

**DEPARTMENT: INTEGRATED
ENVIRONMENTAL MANAGEMENT**

Compliance Monitoring and Audit Strategy



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1 Introduction

The Sub-Section Environmental Law and Auditing sits within the Department: Integrated Environmental Management (DIEM) in the Mogale City Local Municipality. In order to ensure effective execution of its task, it is important for the department to develop an audit strategy. The audit strategy is also briefly outlined in the DIEM Strategic Plan document as one of the goals to be achieved for the 2007/2008 financial year. This document is therefore aimed at giving detailed approach of activities planned for the current financial year. The strategy broadly includes the environmental compliance monitoring of the following:

- Records of decision issued by the national and provincial environmental authorities
- Scheduled processes within the MCLM permitted in terms of APPA
- Waste management and disposal facilities
- Mining activities
- Waste water treatment facilities
- Cemeteries
- Non-compliance notices issued by the MCLM for complaints received
- Other activities this Department is expected to control as per MCLM by-laws and any legal mandate

In addition to the above, this Department also has responsibility for the implementation of credible record keeping aimed at ensuring accountability and compliance with relevant statute for information management. This document will first give a brief outline on the definitions and purpose of compliance monitoring and enforcement, including the regulatory cycle. This will be followed by detailed legal background surrounding environmental compliance monitoring activities. This is very important since it will enable the MCLM staff to understand the legally empowering tools for monitoring activities.

Subsequently, the document will give a detailed status quo in MCLM on compliance monitoring and further addressing the need for intervention where there are grey areas. This will also include resource requirements for the effective implementation of the strategy. The section will also include identification of priority sectors that need monitoring.

Finally the document will include the schedule of monitoring events planned for the said financial year including tools required for the task.

2 Theoretical background

2.1 The purpose of compliance monitoring and enforcement

Several benefits of compliance monitoring have been identified through out the past years. These should be viewed as arguments that reinforce the need for compliance monitoring to be carried out by governments – and carried out effectively. These statements can also be used to answer questions about why MCLM should be concentrating on establishing sound compliance monitoring processes and procedures. Note, that in most cases the benefits of compliance

monitoring are coupled with those of enforcement. The two must work together to achieve the main benefits and purposes.

There are seven (7) reasons why compliance 'assurance' is essential:

- To achieve environmental results by ensuring compliance with regulatory requirements
- To confirm socially desirable behaviour
- To remove opportunities for non-compliance and create deterrence.
- To reverse and offence and/or punish the offender
- To provide equitable treatment to the regulated community
- To ensure credibility of laws and government institutions
- To realise long term economic advantages

2.2 The regulatory 'cycle'

The environmental regulatory process is a 'cycle' or circle which includes authorisation, compliance monitoring and enforcement elements, as illustrated in Figure 1 below.

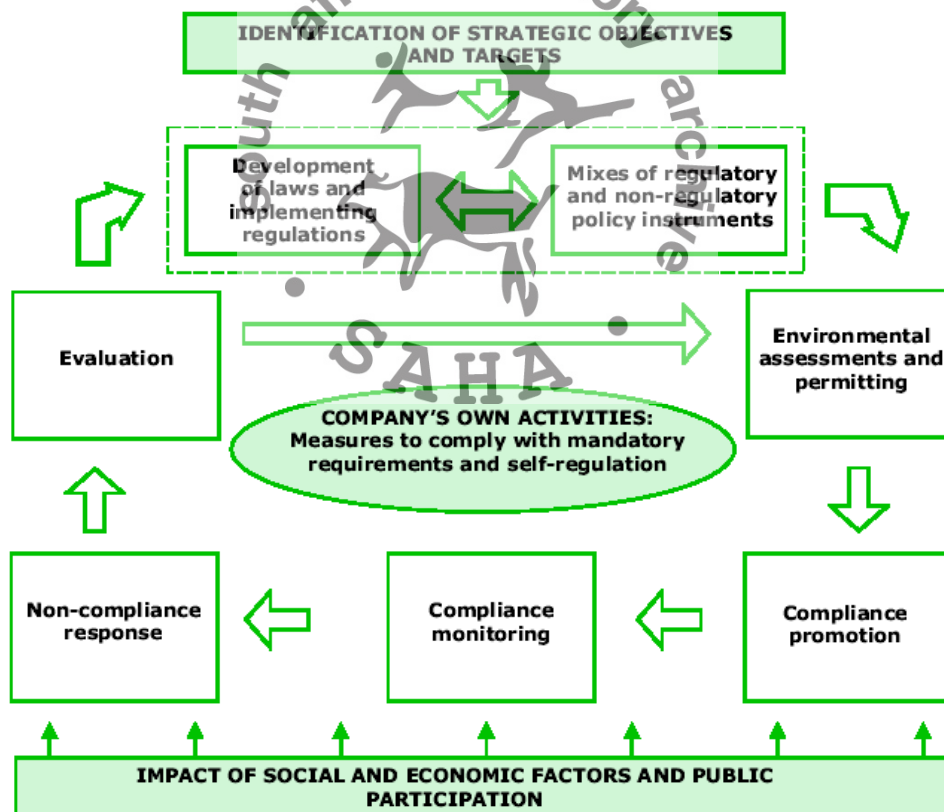


Figure 1: The regulatory cycle

The important feature of this process is that it is circular, with compliance promotion and monitoring feeding into enforcement activities, after which assessment and feedback is provided which is used to amend and improve legislation and the permitting activity itself.

2.2.1 Steps in the regulatory cycle

Policy Planning & objectives

The regulatory cycle starts with policy planning and the objectives following from that. Regulations or by-laws are often introduced in response to political pressure to tackle urgent issues. All phases and links in the cycle are there to ensure the achievement of the policy objectives. There is no point in inspecting and enforcing if there is no specific policy objective.

Legislation & permitting

Setting policy objectives alone is insufficient. These objectives thus have to be translated into legislation. By nature, environmental legislation will, to a large extent, be framework legislation. The practical application of the legal provisions in particular situations is further given shape in secondary legislation, as well as in environmental licenses/permits and other types of environmental approvals required before an economic activity is started.

Compliance Promotion

Establishing rules is important, but their usefulness is doubtful unless the regulated community takes steps to comply. Industries can be supported in doing so by compliance assistance activities. The compliance promotion activities are carried out by or on behalf of the responsible authorities.

Compliance Monitoring

Often compliance promotion alone will not be convincing enough for all members of the regulated community to obey the law voluntarily and therefore compliance monitoring and enforcement will be necessary. Inspections remain the backbone of compliance monitoring, and compliance assurance in general.

Non-compliance Response

Discovery of non-compliance during inspections will lead to enforcement action. The contents of the latter will depend on the enforcement strategy that is being used by the competent authority.

Evaluation (and feedback)

Outcomes of inspections and enforcement are assessed to see whether the legal provisions and permit conditions were enforceable and practicable. The conclusions from this assessment should be communicated to the officials responsible for drafting the legislation and permitting. Through the practical input from the inspection and enforcement steps, improvements in legal provisions, licenses and permits can be made, in order to achieve the policy objectives and keep the laws and inspectorate action credible and accepted by the public.

3 Legislation, Policy & Institutional Arrangements

The purpose of this chapter is to outline the legislative and policy framework for environmental regulation in South Africa and the institutional arrangements that have been established to implement the regulatory functions.

Particular reference is made to the management of air, waste, emergency incidents, and environmental impact assessments – and the monitoring of compliance with their respective regulatory requirements.

3.1 General legislation for environmental regulation

3.1.1 Legislation & Policy

Constitution of the Republic of South Africa (Act No. 108 of 1996)

All spheres of government in South Africa derive their legislative competence from Schedule 4 and 5 of the Constitution of the Republic of South Africa (Act 108 of 1996). Provincial government, through the office of the Premier, is responsible for implementing all national legislation within the functional areas listed in Schedule 4 and 5 of the Constitution. In addition, provincial government is also responsible for administering all national legislation that is excluded from Schedule 4 and 5 but is assigned to a province in terms of an Act of Parliament.

The functional areas within the schedules are divided into two parts namely, Part A and Part B. Part A refers to those activities which are not considered to be local government matters and Part B lists functional areas which are local government matters.

Section 155 and 156 of the Constitution requires provinces to see to the effective performance of municipalities with respect to functional areas in Part B of Schedule 4 and 5. In terms of compliance monitoring, this requires provincial departments to monitor compliance of municipalities with certain functional areas as well as monitoring compliance of other relevant parties with respect to other functional areas.

With respect to air, air pollution is listed as a local government matter (Schedule 4B).

With respect to waste management, local government is for refuse removal, refuse dumps and solid waste disposal (Schedule 5B).

Municipal Systems Act (Act 32 of 2000)

This Act aims to clarify the executive power of municipalities and in particular, develop the notion of a separation between the roles of 'service authority' and 'service provider'. This lays the basis to enable municipalities to choose the most appropriate service provider from a menu of options, ranging from internal departmental delivery to joint ventures to private sector delivery options.

The Systems Act also rationalises the system of planning into a single five yearly planning cycle, subject to annual monitoring and review, in which IDP's are adopted by Council as their core planning and management instrument.

The Act augments the legal capacity of municipalities to prosecute for contraventions of by-laws. This may provide the legal basis for the development of a compliance monitoring function at the municipal level if seen as appropriate by a particular municipality.

Section 4 of the Act further confirms the right and duty of municipal councils to ensure the provision of municipal services to all residents and communities in a financially and environmentally sustainable manner; and promote a healthy and safe environment in the municipality.

National Environmental Management Act (107 of 1998)

The National Environmental Management Act (NEMA) (Act 107 of 1998) represents the overarching framework for environmental legislation in South Africa. As such it then necessitates media-specific legislation (such as the Air Quality Act) to reflect the principles and approaches it contains.

