

### 3 Legislative framework

The purpose of this chapter is to highlight the objectives towards dolomite related issues found in the South African law. The way that the legislature achieves these objectives will also be explained. Sustainability and equity are fundamental parts of this legislative framework and it is a guiding principle for protection, use, development, conservation, management and control of dolomitic areas.

This legislative framework recognizes the needs of current and future generations and their need to be protected, as their need for protection is central to the role of past and future ruling governments. The need to protect and promote social and economic development and the need to establish suitable institutions in order to achieve the purpose of these Acts are also fundamental to this legislative framework.

The legal framework hierarchy (Figure 3-1) indicates the priority by which legislation should be approached. The Constitution of South Africa should foremostly be approached, as it is concerned with the rights of humans, which is the basic point of departure for any legal framework.

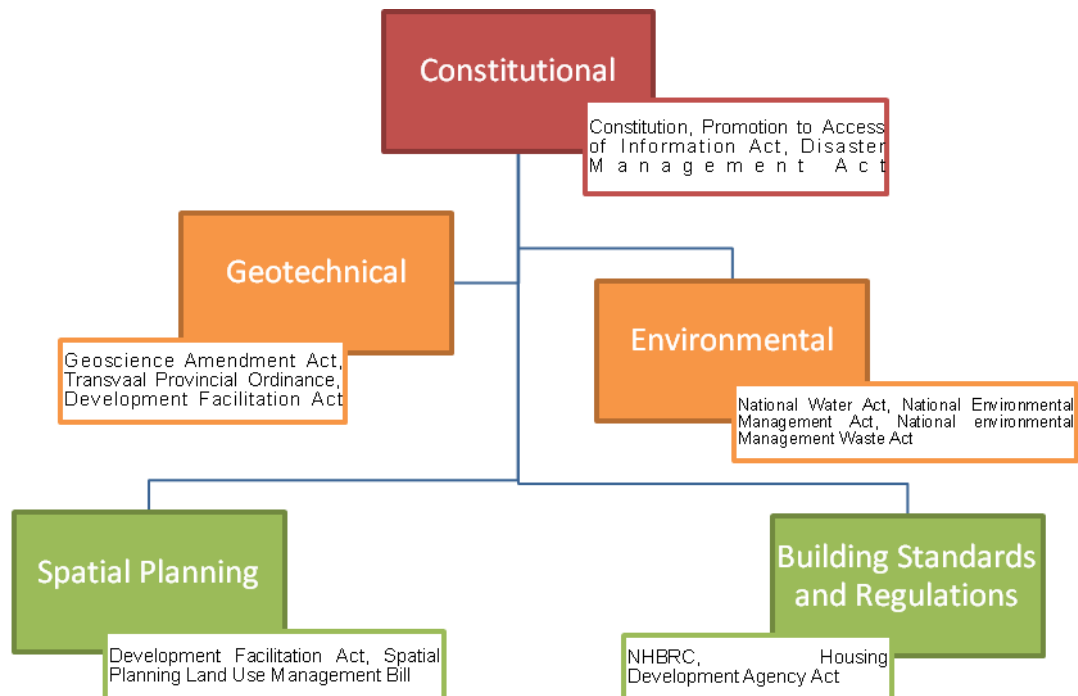


Figure 3-1: Legislative framework hierarchy

### 3.1 Constitutional and Inter Governmental Framework

#### 3.1.1 Constitution

According to the Constitution of South Africa (Act 108 of 1996), the local authority has a responsibility towards the health and safety of its inhabitants:

Section 24 states:

- (a) *“Everyone has the right to an environment that is not harmful to their health or well-being”* while Section 152 (1)(d) states *“the object of local government is to promote safe and healthy environments”*
- (b) *“to have the environment protected, for the benefit of future generations, through reasonable legislative and other measures that prevent:*
  - *Ecological degradation*
  - *Promote conservation*
  - *Secure ecological sustainable development.”*

This is confirmed by the Local Government Municipal Systems Act 32 of 2000, Section 11(3) where the Council of a municipality ... has the duty to ... (l) promote a safe and healthy environment in the municipality”

