# Introduction to a Legal Framework to Pollution Management in South Africa

by

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"***Interface of Atlanta, my company, is changing course to become sustainable – to grow without damaging the earth and manufacture without pollution, waste, or fossil fuels. If we get it right, our company and our supply chain will never have to take another drop of oil."***

Ray Anderson, CEO of Interface
Quoted in Fortune Magazine, June 21, 1999

# 1 Introduction

## 1.1 Overview

The introduction in 1998 by the Department of Water Affairs and Forestry of the National Water Act 36 of 1998 has contributed to the fundamental reform of legislation relating to the protection, use, development, conservation, management and control of the country's water resources. The Act, as a whole, gives effect to the Constitutional right of access to water and the environmental right ensuring its protection and conservation, thus assisting South Africa to take a further step towards achieving integrated environmental management and a first world environmental management system. The provisions of the Act are onerous, and the impact on the day-to-day operations of companies within the country should not be underestimated. The Act must be seen not only in the context of the Constitution, but also in the context of other national, provincial and local environmental legislative and

policy developments that have been introduced over the past few years which have increasingly placed the onus for pollution and waste management on the shoulders of industry. All three spheres of government are gearing themselves towards the implementation of these new laws, on the one hand because they are obliged to do so in terms of our Constitution and other empowering legislation, but more importantly because there is a belief that in doing so this will go some way towards achieving a clean and healthy environment.

The importance of these developments cannot be overstated. There will of course be a few companies, and it is generally those that have no environmental ethos of their own, who will see the new legislation as oppressive, unnecessary and resulting in a further financial cost. Others may simply be concerned with the realisation that the current environmental liability regime is particularly onerous, and that the company and its individual members face liability where pollution occurs. Still others will see the latest legislative and policy developments as an opportunity to not only clean up their businesses, and achieve compliance, but also to improve the company's profit in doing so. This document will hopefully go some way to addressing the concerns of all three of these groups, and hopefully any others.

The Department of Water Affairs and Forestry, which

administers the water law, has made a significant contribution in redressing the injustices of the past, and to integrating their services to ensure that they have the skills and capacity to effectively implement the law. Additionally, they have gone a long way in achieving co-operative governance and integrated management at a local, provincial and national level.

The South African business community should thus see the new water law and the other latest environmental laws as a golden opportunity. By accepting the challenge to fall in line with environmental considerations of the first world, South African cities will be able to sell themselves to the rest of the world as being environmentally sustainable. Green issues, put simply, are “massive” overseas and the investment opportunities and benefits for a city or region perceived as environmentally friendly are real.

Our companies are now at a new crossroad where they are faced with having to make elections regarding how to conduct their businesses in terms of the contemporary pollution liability regime. They are concerned with issues such as the standards which they will need to achieve to ensure compliance, and the effect which the new laws will have on business costs and personal liability for directors and officers. While social, economic and political factors, and existing judicial norms in South Africa will play a significant role in the interpretation of pollution laws, globalisation now also demands that

companies consider the application of similar laws in foreign jurisdictions. South African companies are fortunate in that they have an opportunity to measure the standards and liability faced by companies overseas, and in a proactive manner to adjust their course during the period it takes our enforcement agencies and courts to “catch-up” with global pollution control trends, and thereby position themselves favourably to avoid potential negative implications of enforcement.

Bearing the above in mind, it is hoped that this document will assist in some small way to helping South African industry to take positive steps towards incorporating global and South African environmental standards into their day-to-day operations.

This document is not meant to be a complete answer to environmental management, but it is as the title suggests a guide to important environmental issues for companies operating in South Africa. Given that the target audience is urban industry, the document has a strong bias towards highlighting pollution management issues. However, it should be borne in mind that although pollution is perhaps the principal environmental risk for existing industry, it is but one subset of the broader subject of environmental law. Natural resource use, physical planning and nature conservation issues should not be ignored as a result. Having been

commissioned by the Water Research Commission, the document has a bias towards detailing water pollution laws. This is not the only environmental aspect at stake, and air pollution, soil conservation and human health should not be ignored.

As environmental issues increase in importance for companies, so the number of NGO's representing businesses' environmental concerns have increased. The contact details of a sample of a few of these, together with the contact details of the relevant national and provincial government departments responsible for the administration of environmental and related law are provided in Schedule 3 of this document.

The law referred to is as at December 2000.

### 1.2 Corporate responsibility versus corporate accountability

Companies must appreciate the distinction between corporate responsibility and corporate accountability. The environmental "morals" of a company form part of its corporate responsibility, whereby it selects particular production methods, processes and waste streams which will have the least impact on the environment. Corporate accountability, on the other hand, relates to "legal compliance" in terms of which a company must ensure that its products and operations do not violate

prescribed environmental norms and standards. Corporate responsibility is behaviour that is encouraged, while corporate accountability is required by law.

Many of our companies have used the excuse that environmental responsibility and accountability cost too much in our developing economy. However, environmental non-compliance in business terms, is simply a decision by a company to transfer or externalise its pollution related costs of production to the poor (who live near factories), to our children (who are more susceptible to pollution than adults), to indigenous people (who lose their habitats and natural resources), to workers (who become ill), and to the earth at large (as pollution knows no boundaries, and resource depletion and destruction of ecosystems and species affects us all).

Companies should also be careful not to misuse their environmental corporate responsibility and accountability policies. Often such a corporate responsibility policy amounts to mere window dressing, and an accountability policy amounts to mere lip-service. Thousands, often millions, of rands are spent employing a team of environmental staff and consultants to deal with the issues and to produce glossy public brochures to tell the world of the high environmental standards of the company. Yet often precious little of this budget is actually spent on redressing environmental harm

caused in the past or introducing cleaner technology and processes to reduce the company's environmental impact in the future. It is easy for companies, especially those with large structures, to eventually believe the lie that they are "clean" and that they comply with environmental laws and standards. Frequently the reality is that they are far from compliant and many face the risk of legal sanction.

### 1.3 Public awareness and judicial response

Public awareness and concern for the impact industry and business in general are having on the environment has increased since 1994. The entrenchment of an environmental constitutional right and the reintroduction of South Africa to the global community has resulted in a public ethos which now increasingly perceives pollution to be a crime. This has not been the traditional public position, where save for interest in our nature reserves and wilderness areas, the general population have had little concern for the threat of pollution and virtually no knowledge as to what constitutes an environmental offence. However, in theory at least, the greater the public's anger or concern for an issue, the more stringent are the laws that develop. It also results in our courts treating pollution crimes more seriously as can be seen from the following recent examples:

(a) *Minister of Health & Welfare v Woodcarb (Pty) Limited & Another, 1996 (3) SA 155 (N)* where the court

granted the Minister of Health an interdict against the Respondent who was causing an unacceptable smoke nuisance in the vicinity of its factory. The court found that the Minister had legal standing to institute a civil application to stop a facility operating in a manner which caused pollution even though the Act governing the Minister's actions did not specifically provide her with these powers.

(b) *Lascon Properties (Pty) Limited v Wadeville Investment Co. (Pty) Limited & Another, 1997 (4) SA 578 (W)* where the court acted cautiously in holding that a statutory provision in the Minerals Act 50 of 1991 did not require the element of fault to be proved, and that it was the intention of the legislature to provide a civil remedy for those individuals suffering from pollution caused by another.

(c) In a criminal case by the Durban Metropolitan Council against Plascon Inks & Packaging Coatings (Pty) Limited in December 1998, the accused was fined R50 000.00 for offences it committed in terms of the Water Act and Environment Conservation Act through its pollution of the Umhlatuzana Canal with Acrolyte Resin.

(d) *The Director: Mineral Development, Gauteng Region & Sasol Mining (Pty) Limited v Save The Vaal Environment & Others, Supreme Court of Appeal, Case No. 133/98 3 81/98 (unreported)* where the

> Supreme Court of Appeal allowed a group of citizens concerned about the quality of the Vaal River to participate in terms of their environmental rights in the formal procedure for the granting of a mining licence in terms of the Mineral Act 50 of 1991.

These cases exhibit a new attitude by our courts towards pollution related offences. Where traditionally our courts would have leant in favour of business in instances where there was any doubt that they were causing harm, today they appear to be adopting a more cautious and socially aware approach by giving the environment and public health the benefit of the doubt.

The shift in environmental ethos should not be underestimated. In a 1994 survey conducted in the United States 60 000 people were asked to rank the severity of particular crimes. Environmental crime placed seventh after murder, but ahead of heroin smuggling, armed robbery, bribery of public officials and sky jacking.

### 1.4 The impact of globalisation

Globalisation or world “shrinkage” is not only a trend, but it has become a way of life over the past decade. South Africa has not been isolated from this process. Contemporary international environmental law, perhaps because of the transboundary problems its poses, is a good example of the

way in which globalisation has occurred. South African pollution control law has undergone dramatic changes over the past ten years, the last two of which have in particular seen the introduction and implementation of radical new legislation and policies. It is no coincidence that these national and international developments took place during the same period. Many of our laws have borrowed from similar laws in foreign jurisdictions and international pollution control trends. The manner in which the latter has occurred will be highlighted in Chapter 2.

