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ENVIRONMENTAL ADMINISTRATION IN CITY-STATUS LOCAL AUTHORITIES IN SOUTH AFRICA

 \mathbf{BY}

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DISSERTATION

Submitted in part fulfillment of the requirements for the degree of Master of Public Administration (MPA) in the Faculty of Commerce and Administration at the University of Durban-Westville

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DEDICATION

To my son Vishad for all the time that we spent apart whilst accomplishing this study

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Firstly, I thank Almighty God, for granting me the strength and fortitude to complete this study.

My sincere gratitude to my parents for all the encouragement and assistance throughout my studies.

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SYNOPSIS

In this dissertation a study was undertaken of environmental administration in city-status local authorities in South Africa. Local authorities in South Africa constitute the third tier of government.

They are established to provide essential goods and services to the community and to contribute to the national goal of community welfare. The services rendered by a local authority affects the quality of life of its inhabitants. South Africa is presently undergoing a period of transition and there are demands placed on local authorities to improve the quality of life of its inhabitants. Local authorities have become increasingly sensitive to environmental matters.

Environmental administration plays a pivotal role in improving the quality of life of the community.

In order that local authorities carry out their environmental functions efficiently and effectively, it is essential that the enabling generic administrative processes, managerial, functional, auxiliary and instrumental activities be instituted and executed. The enabling administrative processes include policy—making, organising,

financing, staffing, determining methods and procedures and exercising of control. In the execution of these duties it is imperative that the normative factors, namely respect for environmental rights, ethics of environmental conservation, requirements of administrative law, maintenance of public accountability, fairness and reasonableness, efficiency and effectiveness and transparency and freedom of information be taken cognisance of.

Attention was focused on the policy-making process emphasising environmental concepts and applications, environmental projects, pressing environmental issues, environmental awareness and external participation. Organisational structures in the form of committees are regarded essential to ensuring effective environmental administration. Appropriate and specific financial allocations are necessary for the environmental administration function. Well defined staffing practices are basic to ensuring that municipal functionaries involved in environmental administration achieve their objectives. Methods and procedures have to be constantly reviewed in the light of overall changes in environmental administration. The exercising of control is

vital to ensure that the processes of environmental administration are performed within the context of the normative factors.

The recommendations contained in the dissertation are directed at continuous review of environmental administration in local authorities within a conceptual framework which constitutes the following functions, policy-making, organising, financing, staffing, determining methods and procedures and exercising of control. Focus was placed on processes such as:

- (i) the formulation of environmental policy;
- (ii) designing separate organisational structures;
- (iii) specific budgetary allocations;
- (iv) the need for staffing practices to ensure that objectives are achieved;
- (v) the need for uniform and constant review of methods and procedures; and
- (vi) establishing codes of conduct relevant to environmental administration.

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CHAPTER 1

1. INTRODUCTION

1.1. STATEMENT OF PROBLEM

The local authorities in South Africa render essential goods and services to the community and thus it is important that they be administered in a manner that will allow for the attainment of quality of life objectives at the local level.

Public administration is a comprehensive term used to explain the nature of activities executed by public institutions to achieve public goals resulting in an improved quality of life for the community as a whole.

According to Cloete (1991:51) public administration consists of various specialist sub-fields, such as

- international administration;
- central or national administration;
- regional or provincial administration; and

- local or municipal administration.

Municipal administration is a specialised branch of public administration and, therefore, the functions attached to municipal administration will be similar to that of public administration. The generic administrative and managerial functions and the functional, auxiliary and instrumental activities which apply to public administration will also apply to municipal administration (Cloete 1991:51).

Environmental administration is one of the primary components of municipal administration and therefore environmental administration together with other municipal components contribute towards achieving the goals set by municipalities.

Research on local authorities in South Africa have been conducted mainly in the fields of financing, housing, materials administration, performance appraisal, grievance and disciplinary procedures and training. This study aims at contributing to the field of environmental administration at the local government level.

1.2 AIM OF STUDY AND RESEARCH

Environmental administration is an extensive field of study. In South Africa it aims at ensuring inter-alia, equitable access to natural resources; safe and healthy living and working environments. It involves all levels of government, namely, central, provincial and local authorities. For the purpose of this dissertation, the scope of study was limited to environmental administration in city-status local authorities in South Africa. The central and provincial governments were excluded in this study.

The objective of this study is to understand the theoretical and applied dimension of environmental administration in South African city-status local authorities.

1.3 METHOD OF STUDY

The bibliography is indicative of the number of books,

journals, reports, periodicals and official documents relevant to municipal environmental administration that were consulted in order to complete this dissertation.

The various acts and other official documentation relevant to this investigation were studied to understand the legislative viewpoints. Although questionnaires were sent out to all city-status local authorities in South Africa (Annexure A), only 17 replies were received. Correspondence in the form of letters from these local authorities constituted an important source of information.

1.3.1 Questionnaires

In this dissertation reference is made to the questionnaire for example "(Questionnaire 1993:Q1)" indicates the year in which the questionnaire was sent and received and Q1 refers to question 1 in the questionnaire.

1.3.2 Official Correspondence

Official correspondence refers to all letters and documentation received from city-status local authorities.

1.4 Limitations of the Study

There will always be limitations in a research study of this nature. These limitations are outlined as follows:

- the questionnaires whose primary purpose was to gather
 information were not properly completed by some local
 authorities concerned as they do not have separate
 departments or sections to deal with environmental matters.
- the city-status local authorities of Cape Town,
 Bloemfontein, Port Elizabeth, Durban, Roodepoort and
 Johannesburg provided valuable inputs in all sections of
 questionnaires and also provided additional information
 on their environmental policies and activities.
- questions pertaining to the following aspects of

environmental administration were not adequately answered:

- * size of staff establishment;
- * budget allocation for environmental administration;
- * funding from outside bodies;
- * whether the local authority favours a bill on environmental rights to become part of the new constitution;
- * factors that inhibit the formulation and implementation of the policy;
- * measures to ensure that environmental policy is implemented by all departments and officials within a local authority and
- * name of committee that deals with environmental matters.

1.5 TERMINOLOGY

In this dissertation, the writer has endeavored to maintain the use of current terminology. However, owing to the multiplicity of connotations and definitions of terms, some clarification is necessary.

1.5.1 Municipal Administration/Local Authorities

In this dissertation the terms local authority and municipality are used interchangeably.

Craythorne (1993:56) asserts that municipal administration is a decentralised form of public administration which has evolved historically and provides for the needs of local communities. Municipal administration is that part of the government that is closest to the people.

Municipal administration is an important activity in the efforts of municipalities to achieve predetermined goals and objectives. Environmental administration can be regarded as one of the crucial activities of municipal environmental administration.

According to Speed (1971:1) local government is government in defined parts of the country, ie. in cities, towns and other

areas with limits of the powers and functions conferred by higher authority, and local authorities are statutory bodies which are the constituent parts of local government which derive their power from a higher source and are bound by the terms and conditions upon which they are created.

Local authorities generally have the following common characteristics (Speed 1971:1):

- (a) they are created by statutes;
- (b) they have localised governing powers;
- (c) they have the power to tax by levying rates on immovable property;
- (d) they are charged with certain duties for the protection of public health;
- (e) they are road making authorities; and
- (f) they may render certain services to the public and levy charges for them.

In short their duty is to make the areas they control desirable places in which to live.

1.5.2 Environmental Administration

Environmental administration may be defined as directing activities in environmental affairs that promote and protect public interest. It involves numerous governmental departments, agencies and independent units with environmental and natural resource programmes and concerns at virtually every level of government (Henning 1989:1). From this definition, it is evident that environmental administration is intended to protect and promote the environment as well as public interest.

1.5.3 Administrative functions, activities and processes

According to Cloete (1993:2) public administration consists of various processes or functions, namely the generic administrative, management, functional, auxiliary and instrumental activities. The generic administrative functions consist of conceptual and directive functions.

For the purpose of this dissertation the terms administrative functions, activities and processes are used interchangeably.

1.5.4 Gender

For the sake of expediency the pronoun "he" is used to refer to both sexes.

1.6 STUDY PLAN

The four chapters, apart from the introduction and conclusion outline the following areas of study:

- chapters two and three explain the theoretical aspects of municipal administration, municipal environmental administration, the normative factors of environmental administration as well as concepts and approaches in relation to environmental administration;
- chapter four provides an applied focus on environmental administration in city-status local authorities in South Africa.

1.6.1 Chapter 2

Municipal administration is regarded as one of the specialised branches of public administration and therefore it reflects large measures of similarity to the other specialised branches of public administration. This is due to the fact that administrative processes consist fundamentally of six main groups, namely policy-making, organising, financing, staffing, determining work methods and procedures and exercising of control.

Municipal environmental administration is a sub-field of municipal administration and these specialist fields use the six generic administrative processes of public administration to achieve their objectives. These activities contribute to the goal of municipal administration, which is to promote community welfare by improving the quality of life.

This chapter focuses on:

- local government transformation and environmental administration;
- municipal environmental administration; and

- the normative factors.

1.6.2 Chapter 3

The basic function of local authorities is to provide goods and services in such a manner that the result will contribute to the enrichment of the lives of the local community. Environmental administration is one of the many activities that contribute to this goal.

Various concepts and approaches have been developed to understand the nature and scope of the phenomenon environment. Management approaches have also been developed, namely, integrated environmental management and environmental impact assessments. All these concepts and approaches influence the execution of the environmental function. This chapter focuses on:

- -definition of concepts; and
- -description of approaches.

1.6.3 Chapter 4

This chapter emphasises an applied dimension to environmental administration. Attention is given to this aspect in city-status local authorities in South Africa within a conceptual frame of reference which includes inter-alia:

- -policy making;
- -organising;
- -financing; and
- -staffing.

CHAPTER 2

ENVIRONMENTAL ADMINISTRATION AND MUNICIPAL ADMINISTRATION

2.1. INTRODUCTION

Most South Africans live and work in urban areas generally referred to as towns and cities. To provide for the orderly establishment, development and maintenance of these urban areas, a number of complicated governmental and administrative activities have to be undertaken by local authorities. These activities have to be performed to provide the essential municipal goods and services for local community welfare.

In recent years, it has become evident that the public must protect the environment to ensure that they always have a place to live. Local authorities are expected to play a pivotal role in the protection of the environment.

In this chapter attention is given to:

- local government transformation and environmental administration;
- municipal environmental administration; and
- normative factors governing environmental administration.

2.2 LOCAL GOVERNMENT TRANSFORMATION AND ENVIRONMENTAL ADMINISTRATION

Local authorities should embark on a programme to restore, maintain, upgrade and extend its services.

Local government is the level of representative democracy closest to the people and will be involved in the allocation of resources directly affecting communities.

(The Reconstruction and Development Programme (RDP) 1994:129).

The Local Government Transition Act, 1993 (Act 209 of 1993) provides for revised interim measures to promote

the restructuring of local government and for the establishment of Provincial Committees for Local Government for the provinces. It provides for forums for negotiating the restructuring, for the exemption of certain local government bodies from certain provinces, for the establishment of transitional councils in the pre-interim phase, for the delimitation of areas of jurisdiction and the election of transitional councils, for the issue of proclamations by the Premier of the provinces and for the establishment of Local Government Demarcation Boards and for the repeal of certain laws.

Even though South Africa has a wide range of environmental legislation, the responsibility is scattered over a number of departments namely Agriculture, Forestry, Mineral Resources, Water Affairs and Health. The Department of Environmental Affairs only administers a few of these acts and consequently this has had a detrimental effect on the environment (The

Reconstruction and Development Programme 1994: 38).

The Reconstruction and Development Programme(RDP)

(1994:38) identified the following aspects that need to be reviewed:

- (a) the fines for environmental offences are not consistent and adequate and the South African legal system makes it difficult to obtain locus standi in the courts on environmental issues;
- (b) the democratic government must rationalise
 environmental legislation into a cohesive and
 workable form. It must legislate the right of access
 to information on environmentally harmful practices,
 and insist that compulsory environmental
 impact assessments are carried out in the case
 of large scale projects. An environmental ombudsman
 must be appointed to deal with environmental

offences and the government must also review and conform with international conventions and agreements on environmental issues;

- (c) environmental management must be organised in a manner that would foster public participation;
- (d) both the local and regional governments must play
 a crucial role in environmental management. A strong
 provincial Department of Environmental Affairs as
 well as a national Department of Environmental
 Affairs should be established to ensure overall
 standards and financing of environmental protection;
- (e) a Commission on the Environment must be established as an independent body to ensure transparency and accountability on the part of agencies dealing with the environment. This Commission must facilitate the gathering, collation and publication

of data on the environment. It must also provide an interface between civil society and public agencies responsible for the environment and the natural resources.

It is expected that the recommendations of the Reconstruction and Development Programme on environmental matters will impact on the environmental function in local authorities.

2.3 MUNICIPAL ADMINISTRATION

In order to understand municipal administration it is necessary to define the term "municipal".

Craythorne (1990:53) states that the term "municipal" refers to a town or city, which has as its root, the Latin word, municipium, which meant a town in Italy, the inhabitants of which had the Roman citizenship but were governed by their own magistrates and laws, ie. a free town. From the above

definition it is evident that a" municipality" refers to a town or city that has a governing authority.

Adlem & Du Pisani (1982:101) have asserted that factors within the local environment influence the field of municipal administration. These factors make provision for the implementation and expression of municipal administration as an activity and affect municipal administration in two specific environments;

- (i) Internal municipal environment: consists of municipal councillors and officials who work subject to specific rules and regulations, which provides the basic infrastructure within which they operate.
- (ii) External municipal environment: is influenced by factors such as constitutional, statutory, economical, social, historical, cultural and

spatial factors.