The Constitution also states in Section 26 (3) that:

- *“No one may be evicted from their home, or have their home demolished, without an order of court made after considering all the relevant circumstances.”*

#### **Co-operative Governance**

In Chapter 5 of the Development Facilitation Act (32 of 2000) Section 24, it gives the measures for planning and the alignment between local and district councils. It states in Section 24 (1) that:

*The planning undertaken by a municipality must be aligned with, and complement,*

*the development plans and strategies of other affected municipalities and other organs of state so as to give effect to the principles of co-operative governance contained in Section 41 of the Constitution.*

In Section 24 (3) it goes further and gives the requirements to comply with planning requirements in terms of national and provincial legislation. For such requirements the municipality should, in 24 (3)(b):

- i. Consult with the affected municipality; and
- ii. Take responsible steps to assist the municipality to meet the time limit mentioned in Section 25 (Adoption of an integrated development plan) and other requirements applicable to its integrated development plan.

Co-operative Governance between local and district municipalities and cross provincial municipalities are vital when it comes to dolomite. Dolomite is most of the time not contained within one municipality and could range for hundreds of kilometres. It is therefore important that municipalities should assist other municipalities in their planning when dolomite is involved. They should also plan together so as to solve the problems that are associated with dolomite.

The Municipal Systems Act (32 of 2000) in Section 24 continues on the topic of municipal planning in co-operative government and states in 24(1) and (2) that:

- (1) The planning undertaken by a municipality must be aligned with, and complement, the development plans and strategies of other affected municipalities and other organs of state so as to give effect to the principles of co-operative government contained in Section 41 of the Constitution.
- (2) Municipalities must participate in national and provincial development programmes as required in Section 153(b) of the Constitution.

It is therefore important that municipalities incorporate any obligation towards dolomitic issues in an Integrated Development Plan (IDP), Spatial Development Framework (SDF) and Housing plans. It should not only be included in local municipal SDFs but also in district, provincial and National SDF

### 3.1.2 The Disaster Management Act (57 of 2002) (DMA)

The Disaster Management Act (57 of 2002) (DMA), gives explicit priority to the application of the principle of co-operative governance for the purpose of disaster risk management and emphasizes the involvement of all stakeholders in strengthening the capabilities of national, provincial and municipal organs of state to reduce the likelihood and severity of disasters.

Disaster management in terms of the DMA (2002), means a continuous and integrated multi-sectoral, multi-disciplinary process of planning and implementation of measures aimed at:

- Preventing or reducing the risk of disasters;
- Mitigating the severity or consequences of disasters;
- Emergency preparedness;
- A rapid and effective response to disasters; and
- Post-disaster recovery and rehabilitation.

This can be applied by disaster management plans and disaster management centres as recommended by the DMA (2002) in Section 52.

According to Chapter 5 Section 42 of the DMA (2002), (1) each district municipality must establish and implement a framework for disaster management in the municipality aimed at ensuring an integrated and uniform approach to disaster management in its area by (a) the municipality and statutory functionaries of the municipality, including, in the case of a district municipality, the local municipalities and statutory functionaries of the local municipalities in its area. There should consequently be a simultaneous approach to disaster management within local government and the Tlokwe City Council must establish its disaster management framework after consultation with the local municipalities in its area.

### 3.1.3 The Promotion of Access to Information Act (2 of 2000) (PAIA) with reference to the Development Facilitation Act (32 of 2000)

According to the Constitution of the Republic of South Africa of 1996 Section 32, everyone has the right of access to information held by the state (public body) and any information held by another person, which is required for the exercise or protection of any rights. As the subject matter is concerned with the environmental rights, people whether natural or juristic should be informed about the environmental dangers that exist in their area. This is also emphasized in the PAIA (2000). A requester of information must be given access to information or a record of a public body, regardless of reason, if he or she complies with procedural requirements.

When it is therefore the right of a person to know about the safety of his or her environment; and it is being challenged by areas underlain by dolomite, that person needs to know by what extent he or she is being influenced by the situation.

