medical officer of health shall cause a complaint relating to such nuisance to be made before a magistrate, and such magistrate shall thereupon issue a summons requiring the person on whom the notice was served to appear before his court.

If the court is satisfied that the alleged nuisance exists, the court shall make an order on the author thereof, or the occupier or owner of the dwelling or premises, as the case may be, requiring him to comply with all or any of the requirements of the notice or otherwise to remove the nuisance within a time specified in the order and to do any works necessary for that purpose.

The court may impose a fine not exceeding two hundred shillings on the person on whom the order is made, and may also give directions as to the payment of all costs incurred up to the time of the hearing or making of the order for the removal of the nuisance.

If the court is satisfied that the nuisance, although removed since the service of the notice, was not removed within the time specified in such notice, the court may impose a fine not exceeding two hundred shillings on the person whom such notice was served, and may, in addition to or in substitution for such a fine, under such person to pay all the costs incurred up to the time of the hearing of the case.

If the nuisance, although removed since the service of the notice, was not removed within the time specified in such notice, the court may impose a fine not exceeding 200/= on the person on whom such notice served, and may, in addition to or in substitution of such a fine, order such substitution of such a fine, order such person all costs incurred up to the time of the hearing of the case.

If the nuisance, although removed since the service of the notice, in the opinion of the medical officer of health or local authority is likely to recur on the same premises the local authority or medical officer of health shall cause a complaint relating to such nuisance to be made before a magistrate, and the magistrate shall thereupon issue a summons requiring the person on whom the notice was served to appear before him.

If the court is satisfied that the alleged nuisance, although removed is likely to recur on the same premises, the court shall make an order on the author thereof or the occupier or owner of the dwelling or premises, as the case may be, requiring him to do any specified work necessary to prevent the recurrence of the nuisance and prohibiting its recurrence.

In the event of the person on whom such order not complying with the order within a reasonable time, the local authority or medical officer of health shall again cause a complaint to be made to a magistrate who shall thereupon issue a summons requiring

such person to appear before him, and on proof that the order has not been complied with may impose a fine not exceeding 200/= and may also give directions as to the payment of all costs up to the time of the hearing,

Any person who fails to obey an order to comply with the requirements of the local authority or medical officer of health or otherwise to remove the nuisance shall unless he satisfies the court that he has used all diligence to carry out such order, be guilty of an offence and liable to a fine not exceeding 80/= for every day during which the default continues.

The local authority or medical officer of health may in such case enter the premises to which any such order relates, and remove the nuisance and do whatever may be necessary in the execution of such order, and recover in any competent court the expenses incurred from the person on whom the order is made.

Whenever it appears to the satisfaction of the court that the person by whose acts or default the nuisance arises, or that the owner or occupier of the premises, is not known or cannot be found, the court may at once order the local authority to execute the works thereby directed, and the cost" of executing the same shall be a charge on the property on which the said nuisance exists.

DATA BOOK 4

**PRIVATE SECTOR INVOLVEMENT
IN SOLID WASTE MANAGEMENT**

4.1

**RESULTS OF QUESTIONNAIRE SURVEY ON
PRIVATE COLLECTION COMPANIES**

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES



Table 4.1-1 Results of Questionnaire Survey on Private Collection Companies (1/3)

Company Name	Establishment Year	Number of Employees			Workers	Number of Collection Vehicles			Other
		Total	Admin.	Drivers		Total	Truck	Pick-up	
Bins(NAIROB)Services Ltd.	1986	62	18	11	33	11	10	1	
Domestic Refuse Disposal (K) Ltd.	1987	20	4	5	11	5	5		
Urban Waste Management Services	1997	6	4	2	12	3 (One hired)	2	1	
City Hygiene Services Ltd.	1996	14	4	2	8	2	2	1	2
Chokora Multipurpose Co-operative Society	1993					3	2	1	
City Bins Limited	1993	65	15	15	30	15	8		2
Enviroclean Services	1996	8	3		5	1	1		
Tacentac Enterprises	1990	8	2	1	5	1	1		3
Usafi Garbage Collector	1996	7	2	1	3	1	1		

Company Name	Ownership of Vehicles	Trip	Workers per Vehicle
Bins(NAIROB)Services Ltd.	Own	1.5	3
Domestic Refuse Disposal (K) Ltd.	Own	1	
Urban Waste Management Services	Lease	3	
City Hygiene Services Ltd.	Own	1	4
Chokora Multipurpose Co-operative Society	Own	3	
City Bins Limited	Own and Lease	1	
Enviroclean Services	Lease	1	3
Tacentac Enterprises	Lease		4
Usafi Garbage Collector		2	

Table 4.1-1 Results of Questionnaire Survey on Private Collection Companies (2/3)

Company Name	Contracts										
	Total	Household	Charge (Ksh)	Commercial	Charge (Ksh)	Office	Charge (Ksh)	Industry	Charge (Ksh)	Hospital	Charge (Ksh)
Bins(NAIROBI)Services Ltd.	4,351	4,000	500/month	351	1,500/ton						
Domestic Refuse Disposal (K) Ltd.	1,155	1,100	500/month	30	1,500/ton	5	1,500/ton	20	1,500/ton		
Urban Waste Management Services	60	40	250/month	14	1,500/month	3	1,500/month	2	1,000/month	1	500/month
City Hygiene Services Ltd.	365	300	325/month	37	1,500/month	28	750/month				
Chokora Multipurpose Co-operative Society											
City Bins Limited	5,034	5,000	400/month			10		20		4	
Enviroclean Services											
Tacentac Enterprises	1,300	200									
Usafi Garbage Collector	150	120	150/month	30	600/month						

Company Name	Ownership of						Intermediate Treatment		Recycling Business
	Household	Commercial	Office	Industry	Hospital		Yes	No	
Bins(NAIROBI)Services Ltd.	1	1 or 2	1, 2 or 6	1 or 2	1		No	No	
Domestic Refuse Disposal (K) Ltd.	1	2	1	2			No	No	
Urban Waste Management Services	1	2	1	1			No	No	
City Hygiene Services Ltd.	1	7	3				No	No	
Chokora Multipurpose Co-operative Society		3	2	3	2		Yes	20%	
City Bins Limited	2						No	No	
Enviroclean Services	1						No	No	
Tacentac Enterprises	2						Yes	10%	
Usafi Garbage Collector	1	1					No	No	