Globalisation is resulting in the adoption in South Africa of distinctive environmental principles, which often involve a "paradigm shift" away from the traditional manner in which our companies and directors have thought. For instance the wise use of nonrenewable resources, the preservation of bio-diversity and the "polluter pays" principle were not issues companies in South Africa considered in the past. For directors and other company officers on a personal level, there has been an international shift in the traditional concept of corporate governance to a point where the concerns of a wider group of stakeholders must now be given consideration. Increasingly one of these stakeholders has been recognised as the environment.

Our enforcement agencies have been delegated pollution control obligations in terms of our Constitution and other

legislation. In order to implement the new control laws, it is likely that they will look to similar laws in foreign jurisdictions for guidance. Issues such as source based controls, pollution prevention, ambient pollution standards, and the issuing of permits and licences and attaching conditions to them, have all been dealt with through laws similar to our own overseas.

Our courts whose decisions are meant to reflect the *bona mores* of our society are also undergoing a "globalisation process". Their decisions already indicate that they will in relevant circumstances take issues of global concern into account. Not only have our courts made this transition naturally, but they have been compelled to do so in terms of our Constitution. They are obliged when interpreting the Bill of Rights to consider international law, and may consider foreign law.

A second, and perhaps more business related reason to take heed of the impact of globalisation in an environmental context, is the increased "greening" of business. This aspect has at least two subsets. The first is that many competitors overseas, particularly in Western countries, face strict environmental standards and laws in the operation of their businesses. This will often, in the short to medium-term at least, have increased their costs of production, as they have had to install cleaner technology, reduce their impact on traditionally used natural resources, and substantially reduced

their waste-streams. Where South African companies producing similar products and services wish to sell these overseas, they are increasingly being called upon to show that they have adhered to similar environmental standards. This is not only to ensure that the importing country is satisfied that we are not unnecessarily harming the environment, but is also for purely business reasons to ensure that the "playing fields" are level and that their industry can compete fairly with ours.

It is therefore no surprise that our National Department of Trade and Industry is currently preparing an environmental policy, and that the Draft White Paper on Integrated Pollution Control and Waste Management for South Africa published in 1998, speaks of our government promoting an integrated approach to pollution and waste management by, *inter alia*, ensuring that:

"(a) South Africa meets all its international environmental obligations as rapidly as possible;

(b) Exporters are assisted in meeting internationally expected standards of environmental management; and

(c) International pollution control efforts are not used as unfair trade barriers against South Africa's export."

The second subset is the impact which "greening" business has on investment in our local market. Green issues are big

business overseas. Political parties win elections on these tickets. First world companies in particular appear increasingly to prefer to do business with environmentally like-minded companies in other countries. South Africa at present has no environmentally friendly city worth the name.

## 1.5 Increased environmental responsibility and liability

### 1.5.1 *What are my company's environmental duties?*

#### **1.5.1.1** *General environmental duty*

The National Environmental Management Act 107 of 1998 imposes a positive duty on everyone who causes, has caused or may cause significant pollution or degradation of the environment to take reasonable measures to prevent it from occurring, continuing or recurring, or where it cannot reasonably be avoided or stopped, to minimise and rectify it. Although this duty rests on everyone, the Act singles out an owner, person in control or person who has the right to use land or premises on or in which any activity or process is or was performed, or any other situation exists, which causes, has caused or may cause significant pollution or degradation of the environment, for specific mention.

Similar duties exist for specific aspects of the environment in terms of other legislation at all levels of government. For instance, the National Water Act 36 of 1998 places a duty on everyone to prevent or remedy the effects of pollution of water resources, while the Occupational Health and Safety Act 85 of

1993 obliges all employers to conduct their undertakings in such a manner, as far as is reasonably practicable, so that persons other than those in their employment who may be directly affected by the activities, are not exposed to hazards to their health or safety.

Both the National Environmental Management Act and the National Water Act place a duty on responsible parties to deal with what are termed “emergency incidents”. These are essentially sudden and unexpected occurrences which lead to serious danger to the public or potential or actual pollution of the environment, whether immediate or delayed.

These examples are only a small sample of the numerous pollution-related duties which exist.

#### **1.5.1.2** *Administrative Duties*

Pollution control also places administrative duties on companies. This involves companies being obliged to obtain permits, certificates, licences and authorisations for various activities impacting on the environment. For example, a company may not operate a scheduled process unless a certificate is obtained in terms of the Atmospheric Pollution Prevention Act 45 of 1965. In terms of the National Water Act 36 of 1998, a licence is required for the discharge of trade effluent to a natural water resource unless the water usage falls under an exempted activity.

Furthermore, many activities conducted by companies will now require a compulsory environmental impact assessment study and authorisation before the activity commences.

These administrative measures are increasingly becoming the most widely used technique by governments to prevent environmental harm. Most licencing controls are not designed to eliminate all pollution or risk, but rather serve to control serious pollution and reduce its levels as much as possible.

Licencing in all its guises is important to companies, as frequently without them a company cannot operate. They are becoming increasingly onerous with government authorities stipulating strict requirements for obtaining a licence and then attaching equally strict conditions to the continued validity once the licence is issued. It is therefore a proactive rather than reactive approach to pollution management.

A list of some of the more relevant licences, permits or certificates is contained in Chapter 6 of this document.

#### **1.5.1.3** *Other duties*

A national environmental management standard has now been prescribed in the National Environmental Management Act 107 of 1998. This is known as the Best Practicable Environmental Option (BPEO), which is defined as involving a "selection of the option that provides the most benefit or

causes the least damage to the environment as a whole, at a cost acceptable to society, in the long-term as well as in the short-term".

Furthermore various environmental principles have been given legal effect in the National Environmental Management Act. These include the "polluter pays", "cradle-to-grave" and "waste prevention and minimisation" principles. Some of the more relevant ones are discussed in Chapter 2 of this document.

Finally, a further example of a contemporary environmental duty which may be imposed, is set out in Section 30 of the National Water Act. In terms of this Section a relevant authority may, if it deems it necessary for the protection of a water resource or property, require an applicant for a water licence to give it financial security in respect of any obligation or potential obligations which may arise from the licence. Clearly one of the obligations which may arise would be as a result of a company causing pollution. The Act stipulates that the financial security which a company may be required to provide includes:

(a) a letter of credit from a bank;
(b) a surety or bank guarantee;
(c) a bond;
(d) an insurance policy; or
(e) any other appropriate form of security.

### 1.5.2 *Pollution liabilities for companies*

#### 1.5.2.1 *Clean-up costs*

The company may incur these costs where it either voluntarily cleans up after having caused pollution or where it is ordered to do so in terms of it falling within the ambit of being "a responsible party" as detailed below. Alternatively, the costs can be incurred where an authority effects a clean-up and calls upon a responsible company to reimburse it. Importantly it is not just the polluter who falls within the category of "responsible party". Consequently, a company may become liable to clean-up or pay the costs for doing so when it:

- was or is the party responsible for the pollution;
- directly or indirectly contributed to the pollution;
- was the owner of the land when the pollution occurred or the successor-in-title to such land;
- was in control of land or had the right to use the land when the activity or process is or was undertaken, or the situation came about;
- was the party who negligently failed to prevent the activity or process being performed or the situation coming about; or
- was a party who benefitted from the clean-up measures completed by the government agency.

All responsible parties, (where there is more than one), are liable on a joint and several basis, and consequently the authority can select the party which is the easiest to find, and

which has the “deepest pocket”. A careful consideration of the list of potentially responsible parties, particularly when compared to similar provisions overseas, suggests that multinational holding companies or foreign, (or local), investors may find themselves responsible for the clean-up of pollution or contamination caused by their subsidiaries. For instance, they may be deemed to have been either directly or indirectly responsible where the relationship between the holding company and its subsidiary is sufficiently close. Financial institutions will most certainly fall within the list of responsible parties where they foreclose on contaminated land and thereby become the owner. Banks may also potentially be deemed to be a responsible party where in the course of their risk assessment of a company calling for a loan, they determine that the activities will cause pollution and yet fail to refuse the loan or to disclose the activities to a relevant authority. The same result may occur where a bank becomes a part owner in a joint venture.

#### **1.5.2.2** *Costs of rehabilitation of the environment*

These costs may be separate from the costs of a clean-up for a pollution incident. In terms of the National Environmental Management Act rehabilitation costs may be recovered from the responsible party as damages by an affected party in the same criminal proceedings when the offender is convicted of a pollution offence.

**1.5.2.3** *Fines*

Environmental or related statutes prescribe varying maximum fines. The Environment Conservation Act, for example, prescribes a maximum fine of R100 000.000 for the disposing of waste in an unlawful manner. Certain offences may also incur continuing fines where a polluter continues with the activity after he, she or it has been convicted.

The objective of a fine is to deter. Traditionally the size of fines for pollution have been ridiculously low and have been absorbed by offenders as one of the costs of production. Consequently, companies can expect the size of fines to increase significantly to ensure that the deterrent effect remains. This certainly is the case in other countries where massive fines running into millions of rands have been imposed.