According to the Development Facilitation Act (32 of 2000) (DFA), Section 21, it states that when anything needs to be notified by a municipality through the media to the local community in terms of the DFA or any other applicable legislation, it must be done according to Section 21, (1 – 5) which provides the different types of media that can be used and the manner that it should be conveyed to the public.

#### **Public Participation**

The concept of public participation in all spheres of government is rooted in the South African Constitution. Chapter 2 of the Constitution includes a Bill of Rights including equality, human dignity, freedoms, environment, as well as rights to housing, health care, food, water, social security, education, access to information. In terms of the roles of national, provincial and local spheres of government the Constitution states:

*Section 151(1) (e) - obliges municipalities to encourage the involvement of communities and community organisations in local government.*

*Section 152 - the objects of local government (are) to encourage the involvement of communities and community organisations in the matters of local government.*

*Section 195 (e) – in terms of the basic values and principles governing public*

*administration – people’s needs must be responded to, and the public must be encouraged to participate in policy-making”*

Considering Section 151 (1) (e), people affected by dolomite occurrences must be informed by means of a Dolomite Awareness Plan or a similar program or plan. Communities can therefore be part of the organisation and fate of their circumstances.

In the White Paper on Local Government, 1998 the object of community participation is rooted in the following four principles:

- To ensure political leaders remain accountable and work within their mandate;
- To allow citizens (as individuals or interest groups) to have continuous input into local politics;
- To allow service consumers to have input on the way services are delivered;
- To afford organised civil society the opportunity to enter into partnerships and contracts with local government in order to mobilise additional resources.

The White Paper also proposes that municipalities should develop mechanisms to ensure citizen participation in policy initiation and formulation, and the monitoring and evaluation of decision-making and implementation.

Figure 3-2 shows the four steps of the public participation cycle.

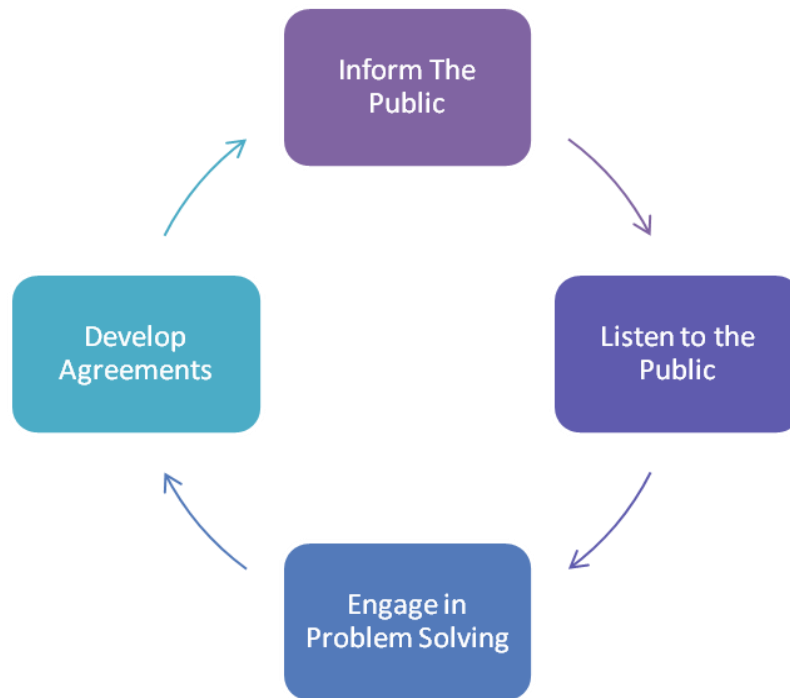


Figure 3-2: Public participation cycle

### 3.2 Geotechnical Framework

#### 3.2.1 The Geoscience Amendment Act (16 of 2010)

The Geoscience Amendment Act (16 of 2010), more directly addresses the responsibility of the state authority with areas underlain by dolomite in three scenarios indicated in Figure 3-3. Depending on the situation, documents must be submitted to the Council of Geoscience (CGS) for advice to minimize the risk of dolomite instability events occurring.