4.2

**SUMMARY OF PRIVATE GARBAGE
COLLECTION QUESTIONNAIRE CONDUCTED
IN FEBRUARY 1997 BY NCC**

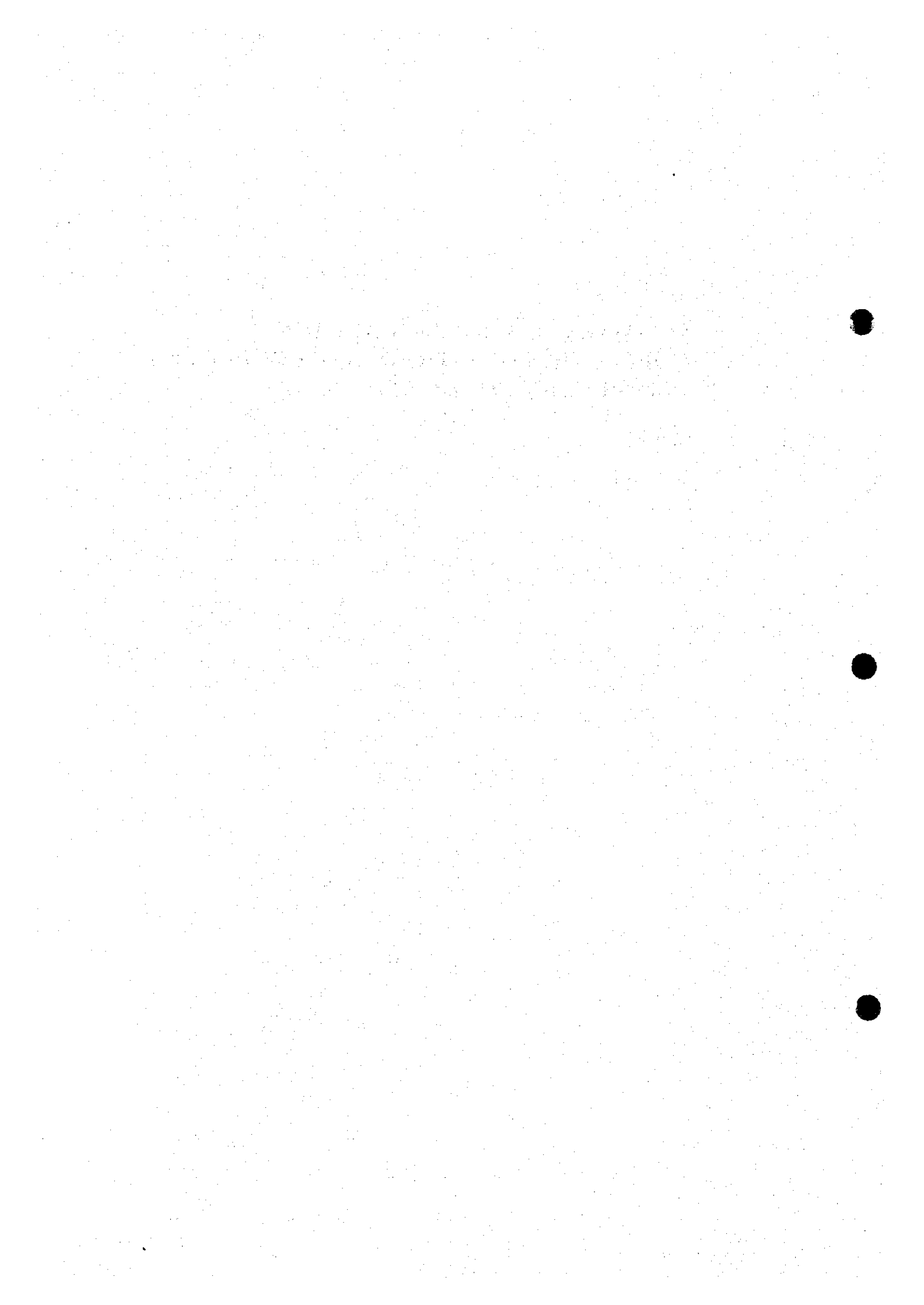


Table 4.1-1 Results of Questionnaire Survey on Private Collection Companies (3/3)

Company Name	Disposal		Human Resource Development			Market Survey
	Site	Charge	Policy	Personal Director	Staff Training	
Bins(NAIROBI)Services Ltd.	Dandora	100	No	No	No	No
Domestic Refuse Disposal (K) Ltd.	Dandora	100			No	No
Urban Waste Management Services	Dandora & Other	100	No	No	No	
City Hygiene Services Ltd.	Dandora	100			No	Yes
Chokora Multipurpose Co-operative Society	Other		Yes	No	Yes	Yes
City Bins Limited	Dandora	120	Yes	Yes	Yes	Yes
Enviroclean Services		50	Yes	No		Yes
Tacentac Enterprises	Dandora	100	No	No	Yes	Yes
Usafi Garbage Collector	Dandora & Other	100			No	No

Company Name	Ownership of (Ksh)	Operating Cost Per Month (Ksh)			
		Labor	Transport	Collection Material	Other
Bins(NAIROBI)Services Ltd.	15 million	500,000	400,000	140,000	13,000,000
Domestic Refuse Disposal (K) Ltd.					
Urban Waste Management Services	2.00 million	30,000	120,000	10,000	20,000
City Hygiene Services Ltd.		60,000	30,000	20,400	10,000
Chokora Multipurpose Co-operative Society					
City Bins Limited					
Enviroclean Services	over 200,000	50,000	50,000	20,000	50,000
Tacentac Enterprises		40,000	40,000	60,000	25,000
Usafi Garbage Collector		10,500	9,000	7,000	2,000

Table 4.2-1 Summary of Private Garbage Collection Questionnaire Conducted in February 1997 by NCC (1)