Adlem & Du Pisani (1982:101) have stated further that municipal administration is influenced by the local political process which involves voters, political parties and pressure and interest groups who direct their activities at promoting the welfare of the municipal community.

The attainment of municipal goals has implications for municipal environmental administration. It is therefore relevant to highlight the importance of municipal environmental administration within the context of municipal administration.

2.4. MUNICIPAL ENVIRONMENTAL ADMINISTRATION

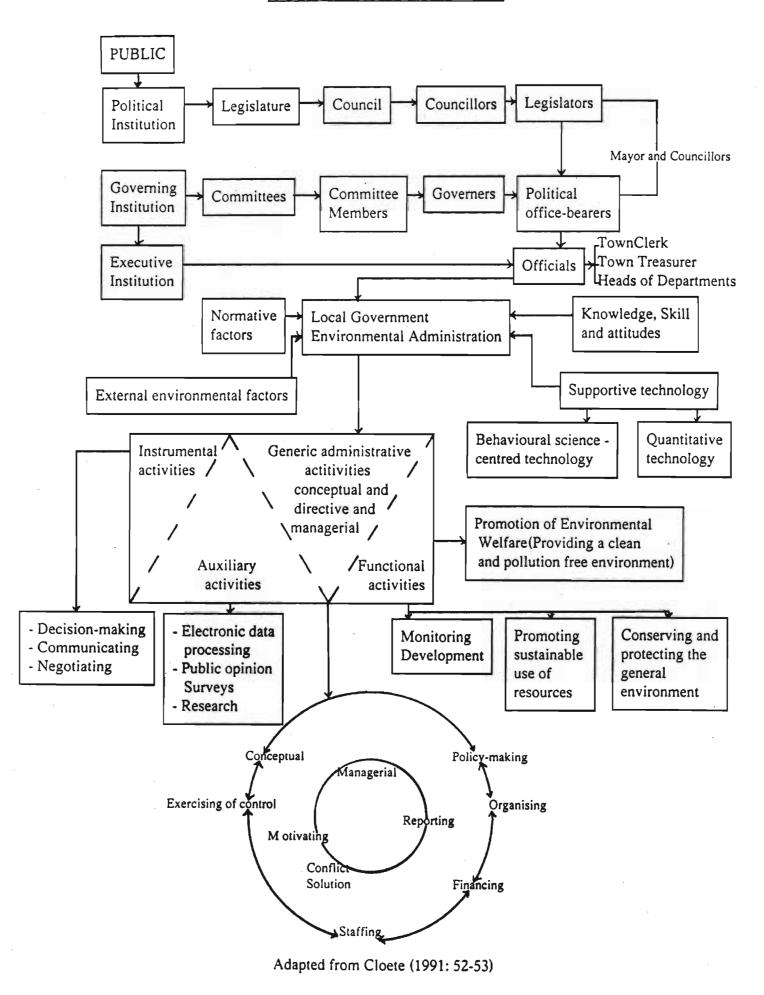
Municipal environmental administration is one of the primary components of municipal administration.

Municipalities have a decisive role to play in environmental work. Not only must municipalities protect their environment but they also face a great challenge in actively changing the environment for the better.

Municipal environmental administration is a specific field of activity and consists of several component activities. The activities and functionaries involved in the execution of municipal environmental administration may be seen in terms of a conceptual framework depicted in Figure 1.

It is evident from Figure 1 that municipal environmental administration consists of the generic administrative and management functions, and the functional, auxiliary and instrumental activities.

FIGURE 1 LOCAL GOVERNMENT ENVIRONMENTAL ADMINISTRATION: A CONCEPTUAL FRAMEWORK



2.4.1 GENERIC ADMINISTRATIVE FUNCTIONS: CONCEPTUAL AND DIRECTIVE

The generic administrative processes are the enabling processes because they determine the nature and scope of the functional, auxiliary and instrumental activities (Cloete 1991:50).

The generic administrative processes are both of a conceptual and directive nature. These functions are inter-related, inter-dependent and mutually inclusive. This indicates that one function cannot operate in isolation and all the functions take place simultaneously, although discussions may take place separately (Cloete 1991:50).

For example, if a municipal authority wants to provide a functional activity of implementing environmental policy, procedures have to be formulated, research must be undertaken to determine whether the procedure would be acceptable to municipal employees and decisions must be clearly conveyed to all employees.

The conceptual and directive administrative functions consist of:

(a) Policy- Making:

The policy- making process is primarily concerned with the identification of needs and the setting of goals to satisfy the needs of the community (Cloete 1978:13). Policy is the outcome of the process of policy making and entails the statement of intention, it is the process by which the municipal council and its officials strive to attain the intended goal (Cloete 1978:13).

According to Hanekom, Rowland and Bain (1986:25) the promotion of the general welfare of society depends on the policies made by the policy- makers (legislatures), the resources available, whether the policy makers have a clear understanding of societal problems and the needs and the nature of public policy.

In municipal environmental administration, policy-making involves inter-alia, the following:

- a) identifying the environmental needs, for example, providing a safe, clean and pollution free environment;
- b) preparing legislation, regulations, instructions and other directives, for example, directives on environmental matters and environmental administration; and
- c) analysing existing policies and legislation in order to review environmental matters.
- (b) Organising:

"Organising is the process through which activities are grouped logically into distinct areas ... it is the division of work. It results in the logical grouping of activities" (Dessler

1977: 122).

According to Cloete (1986:79) the organising process entails the creation and establishment of the organisational unit and includes aspects, such as,

- division of work;
- delegation of authority;
- coordination; and
- determining of communication channels.

In South African local government, it is usual to encounter two forms of organisational structures, namely, a long flat organisation, and a pyramidical type of organisation. However, a smaller municipality may not have a separate section/division to deal with environmental matters but in the case of a larger local authority a separate section may have to be created to deal with environmental matters. Ideally every local authority should have a specialised department or section to deal with environmental matters

in order to ensure that the objectives of environmental administration is carried out effectively and efficiently (Craythorne 1990:253).

(c) Financing:

The financing process involves numerous activities:

- the determining of income and expenditure;
- preparation of the annual budget;
- recording of all financial transactions;
- ensuring that expenditure is in accordance with approved directives of the municipal council; and
- maintaining money in appropriate accounts (Cloete 1978:63-78).

Municipalities have to make the necessary budgetary allocations for environmental matters and ensure that they have sufficient funds to maintain a clean, safe and pollution free environment.

(d) Staffing:

Once an environmental policy has been formulated, the organisational arrangements have been completed and money has been made available, then personnel can be appointed to put the administrative machinery into motion. It is necessary to employ officials having diverse qualifications and varied experience.

Municipalities employ inter_alia, environmentalists, architects, town planners, engineers, economists and other personnel to execute duties pertaining to environmental administration.

(e) Determining Methods and Procedures:

After policy has been formulated, the organising and financing functions have been completed, and personnel have been appointed, the work can commence. Every supervisor will

have to perform the functions involved in the devising and implementing of methods and procedures (Cloete 1991:216).

According to Cloete (1991:216) the first function involved is method study to determine the motions involved in the completion of the task. The second function could be to time each motion and to eliminate unnecessary motions.

Supervisors in municipalities are responsible for the preparation of codes, manuals and work study systems in order to ensure that municipal functionaries perform their work efficiently and effectively in order to realise the objectives of environmental administration

(f) Exercising of Control

If an organisation is structured to operate efficiently and effectively, control measures are necessary in order

necessary to formulate corrective plans and policies since malperformance may be due to the lack of necessary control. Control is strongly linked to accountability (Craythorne 1990:263).

Cloete (1981:185) asserts that there are various control measures that can be effective, namely, written reports, inspections, audits, statistical returns, and programmes of work. These control measures can also be effectively utilised for environmental administration.

Municipal functionaries, when exercising control should ensure that the following functions are carried out:

- devising control systems and directives to ensure that
 work is carried out in accordance with expected
 standards or goals; and
- reporting to municipal councillors and municipal committees (Cloete 1991:53).

The aforementioned control measures are also applicable to environmental administration and can be utilised by local authorities.

2.4.2 Managerial Functions

The managerial parts of the generic administration functions will be performed mainly by the institutions and officials who are charged with the implementation of the directives issued by institutions and officials who undertake the conceptual functions which culminate in directives such as laws, ordinances, regulations, proclamations, instruction codes or other commands.

These management functions include monitoring, reporting and conflict resolution (Cloete 1991:53).

The management functions together with the generic administrative processes, functional activities, auxiliary and instrumental activities, collectively

contribute towards achieving the goals of municipal environmental administration.

2.4.3 Functional Activities

The functional activities of environmental administration consist of the following:

- monitoring development;
- promoting sustainable use of resources; and
- conserving and protecting the general environment.

 (infra chapter 3 :pp 66-68)

It can be said that in order to perform the functional activities of municipal environmental administration the relevant policy directives, the financial arrangements and procedural requirements have to be adhered to (Cloete 1991:241). For example, if a municipal functionary is to perform the support functions of environmental administration efficiently and effectively he must

receive guidance with regard to environmental policy and procedures.

2.4.4 Auxiliary and Instrumental Activities

For the performance of the generic administrative functions, as well as the functional and instrumental activities, a number of auxiliary functions have to be performed (Cloete 1991:223).

According to Cloete (1986: 2), the auxiliary activities of municipal environmental administration are the "help" or "aid" techniques and tools used to provide the necessary support services to municipal authorities so that they may render improved and efficient services.

Cloete (1990:50) asserts that the auxiliary activities comprises of the following:

research;

- providing legal services;
- conducting public relations;
- notification functions; and
- construction and maintaining information systems.

The instrumental activities may be regarded as tangential because they are performed in conjunction with both the administrative and functional activities (Cloete 1991:223).

The generic administrative activities comprising of policy making, organising, financing, staffing, determining methods and procedures and exercising control are the enabling activities and should therefore be carried out with precision to ensure effective and efficient performance of functions

They provide direction for the achievement of functional activities of municipal environmental administration.

Therefore, it is important that sound public administration

principles and practices be employed in municipal environmental administration in order to achieve efficiency and effectiveness.

However, these principles and practices are governed by certain legislative measures passed by Parliament. The legislative measures relevant to this field of study are discussed hereunder.

2.4.5 <u>Legislative Measures for Environmental</u> Administration

In the White Paper on National Policy regarding Environmental Conservation of 1980 (Environmental Conservation Bill,1989:) a clear picture was drawn of the scope of humanity's responsibility in respect of environmental conservation. The need for co- ordinated action was identified and it was envisaged that legislation would be submitted to remedy certain deficiencies.

This was done in 1982 with the passing of the

Environmental Conservation Act, 1982 (Act 100 of 1982)

in which, inter-alia.

- i) certain bodies were established to advise theMinister; and
- ii) provision was made for the granting of limited regulating powers to the Minister in respect of certain matters.

Although attention was paid to many aspects of the environment, the conclusion was reached that the powers granted by the above-mentioned Act was insufficient to reach desired goals. Consequently, the Environment

Conservation Act, 1983 (Act 45 of 1983), the Environment

Conservation Amendment Act, 1987 (Act 61 of 1987), the Environmental Conservation Act, 1989 (73 of 1989), the Environmental Conservation Amendment Act, 1991 (Act 98)

of 1991), the Environmental Conservation Amendment Act, 1992 (Act 79 of 1992), and the Environmental Conservation Secondment Amendment Act, 1992 (Act 115 of 1992) were passed.

One of the essential aspects of environmental conservation acknowledged in the White Paper is the fact that environmental conservation is not only the responsibility of any one government department but indeed involves the government machinery in totality. There has been concern for some time that until now, there has been no effective way in which coordinated action regarding all concerned bodies (public and private sector) could be directed. This deficiency, as well as the fact that the environment has gradually deteriorated since the passing of the first legislation in 1982, led to the present Environment Conservation Act. 1989 (Act 73 of 1989) being passed by Parliament. The findings of the investigation of the Planning Committee of the President's Council into the state of Nature Conservation in South Africa also played a pivotal role

in the passing of the new Act (Environmental Conservation Bill, 1989).

2.4.5.1 Environmental Conservation Act, 1989 (Act 73 of 1989)

The Environmental Conservation Act, 1989 (Act 73 of 1989)
has introduced new protection measures enabling the
Department of Environmental Affairs to coordinate
environmental conservation activities and also providing it with
greater powers of enforcement.

The main purpose of the Act is to provide for the effective protection and controlled utilization of the environment and for matters incidental thereto. A basic approach in the Act is that it is not practicable to be prescriptive in respect of government institutions and an endeavour is made to obtain the co-operation of such institutions by way of:

- i) Supplying a directive in respect of activities influencing the environment; and
- ii) by establishing a mechanism for the determination of policy in respect of the different aspects of the environment and the activities having an influence on the environment in cooperation with the executive institutions.

2.4.5.2 Provisions of the Act applicable to local authorities

Local authorities and other government institutions are expected to comply with any such policy and duty assigned to them concerning the environment (van der Merwe 1989:1).

The Act provides for the protection of the natural environment by the institution of two categories of protection. Section 16 and 17 of the Act empowers the

Premier to declare "protected natural environments"

whilst Section 18 creates a total new category of

protected areas namely special nature reserves where

human activities are mostly severely restricted. The Act also

provides for stronger control over aspects of environmental

pollution (Environmental Conservation Act, 1989 (Act 73 of 1989).

Section 19 prohibits littering and Section 20 determines the conditions for the disposal of waste. The latter in particular is developing into a serious problem, not only as regards nuisances, but also progressively as a pressing danger in the form of pollution of ground and surface water. Consequently, the power to act in this instance is placed in the hands of the authority entrusted with the administration of water affairs (Environmental Conservation Act, 1989 (Act 73 of 1989).