**1.5.2.4** *Directives*

Many environmental or related laws entitle a relevant authority to issue notices or directives to pollution offenders in terms of which they can oblige the offender to take necessary steps to either prevent or stop an activity causing pollution. A directive could include an instruction to change processes, to install cleaner production methods, or to take steps to clean-up pollution contamination. A directive is a potentially powerful weapon for authorities in that provided it is issued correctly, should the recipient fail to respond or fail to adequately

respond, any legal action which the relevant authority subsequently takes, would be based on the breach of the directive. In legal terms, this is a far simpler case to prove than a case which is based on the pollution incident itself.

#### **1.5.2.5** *Damages awards*

A company faces paying significant damages to both government agencies as well as individuals where pollution caused by the company results in harm being suffered. The National Environmental Management Act, for example, recognises damages such as the costs of rehabilitating the environment or preventing damage to the environment; or the monetary advantage gained or likely to be gained by a company as a result of an environmental offence being committed. Added to this are the potential civil law damages claims by individuals who have suffered physical harm or property damage as a result of a pollution incident.

#### **1.5.2.6** *Labour, administrative and overhead costs*

Both the National Environmental Management Act as well as the National Water Act now entitle an enforcement authority to recover its labour, administrative and overhead costs associated with the investigation, clean-up and prosecution of pollution offences. This is seemingly an attempt to encourage enforcement agencies to properly fulfil their functions. Fiscal restrictions have traditionally limited the extent to which an authority will investigate and repair damage on its own accord.

**1.5.2.7** *Related costs*

There are numerous indirect or related expenses which a company may face as a result of it causing pollution. Listed below are a few examples:

(a) Property devaluation

Where a company's land is found to be contaminated, its value will almost certainly drop significantly. This has been the case in foreign countries where lists of contaminated land are compiled by relevant authorities. South African legislation now also allows for the accumulation of information on contaminated land and for making it public.

Given that successors-in-title to land face the costs of cleaning up the previous owner's pollution, the potential to sell such land will be reduced. Alternatively, potential buyers would insist on sale agreements incorporating onerous clauses either compelling the seller to clean-up the site prior to the sale date, or providing the buyer with adequate security to cover the latter should they at any stage be faced with a clean-up order.

(b) Business interruption

Where an environmental permit, certificate or licence is withdrawn by a relevant authority due to the company causing pollution, this may result in the

company having to stop production or shut-down all together. Where it is obliged to remain shut until such time as it removes the activity or process causing pollution, the costs to the company are potentially massive.

(c) Insurance premium loading

Where a company is labelled as having caused pollution, the costs of insuring future risks of a similar nature may become significantly more expensive, and often become uninsurable.

### 1.5.3 *Director's duties and liabilities*

In terms of the National Environmental Management Act 107 of 1998, a director is under a duty to take all reasonable steps necessary under the circumstances to prevent the commission by the company of an environmental offence in terms of the provisions of various statutes listed in a Schedule to the Act. Another example of a personal environmental duty imposed on a director is found in the Occupational Health and Safety Act 85 of 1993, where it stipulates that the Chief Executive Officer is under a duty, as far as is reasonably practicable, to ensure that the duties of the company set out in the Act, are properly discharged. This latter duty includes the obligation to ensure that the company operates in such a manner so as not to pose a threat to the health and safety of people on or off its site.

These duties must be seen against the wider background of a shift globally in the meaning and extent of a director's fiduciary duty. The traditional role of a director to run a company for the benefit of its shareholders and to maximise profits for them is rapidly changing. Globally, public policy demands a model of corporate governance which is both legally justifiable and acceptable, with a shift towards a concept of corporate social responsibility. In terms of this ethos directors should not only consider the interests of their shareholders, but also those of their employees, customers, suppliers, creditors, the environment and the community at large. In South Africa the King Report on Corporate Governance published by the Institute of Directors in South Africa, has recognised the shift and suggested that although the traditional role of directors remains, they must now also have regard to the interests of all stakeholders.

Precisely to what degree South African law will extend a director's fiduciary duty will ultimately be determined by the developments which take place through judicial review of our common law, and by statutory intervention to prescribe extensions or limits. The director's duty set out in the National Environmental Management Act discussed above, is a clear example of such an extension. It applies to both current and former directors who held that position when the company committed an environmental offence.

Consequently a director faces personal liability for retrospective harm caused by his or her company. The duty is of course subject to the proviso that the director failed to take all reasonable steps necessary in the circumstances to prevent the harm. The meaning of “reasonable steps” has not been defined, and it would be premature to anticipate precisely what is required of a director to satisfy this standard. However, judging by similar duties in other countries, it is likely that a director will have to show that he or she exhibited environmental due diligence in order to convince the authority that “reasonable steps” were taken.

The types of issues which may be accepted as either confirming environmental due diligence or indicating that there was failure on the part of the director include:

(a) where a director makes a decision which impacts on the environment or public health or safety, he or she must show that it was an informed and rational one based on all the facts of a particular case;

(b) where an environmental management system has been introduced at a company and deals with environmental issues on a day-to-day basis from a boardroom level down to the factory floor, this may indicate due diligence;

(c) where a director knew or ought reasonably to have known that his or her employees, machinery, processes, agents or consultants were causing

environmental harm, but failed to act to prevent or limit such harm, they will probably have failed the "reasonable steps" test; and

(d) when the company or its consultant produces an environmental audit report disclosing that environmental harm is being caused by the company and the director ignores it or neglects to take any steps to remedy the situation, once again, he or she will probably have failed the "reasonable steps" test.

Directors may be held to be jointly and severally liable with a company. They may face sentences including fines or imprisonment. Although the concept of a director being sent to jail for a pollution offence is novel in South Africa, it has occurred on several occasions overseas, and it is arguably not long before such a sentence is imposed in South Africa.

The fines directors potentially face include those which may be imposed for the monetary advantage gained or likely to be gained by the director as a consequence of the polluting offence.

Other personal liability awards which may be made against the director include:

(a) damages awards to third parties who suffer physical harm or property harm;

(b) the costs of a clean-up and/or rehabilitation of the environment;

(c) the reasonable costs incurred by the public prosecutor and the organ of state concerned with the investigation and prosecution of the offence;

(d) that he or she may be barred by a court from holding the office of a director permanently or for a stipulated period in terms of the Companies Act.

### 1.5.4 *Access to information*

Our Constitution envisages giving government authorities as well as the general public greater access to information held by both the state and any individual which is required for the exercise or protection of any rights. National legislation, in the form of the Promotion of Access to Information Act 2 of 2000, has been finalised to give effect to this right, although a date for its implementation is still awaited. In the interim, however, the National Environmental Management Act sets out the various instances in which information must be made available to either government authorities or to the public at large.

In brief, the present position is that the state is currently entitled to have access to information relating to the state of the environment and actual or future threats to the environment, including any emissions to water, air or soil and the production, handling, transportation, treatment, storage and disposal of hazardous waste held by any person where

that information is necessary to enable them to carry out their duties. The Act goes on to stipulate that private individuals can obtain similar information from the state or any organ of state.

As such it would appear that where a company is causing environmental harm an individual can compel, (through a court procedure if necessary), a relevant authority to obtain important information regarding the pollution having been or being caused by a company, and thereafter hand this information to the individual.

There are very few instances where a company may refuse to disclose the information sought. One of the instances is for the reasonable protection of commercially confidential information. However, companies should not console themselves too much with this exception as the Act goes on to define “commercially confidential information” as expressly excluding details of emission levels and waste products.

The importance of this legislative development is that frequently the information which companies are obliged to disclose is precisely the information which is required by a prosecuting authority or by an individual in order to initiate legal action against the company. By making the information available in this manner, it would appear that the legislature is hoping to introduce a further form of environmental control by ensuring that the company improves its environmental

performance and thereby reduces the chances of it having to make a potentially harmful disclosure.

### 1.5.5 *Private prosecutions and class actions*

Once again in line with the constitutional provisions, the National Environmental Management Act has substantially increased the legal standing of private citizens and environmental concern groups to bring legal action against companies for environmental offences.

Consequently individuals are now entitled to seek judicial relief in respect of any breach or threatened breach of any provision of the National Environmental Management Act, including a principle contained in the Act, or any other statutory provision concerning the protection of the environment. Individuals may exercise this right in the following way:

- in their personal capacities;
- on behalf of another individual;
- in the interest of or on behalf of a group or class of persons;
- in the public interest; or
- in the interest of protecting the environment.

Private environmental prosecutions are now also available. The National Environmental Management Act allows any person or group of persons, where they are acting in the public interest or in the interest of protecting the environment, to

initiate and conduct a prosecution in respect of any breach or threatened breach of any duty in any national or provincial legislation or municipal bylaw, or any regulation, licence, permission or authorisation issued in terms of such legislation, where that duty is concerned with the protection of the environment and the breach of that duty is an offence. The inclusion of this provision is seemingly to address the difficulty our enforcement agencies have with resources, capacity and training to properly enforce the environmental laws they administer. Where private prosecutions are brought, the Act allows our court to make costs orders in favour of the prosecutor to encourage them to institute the action, and to do so without the fear of potentially incurring large and irrecoverable expenses often associated with pollution prosecutions.