Critical and most important chapters of NEMA, which can be referred to, if detailed information is required and which are relevant to this monitoring strategy are:

- NEMA principles
- Cooperative Governance
- Environmental Impact Assessment
- Emergency Incidents
- Rectification of Illegal Activities

Environmental Conservation Act (no 73 of 1989)

The Environmental Conservation Act (ECA), Act 73 of 1989 aims to provide for the effective protection and controlled utilisation of the environment. Several sections of this Act have been repealed and replaced by the NEMA. Only sections of the ECA which are of relevance to compliance monitoring and air quality management **and** which have not yet been repealed are discussed.

Part 4 of the ECA, 'Control of Environmental Pollution', has also not yet been repealed by the NEMA. This part comprises two sections, one entitled 'Waste Management' (section 20) and the other dealing with littering (section 19). The waste management section is primarily concerned with the potential contamination of underground water resources by landfill sites and provides that no person may establish or operate a waste disposal site without a permit.

The section on waste management and the various Minimum Requirement guideline documents issued by DWAF in respect of waste handling and disposal are also relevant to air pollution control and air quality management since atmospheric emissions from landfill operations are currently regulated in this context. **The second revision of the Minimum Requirements for Landfills stipulates landfill gas monitoring and management measures required depending on the type and design capacity of the landfill.**

3.1.2 Powers & Functions

NEMA allocates powers and functions for monitoring of regulatory activity between the three spheres of government. These are summarised in Table 1 below.

Table 1: Intergovernmental compliance monitoring functions of NEMA

FUNCTION	NATIONAL	PROVINCIAL	LOCAL
NEMA			
EIA RoDs and EMPs – Chapter 5 of NEMA Assess compliance with the requirements of Environmental Impact Assessment Record of Decisions and Environmental Management Plans in respect of EIAs.	X	X	
Environmental Audit Reports – Regulations in respect of Chapter 5 of NEMA require holder of an environmental authorisation of exemption suspected on contravention to submit an environmental audit report	X	X	
Environmental Management Inspectors - Chapter 7, NEMA (as amended, Amendment Act No. 46 of 2003) EMIs responsible for monitoring and enforcing compliance with relevant laws including NEMA and 'specific environmental management legislation', currently does not include APPA or AQA but is proposed to be extended to include these	X	X	X

FUNCTION	NATIONAL	PROVINCIAL	LOCAL
Emergency Incidents – Chapter 7 (section 30) of NEMA Control of emergency incidents – (a) receive report by responsible person (nature of incident, substance involved, quantity release, possible effects, initial measures taken, causes of incident, measures taken to avoid recurrence) (b) consider measures to be taken and timeframes and ensure compliance, (c) monitor compliance with requirements	X	X	X
Compliance Monitoring of Illegal Activities to be Rectified - National Environmental Management Amendment Act, Act No. 8 of 2004 Monitoring of compliance with conditions of an authorisation issued by the Member of the Executive Committee (MEC), and monitoring compliance with requirements of the MEC for the decommissioning and site rehabilitation for activities which are not granted authorisation	X	X	

3.1.3 Institutional Arrangements

Department of Environmental Affairs & Tourism (DEAT)

DEAT is the lead agency for the management and protection of the environment and has recently created a new structure to deal solely with environmental compliance and monitoring function.

Department of Water Affairs & Forestry (DWAF)

DWAF is the custodian of South Africa's water and forestry resources. It is primarily responsible for the formulation and implementation of policy governing these two sectors. It also has overriding responsibility for water services provided by local government

Provincial Environment Departments

Provincial Environmental Departments (PEDs) represent the national Department of Environmental Affairs and Tourism on a provincial level. They have a more direct active role in environmental management whereas DEAT has a more strategic role.

Broadly the PED's are expected to perform the following functions:

- Enforcing applicable environmental legislation;
- Set provincial standards for environmental management;
- Processing Environmental Impact Assessment applications in respect of the National Environmental Management Act and Environment Conservation Act;
- Monitoring of Record of Decisions;
- Curators of biodiversity and conservation; and

Institutional limitations at the provincial level

A study of the institutional arrangements for waste management at provincial level has identified the following limitations with respect to waste. However, these may also be relevant in other sectors and thus have been included in this general section.

- Some of the provincial environmental departments do not have clear agreed provincial policies, norms, standards and frameworks for waste management and compliance monitoring.
- Chapter 3 of the National Environment Management Act, 1998(Act 107 of 1998) states that all organs of state at all levels of government must act in accordance with the

principles of co-operative governance and must adhere to these principle. In practice there is still very limited communication and co-operative governance between the various provinces on a horizontal and vertical scale which has limited effectiveness of compliance monitoring.

- There is little uniformity in structures and institutional arrangements across the nine provincial environmental departments.
- Although a directorate for compliance monitoring exists at national level, there is no such corresponding directorate or dedicated staff or resources for compliance monitoring within most of the provincial environmental departments.
- There is confusion between the roles and responsibilities of the other provincial and regional departments such as Health, Water Affairs, Minerals and Energy, Agriculture with respect to policy concerning managing the various waste types, compliance monitoring and enforcement.
- In some of the provinces there is no provincial standard in place to deal with some of the waste streams such as health care waste hence there is limited basis for compliance monitoring.
- There is very limited formal communication between provincial departments and the primary sources of information, such as provincial hospitals, and clinics for health care waste, local municipalities, and regional waste disposal facilities.
- There are no functional information systems in most of the provinces that could be used as information sources to aid compliance monitoring.
- The provincial departments have not put in place forums to involve the public and the private sectors in compliance monitoring.

Local Government

The local sphere of government comprises local, district and metropolitan municipalities. The primary role of local government is to ensure that services such as water, electricity, waste and sanitation services are delivered to the communities within their respective boundaries. Local government is also responsible for a variety of other municipal functions, some of which may be shared with provincial government. These typically include municipal planning, building regulations, municipal public transport, local tourism, the regulation of harbours and airports, fire-fighting services, amongst others.

Details of the current institutional arrangements within MCLM for dealing with the specific functions under discussion in this report (air quality, waste management, EIAs and so on) will be dealt with in more detail in the remaining part of this report.

3.2 Air Quality

3.2.1 Legislation & Policy

In addition to NEMA and ECA, several pieces of national legislation are of relevance in terms of the control of atmospheric emissions and/or the management of air quality. These include the following:

- Atmospheric Pollution Prevention Act (APPA), Act 45 of 1965
- National Environmental Management: Air Quality Act (AQA), Act 39 of 2004
- Mineral and Petroleum Resources Development Act, Act 28 of 2002
- National Health Act 61 of 2003
- National Building Regulations and Building Standards Act 103 of 1977

This document is not intended to substantiate on the applicability of each of the above pieces of legislation to the monitoring task but just to highlight to the reader. What is important is identification of power in terms of the legal mandate.

3.2.2 Powers and Functions

The following tables (2 and 3) outline the allocation of powers and functions between the three spheres of government under the APPA and the AQA.



Table 2: Powers and functions allocated to national and local authorities by the APPA

Functions pertaining to compliance monitoring are highlighted

National	Local
Designation of controlled areas (Minister)	Promulgate smoke control regulations (by laws) – may include prohibitions on smoke emissions which are darker in colour or density than that stipulated in regulations, prohibitions on installation on premises which do not comply, prohibitions on the use of solid-fuel in dwellings which do not comply with specifications (etc.)
Review applications and issue registration certificates and provisional registration certificates for Scheduled Processes	Promulgate various by-laws including: prohibition of atmospheric pollution generation in the form of burning and/or offensive odours.
Monitor compliance with provisional registration certificate and registration certificate specifications ^a	Monitor and enforce compliance with local smoke control laws and other by laws
Issue regulations for fuel burning appliances, dust control	Prohibit the manufacture or import of fuel burning appliances for use in dwellings which do not comply with CAPCO regulations. Monitor compliance of fuel burning appliances with regulations.
Designation of dust control areas	Prohibit the installation of fuel burning appliances unless it is capable of being operated continuously without emitting smoke darker than that permitted (Monitor smoke from premises within designated smoke control areas)
Enforcement of best practicable means of dust control for any industrial processes in a dust control area which is likely to cause a nuisance to people, and deposits exceeding 20 000 cubic tons	Evaluation of the siting of fuel burning appliances and plans for chimney construction
Monitor compliance with dust control regulations	Several municipalities in larger metropolitan areas scheduled (by notice under APPA) to assess compliance of diesel-driven vehicles in terms of the opacity of their emissions

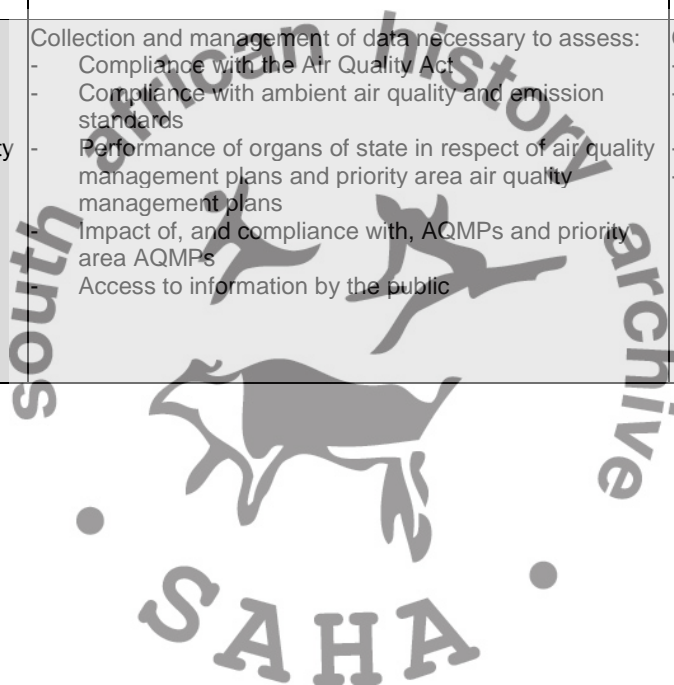
^a Chief Air Pollution Control Officer (CAPCO) and Inspectors may without previous notice enter any premises where a scheduled process is or is suspected to be carried on and inspect any process in which any noxious or offensive gas is used or produced and any apparatus for condensing any such gas or otherwise preventing the discharge thereof into the atmosphere.