The responsibility of the local authority is addressed in Chapter 4 of the Geoscience Amendment Act (16 of 2010) where it states:

- *“All State authorities that are directly considering **development or infrastructure of their own on dolomitic land**, must prior to authorization for development,*

submit to the Council for Geoscience an appropriate **Dolomite Risk Management Strategy** for advice to minimize the risk of dolomite instability events occurring;

- All State authorities that are **approached for permission to develop on dolomitic land** under their jurisdiction must, to minimize the risk of dolomitic instability events occurring, ensure that the relevant **dolomite-related geotechnical reports** (in terms of the guidelines in Annexure E) are submitted to the Council for Geoscience for review and evaluation prior to authorization by the relevant state authority for development;
- All State authorities that have **existing developments or infrastructure** of their own on **dolomitic land** shall develop and submit to the Council for Geoscience an appropriate **Dolomite Risk Management Strategy** for advice, to minimize the risk of dolomite instability events occurring”

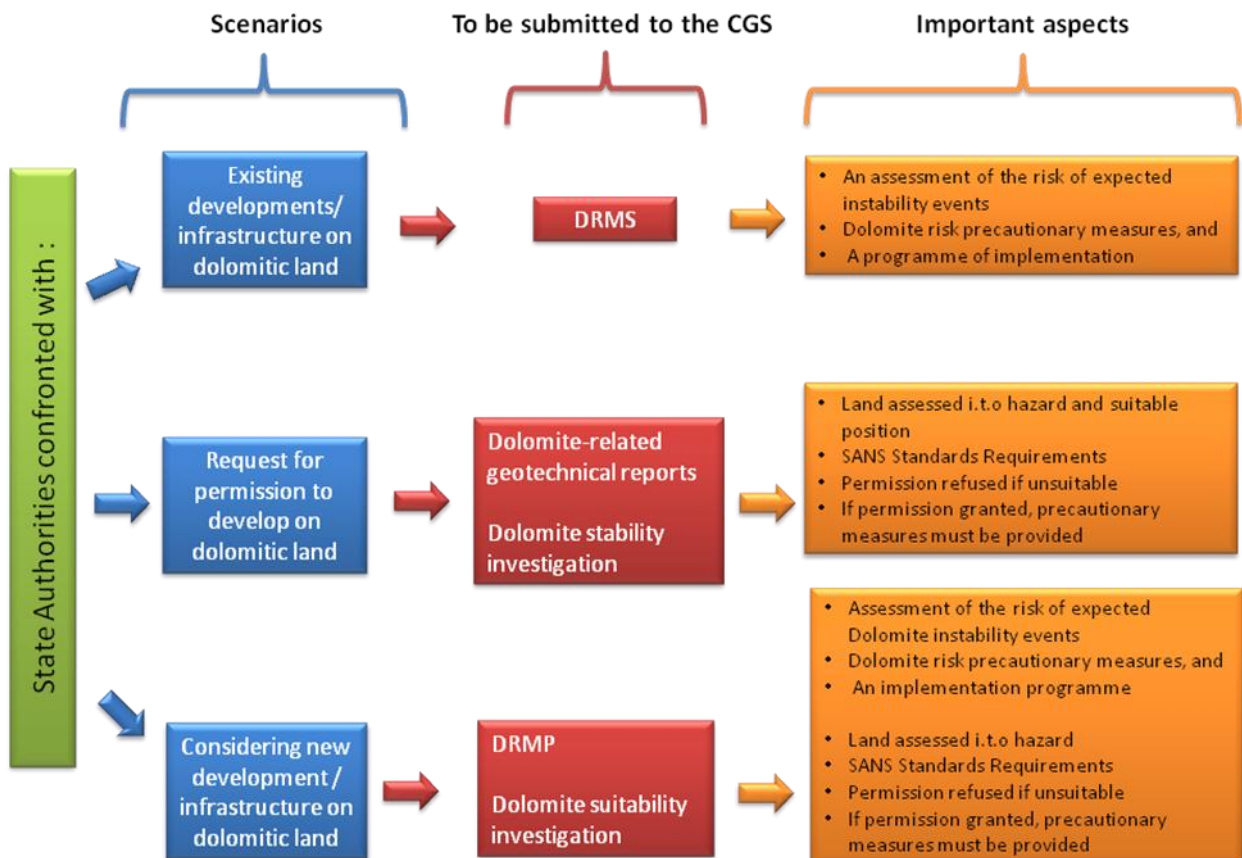


Figure 3-3: Geoscience Amendment Act requirements for development on dolomitic land