Section 22 of the Act makes provision for impact studies to be conducted before decisions are taken on aspects which may

have grave consequences for humanity or may do irreparable damage to the environment (Environmental Conservation Act. 1989 (Act 73 of 1989).

Section 23 of the Act provides that an area may be defined where development may only be undertaken under certain conditions. The aforementioned section empowers the local authority to take such a decision (Environmental Conservation Act. 1989 (Act 73 of 1989).

Part Two of the Act provides for the establishment of two bodies to assist the Minister and the Director-General in the execution of their task, namely the Council for the Environment in an advisory role, and a Committee for Environmental Management in a co-ordinating role (Van der Merwe 1989:1).

In Part Three, provision is made for the protection of the natural environment. It gives the Premier of a Province the

power to declare any area a protected natural environment if adequate grounds exist for such a step. The management of such an area may be assigned to a local authority but only with the concurrence of such authority (Van der Merwe 1989:1).

In Part Four, the Act provides for the extended control over environmental pollution. The Minister of Water Affairs is entrusted with powers to determine conditions for the establishment and management of waste disposal sites, and to exercise control through a system of permits without which no disposal site may be operated (van der Merwe 1989:1)

Part Six of the Act describes the powers of the Minister in respect of the specific regulatory actions regarding waste management (section 24), noise, vibration and shock (section 25) environment impact reports (section 27) and general regulatory measures (section 28). Functions may be assigned to

local authorities through any of theses regulations (van der Merwe 1989:1)

Section 21 (i) (ii) provides that the Minister must obtain the concurrence of local authorities concerned before promulgating a regulation (Environmental Conservation Act, 1989 (Act 73 of 1989).

The Environmental Conservation Act is an important legislative milestone in the development of South African Environmental Law (Schwella & Muller 1993:118-119).

The following section focuses on the normative factors that pertain to municipal environmental administration.

2.5 NORMATIVE FACTORS AND ENVIRONMENTAL ADMINISTRATION

Municipal environmental administration as a specialised branch

of municipal administration, is a comprehensive field of activity consisting of the generic administrative, managerial, functional, auxiliary and instrumental activities. These activities are carried out to achieve a predetermined goal, which in this study focuses on conservation of the environment.

There are, however, specific guidelines which municipal functionaries have to abide by. These guidelines are referred to as the normative factors of public administration.

It is essential to discuss the term "normative" prior to discussing the specific normative factors. There are however various definitions of the term normative.

The term "normative" is derived from the word "norm".

According to the Concise Oxford Dictionary (1976:743) the word "norm" is defined as a requirement of a standard quality to be produced, amount of work to be done, as well as

customary behaviour.

The Collins English Dictionary (1990:574) defines a "norm" as a standard that is required desired, or regarded as normal.

The Shorter Oxford Dictionary (1978:1413) defines a "norm" as a rule or authoritative standard. It can be said that "normative" sets out certain rules and standards of behaviour in accordance with prevailing values of society. In view of the above, it is expected that the actions of all public functionaries, including municipal functionaries, aimed at protecting the environment, must be based on the specific guidelines that govern their conduct.

Sachs (1990:146-147) firmly believes that there should be an environmental code to provide binding norms on certain issues such as pollution, waste, protection of species, soil erosion and protected areas. The following normative factors have

implications for environmental administration for local authorities in South Africa.

2.5.1 . Respect for Environmental Rights

According to Glazewski (1991:169) developments in international law are relevant to the field of environmental administration. This is so because international norms generally permeate and may influence municipal law systems. The Stockholm Declaration on Human Environment (1972) is an historical development and it was adopted by the United Nations Conference on the Human Environment. The Declaration can be described as the "environmental" counterpart of the 1948 Universal Declaration of Human Rights".

Glazewski asserts (1991:169) that Principle 1 is relevant as it lays down a fundamental right in respect of the environment. It provides:

"Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment where equality permits a life of dignity and well being ... Man ... bears a solemn responsibility to protect and improve the environment for future generations".

It is clearly evident that International Conventions have to some extent either directly or indirectly influenced environmental administration. In the First World countries such as Sweden and United Kingdom the pollution phenomenon has led to the formulation of international norms and conventions governing various forms of pollution, for example the Montreal Protocol on Substances that Deplete the Ozone Layer which South Africa ratified in 1990. The Convention on Trade in Endangered Species (CITES) dealt with trade of wild animals and products derived from them. South Africa has participated in about twenty of these international

environmental conventions (Glazewski 1991: 169-170).

The World Charter for Nature passed by the General Assembly of the United Nations Charter in 1982 states that the lasting benefits from nature depend on the maintenance of essential ecological processes and life support systems and upon the diversity of all life forms which are affected by man's exploits (Glazewski 1991:170).

The American Declaration of the rights and duties of man is the only African Charter of Human and Peoples' Rights, adopted by the Organisation of African Unity in 1981. It includes an environmental protection provision in its ranks. This Charter on Human Rights provided that all peoples shall have the right to a generally satisfactory environment favourable to their development (Glazewski 1991:170-171).

It is the responsibility of local authorities to provide clean water, rubbish removal and a hygienic and pollution free

environment for its inhabitants.

2.5.2 Ethics of Environmental Conservation

Local authorities when making decisions on environmental matters must consider the ethics of environmental conservation.

Fuggle & Rabie (1989:5) state that ethics provide the basis by which an individual can ascertain whether a course of action which requires man to change the environment is acceptable. Ethical systems acknowledge that individual desires must be controlled and limited and that the expediency is not an appropriate basis for judging human actions. The ethics of environmental conservation provide a basis for the relationship between man and the subhuman world (Fuggle & Rabie 1989:5).

(a) Utilitarianism

Globally and in South Africa conservation strategies are based on the principle "Conservation is for man". It provides a rationale for conservation based on the environment's utility to man. However, the link to utilitarian ethics is based on the fact that environmental conservation will be beneficial to humankind (Fuggle & Rabie 1989 :5-6).

Utilitarian ethics are prevalent in a society dominated by economic values. Since utilitarianism is concerned with the well being of future generations, it introduces the idea of time into the assessment of the greatest good (Fuggle & Rabie 1989:5-6).

(b) Judeo-Christain Ethics

According to Fuggle & Rabie (1898:6-7) ethical systems based on the religions of Christianity, Judaism and Islam differ from

utilitarianism.

The Judeo-Christian ethical norms request man to acknowledge the fact that subhuman nature has a right to exist over and above its utility to man. It states that man has been granted control and management of the environment only to satisfy his needs and that it is his responsibility to ensure that natural processes are sustained and that natural phenomenon are not destroyed. The Judeo-Christain belief is that both man and nature are creations of God but the relationship between them is not perfect because of man's sin (Fuggle & Rabie 1989:6-7).

2.5.3 Requirements for Administrative Law

Environmental administration in South Africa relies
heavily on government departments and administrative
bodies which represent public concern for environmental
conservation. Municipal functionaries must, therefore,
comply with South African administrative law since these

departments and administrative bodies make important decisions concerning conservation of the environment and enforce environmental legislation (Fuggle & Rabie 1989:47-48).

Schwartz, quoted in Barton & Chappel (1985: 174) defines administrative law as:

"That branch of the law which controls the administrative operations of government. It sets forth the powers which may be excercised by administrative agencies, lays down the principles governing the excercise of those powers, and provides legal remedies to those aggrieved by administrative action".

Miewald (1978: 243) states that administrative law refers to the legal processes involved in administrative decision-making and execution.

Municipal funtionaries in complying with administrative law must perform their functions with legality, which according to Andrews (1988:28) refers to all rules of

natural justice and the rule of law be borne in mind with every action performed in public institutions.

2.5.4 Maintenance of Public Accountability

Local authorities are public institutions established to promote the welfare of the community. Municipal functionaries must, therefore, be able to account for whatever decision they make and for all their actions subject to the provision of such legislatures, for example, public accountability implies accountability to the public through the legislature (Hanekom & Thornhill 1983:139). It implies that municipal authorities are public institutions established to promote the welfare of the community and are therefore accountable to the state and its citizens for decisions implemented.

Accountability refers to the need for decisions to be justified to the community through its elected representations. Responsible government, if it is to be

effective, must also mean accountable government. This implies that the municipal officials are required to answer for their activities and that a degree of control over municipal official behaviour is necessary (Derbyshire & Patterson 1979:219).

According to Cloete (1991:64-67), measures that are used to uphold public accountability are the legislature, judicial institutions, organisational arrangements and work methods and procedures.

Parliament passes laws which protect and control the utilization of the environment. Municipal functionaries are subject to the provisions of such legislatures for example, the Environmental Conservation Act, 1989 (Act 73 of 1989) when dealing with environmental conservation.

Effective and efficient organisational arrangements ensures that municipal functionaries are able to render account to their

superiors for actions taken, and are responsible for such action. Demarcation of lines of authority ensure that municipal officials do not abuse their powers and waste taxpayers money (Cloete 1986:76). Services and actions undertaken by public institutions are always measured in terms of necessity.

2.5.5 Fairness and Reasonableness

Municipal functionaries should always act fairly and reasonably when dealing with environmental matters.

Cloete (1976:8) maintains that actions of public servants will be fair and reasonable if they meet the requirements of balance, thoroughness, incorruptibility, honesty and legality.

Cloete (1990: 70) expresses the view that an individual can excercise his freedom and rights only to the extent that he will not prejudice the rights and freedom of others or cause himself and others harm, by acting unfairly and unreasonably.

With the aid of environmental impact assessments, it is now possible to ensure a fair and reasonable treatment of all parties involved in a development project. All relevant aspects of a proposed project may be carefully considered if the composition of the assessment team are laid down (Van Rensburg 1988: 100).

The conditions under which a project may proceed could also create opposition if unreasonable demands are made and preconceived ideas exist within the assessment team.

Built-in controls should also be created for such problems.

The assessment teams should consist of people of sound character to prevent corruption, dishonesty and bribery (Van Rensburg 1988: 100).

2.5.6 Efficiency and Effectiveness

Local authorities are created to promote the welfare of the community. Therefore, municipal functionaries should always

carry out the objectives and goals of environmental administration in an efficient and effective manner. The Collins English Dictionary (1992: 66) defines "efficiency" as

- functioning or producing effectively;
- with the least waste of effort; and
- competency.

Efficiency in the public sector means satisfying the most essential needs in the community to the greatest possible extent, in qualitative and quantitative terms using limited resources that are available for this purpose, and also involves upholding public accountability, democratic requirements, fairness and reasonableness and the supremacy of the legislature. Efficiency indicates a definite standard which applies equally to every activity in the public sector and which can be met only through resolute effort (Cloete 1990:72-74).

According to Van Rensburg(1988:10) efficiency in public

administration does not apply to economy, but to the wildest possible quantitative and qualitative meeting of the essential demands with limited resources.

2.5.7 Transparency and Freedom of Information

Local authorities must ensure that information pertaining to environmental administration is always correct and concise.

According to the Reconstruction and Development Programme Policy Document (RDP) 1994:133), open debate and transparency in government are crucial elements, and must therefore guarantee active exchange of information and opinion among all members of society.

This new information policy must aim at facilitating exchange of information within and among communities and between the democratic government and society as a two-way process. It must ensure that media play an important role in facilitating projects in areas such as education and health. This

should also apply to environmental projects (Reconstruction and Development Programme (RDP) 1994:133).

2.6 Summary

Public administration is a capacious field of activity
aimed at promoting community welfare. In order to achieve
this goal efficiently and effectively specialization takes place.
At the local level, municipal administration is considered to be
a sub-field of activity of public administration.

In a similar vein, municipal environmental administration is a specialised field of activity of municipal administration and is, therefore, concerned with the predetermined goal of upgrading the quality of the environment in order to ensure that it is a safe and clean place to live. Municipal functionaries must direct their attention towards achieving this predetermined goal. To this end, the generic administrative and managerial

functions, and the functional, auxiliary and instrumental activities are executed. The functional activities may be categorised into conservation and protection functions, monitoring of development and promoting sustainable use of resources.

In the execution of these activities, the normative factors must also be adhered to, namely, respect for environmental rights, ethics of environmental conservation, requirements of administrative law, maintenance of public accountability, fairness and reasonableness, efficiency, effectiveness and transparency and freedom of information.

Local authorities at present implement the provisions of the Environmental Conservation Act, 1989 (Act 73 of 1989).

The Local Government Transition Act, 1993 (Act 209 of 1993) provides for revised interim measures to promote the restructuring of local government.

The Reconstruction and Development Programme (RDP) has highlighted certain recommendations which will impact on the administration of environmental affairs at the local government level.

CHAPTER 3

CONCEPTS AND APPROACHES PERTAINING TO ENVIRONMENTAL ADMINISTRATION

3.1. INTRODUCTION

It is generally accepted that one of the most important issues facing the world today is the environment and consequently local authorities have become increasingly sensitive to this issue.

Recently many concepts and approaches have been developed to understand the nature and scope of the phenomenon "environment". Management approaches have also been developed. All these concepts and approaches influence the execution of the environmental administration function. The purpose of this chapter is to:

- define the concepts; and
- describe the various approaches.

3.2 DEFINITION OF CONCEPTS

It is imperative that the terminology relevant to environmental administration be defined. The following definitions have implications for environmental administration.

3.2.1 Environment

The Collins English Dictionary (1990:278) defines the term "environment" as the external conditions or surroundings in which people live.

The Environmental Conservation Act, 1989 (Act 73 of 1989) defines the term "environment as an aggregate of surrounding objects, conditions that influences the life and habits of man or any other organism or collection of organisms".

Rabie (1991:76) asserts that the term "environment "defined in its broadest sense would comprise the external circumstances,

conditions and things that affect the existence and development of an individual or group. However, in the context of development and conservation this would consist of both a source of materials for creating things that will improve the human conditions and a source of natural amenities and life support systems which directly contribute to the well-being and survival. From the above definitions, it could be accepted that the term "environment " refers to the external or physical environment which influences the lives of individuals or groups.