No	Name of Company	P.O Box	Tel/Fax	Location	Qualification	Areas of operation	Type of waste	Transportation	Day	1 month	Workforce	Disposal	Problems	Re use	Landfill	Suggestions and comments
1	Sanitation Cares(K) Ltd	44047	244588 244588 (Fax)	Protection Hse Parliament Rd	Certified Public Health Dip. Sanitary Science BA(india) MPH(Britain)	Kenya Valley Development Authority Kenya Commercial Bank National Bank of Kenya Olkaria Geothermal Project	Industrial (liquid) Radiated substance Hospital waste Ordinary waste	Isuzu N.P.R 3.6 3-Pick-up enclosed	10k	300k	90	Designated points	Lack of adequate refuse containers Decomposing garbage piled in public areas Lack of proper disposal radiated and hospital, industrial waste Lack of separation of hazardous toxic residues	No		Environmental Sanitation Health/Hygiene Education Chemical safety, Pollution control Public health law enforcement Rodents control Water suppliers for use in cleaning --
2	City Bins Ltd.	56538	545979	Off Shimo-La Tewa ID	Green Peace (over 10 years) (4 years in Toronto)	Restaurants and Hotels Industrial Areas Offices Residential Area	Domestic waste	14 lorries	120	2580	50	Dandora	Service charge to be remitted by the Members of the public to NCC though the Services are not rendered. This is always a draw-back to Members of the public joining the private companies.	Plastics Bottles	Yes	Privatize and zone out areas for private companies Enforce the law of inquire Strict and strong supervision should be enforced NCC should increase their service charge so as to benefit too Recycling of solid waste into papers
3	Bins Services Ltd.	42766	543420 545814 540546 (Fax)	Kampara RD Ind Area	BA(HONS) Degree Chartered Management Accountant (CIMA)	City Centre Nairobi Suburbs Industrial Area	Domestic waste Industrial Commercial	10 3.9t high-sided fully enclosed vehicles		2000	52 10 drivers 35 tumboys 12 administration staff	Dandora	Looting by scavengers at dump site Unreasonable Police Checks	No (but in future)	Yes Plans are submitted to NCC	Tighter regulations regarding disposal Licensing of all Businesses in the Sector Privately managed landfill site Privatization of the sector Approval to operate medical waste & septic tank clearance
4	Office P Enterprise	11877	335166	Kilimambogo	Technician Technical Services	Civil Servant, Komarok Pioneer BuruBuru I, II	Domestic waste		49	1519	20	Dandora	Cooperation of workers Punctuality of garbage disposal	No	No	Routine check up of cleaners
5	Kane Investments (MR BIN)	46874	223693	Windsor House Univ. Way 2nd Floor Kasarani	B. Commerce (Marketing) Dip. Export Marketing Computer Studies	South B&C, Nairobi West, Doonholm Greenfields, BuruBuru, Embakasi, Kilimani, Westlands, Lavinton, State House, Parklands, Ngaka	Domestic waste Industrial Medical	1 7t-truck 2 3.3-truck 1 Pick-up	36	936	27 4 drivers 13 loaders (incineration) 3 salesmen 1 supervisor 4 sweepers 1 secretary & 1 messenger	Dandora Kasarani (incineration)	Scavengers scattering the garbage Complexities in types of waste Incinerated medical waste leaves contaminated ash indisposable unless at a water point Bulldozers at the dumping site often force us to dump near the road	Paper Plastics	Yes	Divide into zones to ease administrative, health and social problem Community education and participation Privatization of garbage collection esp. in ind. & com. area Stop relying on landfill, composing controlled tipping & incineration Deployed staff to be fully qualified technically and managerially Open drainage systems should be discouraged Organic and inorganic waste should be disposed differently
6	Central Projector Services	11877	335166	Mwangano St.	Projector Technician Electronics	Sunvien, Gumo, Golf Course, Magina, Kenyatta	Domestic waste	lorry	45	825	20	Dandora	Lack of cooperation Punctuality on garbage disposal	No	No	Routine check up of cleanliness
7	Rawini Gen. Agencies	55843	335166	Reli-Co House	Technician	Juja Road Estate Nuruma Flats Pioneer Estate Kariobangi south Estate	Domestic waste		45	725	25	Dandora	Workers cooperation Punctuality on garbage disposal	No	No	Routine check up of cleaners
8	Tacentic Enterprises	50226	820341	Imara Daiwa	Higher National Dip. in Mechanical Engineering Banker	South C, Nairobi West, Imara Daima Ngummo	Domestic waste Hotel, Office	2 Heavy commercial vehicles	25 30	600- 750	21	Dandora	Collection of payments	Papers Plastics Metals Rubber	Yes applied	Strict by-laws against littering and dumping An efficient system in collection/payment of funds set up Support by NCC
9	Kandune Hardware Associate	13058	760496	Gikomba		Gikomba Areas, Chirki Lane, Pumwani Road		Lorry	2	680	15	Dandora	Punctuality on garbage disposal Lack of cooperation	No	No	Routine check up of cleaners
10	Domestic Refuse Disposal (Kenya) Ltd	45360	723240	Hullingham (off Lenana Rd)	Film and above	Kilimani, Kileleshwa, Muthaiga Westlands, Parklands, Runda, Kilisnoo Riverside, Ziresho, Kyuna, Spring Valley, Nairobi Town, Hillview, Lakeview, Industrial	Domestic waste Industrial waste	Mitsubishi Canter Half Lorries (Yellow)	5 20	600	21	Dandora	Maintaining vehicles Road condition (Rainy season) Harassment by street boys at dumping site	No	No	Strict penalty to those who litter More seminar on how to keep our city clean and safe To improve the vehicles Supply dustbins to the residents To cooperate with private firms
11	Urban Waste Management Services	58361	336676	Haile Sellassie Avenue	Diploma in Environmental Studies	Embakasi, City Centre, BuruBuru, Industrial Area	Domestic waste Industrial waste Commercial waste	3 lorries	15	450	18 Manager Secretary Messenger (+15)	Dandora	Organization Distance of disposal Lack of certainty of the continuity of business	No	No	Decentralization Privatization Control of illegal dumping and disposal of waste Introduction of incinerators Treatment and burning of hospital waste at source
12	Sora Cleaners Services	30143	245960	Rwer Road	Computer Programmer O-level	Pangham Shopping centre, Off Kirinyaga Road Part of Lutthuli, Gabelone Lane	Domestic waste Hotel, Office	Toyota Pick-up KUP191 Isuzu 7t KXP 834	10- 17	360- 550		Dandora Shbbil Centre	No proper dumping place given No protective equipments Transportation cost Hospital facilities			To locate areas of collection & division Donors to come in & UNICEF to be involved NCC to pinpoint private cleaners by paying them in terms of tender
13	Kenya Refuse Handlers (KEREHA) North end trading Co. Ltd	78359	243061	C B D Kalyan House Tubman Road	B ED (HONS Environmental Studies Kenyatta Univ.)	C B D, Southlands-Dam, Masai, Onyorka, Ngei Hill, Rubia, Jambo, Akiba Nairobi West-Miller, Mai mahiu, Magwa, akiba South C. Eastlands- Doonholm, Greenfields, Tena	Domestic waste Commercial Industrial Waste from public dumping sites	3 small van-typed pick-ups 2 7t-lorries 1 Canter Pick-up	13	364	43 9 personnel 7 drivers 24 refuse collectors 3 field supervisors	Dandora (providing bag)	Improper use of our garbage storage bags Insistent careless dumping by residents Frustrations of our drivers by parking boys at Dandora Interference by NCC Askaris at our 'Sorting sites'	Paper Plastics Scrap metals Humus Glass	Yes	NCC should establish strong anti dumping/littering by law Central dumping sites should be strategically located in all zones Private companies should be registered, sound financial status Mobile trucks for dumping within the city centre (24hrs) Different wastes to be dumped differently
14	Environ Services	59408	227457	Corner House	Building and Civic Engineering Technology	Uhuru Estate Buru Buru Estate Harambe Industrial Area (Likoni Road)	Domestic waste Industrial	Mitsubishi Canter	24	250- 360	11 Manager, 2 Drivers, + 8)	Njoro area & others	Without Registration, impossible to sign contracts with companies Lack of proper equipment No permanent dumping site forces us to move from site to site	Bottles Papers	No	The Council should formulate clear policy, enforce stringent laws on environmental pollution Privatization of waste collection Nairobi should be divided into zones of divisions with codes each private collector to be registered in particular zone. Director of Environment will be able to keep proper record of private collector and the area of operation. The Director to call meetings periodically.

Table 4.2-1 Summary of Private Garbage Collection Questionnaire Conducted in February 1997 by NCC (2)