Table 3: Powers and functions allocated to national, provincial and local authorities by the AQA.

Powers and functions pertaining to compliance monitoring are highlighted

National	Provincial	Local
Establish & review national framework	Air quality monitoring	Air quality monitoring
Identify pollutants posing threat	Monitor municipality performance	Emission monitoring
Establish national air quality standards (for pollutants posing threat)	Identify pollutants posing threat	Identify pollutants posing threat
Establish national emission standards (for pollutants posing threats / listed activities / controlled emitters)	Establish provincial air quality standards (pollutants posing threat)	Establish local emission standards (pollutants posing threat)
Appoint national AQ officer	Establish provincial emission standards (priority pollutants / listed activities / controlled emitters)	Appoint AQ officer
Draft of AQM plan (within EMP)	Appoint provincial AQ officer	AQM plan (IDP)
Declare priority areas	AQM plan (EMP)	Report on implementation of AQMP
Prepare priority area AQMPs	Report on implementation of AQMP	Collaborate with national & local (priority areas)
Prescribe regulations for implementing & enforcing Priority Area AQMPs (funding arrangements, measures to ensure compliance, penalties, etc.)	Declare priority areas	Request & review Atmospheric impact reports (air quality officer)
Report on implementation of AQMP	Prepare priority areas AQMP	Establish recognition programmes (air quality officer)
List activities	Prescribe regulations for implementing & enforcing Priority Area AQMPs (funding arrangements, measures to ensure compliance, penalties, etc.)	Perform emission licensing authority functions (metros, DMs)
Declare controlled emitters	List activities	
Declare controlled fuels	Declare controlled emitters	
Establish standards for controlled fuels	Declare controlled fuels	
List priority pollutants (requiring PPPs)	Establish standards for controlled fuels	
Specify categories requiring to submit PPPs	List priority pollutants (requiring PPPs)	
Set requirements for Pollution Prevention Plans (PPP)	Specify categories requiring to submit PPPs	
Request & review Atmospheric impact reports (air quality officer)	Set requirements for PPP	
Establish recognition programmes (air quality officer)	Request & review Atmospheric impact reports (air quality officer)	
Set regulations for dust, odour, noise	Establish recognition programmes (air quality officer)	
Review rehabilitation plans for closing mines	Perform emission licensing authority functions (if Metro or DM delegates its functions or cannot fulfil its functions, or municipality applying for license)	

National	Provincial	Local
Investigate & regulate transboundary pollution		
Investigate potential international agreement contraventions		
Regulations on: EMCAs, open fires, incineration, ODSs, COPs, labelling, trading schemes, powers & duties of air quality officers, appeal process, monitoring, emission reduction (etc.)		
Review applications for exemption from section of Act		
Collection and management of data necessary to assess: <ul style="list-style-type: none"> - Compliance with the Air Quality Act - Compliance with ambient air quality and emission standards - Performance of organs of state in respect of air quality management plans and priority area air quality management plans - Impact of, and compliance with, AQMPs and priority area AQMPs - Compliance with SA's obligations in terms of international agreements - Access to information by the public 	Collection and management of data necessary to assess: <ul style="list-style-type: none"> - Compliance with the Air Quality Act - Compliance with ambient air quality and emission standards - Performance of organs of state in respect of air quality management plans and priority area air quality management plans - Impact of, and compliance with, AQMPs and priority area AQMPs - Access to information by the public 	Collection and management of data necessary to assess: <ul style="list-style-type: none"> - Compliance with the Air Quality Act - Compliance with ambient air quality and emission standards - Impact of AQMPs - Access to information by the public



3.2.3 Specific Institutional Arrangements

Provincial Government

Environmental Impact Assessments

Although air quality management is a relatively new function for many provincial environmental departments, compliance monitoring by such departments in respect of legislation pertaining to EIAs is a well established function in certain provinces. Compliance monitoring functions undertaken by provincial environmental authorities include the following:

- Monitor compliance with provisions requiring activities to apply for authorisation prior to commencement in terms of the ECA and NEMA
- Monitor compliance with authorisation and exemption conditions
- Monitor compliance with directives issued in terms of section 28 of NEMA (duty of care)

Although systems are in place for EIA applications and the review of EIAs, systems for the monitoring of compliance with authorisations and exemption conditions is not as well established. This is largely due to the lack of capacity, the large volumes of past EIAs which would require monitoring, and the absence of focus on this function.

Local Government

Local government was given the mandate for the regulation of air pollution by the Constitution, with its functions in this regard being delineated within the AQA.

According to Section 156(1) of the Constitution a municipality has the executive authority in respect of, and has the right to administer the local government matters listed in, Part B of Schedule 4 of the constitution that deals with air pollution. Section 156(2) makes provision for a municipality to make and administer by-laws for the effective administration of the matters which it has the right to administer so long as such by-laws do not conflict with national or provincial legislation.

3.3 Waste Management SAHA

This section outlines some of the important waste management policies and their implications for compliance monitoring.

3.3.1 Legislation and Policy

In addition to the overarching framework for governance presented in the Constitution, there are several pieces of national legislation and policy that provides the framework within which waste management is currently carried out in South Africa. These are just been referred to in this report for the reader to note. Detailed information on their implications for compliance monitoring can be obtained by reading the Acts.

Table 4: South African Legislation with Waste Management Implications

Waste Management Legislation
Dumping at Sea Control Act (Act 73 of 1980)
Marine Pollution (Control and Civil Liability) Act (Act 6 of 1981) and the Marine Pollution (Prevention of Pollution from Ships) Act (Act 2 of 1986)
Environmental Conservation Act (Act 73 of 1989)
National Environmental Management Act (Act 107 of 1998)
National Environmental Management Amendment Act, 2004 (Act 8 of 2004)
Minimum Requirements for Disposal of Waste by Landfill

Advertising on Roads and Ribbon Development Act (Act 21 of 1940)

Atmospheric Pollution Prevention Act (Act 45 of 1965)

Hazardous Substances Act 15 of 1973

Health Act 63 of 1977

National Road Traffic Act (Act 93 of 1996)

National Water Act (Act 36 of 1998)

3.3.2 Powers and Functions

For the sake of this report, focus will be limited to provincial and local government only.

Table 5: Current powers and functions for waste management within government

Areas with compliance monitoring implications highlighted

Provincial Government	Legislative Instrument	Responsibility
Provincial Environmental Departments	National Waste Management Strategy	Prepare Provincial Hazardous Waste Management Plans.
	National Waste Management Strategy	Approve local government general waste management plans
	ECA NEMA	Review of applications for authorization in terms of activities that have a detrimental effect on the environment (EIA's) and monitoring the implementation of Record of Decisions.

Local Government	Legislative Instrument	Responsibility
District Municipality	National Waste Management Strategy	Prepare District 1st Generation Integrated Waste Management Plans and integrating these IWMPs into the Integrated Development Plans.
	Municipal Structures Amendment Act Amendment of section 84 of Act 117 of 1998	Solid waste disposal sites (Regional), in so far as it relates to— (i) the determination of a waste disposal strategy; (ii) the regulation of waste disposal; (iii) the establishment, operation and control of waste disposal sites, bulk waste transfer facilities and waste disposal facilities for more than one local municipality in the district.
Local Municipality		Prepare 1st Generation Integrated Waste Management Plans. Integration of the IWMPs into the Integrated Development Plans for the local municipality. Cleansing/Refuse removal. Establish, operate and control of waste disposal sites, bulk waste transfer facilities and waste disposal facilities.
	Municipal Structures Amendment Act	Set waste disposal service level agreements.

Local Government	Legislative Instrument	Responsibility
	Amendment of section 84 of Act 117 of 1998	
	Health Act (Act 63 of 1977) Section 20	Take measures to maintain its district in a clean and healthy condition and to prevent any accumulation of refuse.
	Constitution (Act 107 of 1996).	Formulate by-laws that include service level agreements for waste collection.

3.3.3 Specific Institutional Arrangements

Local Government

In terms of waste management, local government functions are clearly outlined in the table above. The Minimum Requirements for Waste Disposal by Landfill (DWAF, 1998) furthermore specify the following requirements for local authorities:

- Performing an annual survey of all waste management facilities within their boundaries;
- Ensuring that waste management companies comply with waste permit conditions;
- Co-ordination of waste management activities;
- Receiving and evaluation of monitoring reports; and
- Planning and co-ordination of future waste disposal, providing adequate waste disposal facilities, well in time for the application of waste management permits.

In the more rural municipalities compliance monitoring has typically been carried out by **environmental health practitioners** who informally monitor waste disposal sites as potential human health risks. As waste management becomes a priority, waste management departments are becoming increasingly resourced in order to carry out additional functions such as monitoring. In addition, environmental management units are being formed with the enactment of NEMA and municipalities are becoming increasingly accountable for environmental management including management of waste.

3.4 Emergency Incidents

3.4.1 Legislation & Policy

Section 30 of NEMA provides for the control of emergency incidents. The section defines an incident as an unexpected sudden occurrence, including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the environment, whether immediate or delayed.

A responsible person includes any person who:

- is responsible for the incident
- owns any hazardous substance involved in the incident; or
- was in control of any hazardous substance involved in the incident at the time of the incident

Relevant authority means:

- A municipality with jurisdiction over the area in which the incident occurs

- a provincial head of department or any other provincial official designated for that purpose by the MEC in a province in which an incident occurs
- the Director General of Environmental Affairs and Tourism
- any other Director General of a national department

In essence the section provides that a municipality with jurisdiction over the area in which the incident occurs is tasked with the responsibility of taking the necessary steps to deal with the emergency incident. If the municipality does not take the necessary steps, then only should the provincial HOD or his designate step in. If the province fails to take the necessary steps, then only can the DG of DEAT step in and if he fails to take the necessary steps then only can another DG step in.