Local authorities have a decisive role to play in environmental administration. Not only must local authorities protect the environment, they also face the challenge in actively changing the environment for the better.

3.2.2 Development

Local authorities must monitor the effect of development on the environment. It must assess matters such as location, density,

form and scale alongside matters such as traffic generation, access and parking. It must also be aware of the wider environmental impacts such as pollution control, demands for water supply and sewage treatment.

According to Henning & Mangun (1989:340), development refers to the modification of the biosphere through the application of human, financial, living and nonliving resources to satisfy human needs and to improve the quality of life. On the other hand, sustainable development integrates development and conservation of the living resources. It comprehensively takes into consideration social, ecological, and economic factors, the living and nonliving resources base as well as the short-and long term advantages and disadvantages of alternative actions.

According to the Reconstruction and Development Programme (RDP) (1994:39) development strategies must incorporate environmental consequences in the course of planning. Local authorities should in fact aim at developing quality local

environments that will contribute to a better quality of life.

3.2.3. Sustainability

Local authorities can secure environmental benefits through sustainable development. Sustainable development implies growth which respects nature in the interest of long term development. It highlights the importance of long-term consideration in the development process and focuses on the fact that developments in the past have been conducted without any considerations to the environment (Horberry & Le Merchant 1992:381-382).

Hannenburg (1992;20) defines sustainable development as a crucial concept, entailing certain principles that apply universally and ascertains that tangible solutions may look quite different, depending on the geographical area and sector concerned. Local authorities must ensure that its citizens have a decent quality of life through sustainable use of resources.

3.2.4 Conservation

Environmental conservation is of paramount importance to local authorities, since it affects the quality of life of its citizens.

Henning & Mangun (1989:339) define conservation as the

" management of the biosphere so that it may yield the greatest sustainable benefit to present generations while maintaining its potential to meet the needs and aspirations of the future generations ".

Local authorities must strive to conserve and protect the environment since the proper administration of the environment and its natural resources is essential not only to ensure survival but also to promote a sound economy and the welfare of its citizens.

3.2.5 Public Participation

Public participation in environmental administration has become an important factor for local authorities to consider when making decisions and judgements pertaining to environmental issues.

Canter (1977:220) defines public participation,

" as a continuous two-way communication process, which involves promoting full public understanding of the processes and mechanisms through which environmental problems and needs are investigated and solved by the responsible agency; keeping the public fully informed about the status and progress of studies and findings and implications of plan formulation and evaluation activities; and actively soliciting from all concerned citizens their opinions and perceptions of objectives and needs and their preferences regarding resource use and alternative development or management strategies and any other information and assistance relative to plan formulation and evaluation ".

There are six objectives of public participation in environmental assessments (Canter 1977:222). These include inter alia:

- information, education, and liaison;
- identification of problems, needs, and important values;
- idea generations and problem solving;
- reaction and feedback on proposals;
- evaluation of alternatives; and
- conflict resolution consensus.

Henning & Mangun (1989:60-61) asserts that it is only through public participation that information, evaluation and

public support can be obtained for environmental problem solving and decision-making. Public participation would facilitate consideration of such public values as lifestyles, quality issues, and other complex areas of the interface between society and the environment. Public participation includes suggestions, information, questions, views and critiques expressed by members of the general public in efforts to influence decision-making in environmental affairs.

Local authorities must ensure that public participation plays a more vital role in the decision-making processes of environmental administration.

3.3 Approaches to Understanding the Nature and Scope of the Phenomenon "Environment"

There are various approaches which could influence the execution of environmental administration. Rabie (1991:204) states that the "environment" is a relational concept, since it denotes an

interrelationship between man and his surroundings. However, depending upon how extensive these surroundings are conceived to be, the following approaches may be identified (Rabie 1991:204).

3.3.1 Extensive Approach

According to the extensive approach the "environment" is a concept which embraces a multitude of ingredients, including the following:

- (a) Natural environment which is in a strict sense the created environment in its pure state, but more generally regarded as referring to renewable and non-renewable natural resources such as air, water, soil, plants and animals.
- (b) Spatial environment which is man-made and natural areas such as a suburb, town, city, region, province and country, as well as certain specific landscapes, for instance mountains,

wetlands, rivers, sea-shore and forests.

(c) Social environment which refers to the family, groups and society. Other components of the environment include interalia, the economic environment, the cultural-historic environment, the built environment, the political environment and the labour or work environment (Rabie 1991:204).

3.3.2 Limited Approach

Rabie (1991:207) states that according to the limited approach the "environment" is construed as pertaining to only certain components of a comprehensively defined concept of "environment". It relates to only the natural environment or simply to nature.

This approach has been influenced by ecological studies which basically have been aimed at researching the

natural environment with its natural ecosystems.

According to this approach "nature " although part of the concept of "environment " is usually viewed as being more limited in extent. This view seems more realistic in that account is taken not only of the natural environment in its pure state, but also of the modifications imposed thereupon by man (Rabie 1991:209).

According to Schwella & Muller (1993: 65-66) the most recent approaches to environmental administration are the open - systems and contingency approaches which are based on the common fundamental premises. However the contingency approach may actually be viewed as open - systems theory applied to administrative problems.

3.3.3 Open-Systems Approach

The Open-Systems Approach regards administrative systems as complex sets of interrelated variables and parts collaborating to reach objectives by using inputs from outside the system

(Schwella & Muller 1993: 65). This approach rejects the so-called "principles of administration" and any search for the "one best way" of administration which is supposedly applicable to all situations. It also provides a macro perspective for analysis and study of administrative phenomena by furnishing a framework for analysis. This provides decision-makers with a framework to consider contextual conditioning factors and to select the most appropriate strategies in the circumstances (Schwella & Muller 1993:65).

3.3.4 Contingency Approach

The contingency approach shares the fundamental premise of the open -systems approach and elaborates upon its implications for administrative decision-makers. These implications are that decision-makers should be analytical, flexible and ingenious (Schwella & Muller 1993:62-63). This approach facilitates strategic decision-making practices by which strategic decisions are made in terms of contextual analysis and situation assessments.

In terms of the abovementioned approaches the following conditioning factors have to be considered from an administrative context (Schwella & Muller 1993:65):

- political factors which includes political ideology,
 political institutions, political parties, pressure and interest groups, political policy;
- economic factors which includes patterns of economic growth,
 inflation;
- social factors which refers to urbanisation, employment,
 environmental education, human development and societal
 values; and
- technological factors which focuses on aspects of a technological nature.

3.3.5 Political Approach

Schwella & Muller (1993:68-69) advocate that the provision of services require decisions to be made about the political approach to be selected for decision-making of the service- provision

system in question.

According to Schwella & Muller (1993:68) the following two basic approaches are possible:

(i) Democratic Approach

This approach focuses on the maximum participation in the decision-making process regarding the service-provision system and institutionalizes possibilities for the participation on an informed basis by all those stakeholders who are involved in or influenced by the service-provision system. One of the limitations of this approach is that scientific and technical considerations may be subject to political and popular influences (Schwella & Muller 1993:69).

(ii) Technocratic Approach

This approach emphasises the need for incorporating scientific

and technical considerations into decision-making regarding the nature, scope and function of the service- provision system in question (Schwella & Muller 1993:68).

Such decisions require expertise and should be taken by knowledgeable and skilled scientific experts rather than be left to the whims and fancies of uninformed persons. In this approach public participation is often not viewed in a positive light because

it leads to irrational and technically inferior decisions and actions (Schwella & Muller 1993:68).

3.4. Management Approaches

These approaches aim at promoting maximum participation and a structured and systematic method in environmental administration.

3.4.1 Integrated Environmental Administration (IEM)

Local authorities must ensure that they not only protect and

enhance their local environment, but also work towards the creation of new environments that contribute to the health and enjoyment of the local people.

Integrated environmental management is designed to ensure that the environmental consequences of development proposals are understood and adequately considered in the planning process. The purpose of integrated environmental management is to resolve any negative impacts and to enhance positive aspects of development proposals (Department of Environment Affairs(b) 1992:50).

Local authorities must adopt the principles and procedures of integrated environmental management when evaluating conservation and development proposals.

3 4.1.1 Planning and Assessing Proposals (Stage 1)

The underlying principles of integrated environmental

management must guide the planning proposals. It is evident that the proposals will be more effectively planned if the recommended steps are included as this would guide the decision-making process (Department of Environmental Affairs(b) 1992:5).

The recommended steps include, inter-alia, (Department of Environment Affairs(b) 1992:5):

- notifying people in the neighbourhood as well as those who are interested and affected in the decision-making process;
- establishing policy, legal and administrative requirements in order to ascertain the framework around which the proposal may be developed;
- establishing the need for the proposal as well as considering integrated environmental management requirements;
- consultation with authorities and other interested and affected parties;
- identification and consideration of alternatives;
- identification and consideration of issues, opportunities and

constraints for alternatives; and

- consideration of mitigatory options as well as management plan options.

Local authorities must ensure that the aforementioned steps are taken into consideration when planning proposals.

(i) Classification of Proposal

This stage determines whether the proposal follows the impact assessment, initial assessment or no formal assessment route. The integrated environment procedure is structured in such a manner in order to direct proposals to one of the three routes (Department of Environment Affairs(b) 1992:6).

(a) Firstly, for an impact assessment, when it becomes evident during the development proposal stage that there are no important impacts.

- (b) Secondly, for an initial assessment, when the proposal is included in the lists of activities as well as the lists of environments.
- (c) Thirdly, for an authority review where no formal assessment is required.

(ii) Impact Assessment

An impact assessment is necessary when it becomes evident during a proposal stage that there will be important impacts.

There are however three major components of an impact assessment (Department of Environment Affairs(b) 1992:6).

Firstly, scoping which is a procedure for determining the extent of and approach to an impact assessment and includes the following tasks:

- The participation of the authorities concerned as well as the

interested and affected parties.

- Identifying and select alternatives as well as significant issues that are to be analysed in the impact assessment.
- Determining the proper guidelines for the impact assessment.

Scoping provides an opportunity for the proponent as well as the relevant authorities and other interested and affected parties to exchange information and impart their views on a proposal before an impact assessment is carried out.

The second component of the impact assessment is the investigation which provides the authorities with the information they require on the positive and negative aspects of the proposal and alternatives so that a balanced decision can be reached (Department of Environment Affairs(b) 1992:6).

The third component of the impact assessment includes a report which is usually prepared by the parties during scoping (Department of Environmental Affairs(b) 1992:6-7).

(iii) Initial Assessment

The initial assessment is an investigation which is conducted to extract information in order to ascertain whether or not there will be important impacts. This investigation is usually conducted by individuals or groups who possess the necessary expertise and knowledge in order to ascertain whether important impacts are likely to take place. The assessment may be based on existing information, but may also require that new information be obtained (Department of Environment Affairs(b) 1992:6-7).

An initial assessment report must be prepared. If the initial assessment concludes that the proposal will

result in important impacts, and an impact assessment is required, the report will form the background information for the scoping stage of the impact assessment. If there is no important impact the report will be submitted for review (Department of Environment Affairs(b) 1992:6).

It is the responsibility of the local authorities concerned to assess the potential environmental consequences of the proposed action and its alternatives, and to suggest ways to improve the environmental acceptability of these proposals.

3.4.1.2 Decisionmaking (Stage II)

(a) Review

It can be said that when local authorities, experts and members of the public are entirely satisfied that adequate information is available in order to make a decision, as well as that adequate consultation has taken place between the interested and affected parties, then a decision to accept the proposal can be taken. In cases where proposals are approved, conditions of approval are laid down in accordance with policy, legal and administrative requirements. Decisions must be recorded and the record of decision must be available to all interested parties (Department of Environment Affairs(b) 1992:6-7).

(b) Appeal

Provision must be made by the decision-making authorities for an appeal. If a local authority feels aggrieved about a particular decision, it may appeal to a higher authority (Department of Environmental Affairs(b) 1992:6-7).

3.4.1.3 Implementation (Stage III)

When a proposal is approved it may be implemented. The condition of approval may stipulate that a management plan or an environmental contract be prepared. Local authorities must devise

a practical procedure for ensuring that the approved action will be implemented and managed in an environmentally sound manner.

3.4.1.4 Monitoring

It is necessary that a monitoring programme be set up for all proposals. The following aspects should be included in the monitoring programme (Department of Environment Affairs(a) 1992:18):

- checking of impact predictions;
- assessment of mitigatory measures;
- adhering to approved plans; and
- complying with conditions of approval.

It can be said that monitoring ensures that the conditions of approval and the management plan as well as the environment contract are carried out. In view of the aforegoing local authorities must implement a programme to monitor the implementation and management of the approved plan.

3.4.1.5 **Audits**

Assessments on the positive and negative impacts of proposals should be conducted. These assessments will provide the following (Department of Environment Affairs(b) 1992:9):

- instructive feedback on the adequacy of planning at the develop proposal stage;
- the accuracy of investigations in the initial assessment or impact assessment stages and the wisdom of the decisions at the authority review stage, and the effectiveness of the conditions of approval and the monitoring programme at the implementation stage.

Environmental auditing will assist a local authority to make more rational decisions about how to allocate resources, both to minimise environmental damage and for positive environmental

improvement. It can help a local authority to determine environmental priorities and can enable environmental considerations to be taken into account in all areas of the authorities activities (Jacobs 1991 :32-34).

3.4.1.6 Integrated Environmental Management in South Africa

Integrated environmental management is vital because most projects and developments do not take proper account of their effects on the natural, social, economic and cultural environment. Consequently this has led to environmental degradation and increased pressure for stricter environmental protection (Council for the Environment(c) 1989:4).