The Kenneth Kaunda District Municipality has a combination of all three scenarios in



different areas and it is of critical importance that all will be addressed whilst complying with the requirements indicated in Figure 3-3.

A Dolomite Risk Management Strategy for the project area, indicated in Figure 3–3, must be submitted to the Council of Geoscience (CGS). There will be legal liabilities in terms of the following acts as stated in Volume 1 (AGES, 2010a):

- The Occupational Health and Safety Act (85 of 1993)
- Section 12 of National Home Builders Registration Council Act (95 of 1998).
- National Building Regulations Act (103 of 1977)
- SANS 10400-B

### 3.2.2 Geotechnical requirement from the Transvaal Provincial Ordinance 15 of 1986

In 1965 an ordinance was passed by the Transvaal Province (Tvl.Ord.25/1965) in which certain regulations in connection with township proclamation were established. The Ordinance came into force on the first of January 1966. In terms of Clause 24(b), it became necessary for a township developer to report, inter alia, on “the suitability of the site with regard to soil and the presence of dolomite rock”.

According to the “*Legal aspects of development on dolomite land in South Africa*” by A. van Schalkwyk (1998), this ordinance came into effect on 10 June 1987 and applies to township applications submitted since that date.

*This ordinance does not specifically mention dolomite land, but in terms of Regulation 18(1), “an application for the establishment of a township in terms of Section 69 or 96 of the ordinance shall be accompanied by... (b) A detailed report with comprehensive motivation relating in the township with special reference to... (cc) how the township will be affected by...(bbb) geotechnical conditions...*

Provision is therefore made in the ordinance for the appointment of authorised local authorities with powers to administer the ordinance and approve town-planning schemes in their area of jurisdiction.

### 3.2.3 The Development Facilitation Act (67 of 1995) (DFA) with policy reference to geotechnical research

According to Section 3 of the DFA (1995) “the following general principles apply on the basis set out in Section 2, to all land development... (h) Policy, administrative practice and laws should promote sustainable land development at the required scale in that they should-... (v) Ensure the safe utilization of land by taking into consideration factors such as geological formations and hazardous undermined areas...” Section 4, which deals with general principles of decision making and conflict resolution, contains the following subsections: “(1) The general principles set out in Subsection (2) apply-... (b) without derogating from the generality of paragraph (a) to any decision-... (iii) Relating to the level or standard of engineering services that are to be provided in respect of land development... (2) The decisions contemplated in Subsection (1) shall be taken in accordance with the following general principles... (b) The decision shall be made by at least one appropriate official in the service of a provincial administration or local government body, and experts in the field of agriculture, planning, engineering, geology, mining, environmental management, law, survey or such other field as may be determined by the Premier”.

Regulations in terms of Section 46 that contain more specific instructions in connection with the required geotechnical assessment appear in Government Gazette no. 17395 of 30 August 1996 (Republic of South Africa 1996).

Section 26, which deal with the geotechnical assessment, include the following subsections:

- (j) The depth to which the profile can probably be excavated with a backhoe;*
- (k) The permeability of the soils and their performance in the transport of wastewater;*
- (l) The occurrence of areas of outcrop and sub-outcrop and their affect on excavation;*
- (m) Whether structures will require modification/ reinforcement and/or special foundations.”*

### 3.3 Environmental Framework

#### 3.3.1 The National Water Act (36 of 1998) (NWA)

In Chapter four of the NWA (1998), the usage of water based on extraction from resources whether from underground or above ground is explained. This is particularly significant when dolomite occurs in the region and water is being abstracted from underground and not being managed properly through infrastructure and legislation. In subsection 1 below, the act defines the way the public may use water.