The Act does not expressly say whether the municipality needs to have taken the required steps within a specified time period. Figure 2 below illustrates the roles and responsibilities for emergency incidents as outlined by NEMA and which are discussed in more detail below.

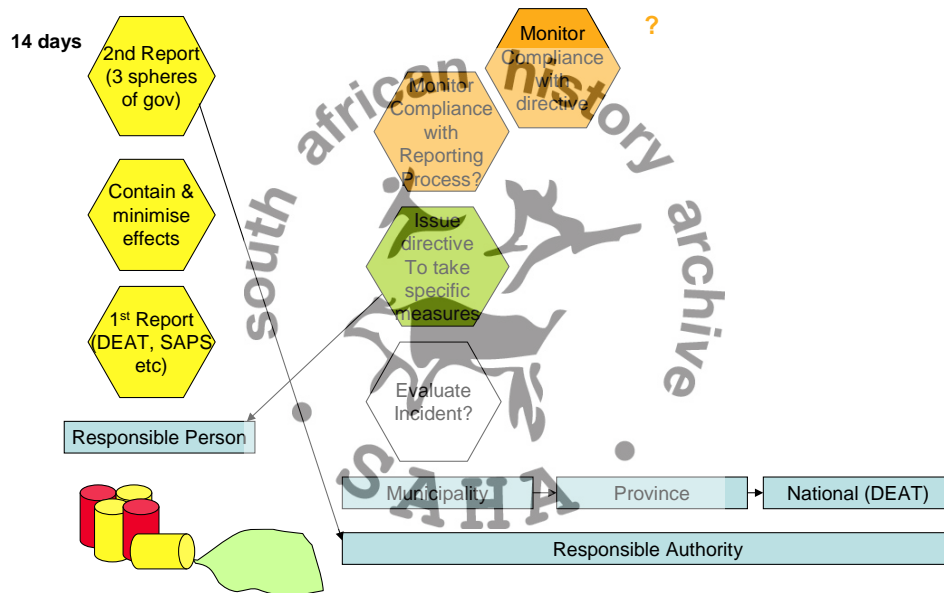


Figure 2: Responsibilities for Emergency incidents under s 30 of NEMA

Responsible Person

The responsible person, as defined above, must forthwith report through the most effective means reasonably available (this is vague) on: the nature of the incident, the risks it poses and the toxicity of substances released by the incident as well as any steps that should be taken to minimise the effects of the incident on the public health and environment.

This should be reported to:

- the DG of DEAT,
- the SAPS and the relevant fire protection services,
- the relevant provincial HoD or municipality (this is a problem – if the municipality is tasked with being the relevant authority – incident should be reported to the municipality – may cause delays if the matter is reported to the MEC and then has to be communicated by the MEC to the municipality)

-
- all persons whose health may be affected by the incident

The responsible person should take all reasonable measures to contain and minimise the effects of the incident.

The Act then places a second reporting responsibility on the responsible person, requiring him, within 14 days of the incident to report it to all 3 spheres of government, i.e. the DG of DEAT, the MEC of environmental affairs and the municipality having jurisdiction in the area of the incident. The purpose of this second report is to enable government to make an evaluation of the incident. As such, the responsible person's report should include the nature of the incident, the substances involved, measures taken to minimise impact, cause of incident and measures taken and to be taken to avoid recurrence of such incident.

Responsible Authority

The Act does not expressly say that the relevant authority must make an evaluation of an incident before it issues a directive.

The Act indicates that a relevant authority may (optional) direct a responsible person to undertake specific measures within a specific time to fulfil the requirements to minimise the effects of the incident and to report the matter as required by legislation.

As such the directive will specify 2 things:

- what the responsible person needs to do
- the time by which it needs to be done

Should the directive be issued verbally by the responsible authority to the responsible person, it should then be confirmed in writing within 7 days.

The Act then goes on to provide that should the responsible person not comply with this directive, or if there is uncertainty as to who the responsible person is, or if there is an immediate risk of danger, then the relevant authority MAY take measures to minimise the effects of the danger and claim re-imburement from the responsible person.

Note: The Act does not specify who will monitor the compliance. For example, if the relevant authority is the municipality, is the municipality then required to monitor compliance. This appears to make most sense as it would probably not be prudent to expect compliance of a directive issued by a municipality by national government. There is no express mention of penalty for non-compliance with a directive issued by the responsible authority.

4 MCLM Environmental Audit Strategy

4.1.1 Background

Previous sections of this report clearly indicate that MCLM has a major role to play in order to make sure that its Constitutional and other environmental legislation obligations to protect the environment, natural resources and human health are adhered to.

Currently the municipality has several activities within its boundary which can negatively impact on its inhabitants and the environment, which necessitate strict compliance monitoring approach. It is important to note from previous sections that though the provincial and national environmental departments are mandated to monitor certain activities, there are significant backlogs especially in the compliance monitoring (CM) functions. This implies MCLM has to wait for these institutions to bring their houses in order. Timeframes for these institutions to effectively implement the CM functions are not defined. While waiting for this to happen, MCLM may find itself having to inherit severe consequences of non-compliance by establishments within its jurisdiction.

Example from Gauteng: Province issues over 1500 RoDs or comments on applications per year. Of these, approximately 1300 come from the “Environmental Planning & Impact Assessment Branch” and 200 come from the “Integrated Waste Management and Pollution Abatement Branch”. In addition, the department also issues “mining comments” and section 24G authorisations (for illegal activities). Very little compliance monitoring of the adherence to RoDs is carried out by the Province at the moment. Activity tends to be concentrated on inspecting sites following complaints that the environment of a site is being damaged by a developer – or following up on whether a developer is complying with the terms of a formal ‘non-compliance response’ (such as a directive) issued by the department. Although compliance monitoring has been centralised into a separate unit within the department, some activity remains the responsibility of line functions – and so there is overlap in responsibility which leads to coordination and delivery problems.

In addition to the CM of RoDs, MCLM is continually receiving complaints from the public regarding odour, illegal waste dumping, illegal developments, non-compliance and many more, a percentage of which to a certain extent even triggers referral to other related institutions or issuing of directives. It has been established that most referrals and internal directives are not followed up and hence giving regulated community a good platform to continue with illegal activities.

It is on these grounds that in line with the concept of co-operative governance as enshrined in the Constitution, MCLM has to intervene for the purpose of safeguarding wellbeing of its citizens and ensure sustainable environmental management.

4.1.2 Resource Requirements

Currently the municipality has several approvals received from the provincial authority. The table below gives a summary of authorisations at the municipality's disposal for the year 2005 and 2006. Records from 1998 to 2004 will be updated to get credible data.

Table 6: MCLM Records of Decisions for the year 2005 to 2006

YEAR	TYPE OF ACTIVITIES					
	Townships	Public Areas	Business/ Industry	Municipality Infrastructure	Telecomm	Subdivisions
Number of approvals for the year 2005	22	3	16	6	2	1
Number of approvals for the year 2006	14	1	12	6	2	1

In addition to the above, the Directorate is receiving an average of ten complaints per month that need to be attended to within 24 hours as per MCLM protocol. As indicated earlier, it has been established that in most cases, non-compliers do not respond to directives (verbal and written).

Though the regulated community is aware that there is incapacity, MCLM need to effectively monitor with minimum resources currently at its disposal. From previous monitoring activities, it has been established that a site-specific inspection programme which outlines the objectives and expected activities required to achieve objectives must consider the timeframes envisaged for undertaking such activities. Inspection programmes vary from simple for routine inspection, to highly involved and complex plans for Multimedia/ Multi-Agency Inspections and are dependant on the complexity of the site and the inspection objectives. The following table gives an idea on time requirements for undertaking a site inspection programme.

Table 7: Timeframes for a site inspection programme

Site Inspection Programme			
Inspection Tasks	Responsibility	Time Duration	Completion of the task
Holding an opening meeting with the concerned personnel in the facility and informing them of the needed personnel to accompany the inspection team during the inspection	Inspection Team	Approximately 15min.	The team leader chairs the meeting and request copies of required documents. He/she also requests access to locations for taking samples. Minutes are kept and attendance register is circulated.
Field inspection of the production processes, pollution sources, identification of samples, measurements points	Team Leader Inspection team	Approximately (0.5-2) hours depending on the size of the facility	During the inspection the Team Leader asks the interview questions and the inspector fills in the inspection checklist

and the most suitable timing for taking samples.			for the production processes
Field inspection of the facility utilities.	Inspector	Approximately 1 to 24hours	During the inspection, the inspector fills in the inspection checklist for the utilities.
Taking samples and undertaking monitoring	Inspector/ Specialist	Approximately 2 to 3 hours depending on the number of samples and measurements	The Team Leader, inspector and the specialist decides on the location and timing for sampling and measurement to ensure samples representative of the operations conditions.
Internal caucus meeting, finalising logbook, noting documents and samples taken. Note the preliminary findings and recommended course of action.	Team members	Approximately 15 minutes.	Before the closing meeting with the facility, the inspection team meets to compile and discuss their observations
Closing meeting collecting last outstanding documents, feedback to facility or how feedback will be communicated	Team members	Approximately 30 minutes.	Minutes of the meeting are kept as part of the inspection record and attendance register is circulated
Laboratory analyses and data interpretation	EMI/ Specialist	3 Days to 2 weeks	Follow-up on the procedures of taking the samples and the data scribed on the samples.

The above table shows that ideally, taking into account the dominant types of developments within MCLM, inspection of one entity can take an average of 8hours, excluding analysis of samples (when required). In the case of MCLM most RoDs are for township developments, medium sized businesses and own infrastructure. **For now the mining database still has to be verified before inclusion in the plan.** The eight hours mentioned above also include preparation of feedback report to the entity, compilation of the inspection checklist and report to management. Recent complaints received by DIEM gave an idea of priority areas that need monitoring. Most complaints are related to township developments approved by MCLM and GDACE. There is a plethora of non-compliance in the sector that qualifies it to be targeted first. The table below gives an ideal compliance monitoring plan taking into account the available resources.