No.	Name of Company	P.O. Box	Tel/Fax	Location	Qualification	Areas of operation	Type of waste	Transportation	Days	Per month	Workforce	Disposal	Problems	Re-use it	Landfill	Suggestions and comments
15	Environment Care Agency	28603	337193 337209	Komarock off Kamgundo Road	Dip. Earth Science Cert. Seimenship Technologist Comp. Literate	Komarock, Nairobi West, Kilimani, Hurlingham, Woodly & along Ngong Rd Sunview (Ngumo)	Domestic waste Soil & rock mounds Drainage sediments & silts	1 KWF 042 1 KVD 498 & 2 hired lorries	10	300	15 5 employee 10 casuals	Dandora	During collection- Lack of collection points lack of modern handling equipments Lack of cooperation from street boys at Dandora Lack of cranes for garbage removal from lorries	carton boxes	Yes	Zoning of the city to various companies for efficiency NCC should provide transport support Creating garbage collection points Provide cranes for loading and off loading Help the companies in fee collection by check off system NCC should provide security at the dumping site
16	Plaza General Sanitary Services	58381	336676	Coffee Plaza	Dip. Public Health	Pangani, City Centre, South B, Nairobi West	Domestic waste Commercial Industrial	2 lorry	10	300	12 Foreman Messenger +10	Dandora	Unreliable transport (unable to transport bulk refuse) Place of dumping is too far Customers still uncertain of our business Unable to sort out some valuable items for re-use	No	No	Particular companies to be entrusted to particular zones NCC to locate dump site near each zone of operation Treatment of hazardous waste to be done near source NCC to maintain commercial sorting out machines at Dandora
17	Hanco Express Agencies	77968	215176 243530	Roti Co-op House	Businessman	Komarock, Umoja, Marakani S/B Matumbalo	Domestic waste	3 Pick-up	10	300	10	Dandora	Dumping sites not well defined	No	Yes	Licensing NCC to make sure that no dumping at unapproved areas NCC to concentrate on low class areas
18	ROC Refuse Collectors	26234	500433 506964 (Fax)	Langata	Accountant	Langata, Southlands, Nairobi Dam South C-Mugoya, Akiba, Heshima South B-Town centre, Ngong Road, State House Road	Domestic waste Industrial Hotel, Office Road side	3-7 lorries	21	275	17	Dandora	Duty of NCC to collect garbage Too few dumping sites and too far Transport costs Dumping at illegal sites by other companies	Paper Glass Plastics	Yes	Zoning of the city to various companies for efficiency Collection of money done by NCC Public awareness on environmental protection Increase number of dumpsites Privatize garbage collection Improve the general condition of roads in estates
19	Jirani Msafi Co. Ltd	30881	786929	Umoja 1/Tena		Umoja 1, Tena	Domestic waste	2 Pick-ups	9	270	2	Dandora	(We have just started)	No	No	Radio/TV education on environmental health Relief people of sewer charges as an incentive to participate in neighbourhood care of environment and replace this with penalties for unauthorised waste disposal- Perhaps to coupled with necessary legislation (I would like to participate in a seminar to elaborate my comments)
20	Oceans Hygienic Services	57595	365234	Westlands	B.Sc. Agriculture (Charles Mugo)	Westlands, Ngomo, Doonholm, Sunview	Domestic waste	2 21-Pick-up 1 7t-lorry	30	240	30	Dandora	Harassment by street boys Other companies don't care attitude of allowing outpouring of litter in our areas of jurisdiction	Papers, Plastics Repairable household goods	Yes	Setting aside a disposal site for refuse Subsidies provision to our clients by the NCC NCC morale will be most appreciated
21	Enviroclean Services	54515	796111	BuruBuru Epren Centre 1st Floor, 5	B. Commerce (Marketing) Kenya Univ.	BuruBuru, Doonholm, Tena, Hurlingham, Fedha, Kariobangi South	Domestic waste Industrial Hospital Hotel	1 3 St-truck 1 7t-truck	7	210- 220	10	Dandora	(comments) 1.NCC should not tender the service but rather let free market prevail. Influence should only come in licensing control. 2 Price to be determined between the supplier and consumer. 3 NCC should consider allocating private landfills and incinerators. 4 NCC should play a roll as a facilitator but not a competitor. 5 NCC should appoint a committee made up of its officials and private collectors to see how best loans acquired by NCC for sanitary services 6 NCC should tender for the privatization of the Dandora site to give it a long due improvement and sustainability.	No	Yes	Price guidelines for specific areas (not price control) Minimal licensing fees, simple licensing procedure Eliminate tip charges for licensed collectors Don't put any barriers to entry and exits 7 NCC should agree with the collectors on how best to serve the low income areas 8 NCC should consider privatizing the whole department except the sewage system.
22	PIK A KAN Services	55905	765732	BuruBuru	Diploma in Business Administration (Kenya Polytechnic)	BuruBuru, Parklands Kilimani, Hurlingham, Lavington	Domestic waste Industrial waste	2 8 Canter KWF 9321 lorry	4	150	20	Dandora	NCC lorries collecting garbage in our bags and instead of carrying everything, they empty the bags and litter everywhere -thus retarding our effort.	No	Yes	Formulate a system for disposal of hospital waste Eradicate corruption (truck drivers, town boys who are paid to collect garbage) Due to lack of enough trucks for the NCC, there are different zones for private collectors
23	Lee Brothers	75795	568722	Dagoretti	Accountant	South B, City Centre, Westlands	Domestic waste	1 Pick-up 1 Hyper lorry	5	100	6	Dandora Uthiru	The distance to the dumping site	Paper Woods (for fuel)	No	More dumping sites should be created Security at the dumping site NCC to educate private firms Avail licenses NCC to provide loans to private firms to buy trucks and others
24	City Hygiene Services Ltd	12505	582412 216178	Kilimani	Industrial Management	Ngong Road, Eastlands, Westlands, Parklands, City Centre	Domestic waste Industrial waste	2 lorries 1 mini van	3	100	8	Dandora	Poor road network/conditions Security at dumpsite	No	No	Waste transportation means
25	Garbage Collectors Enterprise	26215	552903 556286	South B	Business Administration	South B	Domestic waste	2 10t-lorry	20	80- 100	15	Dandora	Parking boys' disturbance during disposal	No	Yes	Privatization of garbage collection Allocation of operation areas to specific companies Reduction of service charge to reflect private garbage collection
26	Nairobi Garbage Collectors	43841	797110	BuruBuru Crescent	Advanced National Certificate in Business Administration Dip. Business Management	Westlands, Hurlingham, Kilimani Kibera, Eastlands	Domestic waste	Hired transport	4	90		Dandora	Delay or refuse in payments Transportation cost Harassment by parking boys	No		NCC should withdraw the service charge so that people will be willing to engage private disposal
27	Protus Services	31495	783115	Eastlands	Sales & Marketing	BuruBuru Pioneer Civil Servant, Kariobangi South Parklands, Racecourse	Domestic waste	Canter KTR 269 Phup's KYS 243 KVR Toyota KVD 161	4	11 88	23 (10 marketing officers + 13)	Dandora	Vehicles get stuck in the mud Lack of security in the dumping area Poor roads in collection area	No	Yes	Clear garbages in the dumping sites Recycle Reduce the charges of levy
28	Wanstar Enterprises	44321		Nairobi	O-level	Harambee, Umoja, Tena, BuruBuru, Pioneer I, II, Westlands, South B, Nairobi West, Fedha Estate and Hurlingham Area	Domestic waste	2 Canter Pick-ups	16	80	18	Plastic bags Dandora	Hard to enter into same area to NCC because they do not let in Garbage collectors who are not enrolled litter around Some people use carts to dispose garbage	No	Yes	People's participation in collecting garbage Private collectors to be assigned to specific areas Licensed private collectors should not be denied entry into due area they have been authorized to operate Loans from donors through NCC would help garbage collectors and also create jobs

Table 4.2-1 Summary of Private Garbage Collection Questionnaire Conducted in February 1997 by NCC (3)