### 1.5.6 *Employees' rights*

The National Environmental Management Act entitles employees to refuse to perform any work if they, in good faith and reasonably believe at the time of their refusal that the performance of the work would result in imminent or serious threat to the environment. Where the employees satisfy these requirements, no action may be taken against them by their employer.

The Act furthermore encourages employees to disclose information about the company to a relevant authority if they in

good faith have reason to believe, at the time, that the information discloses evidence of an environmental risk. Once again where this occurs, the employer may not take any action against the employee.

## 1.6 Environmental business issues

***Pollution prevention benefits: Capital saving and income***

Entrepreneurship involves the identification of market opportunities and the creation of combinations to pursue it. Corporate entrepreneurship involves either the development of new ventures within firms, or the struggle of firms to renew themselves through using new combinations of resources.

Environmental entrepreneurship follows the above patterns through the creation of new products, services or organisations to meet environmental market opportunities. There are several combinations through which this can occur.

Firstly, a company can adopt a proactive environmental stance to define their market niche and to help them gain a competitive advantage, such as through using recycled paper to meet the desire of consumers who wish to buy environmentally preferable paper. Secondly pollution prevention as a form of environmental entrepreneurship aims at reducing the impact on the environment whilst responding to market opportunities through aiming at processed based activities by reducing costs to the company rather than increasing revenue. Examples of this latter form of

environmental entrepreneurship involves reduction of releases and transfers of toxic chemicals to the environment which not only reduces the impact on the environment, but also produces tangible benefits for the company, such as lower disposal or material costs.

Arguably pollution prevention is therefore an entrepreneurial opportunity in that it has the potential to bring companies significant strategic benefits, many of which can be calculated as direct cost saving. Examples of pollution prevention entrepreneurial benefits include:

(a) It allows a company to reduce the amount of material used in products or in the manufacturing process thereby creating yield improvement which is a commonly sought manufacturing goal.
(b) Pollution prevention lowers disposal costs for waste materials by reducing the amount of waste generated.
(c) It can lower contingent liability costs for future remediation of contaminated sites. The costs of paying for a clean-up or remediation of a site can run into thousands and often millions of Rands.

Besides direct cost savings pollution prevention also has peripheral entrepreneurial benefits. For instance they can affect and aid stakeholder management which can improve productivity and earnings goals. Examples of the way in which

pollution prevention can impact on stakeholders include:

(a) Employees are one key stakeholder and pollution prevention can increase productivity and worker satisfaction. A policy of pollution prevention will assist with worker safety, and will boost the morale and pride which employees have in the company.

(b) Regulators will also respond to a company's pollution prevention programs which can lead to faster permitting and less stringent conditions being attached to environmental permits and licences required by the company.

(c) Customers and suppliers will also respond positively to pollution prevention programs used by a company.

(d) Shareholders are another important stakeholder who can have a significant impact on a company, and whose investment attitudes may depend on the degree to which a company implements a pollution prevention program. They will increasingly become aware that large clean-up cost orders can adversely affect the value of their shares.

(e) Some argue that even the natural environment itself deserves consideration as a stakeholder.

The most frequently used methods of pollution prevention in the United States include the following:

(a) Substitution of less toxic materials for more harmful ones.

(b) Changing of production processes to use less toxic materials.

(c) Reformulation of products to use less harmful materials.

(d) Recycling within the production process.

As activities (including environmental ones) which benefit the strategic and financial position of the corporation are most likely to be developed and implemented, pollution prevention seems like a logical choice for corporations to embrace as it can produce significant and quantifiable corporate gain. However, South African corporations have generally to date not widely viewed pollution prevention as an opportunity and its potential benefits have rarely been recognised.

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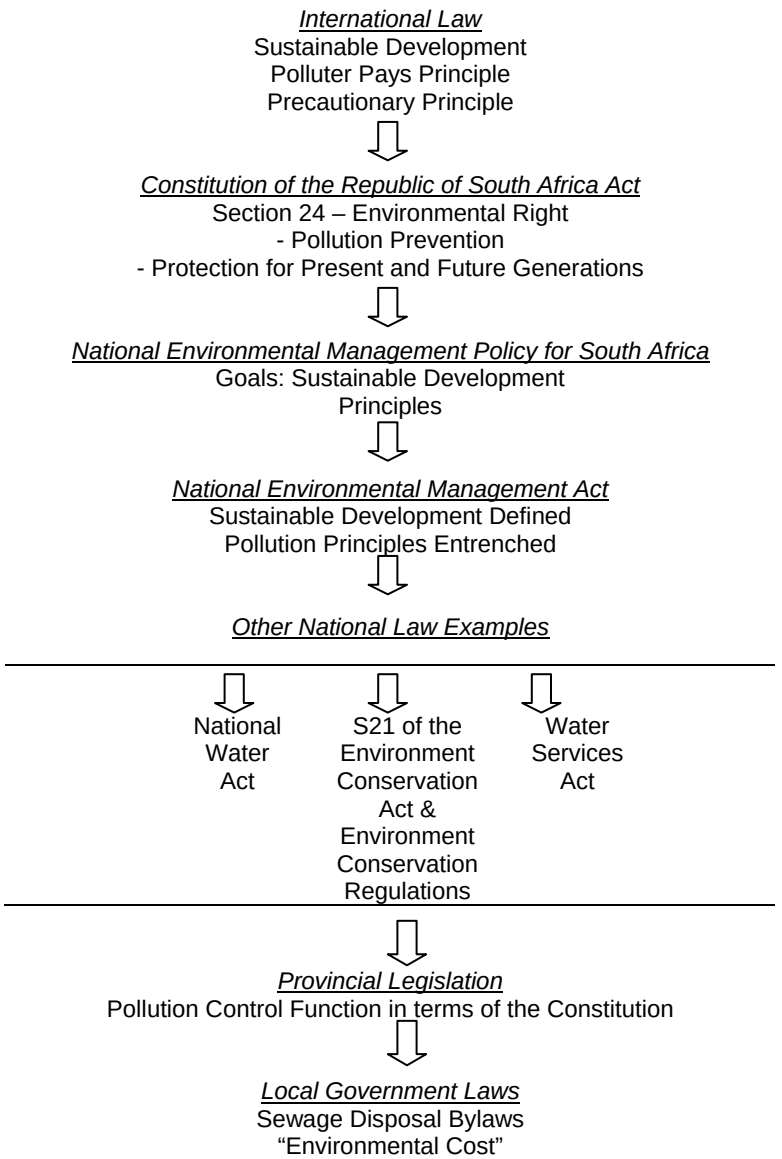
## 2. A framework of current South African pollution control legislation and principles

The Chapter aims to highlight in a brief and simplistic way, the manner in which our most recent environmental legislation is following a common pattern and objective. The law aims to give effect to the overarching environmental management principle of sustainable development. As such the Chapter is not intended to be a comprehensive statutory guide, and should not be read as such. It will however hopefully highlight the aim of integrating and co-ordinating pollution management, from national down to local laws, through emphasising the implementation of sustainable development and its supporting principles.

## 2.1 *Sustainable development pyramid*



## 2.2 Overview of the latest developments in pollution control law – "sustainable development" entrenched

Strangely and perhaps as a sign of its current importance, "pollution" as a term has only recently been legislatively defined in South Africa. Until the passing of the National Water Act 36 of 1998, (in October 1998), and the National Environmental Management Act 107 of 1998, (given effect from 29 January 1999), no statutory definition of the term existed. Despite this many of our older statutes made the pollution of environmental media an offence, (see the Water Act 54 of 1956 for example). The existence of a definition for the term is positive step for companies in the sense that they are now hopefully able to see the benchmark for lawful and unlawful activities. At the same time companies may perceive the definition as negative in the sense that when they are caught causing pollution, the prosecutor's case is made that much easier as the court will ordinarily be obliged to convict the offender if the statutory definition of "pollution" is shown to have been proved in the circumstances.

"Pollution" is defined as involving any change to the environment caused by substances, radioactive or other waves, noise, odours, heat or dust emitted from any activity, including storage or treatment of waste or substances,

construction and the provision of services. There is however one proviso, namely that the change must have had an adverse effect on human health or wellbeing or on ecosystems, or on materials useful to people, or will have such an effect in the future (National Environmental Management Act Section 1(1)(xxiv)). This is a general pollution definition. A specific definition for "water pollution" is found in the National Water Act and is discussed in Chapter 3 below.

"Pollution law" or "pollution control law" is therefore that body of laws, policies, principles and regulations used to manage and control the adverse impacts of human acts and omissions on the environment, with the aim being to prevent pollution where possible, and to punish offenders where it has already occurred.

### 2.2.1 *International Law and Principles*

The United Nations has for many years involved itself in researching and entrenching a global environmental management and development system. At the United Nations Conference on the Human Environment in 1972 (Stockholm) it was decided that although states have a right to exploit their own resources pursuant to their own environmental policies, they nevertheless have a responsibility to ensure that activities within their borders do not cause damage to the environment of other states or areas beyond their limits of national jurisdiction.