Subsection 1:

*A person may only use water - (a) without a license -*

- (i) If that water use is permissible under Schedule 1;*
  - a) Take water for reasonable domestic use in that person's household, directly from any site, water resource to which that person has lawful access;*
  - b) Take water for use on land owned or occupied by that person, for –*
  - c) Store and use run-off water from a roof;*
  - d) In emergency situations, take water from any water resource for human consumption or fire fighting;*
  - e) For recreational purposes and;*
  - f) Discharge*
    - Waste or water containing waste; or*
    - Run-off water, including storm water from any residential, recreational, commercial or industrial*
    - Into a canal, sea outfall or other conduit controlled by another person authorised to undertake the purification, treatment or disposal of waste or water containing waste, subject to the approval of the person controlling the canal, sea outfall or other conduit.*
- (ii) If that water use is permissible as a continuation of an existing lawful use; or*
- (iii) (a) If that water use is permissible in terms of a general authorisation issued under Section 39;*

*(b) if the water use is authorised by a licence under this act; or*

*(c) if the responsible authority has dispensed with a licence requirement under subsection (3).*

A person who uses water as contemplated in subsection (1) –

*a) Must use the water **subject to any condition** of the relevant authorisation for that use;*

*b) Is subject to any limitation, restriction or prohibition in terms of this Act or any other applicable law*

All water usage, which does not fall under schedule 1, needs to be registered and have a license to extract water. Therefore, the authority has the right to grant water usages and also prohibit water usages where it is safe or unsafe to do so and subject to any condition. Subject to subsection 4, chapter 4 of the NWA (1998), the minister may make regulations –

*a) Limiting or restricting the purpose, manner or extent of water use;*

*b) Requiring that the use of water from a water resource be monitored, measured and recorded;*

*c) Requiring that any water use be registered with the responsible authority.*

In the case of dolomite occurrences it is especially important that the authority has all measures in place to limit unnecessary water use in such areas and that water usage is monitored from a dolomite perspective as over usage of ground water can cause sinkholes. In the absence of the these measures it could be fatal to a community and would not be in accordance to Constitution of South Africa (Act 108 of 1996) as can be seen in 3.1.1. When it comes to the issuing of licenses the following regulations 29 (1)(a) and (b) must be considered:

(1) A responsible authority may attach conditions to every general authorization or license –

*(a) Relating to the protection of -*

*(i) The water resource in question;*

*(b) Relating to water management by -*

*Specifying management practices and general requirements for any water use, including water conservation measures.*

- (i) ***Requiring the monitoring and analysis of and reporting on every water use and imposing a duty to measure and record aspects of water use, specifying measuring and recording devices to be used.***

**Enforcement on illegal water usage to decrease risk associated *with* dolomite according to the NWA (1998)**

For suspension or withdrawal of entitlements to use water or any illegal water use, the authorities such as the Department of Water Affairs (DWA) and Blue Scorpions can remove such water uses subject to subsections (3) and (4) of Section 54; a responsible authority may by notice to any person entitled to use water under this act suspend or withdraw the entitlement if the person fails -

- (a) To comply with any condition of the entitlement;
- (b) To comply with this act; or
- (c) To pay a charge which is payable in terms of Chapter 5.

(2) An entitlement may be suspended under subsection (1) –

- (a) For the period specified in the notice of suspension; or
- (b) Until the responsible authority is satisfied that the person concerned has rectified the failure, which led to the suspension.

(3) A responsible authority may only suspend or withdraw an entitlement under subsection (1) if the responsible authority has directed the person concerned to take specified steps to rectify the failure within a specified period, and the person concerned has failed to do so to the satisfaction of the responsible authority and (4) The person concerned must be given an opportunity to make representations, within a reasonable period, on any proposed suspension or withdrawal of an entitlement to use water.