No	Name of Company	P.O Box	Tel/Fax	Location	Qualification	Areas of operation	Type of waste	Transportation	tiday	t/month	Workforce	Disposal	Problems	Re-use it	Landfill	Suggestions and comments
29	Trash-Tin services	59305		BuruBuru	Diploma in Business Management (Kenya Institute of Management)	Eastlands Area, BuruBuru, Kimathi, Jericho, Kariobangi South and peripherals	Domestic waste	2 Open lorries	14-20	60-80	11 (4 permanent 7 casual)	Dandora	We envisage no problem pertaining to collection and disposal since we have a well organized clientele	No	Yes	Privatize waste management especially at residential areas, allow many players to create fair competition to avoid over charging and encourage innovation. Fairly price the license and reduce the difficulties in acquisition. Ensure that all player are licensed.
30	Cepa Bins	58566	787373	Nairobi	O-level	Donholm, Greenfield, Tena, Savana	Domestic waste	Canter Pick-up	18	72	10	Dandora	Some people who use hand carts litter on the ways	No		To protect licensed garbage collectors
31	Home Bins	44321	792427	Nairobi	Accountant	Kimathi, Jerusalem, Tena BuruBuru, Umoja I, Innercore, Pangani Eastleigh, Avenue Paris, Daima Estate	Domestic waste	2 Mitsubishi Canter Pick-up	15	70	14	Dandora	Some garbage collectors refuse others to enter certain areas	No		The NCC to encourage people to join garbage collectors discourage people from dumping garbage Spot check of dumping receipts
32	Mason Services	75769	785732	Nairobi	Electrical Technician	Outering Rd, BuruBuru I, V, V ext, Pioneer, Prudential, Kariobangi South	Domestic waste	1 9t-truck	8	64	6	Dandora	Poor roads Operate several trips		Yes	Legally prohibit dumping in estates License should only be given to competent applicants
33	Chokora multipurpose Co-op Society	54154	573607	Nairobi	Waste recycling, Collection, Sorting Expert	All over Nairobi	Domestic waste	Hired transport	2	60	500	recycle		Papers Plastics Glass Tins Compost	Yes	Informal collection groups must be given a chance to derive an income from a business they have been involved in. Being a part of the informal sector they would like their participation to be recognized.
34	SIS Magna Enterprises	11666	787373 0303-24109	Rongai	Geology Nairobi Univ.	Ayant, Umoja, Juja Road, Ngumo	Domestic waste	Isuzu Pick-up 2 8	15	60	8	Dandora	Harassment by the street boys at the dumping site	No	Yes	Protect the licensed collectors NCC to help private firms by aid to be efficient
35	Safé Nairobi services	74234	600136	BuruBuru shopping centre	Dip. Sales and Marketing experience in waste management	Parkland, Westlands, Highridge Areas, Bistar, Olympic, Ayant, Joseph Kangethe Areas, Avenue, Fedha, Doonhulu, Uhoja, Tena Areas, BuruBuru, Kimathi, Pioneer, Outering Areas	Domestic waste	4 10t-lorries	10-15	50	38	Dandora	Scavengers Bad roads Distance of the Site from some collection points Lack of loader to fasten process	No (but in future)	No	Fines be imposed on people found dumping Council Barr residents from dumping within estates Private companies be allowed to put up 2 litter boxes Areas of Nairobi to be zoned with equitable district of collector The Council give support to private collectors in terms of : hiring their lorries at minimal fees, raising revenue for Council The size of companies operating be reduced Council Privatize the whole garbage collection
36	RCC Disposal	60847	793545	BuruBuru	Accountant	Mawenzi Siwaka BuruBuru Outering	Domestic waste	2 lorries	10	50	10	Dandora	Lack of passable roads at the dumping site Accumulation of garbage at the site Lack of alternative dumping site	Papers Bottles	Yes	Only registered companies should do the collection Private companies should be left to operate in estates The City Council should concentrate its efforts in the city center
37	Bordertown Enterprises	12143	335184	Nairobi	Ex-Banker	Komarock, Ngumbwa, Environs Kileleshwa, Harligan, South B&C Madaraka, Siwaka, Avenue Park, Daima, Utalii Staff Houses	Domestic waste	2 Canter Pick-ups	10	50	12	Plastic bags and dustbins Dandora	Denial of entry in some estates by welfare Some private collectors use handcarts to garbage and dispose in neighbourhood Some people throw away their garbages in open spaces Lack of proper disposable containers	No	Yes	Private collectors should be assigned to specific areas of operation especially where they are already operating Residents of areas where collectors are assigned should be encourage to join others to avoid littering NCC should ensure that only the authorized people are collecting authorised collectors are not denied entry into their area. Private collectors should be encouraged through, being charged reasonable license fees NCC should look for ways getting funding from world bodies to loan people at subsidised interest rates
38	Housing Finance Co of Kenya Ltd	30058	33510	Kenyatta Avenue Koinange Street	Building Technology	Rehant House BuruBuru Phase V Extension Koma Rock Estate Phase I	Domestic waste Paper form	Wheelbarrows	2	48	23 (BuruBuru 13 Rehant 10)	burn	Transport	Papers	No	Schedule of regular collection of garbage Availability of Council transport City Council works to assist our team at B B V or C.C. takeover of clearing B B V
39	City Recycles Garbage Collectors	68793	245758	Town		Parklands, Westlands, Kinmani, Hurigam, Doonhown, Ngumo Imara, Daima	Domestic waste Scrape metals	Mitsubishi Canter KDY 458 KWG 432	9	40	Week	Dandora	The roads are bad when raining	No		
40	Jali Estate Cleaners Ltd	74526	601542 228127	Langata	Businessman	Langata, Nairobi West, BuruBuru	Domestic waste	Out of order (hiring)	1	30	5	Dandora	Poor roads Security at dumpsite Dumping site to be congested	No	No	All companies should be registered/approved by NCC All garbage should be disposed in polythene bags NCC should be managing the dumping site
41	Green City Services	56773	764960	Park Road		Pangani, Park Road, City Park, Westlands	Domestic waste	1 Pick-up	3	30	9	Dandora	Fearing of bags when collecting Security at dumpsite	No	No	Strict penalty to those who litter Private operated land fill to boost recycling
42	Maccossa Co. Ltd	49284	228361 784373	Nairobi	Health Officer Librarian	Avenue Park Fedah Airport View Outering Rd, BuruBuru Phase One Komarock, City Centre	Solid waste	1 tony 1 canter	5-7	25-28		Dandora	Some people throw away their garbages in open spaces Trucks sometimes get stuck during rainy season at the dumping site.	No	Yes	The Council should offer a tractor to help stuck lorries at the dumping site during the rainy season. Educate the residents about the risks of dumpings. e.g. diseases
43	Magast Enterprises	12145		Nairobi	O-level	BuruBuru, Umoja Huruma, Kariobangi South Kileleshwa, Fedha	Domestic waste	Pick-up	5	25	8	Plastic bags Dandora	Some people who use hand carts litter on due ways Some people who are not enrolled dump their garbage	No	Yes	Private collectors should be assigned to specific areas
44	Nairobi Environment Services	62802	217319	Moi Avenue	Diploma in Sanitation	Eastlands (Limuta & Kayole)	Domestic waste	Open pick-ups (25t, hired)	1 week	24 (max)	5	Dandora	Expensive transport charges Lack of proper collection vehicles Payment collection is cumbersome	No	Yes	Each collector be allocated to an individual zone to avoid undercutting in prices Private collectors be trained and licensed Support by NCC A new site for landfill Implementation of a proper plan by NCC

Table 4.2-1 Summary of Private Garbage Collection Questionnaire Conducted in February 1997 by NCC (4)