At the World Commission on Environment and Development in 1987, the now famous Brundtland Report was produced in which, for the first time, the term “sustainable development” was formally accepted and used.

The development of international environmental law reflecting principles seen as basic obligations of states, was further developed in 1992 at the United Nations Conference on the Environment and Development (Rio). This conference resulted in two important documents. The first, the Rio Declaration on Environment and Development was a statement of twenty-seven principles setting out the basis upon which states and individuals are to co-operate to further develop international law in the field of sustainable development. One of its principles called upon states to “reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies”. The second document is known as Agenda 21 which is a blueprint or action plan for the implementation of sustainable development.

The term “sustainable development” is premised on the fact that countries cannot contribute to the preservation of the planet without emerging from present adverse social conditions. In other words sustainable development involves ecology, economy and equity. Although there is no universal agreement of the meaning of the term, it is generally recognised as meaning the integration of social, economic and

environmental factors into planning, implementation and decision making so as to ensure that development serves present and future generations.

Some two hundred states and numerous NGO's have signed these international documents in an effort to promote international and national co-operation towards the environment and development. Furthermore, many national states have incorporated the principles of sustainable development into their national laws and policies. International environmental developments subsequent to 1992 have been, and will continue to be, substantially influenced by the two documents produced at the Rio Earth Summit.

The Rio Declaration, however not only reinforces international environmental law, but furthermore obliges states who have signed the document to diffuse the message of sustainable development through all levels of government. As such the Rio Declaration recognises that for sustainable development to have effect it requires national laws and principles, and calls upon states to introduce effective environmental laws, introduce the precautionary principle and develop the "polluter pays" principle.

It is suggested that the fact that the Rio Declaration has been accepted by so many national governments, now paves the way for its eventual incorporation into customary international

law which will result in it being binding on countries even though it is not formally incorporated into a convention. Some commentators suggest that the “precautionary” and “polluter pays” principles already form part of customary international law.

South Africa’s participation in international environmental law has become clearer over the past few years. There are many conventions relevant to the environment to which South Africa is already a party. Traditionally this was not the case and our participation in international conventions was haphazard and arbitrary. Several important legal instruments, some of which are set out below, now oblige our government to actively pursue and participate in international agreements and conventions.

### 2.2.2 *Constitution of the Republic of South Africa Act 108 of 1996*

The Constitution is the supreme law of South Africa. Any law or conduct inconsistent with it is invalid and obligations imposed by it must be fulfilled (Section 2). It is the cornerstone of environmental law in South Africa.

It contains an environmental right that not only recognises that we all have a right to an environment that is not harmful to our health or wellbeing, but that also recognises and entrenches the notion of sustainable development and its supporting

principles (Section 24). As such we have a right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that, *inter alia*, prevent pollution and ecological degradation (Section 24(b)).

It contains many other rights of relevance to the environment. These include the rights to sufficient water (Section 27), access to information (Section 32), just administrative action (Section 33), limitation of rights (Section 36), the application of rights (Section 8), and the application of international and foreign law (Sections 39 and 233). Also of relevance to the environment and pollution control, particularly with regards to enforcement, is the manner in which the Constitution entrenches the notion of co-operative governance between the three tiers of national, provincial and local government (Section 3). The Constitution does, however, set out in Schedules precisely what the designated functions of each tier of government are.

Of relevance to the environment and pollution control in particular are the following examples from the Schedules:

Schedule 4: Functional Areas of Concurrent National and Provincial Legislative Competence

PART A

- Pollution control.

- Environment.
- Disaster management.
- Health services.
- Industrial promotion.
- Nature conservation, excluding national parks, botanical gardens and marine resources.
- Road traffic regulation.
- Soil conservation.

PART B

Local Government Functional Areas Except as Limited in Section 155(6)(a) and (7)

- Air pollution.
- Building regulations.
- Electricity and gas reticulation.
- Municipal health services.
- Stormwater management systems in built-up areas.
- Water and sanitation services limited to potable water supply systems and domestic wastewater and sewage disposal systems.

Schedule 5: Functional Areas of Exclusive Provincial Legislative Competence

PART A

- Provincial planning.
- Provincial roads and traffic.

PART B

Local Government Functional Areas Except as Limited in Section 155(6)(a) and (7)

- Cleansing.
- Control of public nuisances.
- Fencing and fences.
- Municipal roads.
- Noise pollution.
- Refuse removal.
- Refuse dumps.
- Solid waste disposal.

### 2.2.3 *The White Paper on Environmental Management Policy for South Africa (GNR749, GG18894 of 15 May 1998)*

This is an overarching framework environmental policy. "Specific subsidiary and sectoral policies to carry forward detailed tasks of everyday government will fall within this framework" (Page 10).

The policy is however itself a subsidiary policy in the sense that it seeks to give effect to the rights in the Constitution.

It deals primarily with issues which include environmental principles, strategic environmental goals and objectives and governance:

(a) Principles

The overarching principle is stated to be sustainable development. Twenty-three other principles are set out to guide our government in achieving the overarching principle.

Examples of some of the more important ones in the context of this document include:

**(i) "Polluter pays" – those responsible for environmental damage must pay the repair costs both to the environment and human health, and the costs of preventative measures to reduce or prevent further pollution or environmental damage.**

**(ii) "Cradle-to-grave" – responsibility for the environmental health and safety consequences of a policy, program, project, product, process, service or activity exists throughout its lifecycle. It starts with conceptualisation and planning and runs through all stages of implementation to re-use, recycling and ultimate disposal of products and wastes or decommissioning of installations.**

| | |
|---|---|
| **(iii)** | **"Precaution" – government will apply a risk averse and cautious approach that recognises the limits of current knowledge about the environmental consequences of decisions or actions.** |
| **(iv)** | **"Waste avoidance and minimisation" – waste management must minimise and avoid the creation of waste at source, especially in the case of toxic and hazardous waste. Government must encourage waste recycling, separation at source and safe disposal of unavoidable waste.** |

(b) Goals and Objectives

Seven strategic goals have been identified for achieving environmental sustainability. They are seen as priorities for achieving the vision and for focusing government action over the next five to ten years. Two of the goals include:

(i) Effective institutional framework and legislation (Goal 1):

This goal includes auditing existing legislation and thereafter reviewing it to develop relevant and effective environmental legislation, norms

and standards.

(ii) Sustainable resource use and impact management (Goal 2):

This goal aims to encourage wider involvement by industry and other stakeholders in agreements and partnerships in order to improve environmental performance and develop and adopt best practice standards that exceed minimum requirements. It also aims to make use of market based instruments to internalise environmental costs as part of the production costs; reduce the waste-streams to a level that can be absorbed without harm to the environment and human health; and promote the use of appropriate technology that will reduce resource use, waste generation and pollution.

Furthermore, it aims to prevent, reduce and manage pollution of any part of the environment due to all forms of human activity, and in particular from radioactive, toxic and other hazardous substances. It intends setting targets to minimise waste

generation and pollution at source and produce a hierarchy of waste management practices, namely reduction of waste at source, re-use and recycling with safe disposal as a last resort. It will regulate and monitor waste production, enforce waste control measures, and co-ordinate administration of integrated pollution and waste management through a single government department. An information system of chemical hazards and toxic releases will be set up. It also aims to introduce a system to track the transportation of hazardous materials. It will ensure the protection and proactive management of human health problems related to the environment in all forms of economic activity. Finally, it aims to promote cleaner production and establish mechanisms to ensure continuous improvements and best practice in all areas of environmental management.

The policy intends promoting energy efficiency through the use of renewable energy resources and environmentally friendly alternative energy resources.

(c) Governance

The policy states that the government, at all levels, will take the following specific measures and use the following mechanism and instruments in its management of the environment:

It will introduce an integrated framework of legislation.

- An integrated environmental management and planning system to give all decision makers at all levels adequate information on possible adverse environment effects of an activity will be introduced.
- The enforcement of legislation will be improved including the development of consistent administrative control procedures and effective enforcement measures.
- Punishment of environmental transgressions will occur. To secure sustainable development and protect the wellbeing of citizens, punishment of environmental crimes will reflect the gravity and extent of the degradation and abuse of the environment. Government will investigate methods of determining fines and prison sentences linked to the cost of living and to the cost of the offence to the environment.

- Liability for environmentally harmful actions will increase and take the form of fines, compensation claims and restitution, and rehabilitation orders.

### 2.2.4 *National Waste Management Strategy*

This strategy which was adopted by national government at the end of 1999 seeks to give practical effect to much of the framework as set out in the policy described in paragraph 2.2.3. It consists of 8 action plan documents, namely:

(a) National Waste Management Strategy;

(b) Capacity building, education, awareness and communication;

(c) General waste collection;

(d) Implementing instruments;

(e) Integrated waste management planning;

(f) Waste treatment and disposal;

(g) Waste information systems; and

(h) Waste minimization and recycling

Each action plan is comprehensive. Some of the key issues highlighted by it include:

(a) The Waste Management Strategy follows the hierarchy approach which is internationally accepted, namely:

  (i) cleaner production through waste prevention and minimization;

(ii) recycling through reuse, recovery and composting;

(iii) treatment through physical, chemical and destruction; and disposal through landfilling.