It is evident that integrated environmental management will improve the manner in which South Africa's environmental resources are utilised as it makes provision for a cost-effective procedure ensuring that environmental concerns are carefully considered in the development process (Council for the

Environment(c) 1989:4-5).

The President's Council Report has recommended that the principles and procedures of Integrated Environmental Management should be promoted. Authorities at all levels should be held responsible for environmental management, and interagency co-ordination should be improved so that Integrated Environmental Management will become part of the whole planning process. Special consideration must however be given to the environmental and economic requirements in the fast growing areas such as Pretoria, Durban and Cape Town, which will place a considerable burden on all aspects of the environment (President's Council Report 1989:133).

There are various activities that can be subjected to integrated environmental management as it is applicable to all developments that are subject to the approval of any government authority. This, however, pertains to both the public as well as the private sector and includes new policies and programmes as

well as individual projects, for example, a policy for managing the coastal zone or a new office building or housing project (Council for the Environment(c) 1990:6).

However, integrated environmental management was not intended to promote conservation at the expense of development, integrated environmental management simply guides developments so that damage to the environment is minimal (Council for the Environment South Africa(c) 1989:6-9).

In view of the above local authorities should therefore, develop, test, and eventually promulgate their own regulations for implementing integrated environmental management.

Integrated environmental management is a procedure for guiding the development process. The objective of this procedure is to integrate environmental considerations into all stages of the development process in order to achieve the benefit of developments with minimal harm to the environment.

The main task of the Committee for Integrated Environment Management is to advise on how environmental concerns can effectively be incorporated into all levels of public sector decision-making and development. In South Africa, integrated environmental management is needed to ensure that environmental considerations are efficiently and adequately taken into account at all stages of the development process. It can be said that integrated environmental management sets out the concept of a systematic approach for ensuring the structured inclusion of environmental considerations at all stages of decision making and development (Council for the Environment(c) 1989:5-6).

The object is of course not to impede development but to provide an effective approach using evaluation techniques to improve proposals or suggest more acceptable alternatives. The Department of Environmental Affairs is refining this integrated environmental management procedure with the aid of consultants. The Department has released a comprehensive environment checklist to assist planners (South African Panorama 1992:66).

3.4.2. Environmental Impact Assessment (EIA)

Environmental impact assessment is a process by which the environmental impact of a project is determined (Fuggle & Rabie 1983:488). It is aimed at the recognition of causes and effects, a cause being any action of the proposed project which has an effect on the environment.

Environmental impact assessment methods have the following four major tasks (Fuggle & Rabie 1983 :488):

- collect data on variables relevant to impact prediction;.
- analyse and interpret data;
- identify significant primary and secondary impacts on the environment; and
- communicate the findings of the analysis.

These general tasks will be outlined in detail as follows:

3.4.2.1 Data Collection

Any method for environmental impact analysis should include the following:

- i) nature of available data, the date and method of collection, the quality of the data and any limitations must be outlined;
- ii) sources of data used in the analysis must be identified and in the case of data collected especially for the assessment, the method of collection as well as the names and qualifications of investigators must also be identified;
- iii) check that the systematic data capable of repetition in collection or sampling is employed for evaluation; and
- iv) provision should be made for objective rather than subjective measurement of environmental impacts.

3.4.2.2 Analysis and Interpretation

- i) an assessment of the significance of measured or postulated impacts should be made;
- ii) the criteria and assumptions employed to determine impact significance must be clearly stated;
- iii) the degree of confidence, or amount of uncertainty, inherent in any impact projection must be indicated;
- iv) areas of risk must be identified;
- v) the involvement of interested parties as well the public should be permitted;
- vi) the comparison of alternatives including the noproject alternative should be permitted; and

vii) any weighting systems that may be used to aggregate impacts or to place them in rank order should be clearly indicated (Fuggle & Rabie 1983:488).

3.4.2.3 Impact Identification

Any method of environmental impact assessment should take into account the following aspects:

- i) Comprehensive: the method must encourage a review of the full range of environmental impacts associated with a given project plan including secondary or induced impacts.

 Lateral thinking must be encouraged.
- ii) Precise actions: for example, blasting and specific environmental elements, for example, rock outcrops must be identified and used for assessment. General categories of action, for example, road construction or environment, for example, farmland must be avoided.

- iii) Project-Specific: The method must separate project or plan impacts that is primary or secondary from environmental changes due to other factors.
- iv) Accurate: Location, time and duration of impacts must be identified. Time refers to the phase of the project which will cause the impact. Site preparation, infrastructure, construction, operation or shut down and duration refers to the time period over which the impacts will occur.
- v) Consistent: The method must be consistent ensuring
 that the same assessment of a project will be made by
 different analysts.
- vii) Adaptable: The method must be adaptable in order to identify impacts from a variety of projects in different types of environment (Fuggle & Rabie 1983:490).

3.4.2.4 Communication

In order for communication to be effective, the following factors should be considered (Fuggle & Rabie 1983:490-491):

- important issues and impacts should be highlighted.
- affected parties should be identified in order to ascertain the extent of gains and losses.
- the details of the project setting eg. geographical
 areas should be provided to assist readers, reviewers, and
 decision-makers.
- the reason for development should be outlined.
- remedial measures should be indicated in order to minimize negative impacts.

There are, however, different methods of environmental impact assessment. The most popular being checklists, matrix methods, map overlays and cartographic methods, economic approaches such as cost benefit analysis and panel evaluation techniques such

as the Delphi techniques. These methods assist decisionmaking by providing objective information on the environmental effects of actions and projects. Environmental impact assessment should employ a broad spectrum of disciplines and specialists (Fuggle & Rabie 1983:491).

3.4.3 The Difference between Integrated Environmental Management and Environmental Impact Assessment

Integrated environmental management is much wider in scope than the environmental impact assessment. However, environmental impact assessment is related to one of the four stages of integrated environmental management. Although environmental impact assessment is conducted at the assessment integrated environmental management ensures stage. environmental factors are taken into account when a development is planned, or when a decision is being made, and also when the approved action is carried out. Previously, many development plans contained very little environmental inputs and consequently

environmental impact assessment was very critical in nature. It is evident that environmental impact assessment usually takes place after substantial investment has already been made in a planning proposal and this results in serious environmental problems (Council for the Environment(a) 1989: 1-5).

On the other hand integrated environmental management is intended to play a more positive role in guiding the development process and ensures that effects of the environment will be taken into account during the initial stage of any planning proposal. Integrated environmental management is concerned with all aspects and stages of environmental resource allocation, from conceptualization and planning, through assessment of effects, to the taking and implementing of decisions and monitoring of results (Council for the Environment 1991:5-6).

With regard to integrated environmental management no expensive commitments are made in the early planning stages to a proposal which is likely to have unacceptable effects on the

environment. Integrated environmental management is not intended to promote conservation at the expense of development but simply guides developments so that damage to the environment is minimised (Council for the Environment(a) 1989:1-5).

3.5 Summary

In this chapter various concepts and approaches defining and describing the nature and scope of the phenomenon "environment" was discussed. Concepts such as environment, development, sustainability and public participation were explained. Approaches such as the extensive approach, limited approach, open systems approach, contingency approach and political approach were discussed.

Integrated environmental management is widely used by both the public and private sector since it takes into account environmental factors prior to development during the first stage of the planning

process. It attempts to highlight the positive aspects of the development proposals and guides the planning proposals. It is also necessary because most projects and developments do not take proper account of their effects on the natural, social, economic and cultural environment. Integrated environmental management makes provision for consultation between various organisations as well as other interested parties. Provision is also made for the considerations of alternatives.

Evironmental impact assessment is related to one of the four stages of integrated environmental management. It is a process by which the environmental impact of a project is determined. Environmental impact assessment attempts to study the implications a proposed project will have on the environment.

CHAPTER 4

ENVIRONMENTAL ADMINISTRATION IN CITY-STATUS LOCAL AUTHORITIES IN SOUTH AFRICA: AN APPLIED DIMENSION

4.1. INTRODUCTION

The primary aim of a local authority is to ensure that the welfare of the citizens are promoted. This implies that local authorities must be sensitive to environmental issues so that a high quality environment prevails. Some of the functions that have to be carried out to ensure this, includes inter alia, monitoring development, promoting sustainable use of resources and conserving and protecting the general environment. In order to ensure that these functions are carried out, the prevailing administrative activities have to be instituted and executed.

In this chapter attention is focused on the processes of:

policy-making;

- organising;
- financing; and
- staffing

4.2 POLICY- MAKING:

Policy is the outcome of the process of policy making and entails the statement of intention, the process by which municipal councils and officials strive to attain the intended goal (Cloete 1991:52).

Since the municipal council is vested with authority, it is the highest legislative and policy making body of the local authority. The municipal council is therefore responsible for environmental policies. These policies are aimed at improving the quality of life of its inhabitants.

Local authorities which responded to the questionnaire (Questionnaire 1992:Q1 (a-c)) by way of describing their

environmental policies in official correspondence are described below:

- * The City Council of Kempton Park has a formal environmental policy which is implemented by an Environmental Control Committee. This committee comprises of representatives from the relevant departments within the local authority (Letter City of Kempton Park dated 20/12 92).
- * Similarly, the Germiston City Council has an environmental policy which is implemented by all departments and officials in terms of their policy. A structure plan which is approved by the city council is circulated to all relevant departments and is implemented wherever applicable (Letter (T2/1/AN/4323 (9/13) dated 20/12/92).
- * In terms of its restructuring proposal the City of Durban intends establishing an Environmental Policy Branch within the Urban Development Department in order to ensure that the

Environmental Policy Plan is implemented by the various departments and officials within the council (Letter (SR/2/5/2/1(S348) dated 29/09/92).

- * The City of Pretoria has an environmental policy which is presently in operation. Inter-departmental seminars and discussions are held on pertinent environmental issues in order to ensure that the environmental policy is carried out by the various departments and officials within the local authority (Letter City of Pretoria dated 30/09/92).
- * The City Council of Bloemfontein has devised a policy plan referred to as the "Bloemmoss "Metropolitan Open Space System for Bloemfontein. A report has been compiled by the environmental scientists employed by the council.

 In order to ensure that a policy or plan is implemented by all departments and officials within the local authority, policy is approved by the city council and instructions to co-ordinate actions of the community are conveyed to the

Division: Nature Conservation Services, of the Department of Parks and Recreation (Letter (sv/d Merwe/mjg 19/5/6/1 (840) dated 28/10/92).

- * With regard to the environmental policy of the City of
 Port Elizabeth reference is made to Section 4 (a) of the
 Land Use Planning Ordinance (Cape) No. 15 of 1985 as
 amended. All structure plans address the preservation and
 conservation of the natural and developed environment.

 These policy plans are adopted by the council's resolutions and
 are regulated as public documents. All developmental
 proposals that are subject to the municipal approval
 process are assessed in terms of these policy plans (Letter
 (191/14/07) dated 16/11/92).
- * In the case of Roodepoort the council has adopted measures to ensure that their environmental policy is implemented by the departments and officials throughout the local authority.

 In terms of Item B1 June 1993, the council has resolved to

compile an interdepartmental committee to draw up an environmental conservation management strategy for Roodepoort. The city secretary has been requested to report on the relevant legal aspects and its impact on the community of Roodepoort. In the environmental policy document the council has indicated that Roodepoort is blessed with a rich cultural and natural environmental heritage which must be preserved. In order to ensure this the council has indicated that it is necessary to establish an environmental conservation policy to address the following key problem areas:

- the conservation of water, soil, plant and animal life resources;
- the control of water, air, soil and noise pollution
- the recycling of waste products;
- the utilisation of parks and open spaces;

- the preservation of cultural, historical and natural assets;
- the development of an environmental education strategy and community involvement; and
- the role of town planning in environmental conservation (Letter 5/1/2 W.A.S De Bruyn dated 05/08/93).
- * In the City of Johannesburg council departments currently have their own individual environmental policies thus ensuring an appropriate quality of the environment for the city's users. However, a need has been identified for a co-ordinated environmental strategy and for an integrated management process of the urban environment within the council as a whole. The city council aims to administer, manage and plan in an environmentally responsible and sensitive way, meeting requirements of the relevant acts and ordinances. The directorates will be responsible for ensuring that their activities and

decisions will be compatible with the environmental strategy. Each directorate, therefore, formulates its own specific environmental policy within the broad environmental policy guidelines (Letter Von Schirnding dated 15/09/93).

* In the case of East London, a broad environmental policy on open spaces has been formulated and this policy is used in all detailed structure planning. The city council has just completed a study of all open spaces in East London and has indicated that it is actually considering this as an environmental policy for East London. The council has also completed a study for the future management of the Nahoon Estuary and has established a joint permanent committee with Beacon Bay Municipality to manage this resource. Meetings have been held with other relevant authorities and various government departments with regard to pollution of the Buffalo River (Letter 6585/TP dated 06/10/92).

- * The City of Cape Town has formulated a developmental policy for the conservation of Cape Town's natural environment, including consideration of the adoption of Integrated Environmental Management (IEM) and other strategies for implementation (Letter TP 2528/CW dated 30/10/92).
- * The City of Port Elizabeth works closely with the University of Port Elizabeth, The Algoa Regional Services Council, and other organisations with regard to formulating water quality control policy for the protection of the Swartkops River Estuary. Plans have been implemented for recreational development in the St George's Strand areas which has specific objectives for the protection of the dune system (Letter 191/14/07) dated 16/11/92).

Even though the majority of the local authorities have formulated environmental policies, local authorities must ensure that these policies are carried out effectively. From the aforementioned discussion, it is evident that without properly formulated and clearly directed policies environmental administration will not be able to be carried out efficiently and effectively. Therefore, it is important for local authorities to determine the relevant policy (rules and regulations) to govern environmental administration if the goal of community welfare is to be achieved.