Table 8: Compliance Audit Plan

Month	Types and number of activities earmarked for compliance monitoring of records of decision					
	Townships	Public Areas	Business	Infrastructure	Telecommunication structures	Subdivisions
July 2008	1		1	1		
August 2008	1		1	1		
September 2008	1		1	1		
October 2008	1		1	1		
November 2008	1		1	1		
December 2008	1		1	1		
January 2009	2		1			
February 2009	2		1			
March 2009	2		1			
April 2009	2		1			
May 2009	2		1			
June 2009	2		1			

With reference to the table above, the Directorate currently has RoDs as point of reference for special conditions to be monitored. The task is expected to be undertaken by two officers (Specialist and Principal Officer). It is also important to note that the plan also takes into account other line function activities undertaken by the officers and more specifically complaints, which are not included in this audit plan.

The most important tool for undertaking environmental audits is a checklist. For this audit strategy one standard checklist will be utilised specifically for compliance with RoDs. This is attached as Appendix 1. In some instances, where there are for example guidelines that need to be complied with for certain activities, there will be a need for a tailor made audit checklist. Example of this for a landfill is attached under appendix 2.

In addition to the above, there will be a need to develop templates for responses (referral, pre-directives, directives, reporting, etc).

APPENDIX 1

Generic Compliance Monitoring Checklist

COMPLIANCE MONITORING: Project Name

Reference:	
Inspection Report No.	

Authorisation/ROD holder	
Number/Types of RODs	<ul style="list-style-type: none"> • Change of land use for • Construction or upgrading of • Storage of Hazardous material • etc

Project Manager: Name of MCLM Officer.

Accompanied by: Name of additional MCLM Officer

Monitoring Period: (refer to financial year)

Date of inspection	
---------------------------	--

1. OBJECTIVE

e.g Monitoring of the activity for compliance with the conditions of the RoD.

2. COMPLIANCE INSPECTION

NO	ROD /AUTHORISATION CONDITION/ISSUE	NON COMPLIANT	PARTIAL COMPLIANT	COMPLIANT	COMMENTS
PRE-CONSTRUCTION PHASE					

1	The applicant must submit an EMP for evaluation and approval by the Provincial Department before commencement of construction activities.				
2	The applicant must submit a signed copy of the service level agreements with the local municipality before commencement of construction activities.				
3	The applicant must inform the Provincial Department of its intention to commence construction activities on the site 30 days before commencing with the activity.				

CONSTRUCTION PHASE

1	No development must take place within the 55meter buffer zone between the edge of the wetland and the nearest house.				
2	No workers must sleep on the site.				
3	No inert waste must be disposed of on the site throughout the construction period....				

3. Summary of the findings

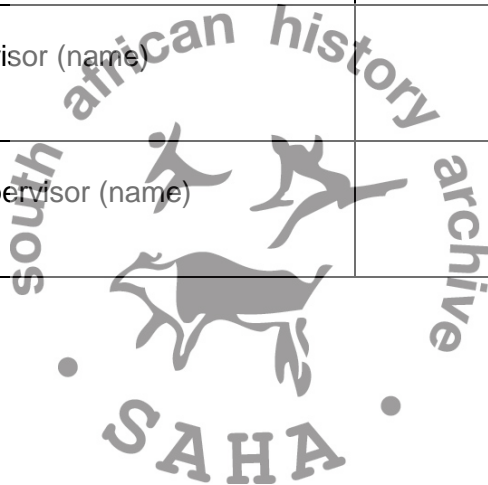
This summary should reflect on pressing or disturbing matters resulting from an assessment conducted above. You can also attach photographs of certain of your findings in this section.

4. Recommendations

In this section (recommendations) you can suggest which corrective measure can be appropriate owing to the nature and extent of transgression(s) identified in the assessment above, e.g. compliance notice , directive, instruction to clean up, interdict etc.

<p>5. Challenges (FOR OFFICE USE ONLY) , (e.g RoD conditions not clear, not allowed to enter premises, etc):</p> <ul style="list-style-type: none"> • • • 		
<p>6. Follow up required</p> <p>(list issues requiring follow up & time frames)</p>	<p>YES</p>	<p>NO</p>
<p>6. Date of next inspection:</p>		

Report reviewed by	Date	Signature
1. First level supervisor (name)		
2. Second level supervisor (name)		





APPENDIX 2

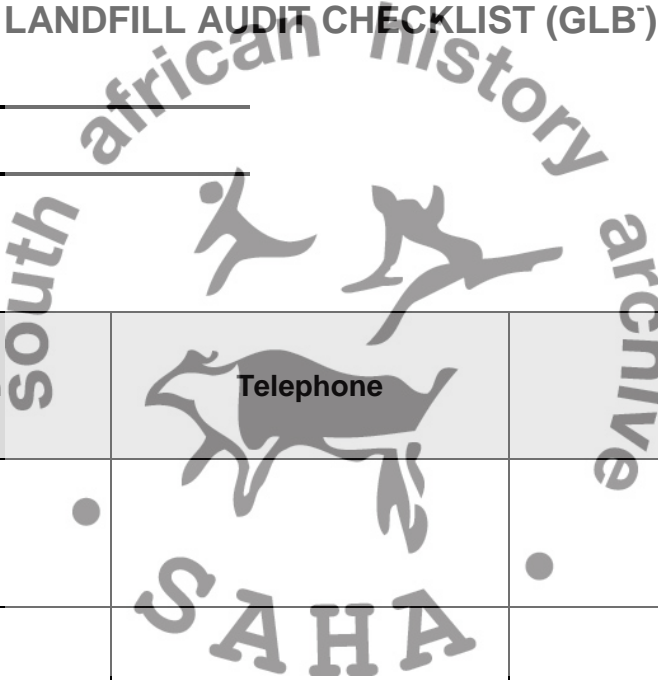
Activity specific inspection checklist

LANDFILL AUDIT CHECKLIST (GLB)

Name of landfill: _____

Date of audit: _____

Persons present during the audit:



Name	Organisation	Telephone	Fax	Signature

Green – heading

Blue – To be noted as a comment but also a Requirement

FC = Full Compliance

PC = Partial Compliance

NC = Non-Compliance

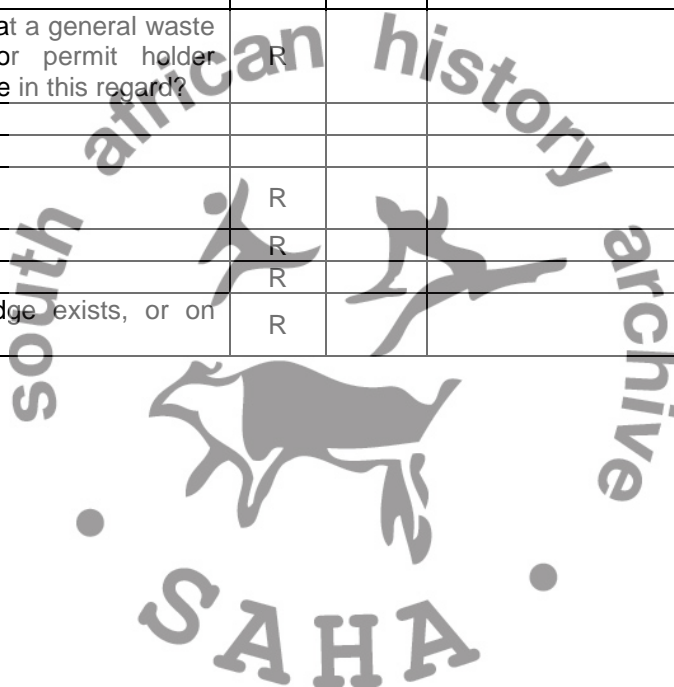
1. Access and controls

No.	Minimum Requirement	GLB	FC PC NC	Comments
1.1	Signs			
1.1.1	Signposting (MR)			
a.	Are signs in the appropriate official languages erected in the vicinity of the landfill, indicating the route and distance to the landfill from the nearest main roads? Do these signs conform to the requirements of the Road Ordinance?	R R		
b.	Are suitable signs erected on site, to direct vehicle drivers appropriately and to control speed?	R		
c.	Is a general notice board erected at the site entrance? Does the general notice board state the following: <ul style="list-style-type: none">– appropriate official languages– name, address and telephone number of the permit holder and responsible person– hours of operation– emergency number– class of the landfill– type of waste that can and cannot be accepted– that the disposal of non-acceptable waste is illegal and can lead to prosecution?	R		
1.2	Road access			

No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
1.2. 1	All weather roads (MR)	R		
a.	Is road access to the site maintained at all times in a manner suitable for vehicles normally expected to utilise the facility?	R		
b.	Are all roads surfaced and maintained (including grading) as to ensure that waste can reach the working face with minimum of inconvenience in all weather conditions?	R		
c.	Is two-way traffic possible in all weather conditions?	R		
d.	Are unsurfaced roads and ungrassed or unpaved areas watered regularly to restrict dust to levels that do not pose a nuisance to workers?	R		
e.	Is mud prevented from being tracked onto public roads?	R		
1.3	Access control			
1.3. 1	Fencing (MR)	R		
a.	Is the site adequately fenced and / or secured?	R		
b.	Is the fence 1.8m with an overhang?	R		
c.	Where normal fencing is removed, or is not practicable because of continued theft despite security measures, barbed wire fences, earth berms and / or shallow trenches must be used to prevent vehicle access	R		
1.3. 2	Control of vehicle and pedestrian access (MR)	R		
a.	Does the site have a single controlled entrance, to prevent the unauthorised entry and illegal dumping of waste on the site?	R		
b.	Does the site entrance comprise a lockable gate?	R		