(b) The strategy places much emphasis on facilitating enforcement and to integrating the regulatory approach. It also intends making use of the "polluter pays" principle and total cost accounting.

(c) It is intended that waste will be categorised into general and hazardous. The general waste stream will include paper, metals, glass, plastic, organic and inerts (builder's rubble). Hazardous waste will be classified according to the nine classes and four hazard ratings set out in the current Department of Water Affairs and Forestry's Minimum Requirements document.

(d) The principles upon which the National Waste Management Strategy is based include accountability, affordability, cradle to grave management, equity, integration, open information, polluter pays, subsidiarity, waste avoidance and minimization, cooperative governance, sustainable development, environmental protection and justice.

A blueprint for a timetable to implement various aspects of the strategy has been formulated. For example during the course

of 2000, a variety of regulations were to be promulgated, principally through Section 24 of the Environment Conservation Act 73 of 1989, but also through the National Environmental Management Act 107 of 1998. These initial regulations are to relate to waste information systems, waste collection, waste minimisation and recycling and waste treatment and disposal.

Not only will the strategy be enforced through either amending existing legislation or creating regulations in terms thereof, but it was also intended to draft and implement an Integrated Pollution and Waste Management Act. The strategy sets out the drafting guidelines for this Act, and industry would be well advised to have someone peruse these guidelines for them, and to advise the client of the manner in which the proposed provisions will impact on their business. The reason for this is, in short, because the impact will be significant.

Current government murmurings however suggest that the Integrated Pollution and Waste Management Act will in fact not be formulated in a separate piece of legislation, but will rather form a chapter within the National Environmental Management Act, which is discussed below. Nevertheless, whether this law forms part of another, or is created on its own, its intended goals whilst laudable in streamlining a currently unsatisfactory waste management situation, will

nevertheless create a multitude of obligations which companies will be obliged to fulfil.

### 2.2.5 *National Environmental Management Act 107 of 1998*

The preamble to the Act describes the method for the implementation of sustainable development. It also defines the term as meaning the integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure the development serves present and future generations (Section 1(1)(xxix)).

Principles relevant to the achievement of sustainable development are given effect and include the principles of "polluter pays", "cradle-to-grave", "precaution" and "waste avoidance and minimisation" which were described more fully under 2.2.3 above (Section 2(4)(a)(iv), (a)(vii), (e) and (p)).

As part of achieving sustainable development the Act imposes a duty on everyone who causes, has caused or may cause significant pollution or degradation of the environment to take reasonable measures to prevent it occurring, continuing or recurring (Section 28(1)). Where harm to the environment is authorised by law or cannot reasonably be avoided or stopped, a duty exists to minimise and rectify the harm (Section 28(1)). Although everyone has this duty, the Act singles out an owner of land or premises, a person in control

or a person who has the right to use land or premises on which any activity or process is or was performed or undertaken, or any other situation exists, which causes, has caused or is likely to cause significant pollution or degradation of the environment, to take reasonable measures (Section 28(2)).

The above measures are stated to include:

(a) investigate, assess and evaluate the impact on the environment;

(b) inform and educate employees about the environmental risks of their work and the manner in which their tasks must be performed in order to avoid causing significant pollution or degradation of the environment;

(c) cease, modify or control any act, activity or process causing the pollution or degradation;

(d) contain or prevent the movement of pollutants or the causant of degradation;

(e) eliminate any source of the pollution or degradation; or

(f) remedy the effects of the pollution or degradation. (Section 28(3)).

Where these measures are not taken or are not satisfactorily taken, whether voluntarily or after a relevant authority has issued a notice to the responsible party to do so, the measures can be taken by the relevant authority and the costs

recovered jointly and severally from the list of responsible parties set out in Chapter 1.5.2 above.

Specific duties are also set out in cases of emergency incidents. The Act defines “incident’ as meaning 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 (Section 30(1)(a)).

The list of “responsible persons” who are obliged to take steps in cases of emergency incidents includes:

(i) the person responsible for the incident;

(ii) the person who owns any hazardous substance involved in the incident; or

(iii) the person who was in control of any hazardous substance involved in the incident at the time of the incident.

(Section 30(1)(b)).

The responsible person or his or her employer must immediately after knowledge of the incident, report the following information to a stipulated list of authorities:

(a) the nature of the incident;

(b) any risks posed by the incident to public health, safety and property;

(c) the toxicity of substances or by-products released by the incident; and

(d) any steps that should be taken in order to avoid or minimise the effects of the incident on public health and the environment.

(Section 30(3)).

The responsible person or his or her employer must furthermore, as soon as reasonably practicable after knowledge of the incident:

(a) take all reasonable measures to contain and minimise the effects of the incident, including its effects on the environment and any risks posed by the incident to the health, safety and property of persons;

(b) undertake clean-up procedures;

(c) remedy the effects of the incident; and

(d) assess the immediate and long-term effects of the incident on the environment and public health.

(Section 30(4)).

These same parties must within 14 days of the incident, report to the relevant stipulated authority details of such information as is available to enable an initial evaluation of the incident, including:

(a) the nature of the incident;

(b) the substances involved and an estimation of the quantity released and the possible acute effects on

persons and the environment and the data needed to assess these effects;

(c) initial measures taken to minimise impacts;

(d) causes of the incident, whether direct or indirect, including equipment, technology, system or management failure; and

(e) measures taken to avoid a recurrence of the incident. (Section 30(6)).

Where a responsible person fails to fulfil these obligations, a directive to do so can be given by the relevant authority (Section 30(6) and (7)). Should the directive be ignored or should there be inadequate compliance, and furthermore should there be uncertainty as to who the responsible person is, or if there is an immediate risk of serious danger to the public or potentially serious detriment to the environment, the relevant authority can take the necessary measures and recover all reasonable costs incurred by it from every responsible person jointly and severally (Section 30(8) and (9)).

Many other provisions seeking to give effect to sustainable development and its supporting principles will affect those who cause or may cause pollution. These include the sections dealing with access to information and protection of “whistle blowers” (Section 31); protection of workers refusing to do environmentally hazardous work (Section 29); improved legal

standing for citizens to enforce environmental laws (Section 32); private prosecutions (Section 33); adverse legal costs orders against those prosecuted or sued for pollution harm (Section 34(4) and Section 32(2) and (3)); and personal liability of directors, managers, agents and employees for environmental harm caused by the company or by them personally (Section 34(6) and (7)). For a more detailed discussion on many of these provisions see Chapter 1.5 above.

### 2.2.6 *Other National Legislation*

In terms of our Constitution, pollution related legislation introduced after 1996 must reflect and enforce the principle of sustainable development. As a result, the Water Services Act 108 of 1997 and the National Water Act 36 of 1998 both refer to using and protecting our water resources for present and future generations. The latter in particular has pollution provisions which very closely resemble those set out above under the National Environmental Management Act, and which are set out in further detail under Chapter 3. Future legislation will follow the same pattern.

However, there is a multitude of older legislation which either directly or indirectly manages pollution control which is also of relevance even though it does not necessarily intentionally subscribe to the overarching principle of sustainable development and its supporting principles. These Acts may

either deal with environmental management as a whole such as the Environment Conservation Act 73 of 1989, or deal with specific environmental media such as the Atmospheric Pollution Prevention Act 45 of 1965 which controls our air pollution. A detailed list of applicable acts, policies and regulations is contained in Chapter 6.

As has been set out in Chapter 5, the current and future developments should see a more integrated approach to pollution control and waste management. There will probably always be some media specific legislation, although it should be integrated in the sense that it pursues the common goal of sustainable development and other related principles much as the National Water Act and National Environmental Management Act do.

### 2.2.7 *Provincial Legislation*

As is set out in 2.2.2 above pollution control and related functions such as “environment”, “industrial promotion”, and “soil conservation”, have been designated in our Constitution as areas of concurrent national and provincial legislative competence. As such, each province has the power under prescribed circumstances to pass legislation for the province for any matter within these listed functional areas.

### 2.2.8 *Local Government Law*

All future bylaws relevant to pollution control can be expected to take heed of the constitutional and national legislative duty to pursue the principle of sustainable development.

A list of applicable bylaws is set out in Chapter 7.

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# 3 Water pollution control laws

## 3.1 Introduction

Set out below are details of the provisions of relevant trade effluent and wastewater laws applicable in South Africa. They describe the duties; the permit, licence and certificate requirements; the relevant authorities with whom companies should interact; the powers of these authorities; and the offences and penalties which companies face for violations. This list is not meant to be an exhaustive list of all laws which apply, as this would make the document unnecessarily cumbersome. Water related legislation is included for instances where industry discharges effluent directly to a water resource, or alternatively where accidental or deliberate discharges of effluent occurs to stormwater systems or to natural water resources by companies. It should also be remembered that where pollution violations occur, Local Councils and/or the Department of Water Affairs and Forestry may elect to use other related laws in addition to those set out below.