No	Name of Company	P.O Box	Tel/Fax	Location	Qualification	Areas of operation	Type of waste	Transportation	t/day	t/month	Workforce	Disposal	Problems	Re-use it	Landfill	Suggestions and comments
45	Annuz Electrical & Hardware	12218	242080	Emmaccra Building Accra Rd City Centre	Diploma in Local Government Management Birmingham Univ. U.K.	Jerusalem Estate Kimathi Estate Buru Buru Estate	Domestic waste	7t lorry with covered body	2	22	Manager, Driver + 3t	Dandora	Inexperience of residents on how to use bags So many parking boys at Dandora site	Plastics Papers Metals	Yes	Private waste collectors should be registered Control of parking boys at dumping site More dumping sites should be created Garbage collection by laws should be formulated Garbage collected should be recycled for manure
46	Joy-City Cleaners	22517	738228	Umoja I Market	Business	Umoja BuruBuru Tena Kariobangi south, Pioneer	Domestic waste	lorry or canter (medium size)	5	20	7	Dandora	Transportation cost Labor cost Sharp objects in garbages (broken glass, ...)	No	No	Give license to private collectors Discourage dumping Council to concentrate more in low cost areas Recycle or burn to ashes the garbage Supply dustbins to the residents
47	Saf Bins Services	12143	225118	Nairobi	A-level	Obende, Ngeli, Southlands, Ngumo, Kileleshwa and environs High Rise	Domestic waste	1 Canter 1 Pick-up	4 5	20	7	Dandora Plastic bags	No proper access to our customers Some private garbage collectors intimidate other collectors	No	Yes	Garbage collectors to be given specific areas Licensed collectors should be availed entry in their areas NCC to maintain the order NCC should assist private collectors through loans from donors
48	Eastemview Services	12143	335184	Jamia Towers	Telephone Supervisor	Zimmerman Estate	Domestic waste	Hired trucks		18	7 Manager Supervisor	Dandora	Transport (Cost, road condition) Lack of cooperation between residents Removal of the existing mountains of garbages	No	No	NCC to support private collecting companies Recycle NCC to assist well-managed companies to acquire loans from banks and donors
49	Evabo Enterprises	65505	882911	Ruaraka	Logistician (Purchasing & Supply materials management)	Ngumba Estate (Ruaraka) Lumumba Drive Estate Zimmerman	Domestic waste	1 1t-pick-up 1 4t-canter	4 week	16	4	Dandora	Poor access road Expensive labour None cooperation by clients Disposal site	No	No	NCC should give guidelines on every area of operation
50	Paku Property Agencies	34221	797123	Maringo Estate	Businessman	Maringo Estate, Kuniyaka Crescent, Kifu Crescent	Domestic waste	Lorry	1	15-20	5	Dandora	No problem	No	Yes	NCC to assist well-managed companies to acquire loans
51	J.S. Coovila Services	70334	227481	Protection House	Businessman	Lavington, Kawangware, Kangemi, Kileleshwa, Zimmerman, Dandora	Domestic waste	1 Pick-up	0.4	13	5	Dandora	Distance from collection points to disposal point	No	No	
52	Gelins Enterprise Ltd	51126	763342	Juja Road Estate	Accountant & Business Administrator	Eastleigh, Juja Road, Ushirika, Pangani	Domestic waste	Hired Pick-ups or half lorries	2,3	12	6	Dandora	Transport (Vehicles are not available for hire) Expenses (labour...)	No	Yes	Disposal sites for various types of wastes Recycling NCC should stop charging per disposal vehicle at the dumping site Privatization (to reduce cost of NCC)
53	Authentic Africa (Waste Management Division)	52869	210051	Ngara	Conservation Education (London) Development communication Computer (Nairobi)	Ngomo, Golf Course Estate Central District, Hurugham	Domestic waste Commercial	2 Pick-ups	3	12	10 5 permanent 4 casual	Dandora	Inadequate management system at Disposal site Inappropriate disposal methods making sorting for recycling uneconomical	Plastics Tin Glass Paper	Yes	Source reduction Recycling Provision of waste bins Education on waste management of communities Involvement of the business community, local government, ...
54	Robert Rragu	74522	554737	South B	Degree in Business Administration	Doonholm, Greenfields, Savannah	Domestic waste	1 3t-Canter	3 week	12	5	Dandora		No	Yes	
55	Walman Services	44377	336744	BuruBuru I	Diploma in Management	City Centre Westlands, Boaraka, BuruBuru	Domestic waste	KAC 192R Tiper-Missan	1	10	10	Njiru Area	Distance to the disposal site Expenses	Papers, C	Yes	Contract people /companies for collection Designate areas for disposal NCC should be cleaned by private persons/companies
56	City Garbage Recyclers	10768	743615	Ofafa Maringo	Trained in organic farming and making compost	Diata Maringo, Ofafa Jericho, Jerusalem Estate	Domestic waste	Wheelbarrows Handcarts	2 week	10	25		Lack of adequate transport Lack of storage facility when compost is ready	Tins Plastics Papers Bones Old clothing		Collect waste separately and send to recycle The director of Environment should call a meeting of garbage collectors and recyclers so that they can talk about waste separation
57	Usafi Garbage Collectors	6152 HRB	765942	Kahama West	Public Health Technician	Kahama West (Jua Kali) Kasarane, Sports View, Githuani 45, Kahawa Wehdani Kahawa Sukari	Domestic waste	Isuzu 2.5 lorry	2.5 week	10	8 2 Directors 5 Employees	Githurai	Road condition (Rainy season) Risk of parking boys removing parts of our vehicle at the dumping site	No	No burn	Additional dumping sites Security at the dumping site NCC should organize for clean-up days where all of us can participate Charges at the dumping sites should be reduced to encourage people to dump at sites
58	Enviro Friendly Service	21742	43156	Kileleshwa	Graphic Designer	Kileleshwa, Lenington	Domestic waste	Mitsubishi Canter	2	9	9 good	Dandora	Sharp objects in garbages (broken glass, ...) Harassment by parking boys	No	No	Recycle Publish names of waste recycling firms Management control at dumping site
59	Ultimate Bins	25011	242090	Nairobi	No formal qualification	Hurlingham, Rileleshwa, Westlands, Fedha, Tassia, Umoja 18th, Umoja Innercore, Kariobangi South	Domestic waste	4 trucks	2	8-9	11 3 field work 3 office	Dandora	Delayed payments by the customers	No	Yes	The public should recognize private collectors Private collectors to be licensed The public should be encouraged to report to NCC any malpractice by private collectors
60	Mogdan Bin Collectors	45757	783014	Nairobi	House wife	Harambee BuruBuru Phase II	Domestic waste	Pick-up KYS-932	2	8 (4 times a month)	3	Dandora	Refusal of people to remove their garbage on time Harassment of police on the roads Harassment by the street boys at where we dump our garbage -they fight for the garbage	No	No	Garbage collection should be privatized We should be given the license to operate confidently NCC should avoid going to places where private collectors operate so that everybody in the estate to join -some feel cheated Give us security at the dumping site
61	Bocivems Disposal	62734	794808	BuruBuru	Environmental Analyst	Eastlands	Domestic waste	1 truck	2	8	15	Dandora	No major problem	No	No	To reduce dumping grounds estates by fencing them off Regular collection of solid waste at the current dumping grounds NCC inspection of kiosks around the estate NCC should take action against those who are found dumping at the restricted areas
62	Gamast Enterprises	13169	787136	Nairobi	K.C.P.E	Umoja I, Lishirika, Pioneer, Komarocks Phase III, Inner core Umoja I	Domestic waste	Pick-up KUG-014	2	8	14	Dandora	Some people who are not enrolled litter around Garbage collectors should be aided by NCC with funds through world bodies to improve their services	No		Public education Garbage collectors to be licensed

Table 4.2-1 Summary of Private Garbage Collection Questionnaire Conducted in February 1997 by NCC (5)

No.	Name of Company	P.O. Box	Tel/Fax	Location	Qualification	Areas of operation	Type of waste	Transportation	t/day	t/month	Workforce	Disposal	Problems	Re-use it	Landfill	Suggestions and comments	
63	Gituka Firm	65765		Tena	Economist	Tena	Domestic waste	Pick-up	2	8	4	Dandora	Timing	No	No	Invite many private participants Remove NCC bin charge Encourage sorting	
64	Blue Bins Services	30571	787476	Savanah	Accountant	Buru Buru Sarlack Donholu	Domestic waste	Peugeot Pick-up	0.2	4	1	Plastic bags Dandora		No	No	Open recycling station Landfilling	
65	Jumu Enterprises	28359	766879	Eastleigh	None	Eastleigh, California	Domestic waste	Mitsubishi Canter 4000lb	1	4	4	Dandora	Transport Labour Lack of business expansion	No	No	Garbage should be dumped in specific areas People should understand that dumpsites are health hazardous The garbage all over the streets should be collected by the NCC	
66	Dumpsters Cleaning Services	34156	500243	Langata	B. Commerce	Langata	Domestic waste	11 Pick-up KOL 598	1 week	4	4	Dandora	Poor disposal site Unmaintained access roads	No	No	Better management of the dumping site Improvement of the access road	
67	Danocol Agencies	45605	784998	BuruBuru I	Accounts & Computer Programmer	BuruBuru I&IV Kimath Ulli	Domestic waste	31 Pick-up	3	3	4	Dandora		No	Yes	The sector should be fully privatized Stop road side dumping	
68	Step Wegy	28039		Eastland	Retiree	Eastland	Domestic waste					burn compost					
69	Rokam Sanitation	11730	794340	Greenfield 2570	Civil Engineer	(This is a newly registered company. Operation starts on 1st Feb. Most Q's can't be answered.)											
70	Clean Homes Services Ltd	58675	785966	Donholm Caltex P. St near by	Hons Degree in Business Administration Univ. of Nairobi	Donholm, Umuja Innercore, Embakas Village, Fedha, Lucy Summer,	Domestic waste	Trucks (sometimes Hiring)	twice a week		8 Manager 3 salesladies 1 workers	Dandora	We used to provide polythene bags for easier disposal but some end up throwing around them in their residential areas	No	No	Near dumping site	
71	Eastleigh Garbage Recyclers	67355	721170 721170 (Fax)	Eastleigh	Common knowledge	Eastleigh Division	Domestic waste	Wheelbarrows with sacks			35		Transportation Working gear "uniform" Community education and participation Constructive advice and new ideas	Glass Papers Tins Shoe soles	No		Give lands within affected community Exposure to information Local government to support present recycling companies in terms of land, equipment, research