The following aspects which can be regarded as policy issues are now discussed hereunder:

(a) Environmental Concepts and Applications

The following city-status local authorities inter alia:

Welkom, Bellville, Pretoria, Pietersburg, Veereeniging, and

Roodepoort have defined the term "environment "as a natural resource. The cities of East London, Germiston, Bloemfontein and Cape Town have defined the term "environment" as open spaces within the city (Questionnaire 1992: Q 2).

The participating local authorities, Durban, Johanessburg,

Pretoria and Bloemfontein, have received copies of the Council for the Environment's recommendations for integrated environmental management and are gradually considering implementing it (Questionnaire 1992 : Q 2).

(b) Environmental Projects

In response to the section of the questionnaire

(Questionnaire 1992: Q 7) dealing with environmental

projects, local authorities have described their projects in

official correspondence. The projects are described

hereunder:

- * The Bellville City Council has indicated that they have several projects in progress, examples of which include inter alia:
- the Loevensteinsloot Planning;

- hiking trails;
- the reclaiming of glass; and
- the Welgedacht Development (Letter 10/3/2/3 dated 7/10/93).
- * The Pietersburg City Council has focused on projects such as:
- the establishment of a bird sanctuary;
- the development of two nature reserves in order to make provision for better recreational and educational opportunities (Letter 1/6/2/CW:dw dated 09/11/92).
- * In the case of Kempton Park, the Council has concentrated on the development of the Swartspruit Trail and picnic areas (Letter City of Kempton Park dated 20/12/92).

- * The City Council of Veereeniging has directed its attention on the long term effects of air pollution which is actually part of the Vaal Triangle Health Programme (Letter G1 dated 03/09/92).
- * The City Council of Grahamstown has formulated a management plan for the greater municipal commonage and has focused on pollution, waste removal, control of alien vegetation and environmental education (Letter City of Grahamstown dated 23/07/93).
- * "The Keep Kimberley Clean Committee" was devised to make Kimberley environmentally pleasant and acceptable despite the harsh climatic conditions (Letter 48 dated 17/09/92).
- * The City Council of East London has focused on the management of the Nahoon River Estuary and the pollution of the Buffalo River (Letter 6585/TP dated 06/10/93).

- * In the case of Germiston, emphasis has been placed on the preservation of the greenbelt as well as the development of the Primrose Quarries and the Germiston Lake Area (Letter T2/1/AN/4323(9/13) dated 12/10/93).
- * The City of Cape Town has concentrated on the following projects:
- management of inland and marine water quality and is presently busy with a programme for False Bay;
- implementing proposals for "Greening The City "
- formulating a policy plan for Signal Hill;
- formulating a management plan for the Cape Penninsula protected natural environment;
- providing environmental impact to "local area plan"; and

providing impact to development control (Letter (TP 2528/CW) dated 30/10/93).

- * The Durban City Council has designed the D'Moss Open Space System in order to render open spaces ecologically more viable. The integrated environmental management (IEM) and environmental impact assessment (EIA) proposals have been formulated for southern Durban industrial areas with specific emphasis on impacts on adjacent residential areas. The council has focused on the conservation of areas of ecological importance through the D*Moss system (Letter SR/2/5/2/1 (S348) dated 29/09/92).
- * The City of Pretoria has focused on environmental projects such as the Fountain Valley Development Plan, the City Lake Project, and the public participation programmes (Letter City of Pretoria dated 30/09/92).

- * The City Council of Bloemfontein has implemented the Bloemmoss: Metropolitan Open Space System: Joint City / Council Community (Letter Sv/d Merwe/mjg 19/5/6/1 (840) dated 28/10/92).
- * The City Council of Pietermaritzburg has directed it's attention on the development of two nature reserves as well as the provision of recreational and educational facilities (Letter (1/6/2 CW:DW) dated 09/11/92).
- * The City of Port Elizabeth has focused on development of the St George's Strand areas which has specific objectives for the protection of the dune system (Letter 191/14/07) dated 16/11/92).
- * In the case of Roodepoort emphasis is placed on a special project entitled the Greenlink Underway (Letter 5/1/2 dated 05/08/93).

* The City Council of Johannesburg has a project referred to as the Healthy Cities Project presently underway. This project is an inter-sectorial urban development project. There are also various other environmental health promotion programmes, including initiatives related to tobacco use and health, indoor air quality, housing and health, urban renewal projects, conservation projects in the council's zoo and other aspects relating to the environment and health (Letter Director: Environmental Health dated 15/09/93).

The participating local authorities have focused on projects that would protect, upgrade and restore the environment.

These projects would improve the quality of life of the local community.

(c) Pressing Environmental Issues

The participating local authorities have indicated that they have

certain important environmental issues that receive priority (Questionnaire 1992:Q 8).

(a) City of Johannesburg

- inner city decay;
- lack of housing;
- associated environmental health services; and
- environmental pollution and litter, and uncontrolled poorly managed urban development (Letter Director: Environmental Health dated 15/09/93).

(b) City of Bellville

has several environmental projects. However, priority is given to the Loevensteinsloot Planning and the development of hiking trails (Letter 10/3/2/3 dated 07/10/92).

(c) City Council of Pietersburg

- priority is given to the preservation of bird and animal life (Letter City of Pietersburg dated 11/09/92).

(d) City Council of Kempton Park

- has focused on the proper utilization of the environment through integrated environment management, sensitive habitat protection and the visual upgrading of the urban environment (Letter City of Kempton Park dated 21/12/92).

(e) City of Vereeniging

- special projects have been undertaken as part of the

Vaal Triangle Health Programme, which focuses on the

long term effects of air pollution (Letter G1 dated

03/09/93).

(f) City of Grahamstown

- has focused on important issues such as pollution;
- the removal of waste;
- the control of alien vegetation and;
- environmental education (Letter City of Grahamstown dated 15/07/93).

(g) City Council of Kimberley

has concentrated on projects that would ultimately transform Kimberley into an environmentally pleasant and acceptable environment despite the harsh climatic conditions (Letter 48 dated 17/09/93).

h) City of East London

- has accorded priority to projects such as the pollution of the Buffalo River, the impact of informal residential settlements on the environment and the

spilling of sewage into rivers and sea (Letter (6585/TP) dated 06/10/93).

(i) City of Germiston

- priority is given to the development and
 upgrading of all entrances to the city as well as
 the development of the Germiston Lake Area and the
 Rondebult Bird Sanctuary;
- importance is also attached to the planting of trees and shrubs to obscure unslightly places and also to preservation of the Elsburg Spruit (Letter T2/1/AN/4323(9/13) dated 12/10/92).

(j) City of Durban

- has focused on the conservation of areas of
ecological importance through the D'Moss System. Great
emphasis is placed on environmental degradation through
informal settlements, informal trading and deregulation

(Letter SR/2/5/2/1 (S348) dated 29/09/92).

(k) City Council of Pretoria

- the most important projects include the management of the Ridgewater courses and the involvement of the affected parties in the planning of major projects (Letter City of Pretoria dated 30/09/92).

(1) City of Bloemfontein

the management of natural open spaces within the city's borders and the execution of the zoo's masterplan receive priority (Letter 19/5/6/1 (840) dated 28/10/92).

(m) City of Pietermaritzburg

- has concentrated on the prioritisation of areas with conservation significance as well as the eradication

of noxious weeds (Letter 1/6/2 CW:DW) dated 09/11/92).

(n) City of Port Elizabeth

- great emphasis is placed on the protection of the

Swartkops Estuary, the conservation of environmentally
sensitive sections of the coastline as well as the
major rivers and escarpment features (Letter
191/14/07 O.B.dated 16/11.92).

(o) City of Roodepoort

The following environmental issues receive priority;

- invader plants;
- replanting of indigenous plants;
- environmental education; and
- integrated environmental management (Letter 5/1/2 dated 05/08/93).

The majority of the local authorities are concerned with the

conservation of areas of ecological significance, degradation of the environment, the management of open spaces as well as air and water pollution. These issues are regarded as the pressing environmental issues and receive priority.

(d) Environmental Awarenesss

The level of environmental awareness in city-status local authorities studied is summarised as follows (Questionaire 1992:13):

1. WELKOM: High Medium Low

a) Policymakers/politicians x

b) Heads of depts/officials x

c) Public interest groups x

d) Ratepayers and general public x

It is evident that in Welkom environmental awareness is high amongst the departmental officials and members of the public in comparison with the policymakers and members of the general public.

2. BELLVILLE:	High	Medium	Low
a) Policymakers/politicians	x		
b) Heads of depts/officials	x		
c) Public interest groups		x	
d) Ratepayers and general public		x	

In Bellville the level of environmental awareness is high amongst policymakers/politicians and departmental heads.

Public interest groups, ratepayers and the general public play a mediocre role.

3. PIETERSBURG:	High	Medium	Low
a) Policymakers/politicians		X	
b) Heads of depts/officials	x		
c) Public interest groups			x
d) Ratepayers and general public			X

In Pietersburg the level of environmental awareness is high amongst the departmental officials and low amongst the ratepayers, general public and interest groups. It would appear that the politicians are not actively involved in environmental matters but are concerned with environmental issues.

4.	VEREENIGING :	High	Medium	Low
a)	Policymakers/politicians		x	
b)	Head of depts/officials	x		
c)	Public interest groups	x		
d)	Ratepayers and general public		x	

In Vereeniging the level of environmental awareness is high amongst departmental officials and interest groups in comparison with politicians, ratepayers and the general public.

5.	GRAHAMSTOWN :	High	Medium	Low
a)	Policymakers/politicians		x	
b)	Head of depts/officials	x		
c)	Public interest groups	x		ŭ.
d)	Ratepayers and general public		X	

The level of environmental awareness amongst the departmental officials and interest groups is high in comparison with the politicians and general public.

6.	KIMBERLEY:	High	Medium	Low	
a)	Policymakers/politicians	x			
b)	Heads of dept/officials		x		
c)	Public interest groups		x		
d)	Ratepayers and general public		x		

In Kimberley the level of environmental awareness is high amongst the politicians in comparison with the other stakeholders involved in environmental administration.

7.	EAST LONDON:	High	Medium	Low
a)	Policymakers/politicians			x
b)	Heads of depts/officials		x	
c)	Public and interest groups	x		
d)	Ratepayers and general public		x	

In East London environmental awareness is low amongst the policymakers and high amongst the public interest groups. This could be attributed to the fact that East London is a coastal city.

8.	KEMPTON PARK:	High	Medium	Low
a)	Policymakers/politicians	x		
b)	Heads of depts/officials	x		
c)	Public and interest groups		x	
d)	Ratepayers and general public		x	

In Kempton Park the level of environmental awareness is high among politicians and officials and mediocre among public interest groups as well as the ratepayers and members of the public.

9.	GERMISTON :	High	Medium	Low
a)	Policymakers/politicians	x		
b)	Heads of depts/officials	x		
c)	Public and interest groups		x	
d)	Ratepayers and general public			x

In Germiston the level of environmental awareness is high amongst the politicians and officials. It is however, mediocre among the public interest groups and low among ratepayers and members of general public.

10. CAPE TOWN:	High	Medium	Low
a) Policymakers/politicians		x	
b) Heads of depts/officials		x	
c) Public and interest groups		X	
d) Ratepayers and general public		x	

The level of environmental awareness among the politicians, officials, public and interest groups and ratepayers and general public is mediocre. This is surprising given the fact that Cape Town is a coastal city and a major area for tourism in South Africa.

11. PRETORIA:	High	Medium	Low
a) Policymakers/politicians	x		
b) Heads of depts/officials	x	ia .	
c) Public and interest groups	x		
d) Ratepayers and general public	x		

The level of environmental awareness is high among politicians, officials, public and interest groups as well as ratepayers and members of the general public in Pretoria.

12. <u>DURBAN</u> :	High	Medium	Low
a) Policymakers/politicians		x	
b) Heads of depts/officials		x	
c) Public and interest groups	x		
d) Ratepayers and general public			x

The level of environmental awareness is high among public and interest groups in Durban and low among ratepayers and members of the general public. It is mediocre among the politicians and officials.

13. BLOEMFONTEIN:	High	Medium	Low
a) Policymakers/politicians		x	
b) Heads of depts/officials		x	
c) Public and interest groups	x		
d) Ratepayers and general public		x	

In Bloemfontein the level of environmental awareness amongst public and interest groups is high and mediocre among

politicians, officials and ratepayers and members of the general public.

14. PIETERMARITZBURG:	High	Medium Low
a) Policymakers/politicians		x
b) Heads of dept/officials	x	
c) Public and interest groups	x	
d) Ratepayers and general public		x

The level of environmental awareness in Pietermaritzburg is high among officials and public and interest groups and mediocre among politicians. It is regarded as mediocre to low among ratepayers.

15. PORT ELIZABETH:	High	Medium	Low
a) Policymakers/politicians		x	
b) Heads of depts/officials	x	z.	
c) Public and interest groups		x	
d) Ratepayers and general public			X

In Port Elizabeth, the level of environmental awareness is mediocre among politicians and public and interest groups, high among the departmental heads and officials and low among the ratepayers and members of the public.

16. ROODEPOORT:	High	Medium	Low
a) Policymakers/politicians	x		
b) Heads of depts/officials	x		
c) Public and interest groups		x	
d) Ratepayers and general public		x	

The level of environmental awareness in Roodepoort is high among politicians and departmental heads and mediocre among the general public interest groups, ratepayers and general public.

17. JOHANNESBURG:	High	Medium	Low
a) Policymakers/politicians		x	
b) Heads of depts/officials		x	
c) Public and interest groups		x	
d) Ratepayers and general public			x

In Johannesburg environmental awareness is mediocre amongst the departmental heads, politicians, public and interest groups and low among the ratepayers and the general public.