3.3.2 The National Environmental Management Act 107 of 1998 (NEMA)

In the principles of chapter 1 of the National Environmental Management Act (107 of 1998) (NEMA), Section 2 (2) it states that environmental management must place

people and their needs at the forefront. In conjunction with the Constitution, NEMA (1998) also states in Section 2(1)(a) of the principles, that all actions by organs of state that may significantly affect the environment shall apply alongside all other appropriate and relevant considerations which includes the states responsibility to respect, protect, promote and fulfil the social and economic rights of all people.

The term environment refers to us humans and the surroundings within which one live and co-exist and that are made up of among other the land, water and atmosphere of the earth and the inter relationship between them. When applying environmental management to dolomite, one cannot manage dolomite but one can however manage the behaviour and activities of people that may affect dolomite especially when it comes to geohydrology. Environmental management is therefore directed at regulating or directing the behaviour of people in a given society through a legal framework.

The term sustainability is a central term when it is connected to environmental management towards dolomite; it becomes a governance issue and not an environmental problem. This leads to a precautionary approach where the authority in this case should prevent harm as the best method of environmental protection, and when knowledge is limited, apply a precautionary approach.

The authority also has a duty of care as it is stated in NEMA (1998). With reference to the use of natural resources (i.e. water) in the area, it is the authority's duty to prevent environmental harm and to protect people.

In Section 2(4)(a), it states that sustainable development requires the consideration of all relevant factors including the following:

- (ii) That pollution and degradation of the environment are avoided, or, where they cannot be avoided, are minimised and remedied;
- (vii) That a risk-averse and caution approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and
- (viii) That negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot

altogether be prevented, are minimised and remedied.

The impacts of pollution on dolomite will be discussed further in the National Environmental Management Waste Act (59 of 2008). It is altogether important to take notice that pollution must be avoided as it has a severe effect on dolomite. This Act emphasises that it is important that when knowledge is not 100% of a subject such as the possible consequences of managing dolomite, that a risk-averse and caution approach must be taken.

In the case where dolomite occur in areas, for example Ikageng, Section 2(4)(c) states that environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a way as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.

NEMA (1998) in terms of public participation states in Section 2(4)(f) that the participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured. This will be further discussed under the Public Administration and Information Act and public participation.

With reference to co-operative governance, there must be intergovernmental co-ordination and harmonisation of policies, legislation and action relating to the environment according to Section 2(4)(l) of NEMA (1998). This means that policy and planning documents such as SDF, IDP and housing sector plans must be aligned with neighbouring documents and even to a national level. Therefore, all planning documents should contain all possible information concerning dolomite in its relevant area.

The Act states that three approaches must be taken in consideration towards the preservation of the environment, as well as to serve as the general framework within which environmental management and implementation plans must be formulated.

The three approaches are:

1. A Precautionary Approach

2. Polluter Pays, and

3. Duty of Care

The most applicable and pertinent to dolomite would be the precautionary approach. It is an approach that will prevent harm as the best method to protect the environment when knowledge is limited. This approach will also take action to avoid the possibility of serious or irreversible environmental harm when scientific knowledge is cursory or inconclusive.

The precautionary approach aims to:

1. Be pro-active
2. Avoid environmental impact before it occurs
3. Be risk averse and cautious

### 3.3.3 The National Environmental Management: Waste Act (59 of 2008)

When referring to the National Environmental Management: Waste Act (59 of 2008) (NEM: WA), licensing should be particularly cautious due to the impact of polluted ground water on dolomite. A “waste treatment facility” is any site that is used to accumulate waste for the purpose of storage, recovery, and treatment, reprocessing, recycling and sorting of waste.

When considering a license for a waste treatment facility, Section 48 (d) of the NEM: WA (2008) should be taken into consideration where it states that the licensing authority must take into account all relevant matters such as increased health and environmental risk that may arise as the result of the location where the waste management activity will be undertaken.

According to the NWA (1998), waste includes any solid material or material that is suspended, or dissolved in water such as those in tailings dams and which is spilled or deposited on land or into a water course in such volume, composition or manner as to cause or to reasonably likely to cause, the water resource to be polluted.