4.3

**CONTRACT MANAGEMENT WORKSHOP FOR
THE DEPARTMENT ON THE ENVIRONMENT,
NCC**

**"Contract Management"
Workshop
for the
Department of the
Environment,
NCC**

**Facilitator
Andrew Homewood**

**The Holiday Inn, Nairobi Mayfair Court
8th & 9th January 1998**

JICA SWM Study

Workshop Structure

DAY 1

1. Opening Session by the Town Clerk, NCC
2. Introduction to the Workshop
Workshop Objectives
Workshop Methodology
3. Private Sector Involvement in Waste Collection
4. What is Good Contract Management?
5. Good Practice for Pre Contract Award Arrangements
6. Current Tendering Arrangements in NCC
7. Summary and Preparation for Day 2

DAY 2

8. Formulate Pre Contract Award Arrangements for NCC
9. Good Practice for Post Contract Award Arrangements
10. Formulate Contract Monitoring Arrangements for the DoE
11. Closing Session:
 - Present Workshop's Key Recommendations
 - Closing speeches

Introduction

Workshop Objectives

Workshop Methodology

Workshop Objectives

- To present and inform Workshop participants of the best practice of contract management for waste collection contracts
- To formulate contracting arrangements for collection contracts for NCC and the Department of Environment before they are awarded
- To formulate arrangements to monitor and manage collection contracts after they are awarded

Workshop Methodology

1 Background to the Workshop

1.1 "The Study on Solid Waste Management in Nairobi City, for the Republic of Kenya"

The "Contract Management" Workshop is a joint and cooperative effort amongst the Ministry of Local Government (MOLG), Nairobi City Council (NCC) and the JICA Study Team to formulate and agree actions to strengthen the Department of Environment.

The initiative for the Workshop arises from the "The Study on Solid Waste Management in Nairobi City, for the Republic of Kenya" (the Study) which is being carried out by the JICA Study Team.

Under the Study, an Institutional Restructuring Plan (IRP) has been prepared in draft which contains a number of recommendations concerning the organisation and management of the Department of Environment (DoE).

These draft recommendations include the establishment of a Contract Management Unit (CMU) and proposals for implementing contract management arrangements.

This recommendation was made on the basis that as NCC increases the amount of private sector provision of collection services the Council will need to implement robust and effective contract management arrangements to properly manage collection contracts.

The recommendation has been discussed and agreed in principle amongst MOLG, NCC and the JICA Study Team. Proposals for the Unit's establishment were also formulated at the recent "Organisation and Management" Workshop in December.

Currently NCC has one contract for collection and street cleansing services in the Central Business District (CBD). NCC intends to wait and see how private sector involvement (PSI) in the CBD works before it extends PSI to other parts of the city. At the moment the major constraint to increasing PSI is financial.

1.2 The Role of the Workshop

The Workshop's key role is for participants to jointly formulate the arrangements and procedures for managing waste collection contracts both before and after they are awarded.

These outputs will form a basis for setting up the Contract Management Unit and establishing its tasks and responsibilities.

As well as this the Workshop will inform participants of the good practice of contract management for waste collection contracts.

For the purposes of the Workshop waste collection is defined as including street cleansing services, but the focus will be on collection.

Figure D.5-1 below illustrates the role of the Workshop within the Study.

1.3 The Structure of the Workshop

The key Sessions of the Workshop are:

1. Private Sector Involvement in Waste Collection;
2. What is Good Contract Management?
3. Good Practice for Pre Contract Award Arrangements;
4. Current Tendering Arrangements in NCC;
5. Formulate Pre Contract Award Arrangements for NCC;
6. Good Practice for Post Contract Award Arrangements;
7. Formulate Contract Monitoring Arrangements for NCC; and
8. The Closing Session.

The Workshop begins by considering the decision to involve the private sector in waste collection. This covers why the private sector should be involved, how to decide whether to involve the private sector or not, and the method of involvement.

This is followed by the Session "What is Good Contract Management?" which articulates good practice in contract management. This Session will define the scope, strategic objectives and the main stages in the process of contract management from the very inception of a contract, ie identifying the contract requirement, to the contract's final completion.

The detailed arrangements of each stage of the contract management process are then dealt with in the subsequent Sessions. These articulate the typical practices and procedures drawing on the experience of the City of Westminster in managing its collection and street cleansing services contracts in London.

Role of Contract Management Workshop within the Study

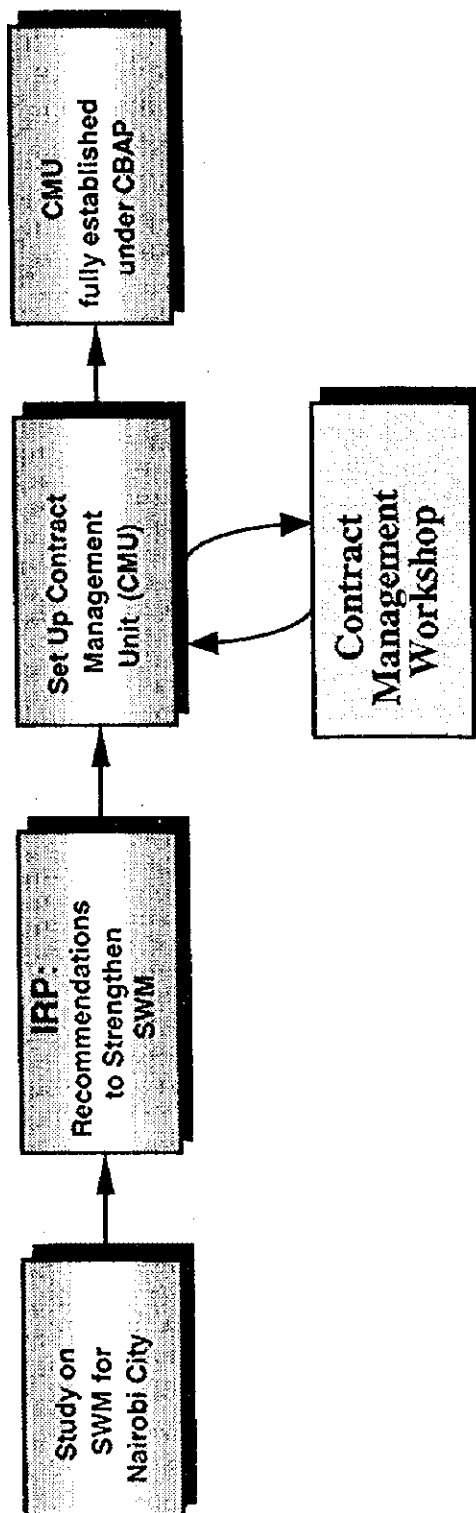


Figure 4.3-1 The Role of the Workshop

Pre contract award arrangements are firstly covered, ie the process and stages up to and including the award of the contract. This will be quite a detailed Session.

This will be followed by a brief session describing and evaluating NCC's current tendering arrangements and procedures. Participants will then formulate arrangements and procedures for managing the pre award contracting process. The formulation will be done in group work. Participants will split into 3 groups. Each group will prepare outputs and present their recommendations in plenary which will discuss and agree them.