No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
	Is the entrance gate manned during hours of operation and locked outside the hours of operation?			
c.	Are site boundaries clearly demarcated?	R		
	Are suitable measures taken to prevent unauthorised entry?			
d.	Is squatting on the site discouraged?	R		
1.4	Security			
1.4.1	Site security (MR)	R		
a.	In addition to access control, is suitable security provided to protect any facilities and plant on site?	R		
b.	Is additional security available after operating hours where appropriate?	R		
1.5	Waste acceptance			
1.5.1	Waste acceptance procedure (MR)	R		
a.	Prior to acceptance, is the incoming waste inspected by suitably qualified staff to confirm that it is general waste?	R		
b.	Prior to acceptance, does the transporter confirm that the incoming waste is general waste?	R		
c.	If there is any doubt if industrial waste is general waste, it must be considered as potentially hazardous until proven otherwise (see MR for the handling, classification and disposal of hazardous waste)	R		
d.	Does the operator at the working face ensure that no hazardous waste (e.g. hazardous liquids, sludge, solids or even sealed drums) are disposed of?	R		
e.	In the event of hazardous waste being intercepted, what is the procedure followed? NOTE: It must be diverted to a hazardous waste landfill)	R		

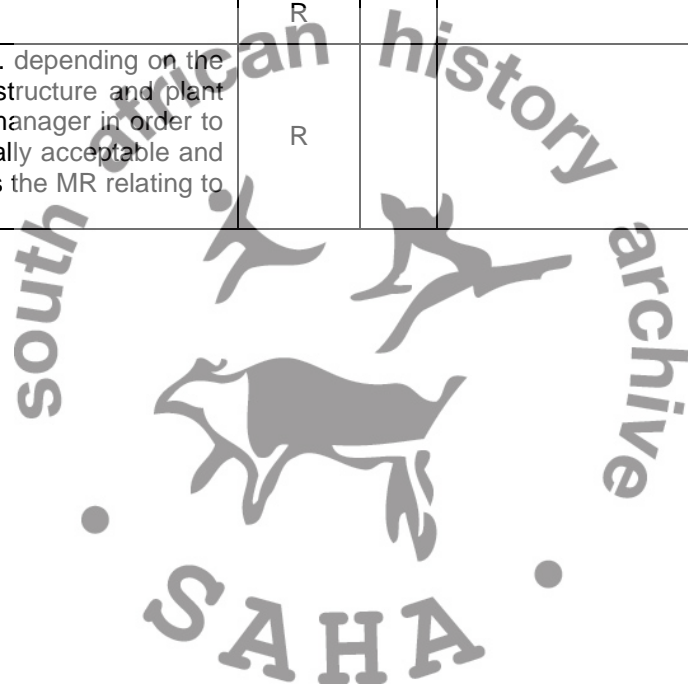
No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
f.	In the event of hazardous waste being intercepted at a general waste landfill site, what is done? NOTE: The source, vehicle registration and a description of the waste must be reported immediately to the Department	R		
g.	In the event that medical wastes are intercepted at a general waste landfill site, does the responsible person or permit holder immediately contact the Department for a directive in this regard?	R		
1.6	Tariffs			
1.6.1	Collection of waste disposal tariffs (MR)	R		
a.	Are waste disposal tariffs levied and collected?	R		
b.	Are tariffs displayed on the notice board?	R		
c.	Are tariffs based on mass where a weighbridge exists, or on estimated volumes?	R		



2. Resources

No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
2.1	Infrastructure			
2.1.1	Is there sufficient infrastructure to ensure that the landfill operation is environmentally acceptable and conforms to both the permit conditions as well as the MR relating to operation?	R		
2.1.2	Does the site have services such as water, sewerage, electricity, telephones, weighbridges, site offices and plant shelters?	R		
2.1.3	Weighbridge (MR)	R		
2.1.4	Site office (MR)	R		
2.2	Plant and equipment			
2.2.1	Adequate plant and equipment (MR)	R		
a.	Are there sufficient plant and equipment and back-up to ensure that the landfill operation is environmentally acceptable and conforms to both the permit conditions as well as the MR relating to operation?	R		
b.	Are there a combination of purpose-built landfill compactors, bulldozers, front-end loaders and trucks to transport cover material?	R		
c.	Is the plant and equipment maintained in good order, so as not to cause nuisances such as noise and air pollution?	R		
2.3	Staff			
2.3.1	Responsible person (MR)	R		
a.	Is the operation of the site carried out under the direction of a landfill manager with a post-matric or tertiary qualification?	R		
b.	Does the landfill manager ensure that the MR for the operation of	R		

No.	Minimum Requirement	GLB	FC PC NC	Comments
	the site is applied to the degree commensurate with its class and to the satisfaction of the Department?			
2.3. 2	Sufficient qualified staff (MR)	R		
a.	Is there sufficient qualified staff and back-up (i.e. depending on the size and type of operation as well as the infrastructure and plant and equipment involved) to support the landfill manager in order to ensure that the landfill operation is environmentally acceptable and conforms to both the permit conditions as well as the MR relating to operation?	R		



3. Operation

No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
3.1	5 Operating Plan & Response Action Plan			
3.1.1	Operating Plan (MR)	R		
a.	<p>Does the site have an Operating Plan?</p> <p>Does the Operating Plan include everything pertaining to the site's operation? For example:</p> <ul style="list-style-type: none"> i. Excavation sequence ii. Projected / progressive development of the landfill with time (i.e. phasing of operations) (note - design included here to a certain extent) iii. Daily cell construction iv. Provision of wet weather cells v. Site access vi. Drainage vii. Operation monitoring procedures, including the role of the Monitoring Committee viii. A plan of mitigatory actions in response to problems detected by monitoring 	R		
3.1.2	Response Action Plan (MR)			
a.	<p>Does the site have a Response Action Plan as part of the Operating Plan?</p> <p>Does the Response Action Plan:</p> <ul style="list-style-type: none"> a. Detail the procedures to be followed in case of failure in the design or operation; 	F		

No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
	b. Include an emergency evacuation plan?			
3.2	Site development and cells			
3.2.1	Two week's cell capacity (MR)	R		
a	Is there sufficient cell capacity on site to accommodate at least two week's waste?	R		
3.2.2	Is the construction of cells always done in accordance with the original design parameters and the Operating Plan (i.e. the general layout must be in accordance with the Operating Plan, including the Development Plan)?	R		
3.2.3	Is waste deposited at the bottom of the working face and worked up a 1 in 3 slope (i.e. the 'Ramp Method')?	R		
3.2.4	Is cover material deposited and spread on top of the cell during the day and extended to cover the working face at the end of the day?	R		
3.2.5	Is the working face kept as small as possible for control and covering purposes, as dictated / determined by the manoeuvring requirements of the vehicles depositing waste, in order to be wide enough to avoid traffic congestion?	R		
3.3	Site development and trenches Note: trenches are usually used at GCB & GSB sites			
3.3.1	Two week's trench capacity (MR)	R		
a.	Is there always sufficient trench capacity on site to accommodate at least two weeks waste?	R		
b.	Are trenches excavated on an ongoing basis during the operation?	R		
c.	Is the excavation of trenches always done in accordance with the original design parameters and the Operating Plan (i.e. the general layout of the trenches must be in accordance with the Operating Plan, including the Development Plan)?	R		
3.3.2	Protection of unsafe excavations (MR)	R		
a.	Are trenches always suitably fenced or protected to ensure that no persons accidentally fall into the excavation?	R		

No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
b.	Is off-loading into trenches such that no persons or vehicles accidentally fall into the excavation?	R		
c.	Is waste deposited into the trench, spread and compacted as much as possible, until it reaches a depth of between 0.5m and 1.0m?	R		
d.	Is all waste covered daily with spoil from the excavation?			
3.4	Principles of sanitary landfilling			
3.4.1	Compaction of waste (MR)	R		
a.	Is all waste spread in thin layers and compacted by a purpose-built landfill compactor?	R		
3.4.2	Daily cover (MR)	R		
a.	Is waste fully covered at the end of each day's operation, unless otherwise agreed with I&APs and the Department?	R		
b.	Is the daily cover sufficient to isolate the waste from the environment? Is a minimum thickness equivalent to the effective covering of 150mm of compacted soil applied? Is the thickness of cover increased in the case of poor quality cover?	R		
c.	If an area is to be left for an extended period, but ultimately to be covered again with waste, the compacted thickness of this intermediate cover must be increased to 300 mm (this is not as thick as final cover, but affords the additional protection required in longer term)	R		
d.	Is soil or builders rubble used for cover? If not, has the material that is being used for cover (e.g. ash, tailing etc.) been approved by the Department?	R		
e.	Are suitable resources made available to ensure that the daily	R		

No.	Minimum Requirement	GLB	FC PC NC	Comments
	cover requirements can be achieved?			
3.4.3	Three day's stockpile of cover (MR)			
a.	Is a strategic stockpile of cover, enough for at least three days, maintained close to the working face for use in emergencies?	R		
3.5	Excavation for cover			
3.5.1	Is the separation between the floor of the excavation and the wet season high elevation of the ground water maintained, as specified in the design? NOTE: This is necessary to ensure that an adequate separation between the future waste body and the ground water will be maintained, should the excavation be used for waste disposal in future.	R		
3.5.2	Are all excavations properly drained to avoid ponding of accumulated surface water, especially near the waste body? Where the base of an excavation forms the base of the landfill, is it sloped to direct leachate to a control point?	R		
3.6	Wet weather cell			
3.6.1	One week's wet weather cell capacity (MR)	R		
a.	Is an easily accessible wet weather cell constructed close to the site entrance or close to an all weather road, for use under abnormally wet conditions?	R		
b.	Does the wet weather cell have the capacity to accommodate one week's waste?	R		
c.	Is the wet weather cell constructed in the same manner as the standard cell, but with a well drained gravel type base in order to ensure vehicle access in wet weather?	R		
d.	Is the wet weather cell operated in the same manner as the standard cell as far as possible?	R		