Figure 2 indicates the level of environmental awareness amongst the various actors involved in the environmental administration in city status local authorities in South Africa. The level of environmental awareness amongst politicians is concentrated in the high and medium category. This also applies to the heads of department/officials category. In the ratepayers and general public category environmental awareness is concentrated in the medium and low category.

Figure 2.

A Summary of Environmental Awareness in City-Status Local

Authorities in South Africa

	нісн	MEDIUM	LOW
1.Policymakers/ Politicians	6	10	1
2.Heads of Depts/ Officials	11	6	O
3.Public/Interest Groups	8	8	1
4.Ratepayers and General Public	1	11	15

e) **EXTERNAL PARTICIPATION**:

External participation in environmental administration is essential and important. In response to (Questionnaire 1992:9 (a)) the following local authorities have indicated that they do liaise with other organisations:

- * The Bellville City Council liaises with the following organisations:
 - Bellville Environmental Advisory Council;
 - Tygerberg Nature Reserve Advisory Council; and other bodies when necessary (Letter 10/3/2/3) dated 07/10/92).
- * The Pietersburg City Council liaises with the Chamber of Commerce and the former national states of Venda and Lebowa (Letter City of Pietersburg dated 17/09/92).
- * The City Council of Vereeniging liaises with the

 Department of National Health and Population Development,

 Mintek, Medical Research Council (Letter G1 dated

 03/09/92).

- * The City Council of Grahamstown liaises with the

 Department of Environmental Affairs and the provincial

 Department of Nature Conservation (Letter City of

 Grahamstown) dated 15/07/93).
- * The City Council of Kimberley is in constant contact with the "Keep Kimberley Clean Committee" (Letter(48) dated 17/09/92).
- * The City Council of East London liaises with the following bodies:-
- The Border Wild Flower Society;
- Nahoon Trust; and
- East London Metropolitan Open Space System (Letter 6585/TP dated 06/10/92).
- * The City Council of Kempton Park liaises with the Wild Life Society of South Africa (Letter City of Kempton Park dated 20/12/92).

quality issues in specific areas or communities. Various informal and formal contacts are established through working groups and steering committees (Letter SR/2/5/2/1) dated 29/09/92).

- * The City Council of Bloemfontein liaises with the following bodies;-
 - University of Orange Free State;
 - Wild Life Society;
 - Department of Agricultural Development;
 - Directorate of Nature and Environmental Conservation; and
 - National Museum. (Letter 19/5/6/1 (840) dated 28/10/92).
- * The Pietermaritzburg City Council liaises with the following bodies:-
 - Natal Parks Board;
 - Natal Midlands Bird Club;
 - Wild Life Society; and
 - Institute of National Resources (Letter 1/62 CW:dw)

dated 09/11/92).

- * The City of Port Elizabeth liaises with the following bodies;
 - The National Research Institute for Oceanography;
 - Wild Life Society of South Africa;
 - University of Port Elizabeth;
 - Port Elizabeth Historical Society;
 - National Monuments Council;
 - The Swartkop Trust;
 - The Baaken Trust;
 - State departments;
 - The Eastern Cape Heritage Committee; and
 - The Simon Van der Stel Foundation (Letter 191/14/07) dated 16/11/92).

- The Eastern Cape Heritage Committee; and
- The Simon Van der Stel Foundation (Letter 191/14/07) dated 16/11/92).
- * The City of Roodepoort liaises with the Greenlink through meetings (Letter 5/1/2 dated 05/08/92).

Local authorities liaise with various organisations on environmental matters. These organisations assist local authorities with certain important environmental issues which are beneficial to both the community and the local authority.

4.3. Organising

Cloete (1990: 76) asserts that since a local authority has to provide a variety of goods and services to the people, it is necessary that its administration consists of a number of departments or divisions. Any organisational systems used to perform environmental functions must be based on the

components of sound organising.

The responses from various local authorities in regard to the organising function is described hereunder:

- * The Bellville City Council has instituted the Bellville

 Environmental Advisory Council that advises on

 environmental matters. Members of this council serve on a

 voluntary basis (Letter 10/3/2/3 dated 07/10/92).
- * The Environmental Preservation Committee deals with environmental matters in the city of Pietersburg. This committee liaises with the parks department, the engineering department, the nature conservation department as well as the former governments of Lebowa, Venda and the Chamber of Commerce. This committee consists of approximately 12 members (Letter City of Pietersburg).
- * The City Council of Veereeniging has a committee

comprising of members of the Vaal Triangle to deal with environmental matters (Letter G1 dated 03/09/92).

- * In the municipality of Grahamstown the general purpose committee reports directly to the council on environmental matters (Letter City of Grahamstown dated 15/07/92).
- * The community services committee deals with environmental matters in Kimberley (Letter 48 dated 17/09/92).
- * In the municipality of Kempton Park environmental matters are dealt with by an Environmental Control Committee, consisting of architects, landscape planners, the town secretary, engineers, personnel from the Health

 Department, Parks Department and Town Planning Department (Letter City of Kempton Park dated 20/12/92).
- * The City Council of Germiston has an Environmental

Conservation Committee which is a sub-committee of the council. This committee comprises of members from the Parks Board, Health Department, Roads, Traffic and Cleaning Departments. The Environmental Conservation Committee deals with environmental problems inside the greater Germiston area (Letter T2/1/AN/4323(9/13) dated 12/10/92).

- * In the City of Pietersburg the Environmental Committee, which is located in the Advisory Committee reports to a Standing Committee dealing with environmental matters (Letter 1/6/2 CW:DW) dated 09/11/92).
- * The City of Bloemfontein has several committees to deal with environmental matters for, example, Friends of the Zoo, Friends of the Ecopark and Friends of the Happy Valley. The Director: Parks and Recreation represents the city council on the committees (Letter (19/5/6/1 (840) dated 28/10/92).

- * In the City of Roodepoort, the Environmental Conservation

 Committee which is an Advisory Committee, comprising of

 council officials and members of the public attend to

 environmental matters (Letter (5/1/2) dated 05/08/93).
- * The municipality of Port Elizabeth does not have a specialist committee to handle environmental matters, but depending on the issues, committees are formed. The City has a Policy and Resources Committee, Land Usage Committee and Works and Traffic Committee. The afore-mentioned Committees constitute 3 out of 4 Standing Committees of the Council. Members are elected by city councillors (Letter 191/14/07 dated 16/11/92).
- * The City of Cape Town has several committees which indirectly deal with environmental matters but only the Environmental Advisory Committee deals specifically with environmental matters. This committee comprises of councillors, officials, non-governmental organisations

and is chaired by Professor Fuggle of the University of Cape Town. This committee reports directly to the executive committee which reports to full council (Letter (tp 2528 cw) dated 30/11/92).

The participating local authorities have several committees to deal with environmental matters. Depending on the size and location of the city status local authorities in South Africa the organizational arrangements will differ accordingly.

4.4. FINANCING:

The municipal budget plays a very important role in environmental conservation. A local authority needs money to employ officials and to render essential services to the public. Before money is spent it must be obtained from one source or another. Every local authority has to prepare budgets of income and expenditure for each of its departments.

The responses to (Questionnaire 1992:4 e - f) pertaining to aspects of the financing functions in local authorities is described hereunder:

- * The municipality of Welkom has not made any budgetary provisions for environmental conservation, however, a bird park was built and financed by the municipality itself.

 The city does not finance any organisation nor does it receive funds from any outside body (Letter (13/2/1/1) dated 07/10/93).
- * Similarly the city council of Bellville has not made any budgetary provision for environmental matters. However, all environmental matters must be included in the capital and expenditure budget. No funds are received from the central and provincial government. The council provides the necessary financial assistance to bodies such as the Bellville Environmental Advisory Council and the Tygerberg Nature Reserve Advisory Council (Letter

10/3/2/3) dated 07/10/92).

- * The municipality of Germiston is one of the three municipalities that have indicated that they have a budget allocation for environmental matters. The City Council has in fact financed several of the Water Research Projects undertaken by the Rand Afrikaans University (RAU), but does not receive funds from outside bodies (Letter T2/1/AN/4323 (9/13) dated 12/10/92).
- * In the case of the City of Roodepoort the budget allocation for environmental administration is integrated with the budget for the Parks and Recreation Department.

 The city council however liases with the Greenlink

 Committee but does not finance this body nor does it receive funds from other bodies for the environmental functions it carries out (Letter 5/1/2 dated 05/08/93).
- * The City of Cape Town has no separate budgetary

allocation for environmental matters. The council does in fact finance outside bodies such as the Fairest Cape

Association and also undertakes planning initiatives such as the environmental evaluation for the development framework which is a joint Regional Services Council study. It also renders advice to smaller local authorities on environmental and other matters (Letter TP 2528/CW) dated 30/10/92).

- * The City of Bloemfontein has set aside R1,3 million for environmental administration for the 1991/1992 financial year (Letter (19/5/6/1 (840) dated 28/10/92).
- * The City of Pietermaritzburg has provided an amount of R1.5 million for environmental matters for the 1991/1992 financial year. This city does not receive any funds from the central and provincial governments and the city council does fund any projects (Letter 1/6/2/CW:dw dated 09/11/92).

The majority of the local authorities have not made budgetary provisions for environmental administration. The following local authorities, Germiston, Bloemfontein and Pietermaritzburg have made budgetary provisions for environmental administration. In the case of Roodepoort the budget allocation for environmental matters is integrated with that of the Department of Parks and Recreation.

None of the participating local authorities receive funds from central or provincial governments.

4.5 . **STAFFING** :

Cloete (1992:75) asserts that since local authorities provide for a variety of goods and services to the public they, therefore, have to employ personnel to render these services. One of the functions of a local authority is to provide a clean and safe environment for its inhabitants.

The local authority has to ensure that effective staffing practices exist to enable personnel to carry out the environmental administration function.

Responses to (Questionnaire 1992:Q4)(a-d) and official correspondence relating to the staffing function is described hereunder;

- * The cities of Welkom, Kimberley, East London and

 Bellville have indicated that they do not have specialist
 groups or personnel to deal with environmental matters.

 However, the following local authorities have
 indicated that they do have a specialist group/section to
 deal with administration of environmental matters

 (Questionnaire 1992:Q 4).
- * In the City of Pietersburg all matters pertaining to the environment are dealt with by the Head of the Department of Parks, Sport and Recreation. This department consists

- of 25 members (Letter City of Pietersburg dated 09/09/92).
- * The City Council of Kempton Park relies on the

 Department of Parks and Recreation (Planning) to deal
 with environmental matters. There are only
 three members to perform the necessary staffing
 functions (Letter Kempton Park dated 21/12/92).
- * The City Council of Veereeniging has a special department which deals with environmental matters, however, no title has been given to this department (Letter (G)1 dated 03/09/92).
- * In the City of Grahamstown all matters pertaining to the environment are dealt with by the Department of Parks and Forests. This department comprises of 90 members, 2 clerks, 1 horticulturist, 7 supervisors, 6 drivers and 74 labourers (Letter City of Grahamstown dated 23/07/93).

- * The City of Cape Town has an Environmental Management
 Group (EMG) located within the Town Planning Branch of
 the City Planners Department in order to develop policies
 for the conservation of Cape Town's natural environment.
 In practice a broad definition is given to the environment and
 work covers environmental health, land use planning and urban
 design. The Environmental Management Group consists of 7
 members (Letter (TP 2528/CW) undated).
- * The City of Durban has established a section headed by an Environmental Manager to deal with environmental matters.

 The Environmental Branch is located in the Urban Development Department of the Physical Environment Service Unit. Other departments include Parks, Roads, Drainage, Coastal Engineering, Planning and Development Control and Traffic and Transportation. Initially the staff establishment consisted of 2 members, however, there are also other staff who are attending to environmental

matters on an unintegrated basis, for, example, river management, air pollution, water pollution and open space systems. The city council aims to provide a co-ordinated approach to environmental matters (Letter SR/2/5/1 (S348) dated 29/09/92).

- * The City Council of Bloemfontein has established a

 Division of Nature Conservation Services, located within
 the Department of Parks and Recreation. This section
 consists of 25 members (Letter Sv/d Merwe/mjg 19/5/6/1
 (840) dated 28/10/92.
- * The City of Pietermaritzburg has employed an Environmental
 Officer to deal with environmental conservation and
 environmental administration. The Environmental Officer is
 located in the Conservation Section of the Parks and
 Recreation Division. The main task of the Environmental
 Officer is to develop and manage the municipal
 conservation areas. The Conservation Section of the

Department of Parks and Recreation comprises of 22 members (Letter (1/6/2 CW:dw) 09/11/92).

- * The City of Roodepoort has an Environmental Conservation

 Committee to deal with environmental matters. This

 Committee is part of the City Council of Roodepoort

 (Letter 5/1/2 dated 05/08/92).
- * The City of Johannesburg is the only local authority that has a newly created Environmental Policy and Programmes Branch of the Department of Environmental Health, pending the approval of the structure. This branch is located within the Department of Health, Housing and the Urbanisation Directorate. The branch consists of 6 members (Letter Director: Environmental Health dated 15/09/93).

The city status local authorities have specialist groups/
sections to deal with environmental matters but rely on the

Department of Parks and Recreation. The Environmental Officer is normally located in the conservation section of the Department of Parks and Recreation.

4.6 Summary

Environmental administration is one of the functions

performed by city-status local authorities in South Africa.

The activities of the municipal functionaries are directed

towards achieving the overall goal which is the attainment of

community welfare. It is also the responsibility of the local

authorities to provide a clean and safe environment for its

inhabitants.

In order to ensure that the duties relevant to environmental administration are executed efficiently and effectively the generic administrative processes such as policy-making, organising, financing, staffing, determining methods and procedures and exercising of control must be performed.