This issue is more intensified when waste like effluent from mines is pumped into lagoons or tailings dams. According to GN R718, this can trigger a basic assessment



Environmental Impact Assessment (EIA) study and authorities responsible for this should be cautious when these facilities exist on dolomitic areas.

### *3.4 Spatial Planning Framework*

#### **3.4.1 The current Spatial Planning Land Use Management Bill (SPLUMB) 2012 on environmental sustainability**

The Spatial Planning Land Use Management Bill that was revised in 2012 will repeal the Removal of Restrictions Act (84 of 1967), Physical Planning Act (88 of 1967) and (125 of 1991) and the Development Facilitation Act (67 of 1995). When the Bill becomes an Act, its intent is to provide a framework for spatial planning and land management in the republic.

In chapter 2 of the SPLUMB (2012) Section 6, it states that the following principles will apply to spatial planning, land use management and land development. (b) The principle of spatial sustainability, whereby spatial planning and land use management systems must; (i) promote land development in locations that are sustainable... (ii) result in communities that are viable.

The sustainability of building on specific areas underlain by dolomite should therefore first be established.

In Section 20 of the SPLUMB (2012), it refers to the content of a spatial development framework (SDF). According to Section 20 (j) a regional SDF should include a strategic assessment of the environmental pressures and opportunities within the municipal area, including the spatial location of environmental sensitivities applicable. It does not refer to dolomite specifically, but as dolomite contribute to an environmental sensitive area for development; it should be taken into consideration.

### *3.5 Building Standards and Regulations*

#### **3.5.1 National Home Builders Registration Council (NHBRC)**

The NHBRC is a statutory body established in terms of Section 2 of the Housing Consumers Protection Measures Act (95 of 1998), as amended, with the mandate, amongst others, to establish and promote ethical and technical standards in the home building industry. The NHBRC is also mandated to provide warranty protection to housing consumers against defined defects in new homes and to regulate the home

building industry. In terms of Section 12(1) of the Act, the Council of the NHBRC publishes a Home Building Manual containing the NHBRC's technical requirements and guidelines. The object of the Council is:

- (a) To represent the interests of housing consumers by providing warranty protection against defects in new homes;
- (b) To regulate the home building industry;
- (c) To provide protection to housing consumers in respect of the failure of home builders to comply with their obligations in terms of this Act;
- (d) To establish and to promote ethical and technical standards in the home building industry;
- (e) To improve structural quality in the interests of housing consumers and the home building industry;
- (f) To promote housing consumer rights and to provide housing consumer information;
- (g) To communicate with and to assist home builders to register in terms of this Act;
- (h) To assist home builders, through training and inspection, to achieve and to maintain satisfactory technical standards of home building;
- (i) To regulate insurers contemplated in Section 23(9)(a); and in particular, to achieve the stated objects of this section in the subsidy housing sector.

### 3.5.2 The Housing Development Agency Act (23 of 2008)

The Housing Development Agency Act (23 of 2008) was established to give everyone access to adequate housing in terms of Section 26 of the Constitution. The object of an established Agency are to, identify, acquire, hold, develop and release state, communal and privately owned land for residential and community purposes and for the creation of sustainable human settlements. As with the possibility with having to relocate due to the impacts of dolomitic land, this act is especially crucial with defining new areas for relocation and quality of new homes. It states in Section 7 (2) of the act, that in performing its function, the Agency must:

- (a) Ensure that residential and community development are sustainable, viable and appropriately located;

Therefore, the local city council or district should ensure that new housing developments or those that have to be relocated comply with the measures set out by the Housing Development Agency Act; these measures are stated by the NHBRC.

It also states in Section 7 (3), that in performing its function, the Agency may:

1. Declare priority housing developments areas for residential and community purposes in accordance with integrated development plans (IDP) and provincial spatial development frameworks (SDF).

Therefore if the IDP or SDF have declared an area unsafe or that special care should be taken due to the occurrence of dolomite, the new housing development or relocation should comply with the measures that were set out by the IDP and SDF of that area.