After this **post contract award** arrangements are covered, ie the requirements to manage and monitor a contract after it is awarded. Again this Session will articulate good practice and draw on the City of Westminster's experience.

After this Session participants will formulate arrangements and procedures for monitoring contracts for the proposed Contract Management Unit. The formulation will be done in group work. Participants will split into 3 groups. Each group will prepare outputs and present their recommendations in plenary which will discuss and agree them.

The **Closing Session** will finally present a summary of the Workshop and key recommendations.

1.4 Scheduling

It is hoped that by the end of Day 1 all Sessions up to and including the Session "Current Tendering Arrangements in NCC" will be finished.

Day 2 will then begin with the formulation pre contract award arrangements. This will be followed by the post contract award arrangements.

Private Sector Involvement in Waste Collection Services

JICA SWM Study

Private Sector Involvement in Waste Collection Services

1 Introduction

The purpose of this session to inform participants on what Private Sector Involvement (PSI) in waste collection and street cleansing services means.

The Session covers why the private sector should be involved, how to decide whether to involve the private sector or not, the method of involvement, competition strategy and a brief look at the current situation in Nairobi.

2 Principles and Objectives of Private Sector Involvement in SWM in Nairobi City

The overriding reason to involve the private sector in SWM is that private sector involvement improves the delivery of solid waste management (SWM) services which are either too costly and/or are of poor quality. World wide experience in both the developing and developed world clearly demonstrates this.

In the UK all collection services are contracted out, and cost savings and service improvements have been significant. In the US there are more than 10,000 private companies involved in SWM and over 80% of all US municipal waste is collected by the private companies. In Seoul South Korea about 35% of municipal waste is collected by the private sector. Studies in 126 cities Canada indicate that private collection is 40% less costly than the public service. PSI in collection is widespread and working well in many South American countries, in Asia and also in Africa.

However, private sector involvement is not a substitute for local government's "primary duty of care" to provide SWM services. Private operators are motivated to make profit rather than a duty to serve the public.

Private sector involvement should only be selected as an alternative to the in-house service if PSI is:

1. more economic and enhances efficiency; and
2. improves or delivers at least the same quality of service.

PSI must meet these two basic criteria. In addition two other important criteria concerning a purchaser's capacity must be also satisfied. These are:

Firstly, the local authority, in our case NCC, must be able to afford PSI services. If local authority cannot financially sustain contracts it puts both the operator as well as the continuity of the service at risk. At the moment NCC cannot afford to contract out SWM services because of its weak financial situation.

Secondly, the local authority must have an effective contract management capability. The local authority must ensure that its duty of care for SWM services which are delivered through a private contractor is properly discharged. To ensure this NCC must have a contract management capability which effectively:

- manages the contract award process, i.e. contract specification, contract strategy, prequalification, tendering and contract award;

- monitors contract performance; and
- enforces contracts terms and conditions.

As well as these there are other factors which need to be considered. The private sector must have the technical, managerial and financial capabilities to provide collection services. Local authorities need to carefully assess and screen potential contractors.

There must be a certain level of competition in the market. If the market is undeveloped the benefits of competition are unlikely to be realised.

There must also be legal sufficiency, i.e. adequate law of contract and a reliable judicial system.

Lastly, the regulatory costs of managing contracts need to be taken into account in the comparison of public and private costs.

3 What is the most Suitable Method of PSI for Collection?

Once it is decided to involve the private sector, the appropriate type of PSI and contracting arrangements have to be selected.

There are a number of different contracting methods but essentially there are three types of PSI in collection services. These are:

1. Open Competition;
2. Operating Contracts sometimes called "contracting"; and
3. Franchises.

(1) Open Competition

Under open competition private companies are free to provide collection services to whom and where they like and collect tariffs directly from customers. At the moment there is "open" and completely unregulated competition of private collection services in Nairobi. NCC does not licence them or regulate them in any way.

Generally open competition is not the best arrangement for PSI even if it is regulated. But where the level of public collection is low it may be, as it is in Nairobi, a vital necessity.

(2) Operating Contracts

The most usual contracting method is a simple operating contract under which a finite term contract is awarded, usually for a fixed price as a zonal monopoly, i.e. the contractor has the exclusive right to provide services in a designated area. Typically it is retendered every 3 to 5 years.

Operating Contracts vs. Open Competition

Operating contracts are preferable to "open" competition for the following reasons:

1. operating contracts give stronger regulation of operators. The local authority has economic sanction over the contractor - if he does not perform to the contract specifications or defaults on his terms and conditions the authority does not pay;

2. operating contracts are generally much more economical because they give "economies of contiguity" for the contractors. "Open" competition is more costly because operations are scattered - collection distances are longer for the number of households and businesses served. Many companies may serve the same area or street. Zonal monopolies therefore give operators the opportunity to realise efficiencies gains and reduce costs;
3. managing and regulating competition is less complex and cheaper. Areas can be properly zoned and prequalification effectively used to screen out unwanted operators. Fewer operators and more emphasis on self regulation means that monitoring is also easier and less costly;
4. economic regulation is easier and cheaper under operating contracts. "Open" competition implies that operators' tariffs and tariff changes will need closer and more periodic monitoring. This could be costly and time consuming. Operating contracts are fixed price and are typically set for a number of years with price the option of adjustment mechanisms built in;
5. operators under open competition have to bear the cost of billing and collection from customers which can add considerable cost (in the US it is estimated that billing is approximately 15% of total service costs). Under operating contracts however the local authority has either no billing costs because SWM is financed from general taxation, or if waste charges levied costs are much lower because charges are typically collected through other utility billing and collection systems, eg water or electricity;
6. the opportunities for price collusion are high under open competition; and
7. operating contracts are established world wide practice.

(3) Franchises

Under a franchise the local authority gives a contractor the sole right to provide services in a designated area, ie a zonal monopoly. In return the contractor pays the local authority a fee for the right to operate in that area and also levies charges on customers and collects revenues from them.

The local authority regulates the contractor's tariffs, as well as service performance, through the franchise agreement.

The disadvantages of franchises are:

1. contractors bear the cost billing and collection from customers which adds considerable cost;
2. economic regulation adds cost; and
3. they can only work where everyone in the franchised zone can afford to pay the contractor's tariffs; this implies that all the households, as well as business establishments, will be able to afford the tariffs and will cooperate with the franchiser. If there are substantial income differentials this method may be unworkable.

Operating contracts are therefore generally preferable to franchises.

4 Competition

Healthy competition is essential to ensure that involving the private sector reduces the cost of services.

Achieving optimal competition requires the local authority to manage competition. Optimising competition means intelligently zoning the city and tendering zonal contracts amongst private contractors. Contractors should be screened and prequalified before tenders are invited.

The local authority must also formulate a policy on the future role of its own in house service. Competition can foster efficiencies from its own in house service where it has to compete with the private sector for contracts.

5 Current PSI in Waste Collection in Nairobi

NCC has contracted out collection and street cleansing services in the Central Business District (CBD). Street cleansing includes street sweeping, gully cleaning and collection of waste from public litter bins. The service covers commercial customers i.e. offices, shops, hotels, restaurants and kiosks as well as public institutions.

In addition to the CBD contract there are a significant number of private companies providing collection services which are delivered under open and completely unregulated competition in Nairobi. NCC has no contractual involvement with these companies and does not regulate them. NCC estimates that there are about 60 companies operating in Nairobi.

At the moment NCC cannot afford to contract out more SWM services because of its weak financial situation. This is currently the overriding constraint to PSI in Nairobi.

In addition NCC needs to implement good contract management arrangements to ensure that the most suitable contractor is selected, the contract is carried out efficiently and effectively and that the contract provides best Value For Money (VFM).