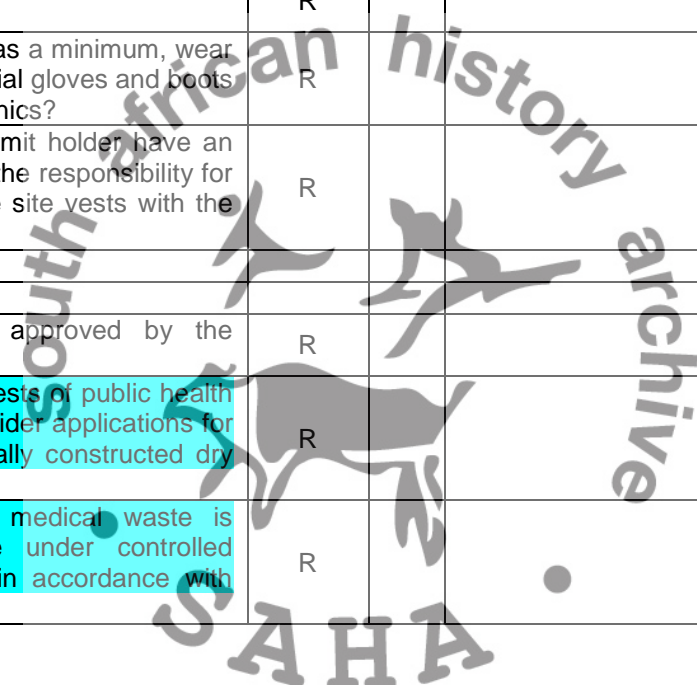
No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
3.7	Putrescible waste			
3.7.1	Immediate covering of putrescibles (MR)			
a.	Are putrescible general wastes, food or restaurant waste disposed of in one of the following two ways (i.e. special cells or at the base of the working face)? Is the waste covered immediately in both cases?	R		
b.	Where special cells are used, is the waste deposited and covered immediately with a layer of soil at least 0.5 m thick in order to prevent odours and to discourage uncontrolled salvaging?	R		
c.	Where the waste is deposited at the base of the working face, is it covered immediately with other waste?	R		
3.8	End-tipping or area method (i.e. where cells or trenches are not used)			
3.8.1	End-tipping prohibited (MR)	R		
a.	Is end-tipping, which is not allowed, taking place at the site?	R		
b.	Is the area method, which is only allowed at certain waste disposal sites where large volumes of non-putrescible dry waste are disposed of and where compactions is not critical, used at the site?	F		
3.9	Progressive rehabilitation			
3.9.1	Are all final slopes in accordance with the landfill design and the End-Use Plan? Are all slopes not steeper than 1 in 2.5 in order to avoid erosion?	R		
3.9.2	Final cover (MR)	R		
a.	Is final cover and capping applied immediately on completion of an area (i.e. an area where no further waste deposition will take	R		

No.	Minimum Requirement	GLB	FC PC NC	Comments
	place)?			
b.	Is the thickness of the final cover and capping in accordance with the site's design and Appendix 8.2 of the MR (page A8-15)	R		
c.	Is the top layer of the final cover able to support the vegetation in the End-Use Plan?	R		
3.9.3	Rehabilitation and vegetation (MR)	R		
a.	Does vegetation commence on all capped areas as soon as possible in order to prevent erosion and to ensure improved aesthetics?	R		
b.	Is vegetation established on screening berms first so that waste disposal takes place behind vegetated berms, which are extended upwards in advance of the disposal operation, to ensure continued screening (i.e. rising green wall approach)?	R		
3.9.4	Monitoring of progressively rehabilitated areas (MR)	R		
a.	Is there ongoing inspection and maintenance of completed areas and established vegetation? Are cracks and erosion gullies, which allow water to access the waste and from which malodorous gasses escape, repaired? Are settlement depressions and / or cavities caused by fire filled-in.	R		
3.10	Control of nuisances (burning, litter, odours, noise, vermin and disease vectors, dust)			
3.10.1	Ongoing general site maintenance (MR)	R		
3.10.2	Control of nuisances (MR)	R		
a.	Is all litter contained within the site?	R		
b.	If the site is characterised by high winds, does it have a moveable litter fences?	R		
c.	Is wind blown litter picked up and removed from fences and	R		

No.	Minimum Requirement	GLB	FC PC NC	Comments
	vegetation on a daily basis?			
d.	Is malodorous waste covered promptly?	R		
e.	Odour suppressants such as sprays curtains may be required in extreme cases	R		
f.	Does all equipment used on-site conform to local authority's by-laws concerning noise levels and hours of operation? In the absence of by laws, is compliance achieved with national regulations on noise control?	R		
g.	Is the landfill site kept free of vermin?	R		
h.	Are appropriate measures taken to eliminate or minimise disease vectors such as rat or flies?	R		
3.10.3	Waste burning prohibited (MR)	R		
a.	Was the burning of waste, which is strictly prohibited, noted at the site?	R		
3.10.4	Are accidental fires on the landfill extinguished immediately? Does the operational procedures followed in the event of a fire involve, for instance, the spreading and smothering of burning waste, rather than through the application of water	R		
3.11	Waste reclamation			
3.11.1	Waste reclamation prohibited (MR)			
a.	On account of the risks to health and safety, waste reclamation must preferably be prohibited at general waste disposal sites. Is this the case?	F		
b.	If reclamation is taking place on site, has permission been obtained as part of a permit application or permit amendment?	R		
3.11.2	Is reclamation formalised and controlled by means of the following?			

No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
a.	Including the activity in the Operating Plan (MR)	R		
b.	Forming a committee and identifying leaders with whom to communicate	R		
c.	Registering all reclaimers (MR)	R		
d.	Assigning the day to day control and overall management of the reclaimers to the committee and its leaders, who will then be accountable to the permit holder. Alternatively, proper contracts can be set up	R		
e.	<p>Separating waste reclamation from waste compaction and covering activities. To achieve this the following can be done:</p> <ul style="list-style-type: none"> i. An area can be set aside within the site fence, but outside the disposal area. In this area, the public can dispose of bulky wastes such as lounge suites, cupboards and appliances, so that waste reclamation can take place away from the disposal operation. Such an area would, however, have to be controlled and unwanted waste would have to be cleared ii. Where reclamation has to take place on the landfill itself, it must be operated using two working areas or cells. In one, waste can be deposited and spread for reclamation purposes, whilst in the other, waste remaining after reclamation may be compacted and covered. The size of the working areas and the frequency with which they are alternated would depend on numerous factors and would have to be optimised on a site specific basis. 	R		
f.	Having regular meetings between the landfill operator and the reclaimers or their representatives, in order to educate them (with respect to the system in operation at the landfill and	R		

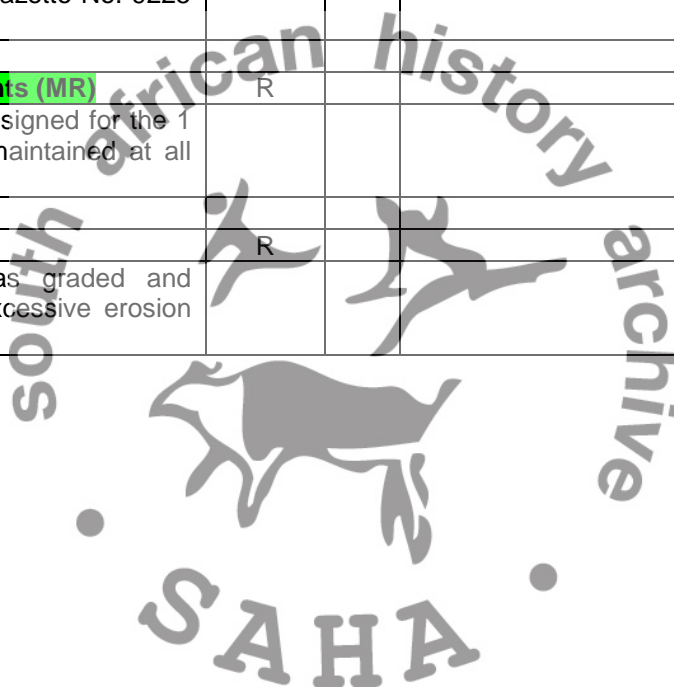
No.	Minimum Requirement	GLB	FC PC NC	Comments
	health and safety issues) and to negotiate with them where applicable.			
3.11.3	Protection of reclaimers (MR)	R		
a.	Does the operator ensure that the reclaimers, as a minimum, wear suitable protective clothing, in particular industrial gloves and boots with protective soles as well as highly visible tunics?	R		
b.	Where reclamation is permitted, does the permit holder have an indemnity agreement with the Department, as the responsibility for the health and safety of the reclaimers on the site vests with the permit holder?	R		
3.12	Medical waste			
3.12.1	If the site accepts medical waste, is it approved by the Department?	R		
3.12.2	In the event of an emergency, and in the interests of public health and the environment, the Department will consider applications for the disposal of medical waste into a specifically constructed dry cell within an approved site	R		
3.12.3	Where an application for the disposal of medical waste is approved, such disposal must take place under controlled conditions and for a limited period of time in accordance with directives from the Department	R		



4. Drainage

No.	Minimum Requirement	GLB	FC PC NC	Comments
4.1	Stormwater diversion measures (i.e. for water adjacent to the site and clean water that arise on the site) (MR)	R		
4.1.1	Is upslope runoff and stormwater diverted away from the waste, to prevent water contamination and to minimise leachate generation?			
4.1.2	Is all clean water that has not been in contact with the waste allowed to flow off the site into the natural drainage system under controlled conditions?			
4.2	Draining water away from the waste (MR)	R		
4.2.1	Is all run-off and storm water that arise on the waste body always diverted around one or both sides of the waste body by a system of berms and or cut-off drains?			
4.2.2	Are all drains maintained and kept free from silt and vegetation?			
4.2.3	Are the bases of trenches and cells so designed that water drains away from the deposited waste?			
4.2.4	Are trenches and cells so oriented as to facilitate drainage away from the deposited waste?			
4.3	Sporadic leachate reporting (MR)	R		
4.3.1	Is any sporadic leachate generated on account of unusual circumstances reported to the Department?			
4.4	Contaminated run-off and leachate contained (MR)	R		
4.4.1	Is dirty water and leachate that arise on the site, including drainage from wash bays, stored in a sump or retention dam?			
4.4.2	Is stored dirty water and leachate recycled? If yes, has approval been obtained from the Department?			