The municipalities must ensure that the policy for environmental administration is clearly laid down and that proper procedure is followed. The municipalities of Kempton Park, Germiston, Durban, Pretoria, Bloemfontein, Port Elizabeth, Roodepoort, Johannesburg, East London, Cape Town, and Port Elizabeth have formal environmental policies.

In view of the aforegoing it is evident that the majority of the city status local authorities in South Africa have formulated environmental policies. However, local authorities must ensure that these policies are carried out efficiently and effectively. It is evident that without properly formulated and clearly directed policies environmental administration will not be able to be carried out efficiently and effectively.

There are various concepts and applications relevant to environmental administration. The following local authorities, Welkom, Pretoria, Pietersburg, Vecreeniging and Roodepoort have referred to the term
"environment" as a natural resource. However, the cities of
East London, Germiston, Bloemfontein and Cape Town defined
the term "environment" as open spaces within the city.

It is evident that the majority of the city-status local authorities have important environmental projects in progress which are directed towards improving the quality of life of the local community by protecting, restoring and upgrading the environment. In these municipalities certain environmental issues receive priority, namely, the conservation of areas of ecological significance, degradation of the environment, management of open spaces as well as air and water pollution.

The level of environmental awareness amongst politicians is concentrated in the high and medium category. This is also applicable to the heads of department/officials category.

In the ratepayers and general public category, environmental

awareness is concentrated in the medium and low category.

Local authorities liaise with various organisations on important environmental issues. This is also beneficial to both the community as well as the local authority.

The organisational structures of each local authority varies depending on the size and the location of the local authority concerned. The City of Port Elizabeth is the only city that does not have a specialist committee to deal with environmental matters, however committees are formed when necessary to deal with specific environmental issues.

In order for a local authority to perform its functions
efficiently and effectively, funding is necessary. None of the local
authorities have indicated that they receive funds from
either the central or provincial governments. The City Councils
of Germiston, Bloemfontein and Pietermaritzburg are the only
three municipalities that have made budgetary provisions for

environmental administration. In the case of Roodepoort the budget allocation for environmental matters is integrated with that of the Departments of Parks and Recreation.

In order for a local authority to render essential services to a community, it has to employ suitably qualified and trained staff. However none of the local authorities have indicated that they provide training on environmental matters. The size of staff varies according to the size of the local authority and the majority of the local authorities experience difficulty in obtaining suitably qualified staff. They do regard this as an inhibiting factor.

Local authorities today have to render the essential goods
and services to its citizens to the best of their ability
despite the limited financial resources and the lack of
suitably qualified personnel. In South Africa, local
authorities are facing challenging demands from changing

societies. However by improving the quality of the environment the local authorities will be able to satisfy the needs of its communities.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

Local authorities are established to promote the general welfare of the local inhabitants. The basic functions of city-status local authorities in South Africa is to provide goods and services to the local community in a manner that will contribute to the enrichment of their lives.

Public administration consists of various subfields, one of which is municipal administration. Municipal administration is a specialised branch of public administration, therefore, the generic administrative and managerial functions, the functional, auxiliary, and instrumental activities applicable to public administration will also apply to municipal administration. The enabling

administrative processes include policy-making, organising, financing, staffing, determining methods and procedures and excercising of control.

Environmental administration is one of the branches of municipal administration and contributes to its goals.

Local authorities are expected to play a pivotal role in the protection of the environment. Local government represents a democracy which is closest to the people, therefore, they should embark on programmes to protect, restore and upgrade the environment.

Municipal functionaries when exercising their functions must abide by the normative factors of public administration, namely, respect for environmental rights, ethics of environmental conservation, requirements of administrative law, maintenance of public accountability, fairness and reasonableness, efficiency and effectiveness, and transparency and freedom of information.

The Environmental Conservation Act, 1989 (Act 73 of 1989)

Docal Government Transition Act, 1993 (Act 209 of 1993) provides for revised interim measures to promote the restructuring of local government. It is expected that the conclusions of the Reconstruction and Development Programme on environmental matters will affect the environmental administration function in local authorities.

Many concepts and approaches have been developed to understand the nature and scope of the phenomenon-environment, namely, the extensive approach, limited approach, open systems approach, contingency approach, and political approach. Management approaches have also been formulated, namely, integrated environmental management and environmental impact assessment which are used by the city-status local authorities in South Africa. The majority of the local authorities have formulated environmental policies, and have to ensure that these policies are carried out effectively. It is therefore important for local authorities to determine the relevant policy (rules and

regulations) to govern environmental administration if the goal of community welfare is to be achieved.

Environmental administration is one of the functions performed by local authorities in South Africa. The participating local authorities have defined the term "environment " as a natural resource as well as the open spaces within the city. These local authorities have also indicated that they have received copies of the Council for the Environment's recommendations for integrated environmental management and are gradually considering implementing it.

Local authorities have several projects underway and have focused on projects that would protect, upgrade and restore the environment. Environmental issues such as the conservation of areas of ecological significance, degradation of the environment, management of open spaces as well as air and water pollution are regarded as important environmental issues and receive priority.

The level of environmental awareness amongst the politicians is concentrated in the high and medium category. This is also applicable to the head of department/official category. Environmental awareness is concentrated in the medium and low category amongst the ratepayers and general public.

Local authorities have to liaise with various organisations in the execution of their environmental functions. These organisations play a positive role in environmental administration and assist local authorities with certain environmental functions. This is beneficial to both the community and the local authority concerned.

Depending on the size and location of the local authority, the organisational arrangements for the implementation of environmental administration differs from one local authority to another. The majority of the local authorities have specific committees consisting of experts in the field of environmental administration.

Local authorities should make the necessary budgetary provisions for environmental matters. However, the majority of the local authorities have not made budgetary provisions for environmental administration. Only certain local authorities receive funding from external bodies depending on the projects in progress. City-status local authorities do not receive funds from central government and this places a great financial strain on the local authorities. It is expected of local authorities to render the essential goods and services to its citizens to the best of their ability despite the limited financial resources.

In order for a local authority to, achieve its objectives it is necessary that appropriate staffing practices exist to ensure that the environmental administration functions are executed efficiently and effectively.

In conclusion, environmental administration is an important function performed by the city-status local authorities in South Africa. As the role and structure of the local authorities change, environmental administration will become a central function.

Local authorities will have to realise that the environment is a key part to the quality of life of its inhabitants.

5.2 RECOMMENDATIONS

The recommendations arising from this research focuses the on the generic administrative processes of policy making, organising, financing, staffing, determining methods and procedures and exercising of control.

5.2.1 Policy-Making

Environmental policy should be formulated in such a manner that it ensures harmony between quality of life and furthermore environmental protection for present and future generations. In addition, environmental policy should meet the following criteria:

- requirements of the Reconstruction and Development

Programme in relation to environmental matters;

- conservation and preservation of the environment;
- definitions of environmental concepts and approaches;
- recognising the need for external participation in environmental administration;
- instilling among municipal councillors and officials and
 the general public the importance of the role and purpose of
 environmental administration.
- promoting the use of environmental impact assessments and integrated environmental management on all developmental and industrial projects;
- directives for the enforcement of environmental laws and regulations;
- describing how environmental awareness can be promoted amongst policy-makers, officials, public interest groups and ratepayers and suggesting mechanisms to ensure optimum external participation.

5.2.2 Organising

Local authorities should be organised in a manner that would foster environmental administration. The following factors should be taken into account:

- an organisational structure of a local authority should be flexible enough to adapt to the changing needs of environmental concerns:
- every local authority should have a specialised department with clearly determined objectives.
- municipal functionaries involved in environmental
 administration should be organised in an orderly manner so that
 predetermined objectives can be achieved;
- the organisational structures should allow for the division of work, delegation of authority to municipal

functionaries, co-ordination of environmental activities within the municipal departments, channels of communication and control measures; and

- organisational structures should be reviewed at regular intervals.

5.2.3 Financing

Local authorities should make the necessary financial provisions for environmental administration by:

- making specific budgetary allocations for environmental administration;
- prioritising environmental projects to ensure that the financial resources are utilised to the optimum.
- adopting control measures to ensure efficient and effective utilisation of funds; and
- taking active steps to obtain funds from external bodies to finance their environmental projects.

- uniformity exists in the remuneration and service benefits packages amongst the city-status local authorities in order to ensure a highly motivated and efficient environmental team.

5.2.5 Determining methods and procedures

Municipal functionaries must ensure that the implementation of methods and procedures in environmental administration are effective. This can be achieved by:

- taking steps to rationalise work procedures on a regular basis and where necessary to provide manuals and codes relevant to environmental administration;
- ensuring uniform and integrated action in environmental matters, where more that one department is involved;
- reviewing procedures on a regular basis, keeping abreast of changing circumstances and to ensure their relevance within environmental administration;

- ensuring that all personnel are aware of changes in procedures or of the new procedures to be followed.

5.2.6 Exercising of Control

The process of control in local authorities will determine whether the environmental functions are performed efficiently and effectively. This can be achieved through the following practices:

- prescribing codes of conduct for municipal functionaries performing environmental duties;
- ensuring that municipal functionaries take cognisance of the normative factors of environmental administration; and
- conducting regular environmental audits.

5.3. Further research

An indepth study of the different aspects discussed in this dissertation, would be appropriate.

5.4. Final comment

It is trusted that this study will be of value to local authorities in meeting the requirements for planning and implementing an accountable environmental administration in future.

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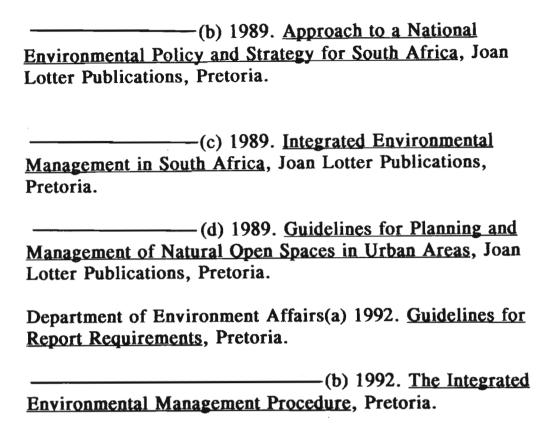
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ANNEXURE A: QUESTIONNAIRE

ENVIRONMENTAL ADMINISTRATION AT THE LOCAL GOVERNMENT LEVEL IN SOUTH AFRICA

	s your local authority have an environmental policy (or ironmental management plan)? Yes No							
If	;o:							
(a)	what measures have been taken to ensure that this policy/plan is implemented by all departments and officials throughout your local authority?							
(8								
(b)	What factors inhibit the formulation an implementation of the policy? For example availability of qualified staff and funds.							
(c)	Please attach a copy of this policy/plan to you questionnaire when it is returned.							
	agement/administration?							
man	agement/administration?							
man	<pre>gement/administration? your local authority: received a copy of the Council for the Environment'</pre>							
Has	your local authority: received a copy of the Council for the Environment's recommendations for Integrated Environmenta							
Has	your local authority: received a copy of the Council for the Environment's recommendations for Integrated Environmental Management (IEM) in South Africa? Yes No							
Has	your local authority: received a copy of the Council for the Environment's recommendations for Integrated Environmental Management (IEM) in South Africa? Yes No If so, has it formally considered these							
Has	your local authority: received a copy of the Council for the Environment' recommendations for Integrated Environmenta Management (IEM) in South Africa? Yes No If so, has it formally considered thes recommendations? Yes No							

1.	offi	your local authority have a specialist/group of cials/section/department to deal with environmental ers and environmental administration?
	Yes	No No
	If s	so, what is:
	(a)	the title given to this individual/group?
	(b)	the location of the individual/group within your organisational structure?
	(c)	the terms of reference?
	(d)	the size of staff establishment?
	(e)	the budget allocation?
	(f)	What are the funding amounts from: (a) Central Government (b) Provincial Government
5.	Has Envi	your local authority received a copy of the cronmental Conservation Act 73 of 1989?
	Yes	No D
6.		s your organisation have a committee which deals with ronmental matters?
	Yes	No.

If s	so, what is:
(a)	its name?
(b)	its location within the committee structure?
(c)	its membership?
(d)	its terms of reference?
	s your local authority have any special environmental jects or programmes in progress at the moment?
Yes	no
If s	so, list and briefly describe them:
envi	t does your organisation regard as its most pressing ironmental issues and priorities?
i) ii)	
iii) <u> </u>
matt	t are the outside bodies concerned with environmental ters with which your local authority liaises, and how this liaison take place?
Does	
Does	s your local authority finance any of these bodies for

c)	Does	your local authority receive funding from outside es for environmental functions.
10.	asse	your local authority use environmental impact ssment (EIA) for purposes of integrated environmental gement (IEM)?
	Yes	No No
	If s	o, is EIA:
	(a)	carried out with reference to its own activities internally?
		Yes No .
		If yes, give examples
	(b)	applied to activities carried out by outside organisations and members of the public?
		Yes No
		If yes, give examples
11.	IEM Cons	is your local authority's view on making the entire process the compulsory in terms of the Environmental ervation Act, 1989 and thereby making the entire ess legally enforceable?
12.	whom Regu	our local authority is a coastal local authority, to has authority been delegated to implement the Coastal lations in terms of Section 12(2)(c) of the ronmental Conservation Act 100 1982 (now Act 73 of)?

13.	How would	d you	descri	be the	level	of	environmental	awareness
	in your	local	area a	amongst	:			

		<u>High</u>	Medium	Low
(a) (b) (c)	Policymakers/politicians Head of dept/officials Public interest groups			
(d)	Ratepayers & general public			

14. Does your local authority favour a Bill or environmental rights to become part of a new constitutional dispensation?