## 3.2 The Laws

### 3.2.1 *The National Water Act 36 of 1998*

Note that as this is a pollution guide, only pollution related provisions have been highlighted, and even then space does not permit all provisions to be highlighted.

The Act defines "pollution" as the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it–

(a) less fit for any beneficial purpose for which it may reasonably be expected to be used; or

(b) harmful or potentially harmful –

(aa) to the welfare, health or safety of human beings;

(bb) to any aquatic or non-aquatic organisms;

(cc) to the resource quality; or

(dd) to property.

(Section 1)

This is the benchmark companies need to strive for, and in turn is the basis upon which your company will be judged where you are prosecuted for having caused water pollution.

<u>Pollution Duties</u>

- A general pollution related duty is prescribed for an owner of land, person in control of land or a person who occupies or uses land on which any activity or process is or was performed or undertaken, or any other situation exists,

which causes, has caused or is likely to cause pollution of a water resource. This duty stipulates that these identified "responsible persons" must take all reasonable measures to prevent the pollution from occurring, continuing or recurring (Section 19(1)).

Some of the important features of this duty include:

- "Water resource" is defined in the Act as including a water course, surface water, estuary or aquifer (Section 1(1)(xxvii)).
- The duty envisages not only current or future pollution, but also historic activities or processes which cause or may cause water pollution and historic pollution.
- Actual water pollution does not need to have occurred before the duty exists, the mere likelihood of pollution is sufficient.
- Although the Act does not define "reasonable measures", it does suggest that these measures may include measures to:
  - (i) cease, modify and control any act causing pollution;
  - (ii) comply with any prescribed waste standard or management practice;
  - (iii) contain or prevent the movement of pollutants;
  - (iv) eliminate any source of pollution;
  - (v) remedy the effects of pollution;

(vi) remedy the effects of any disturbance to the bed and banks of a water course (Section 19(2)).

- The Act imposes a further pollution related duty in "emergency incidents" (Section 20).

"Incident" is defined as including any incident or accident in which a substance:

(a) pollutes or has the potential to pollute a water resource; or

(b) has, or is likely to have, a detrimental effect on a water resource.

(Section 20(1)).

Unfortunately this definition does not clearly distinguish the difference between an "incident" and an "activity or process" mentioned in Section 19. Perhaps a clue to the distinction is through the inclusion of the term "detrimental effect" in Section 20. Further clarification on the way in which our courts and authorities are likely to distinguish an emergency incident from a "normal" incident of pollution may be found through an interpretation of a similar provision in the National Environmental Management Act 107 of 1998 (Section 30(1)(a)). (See paragraph 2.2.4 above)

A responsible person, or any other person involved in the incident or any other person with knowledge of the incident

must as soon as reasonably practicable after obtaining such knowledge report it to:

(i) the Department of Water Affairs and Forestry;

(ii) the South African Police Service or relevant fire departments; or

(iii) the relevant catchment management agency.

(Section 20(3)).

The Act defines “responsible person” as including any person who:

(i) is responsible for the incident;

(ii) owns the substance involved in the incident; or

(iii) was in control of the substance involved in the incident at the time of the incident.

(Section 20(2)).

The duty of the responsible person does not end there. He or she is required to:

(i) take all reasonable measures to contain and minimise the effects of the incident;

(ii) undertake clean-up procedures;

(iii) remedy the effects of the incident; and

(iv) take such measures as the catchment management agency may either verbally or in writing direct within the time specified.

(Section 20(4)).

Notices / Directives

- A catchment management agency may issue a directive (ie a notice) to any person who fails to take the required measures as set out in Section 19(1) and (2). The directive may require the responsible person to:
  (i) commence taking specific measures before a given date;
  (ii) diligently continue with those measures; and
  (iii) complete them before a given date.
  (Section 19(3)).
- In the case of an emergency incident, a catchment management agency may either verbally or in writing direct a responsible person to take specific measures within a specified time (Section 20(4)).

Powers of the Authorities

- Where a responsible person fails to comply or inadequately complies with a pollution directive given to it in terms of Section 19 and described above, the catchment management agency may take the measures it considers necessary to remedy the situation (Section 19(4)).
- Likewise should a responsible person fail to comply or inadequately comply with the directive issued by a relevant authority under the "emergency incident" provisions set out in Section 20 and described above, or if

it is not possible to give the directive to a responsible party timeously, a catchment management agency may take measures it considers necessary to:

(i) contain and minimise the effects of the incident;

(ii) undertake clean-up procedures; and

(iii) remedy the effects of the incident.

(Section 20(6)).

Offences

- The Act prescribes various offences. The pollution related ones include:

  (i) the use of water otherwise than as permitted under the Act;

  (ii) failure to provide access to any books, accounts, documents or assets when required to do so under the Act;

  (iii) failure to comply with any condition attached to a permitted water use under this Act;

  (iv) failure to comply with a directive issued under Section 19 or 20 (Pollution notices);

  (v) failure or refusal to give data or information, or the giving of false or misleading data or information when required to give information under the Act;

  (vi) failure to register an existing lawful water use when required by a responsible authority to do so;

  (vii) to intentionally refuse to perform a duty, or to obstruct any other person in the exercise of any

power or performance of any of that person's duties in terms of this Act;

(viii) to unlawfully and intentionally or negligently commit any act or omission which pollutes or is likely to pollute a water resource; and

(ix) to unlawfully and intentionally or negligently commit any act or omission which detrimentally affects or is likely to affect a water resource.

(Section 151(1)(a), (b), (c), (d), (f), (g), (h), (i) and (j)).

It should be noted that an employee or agent's act or omission which constitutes an offence in terms of this Act can result in liability for the company. Likewise an act or omission which constitutes an offence by the company may result in personal liability for the employee or agent involved (Section 154).

Penalties

- Where a catchment management agency is required to take measures in terms of Section 19 (as set out above and dealing with pollution duties), it may recover all costs incurred jointly and severally from the following persons:

  (i) any person who is or was responsible for, or who directly or indirectly contributed to, the pollution or the potential pollution;

(ii) the owner of the land at the time when the pollution or the potential pollution occurred, or that owner's successor-in-title;

(iii) the person in control of land or any person who has the right to use the land at the time when the activity or process is or was performed or undertaken, or the situation came about;

(iv) any person who negligently failed to prevent the activity or process being performed or undertaken, or the situation coming about; or

(v) any person who benefited from the measures undertaken by the authority to prevent or clean-up the harm, to the extent of such benefit.

(Section 19(5) and (6)).

It should be noted that the costs set out above may include labour, administration and overhead costs incurred by the authority in dealing with the pollution event (Section 19(7)).

- Where a catchment management agency is obliged to act in terms of Section 20 (with regard to an emergency incident and as described above), it may recover all reasonable costs incurred by it from every responsible person jointly and severally (Section 20(7)).

These costs may include labour, administration and overhead

costs (Section 20(8)).

- Where a person is convicted of an offence under this Act and another person has suffered harm or loss as a result of the offence, or damage has been caused to a water resource, the court may enquire without pleadings into the harm, loss or damage and determine its extent (Section 152).

  After making a determination of the damages, the court may:

  (i) award damages for the loss or harm suffered by the person referred to above against the accused;

  (ii) order the accused to pay for the cost of any remedial measures implemented or to be implemented; and

  (iii) order that the remedial measures to be implemented, be undertaken either by the accused or by the relevant water management institution.

  (Section 153).

- Finally, a court is given authority in terms of the Act to grant an interdict or any other appropriate order against any person who has contravened any provision of this Act, including an order to discontinue any activity constituting a contravention and to remedy the adverse effects of the

contravention (Section 155).

### 3.2.2 *National Water Amendment Act 45 of 1999*

An amendment to the National Water Act was assented to on 2 December 1999. It amends Sections 32, 33, 146 and item 3 of Schedule 6 of the National Water Act.

Arguably the most significant amendment was the change made to Section 32. This section defines an existing lawful water use.

When originally promulgated the Act stated that an existing lawful water use was one which either:

(a) had taken place any time during a period of two years immediately before the date of commencement of the National Water Act; or

(b) which had been declared an existing lawful water use under Section 33 of the Act and which—
    (i) was authorised in terms of any law which was in force immediately before the date of commencement of the National Water Act;
    (ii) was identified as a streamflow reduction activity in terms of the Act; or
    (iii) was identified as a control activity in terms of the Act.

It is important to note that in terms of its original draft this meant that even those water uses which were not declared existing lawful water uses in terms of any legislation which preceded the National Water Act, would nonetheless be classified as existing lawful water uses in terms of Section 32 in the event that they had taken place at any time during a period of two years immediately before the date of commencement of the Act.

The amending Act (45 of 1999) significantly changed this position. Section 32 now defines an existing lawful water use as one which:

(a) has taken place any time during a period of two years immediately before the date of commencement of the Act; and which—
    (i) was authorised by or under any law which was in force immediately before the date of commencement of this Act;
    (ii) is as a streamflow reduction activity in terms of the Act; or
    (iii) is a control activity in terms of the Act; or

(b) which has been declared an existing lawful water use under Section 33.

As such not only must a person have been using a water use

at any time during a period of two years prior to the Act, but they must also have either been authorised in terms of any law preceding the National Water Act or have been a streamflow reduction or a controlled activity.