No.	Minimum Requirement	GLB ⁻	FC PC NC	Comments
4.4. 3	Is stored dirty water released from the site into the environment? If yes, does it conform to the Special, General or Specific Effluent Standards in terms of the permit (Government Gazette No. 9225 of 18 May 1984)?			
4.5	0.5m freeboard for diversion and impoundments (MR)	R		
4.5. 1	Do the retention dams have 0.5 m freeboard (designed for the 1 in 50 year flood event) and is this freeboard maintained at all times?			
4.6	Grading cover / avoiding ponding (MR)	R		
4.6. 1	Are all temporarily and finally covered areas graded and maintained so as to promote run-off without excessive erosion and to eliminate ponding or standing water?			



5. **Monitoring, record keeping & auditing** (including landfill operation monitoring and water quality monitoring)

No.	Minimum Requirement	GLB	FC PC NC	Comments
5.1	Gate or weighbridge recording			
5.1.1	Waste stream records (MR)	R		
a.	Are records of all waste entering the site kept, both on a daily as well as a cumulative basis?			
b.	Is a database established and maintained at the landfill site for accumulated data?			
c.	Is waste categorised by the number of loads (defined by volume or mass), the type of waste and the source?			
5.2	Landfill volume surveys			
5.2.1	Landfill volume surveys (MR)	R		
a.	In order to give an idea of the remaining volumetric capacity, are surveys performed with the appropriate instruments and accuracy?			
b.	Was the entire site surveyed prior to the commencement of waste disposal? Is the site surveyed on an annual basis?			
5.3	Collection and processing of other data			
5.3.1	Appropriate records and data collection (MR)	R		
5.4	Leachate and water quality monitoring			
5.4.1	Water quality monitoring (MR)	R		
a.	Are regular sampling and analysis of leachate, ground and surface water undertaken? Are the results interpreted?			

	Are the above done in accordance with section 13 of the MR and the conditions of the Permit?			
5.5	Gas monitoring			
5.5.1	Gas monitoring and control (MR)	R		
a.	Is the risk of landfill gas continually monitored?			
b.	Are gas monitoring systems monitored at three monthly intervals?			
c.	If methane concentrations in the soil exceed 1% by volume at STP, the Department must be informed			
d.	Methane concentrations in the atmosphere inside buildings on or near the site must not exceed 1% (by volume) in air. If the methane concentrations are found to be between 0.1% and 1%, then regular monitoring must be instituted. If methane concentrations above 1% are detected, the building must be evacuated and trained personnel consulted			
e.	Methane concentrations in the atmosphere on landfill boundaries must not exceed 5% in air. This must apply to the air above the surface and also to the air in a hole dug into the earth on the boundary. If the methane concentrations are found to be between 0.5 and 5%, then regular monitoring must be instituted			
f.	Where significant volumes of landfill gas are detected through monitoring, it may be necessary to install properly engineered passive or active gas venting and flaring systems			
g.	Where a site does have a gas management system, it must be correctly operated, maintained and monitored to ensure that any landfill gas emanating from the site is properly managed			
h.	Landfill gas contains a wide range of volatile organic compounds. Where significant landfill gas is present, samples must be taken at various positions at the landfill site, and characterised for volatile organic compounds			
i.	Sampling for volatile organic compounds must be directly in gas wells, or using the techniques described in section 11.5.6 of the MR			
j.	The volatile organic compound compositions of the landfill gas must be subjected to occupational and environmental health risk			

	assessments. This must be done to the discretion of the Department to ensure against unacceptable health risks to workers or communities			
5.6	Air quality monitoring & bufferzone			
5.6.1	Air quality monitoring (MR)	F		
a.	Hazardous air pollutants may be dispersed from a landfill site as dust, or as gaseous substances. These must be monitored separately, specifically at hazardous landfills, in accordance with the requirements stipulated in section 11.5.6 of the MR			
b.	Air quality monitoring may also be requested by the Department at small, medium and large landfills if considered as necessary, in accordance with the requirements stipulated in section 11.5.6 of the MR			
5.7	Health of workers			
5.7.1	In terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), the employer is responsible for the health and safety of the people under his or her jurisdiction (inclusive of waste reclaimers). The Responsible Person must use his or her discretion in applying the Act and monitoring the health of workers. In the case of hazardous waste landfills this will involve medical examinations	R		
5.8	Landfill monitoring committee (MR)	R		
5.8.1	Does the site have a monitoring committee? How often does the monitoring committee meet and when was the last meeting. Are the outcomes of all meetings recorded (i.e. minutes) and submitted to the Department? Does the monitoring committee comprise of representatives of the Department, the operator and representatives of those			

	affected by the facility?			
5.9	Landfill site auditing			
5.9.1	Does the site have an audit committee? If yes, was the audit committee set up in consultation with the Department? Who forms part of the auditing committee (e.g. the Permit Holder, the Responsible Person, the Department, relevant consultants and the monitoring committee)?			
5.9.2	Conduct internal audits (MR)	R		
a.	Are internal audits done every three months to ensure the maintenance of acceptable standards? Are records kept of internal audits and are these available to the Department on request?			
5.9.3	Conduct external audit twice per annum (MR)	R		
5.9.4	Are external audits done twice per annum and when was the last external audit? Are external audit reports, which provides a record of any identified problem areas as well as recommendations for rectification, compiled and submitted to the Responsible Person for implementation? Are copies of external audit reports forwarded to the Department and what is the date of the last external audit report?			
5.9.5	Are all audit reports made available to I&APs through the landfill committee?			
5.9.6	Are records of complaints received and action taken kept and included in the audit reports?			

APPENDIX 3: COMPLAINT FORM

MCP 136

6 MOGALE CITY LOCAL MUNICIPALITY

ENVIRONMENTAL HEALTH SECTION

6.1 COMPLAINT FORM

N.B. – This form must be used for all complaints.

NAME OF COMPLAINANT
(not to be disclosed)

ADDRESS: _____

TELEPHONE NO. HOME: _____ WORK: _____
CELL: _____

TIME RECEIVED: _____
DATE: _____



SUBJECT MATTER OF COMPLAINT:

COMPLAINT RECEIVED BY: SIGNATURE:

DATE FORWARDED TO INSPECTOR:

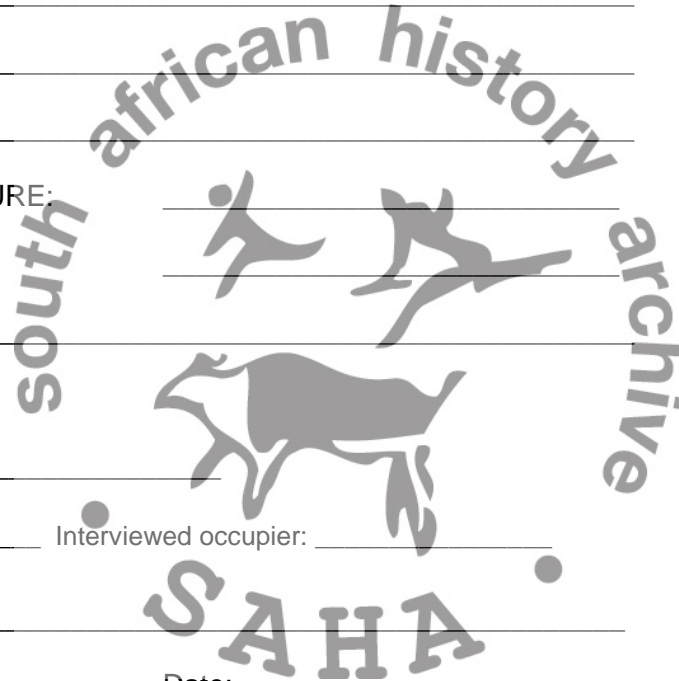
INSPECTOR'S REPORT:

1. Date visited: _____
2. Interviewed owner: _____ Interviewed occupier: _____
3. Interviewed the complainant: _____
4. Inspector: _____ Date: _____

Complaint No. _____

HOLD OVER DATE

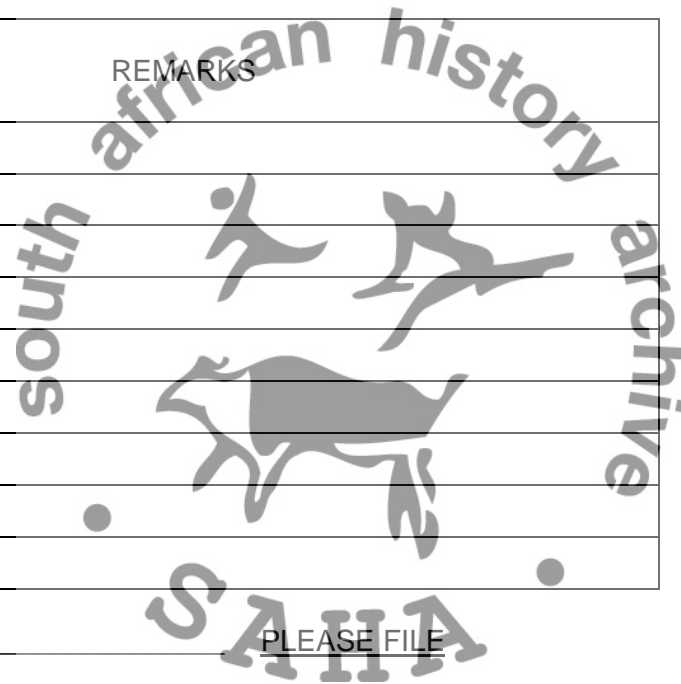
STAND NO. _____



STREET: _____

TOWNSHIP: _____

DATE	REMARKS



IN ORDER _____

EHO _____

INSPECTOR _____

DATE _____

PLEASE FILE _____

SIGNATURE _____