As such should any person have been using water prior to the National Water Act, and should such activity have required a licence or permit in terms of any legislation in existence at the time, and should that person have failed to obtain the necessary permit or licence, or should it have lapsed, been revisited or suspended or otherwise removed in terms of Section 32 they would now not be undertaking "an existing lawful water use".

Given that the National Water Act only envisages a relatively narrow entitlement to use water, the amendment may materially affect a person's water use rights. From a pollution control perspective, where a person was discharging their trade effluent either to river or via irrigation of land, this right may be affected in the event that it is not classified as an existing lawful water use in terms of the National Water Act.

### 3.2.3 *Regulations in terms of the National Water Act 36 of 1998*

Several regulations have been promulgated in terms of the National Water Act since its implementation stages of 1 October 1998 and 1 October 1999.

Set out below is a brief summary of some of the regulatory requirements:

**(a) Regulations on use of water for mining and related activities aimed at the protection of water resources (GN704, GG20119 of 4 June 1999):**

These Regulations repeal those promulgated under Government Notice R287 of 20 February 1976.

Any person intending to operate a new mine or mining activity is required to notify the Department of Water Affairs of such intention a least 14 days prior to the commencement of the operation. Additionally, any person controlling an existing mine is required to:

- submit a copy of all amendments of the existing environmental management programme to the Department;
- notify the Department, in writing 14 days before any temporary or permanent halting cessation of the mining activity, and again before its resumption; and
- immediately notify the department of any emergency or potential emergency incident involving a water resource as a result of a mining activity, and within 14 days after such

an event to inform the Department of measures taken to correct and prevent the recurrence of such an incident.

(Regulation 2)

The Regulations place restrictions on the locality where mining activities may take place from the perspective that they may cause harm to a watercourse, estuary or other water resource (Regulation 4). Likewise restrictions are placed on the use of mine residue or other substances which may cause pollution of a water resource (Regulation 5).

Every person in control of a mine or a mining activity is required to separate clean water from dirty water through various measures prescribed in the regulations (Regulation 6).

In all instances of mining, water containing waste or any substance likely to cause pollution of a water resource must be prevented from entering such a resource. Such substance or water must be retained and recycled, evaporated or purified and disposed of in terms of the National Water Act 36 of 1998. (Regulation 7(a)).

All water systems and residue deposits should be designed, modified, constructed and located in areas that prevent the leaching of materials and the pollution of a water resource through the operation or use thereof, and to restrict the potential damage, by erosion, sedimentation or the alteration of flow characteristics, to riparian or in-stream habitat (Regulation 7(b)).

Surface water and floodwater should be prevented, as far as possible, from entering mine workings through any surface openings (Regulation 7 (c)), while any dam, residue deposit or stockpile that is used for the disposal or storage of hydraulic transported substances, such as slimes or ash, should be constructed and located in such a manner that the stability of such construction will not be threatened by the material therein (Regulation 7(d)). The leaching of materials from these residue deposits or stockpiles must be prevented through the provision of suitable measures, such as barrier dams or evaporation dams, to prevent the material from polluting any water resources (Regulation 7(e)).

The recycling of water used in the mining process is encouraged, where possible. Any water used in recycling is to be impounded in a facility that is adequately designed and constructed in a manner that will prevent

the possible release of water containing waste (Regulation 7(f)).

All water systems must be kept free, at all times, of any obstruction that may effect their efficiency (Regulation 7(g)), and domestic waste that cannot be disposed of in a municipal sewage system should be disposed of in accordance with an authorisation under the Act (Regulation 7(h)).

Several security and additional measures are suggested. These include that any dam or water impoundment containing any injurious substance is to be effectively fenced-off, with warning signs placed in prominent locations. Access to stockpile or residue disposal areas should be restricted so as to protect any measures taken in terms of these regulations. These areas should not be used for any other purpose if such use is likely to result in the pollution of a water resource. Where existing pollution control measures are found to be inadequate, additional measures are to be implemented to prevent the pollution of a water source that might occur, is occurring or has occurred.

On the decommissioning of the mine, or a temporary cessation of mining activities, it is the responsibility of the mine to ensure than the instream and riparian habitat of a

water resource that may have been affected by the mining activity is remediated (Regulation 9).

In the case of winning sand and alluvial minerals from a watercourse or estuary, measures must be taken to ensure that the stability of the watercourse is protected, and that damage to instream or riparian habitats or the alteration of the flow characteristics of the watercourse through erosion, scouring or sedimentation is prevented. Where these activities are conducted the regulations also govern the establishment of slimes dams, water treatment facilities, and the size of sand dumps / stockpiles (Regulation10).

Any person mining or establishing coal residue deposits has a duty to rehabilitate the deposits in order to prevent their spontaneous combustion and also to minimise the infiltration of water. The rehabilitation of these deposits is to be implemented concurrently with the mining activities (Regulation 11).

The Minister, in consultation with the Department of Minerals and Energy, may require that a technical investigation, which may include an independent review, be conducted on water pollution prevention measures connected with or incidental to the operation of a mine or mining activity (Regulation 12).

There is a duty imposed on the person in control of the mine or activity to provide the manager with the means to comply with these regulations (Regulation 13). Various offences and penalties are prescribed for failure to ensure compliance.

**(b) Establishment of the Water Management Areas and their Boundaries as a Component of the National Water Resource Strategy in terms of Section 5(1) of the National Water Act 36 of 1998 (GN1160, GG20491 of 1 October 1999):**

This schedule divides the country into 19 water management areas and highlights the boundary description for each. This was performed as a component of the national water resource strategy which the Act compels the Minister to establish (Chapter 2). It also forms part of the catchment management agency strategy (Chapter 2), and the water use registration program (section 26(1)(c) and see below).

**(c) General authorisations in terms of Section 39 of the National Water Act 36 of 1998 (GN1191, GG20526 of 8 October 1999):**

Four General Authorisations have to date been

recognised:

*(i) The taking of water from a water resource and storage of water*

In appropriate circumstances this authorisation replaces the need for a water user to apply for a licence in terms of the National Water Act for the abstraction or storage of water from a water resource (Regulation 1.1).

Additionally, any person using water in terms of this authorisation is exempt from compliance with section 22(2)(e) of the Act (which imposes a duty to return seepage, run-off or water containing waste from this use, to the source from which it was taken). However, where water is abstracted for industrial purposes, the provisions of section 7 of the Water Services Act 108 of 1997 are to be met whereby a water services providers requirements for use of water and disposal of industrial effluent must be met. Areas excluded from the General Authorisation for surface water and groundwater abstraction are set out in the Schedule. Any person owning or lawfully occupying property outside of these areas is entitled to abstract groundwater in the prescribed manner and abstract surface water at a rate of up to 25 litres per second for the irrigation of up to 25 hectares of land at 6000 cubic

metres per hectare per annum, or up to 100 cubic metres per day for purposes other than irrigation. They may furthermore store up to 50 000 cubic metres of water (Regulation 1.7).

Any person using water in terms of this authorisation is required to apply for registration of the water use prior to the abstraction of more than 50 cubic metres from surface water or 10 cubic metres from groundwater on any given day, or before storing more than 10 000 cubic metres of water (Regulation 1.8(1)).

Precautionary practices are required in that the registered water user is to ensure that any dam complies with the requirements of Chapter 12 of the National Water Act, and at all times must ensure the consistent, effective and safe performance of the abstraction and storage of water (Regulation 1.9). In cases where water is stored in a watercourse, the registered user is required to ensure that the movement of aquatic species is not hindered or prevented (Regulation 1.9(3)).

Monitoring programmes measuring the quantity of water abstracted and/or stored must be implemented, the results of which must be made available to the responsible Authority on request (Regulation 1.10).

*(ii) Engaging in a Controlled activity, identified as such in Section 37(1): Irrigation of any land with waste or water containing waste generated through any industrial activity or by a water works*

This replaces the need for a water user to apply for a licence in terms of the National Water Act 36 of 1998 provided that the irrigation is within the limits and conditions set out in the authorisation.

In terms of Regulation 2.7 any person who legally owns or occupies land outside of those subterranean government water control areas excluded from this General Authorisation for irrigation with waste may irrigate stipulated volumes of domestic or biodegradable industrial wastewater at the prescribed standards contained in the Authorisation. A land owner/occupier is required to register this water use where irrigation with wastewater in terms of this authorisation is practiced, and more than 10 cubic metres of wastewater are irrigated in a single day (Regulation 2.8(1)).

In terms of Regulation 2.9. wastewater irrigation is permitted only where it takes place above the 100 year flood line, or alternatively, more than 100 metres from the edge of a water resource or a borehole which is utilised

for drinking water or stock watering, and on land that does not overlie a Major Aquifer, as identified by the Department of Water Affairs and Forestry.

The registered user is to ensure the establishment, prior to irrigation, of programmes for monitoring both the quantity and quality of the wastewater to be irrigated, as defined in Regulation 2.10(1) of the Authorisation.

Precautionary practices are put in place in terms of this authorisation to ensure the effective and safe performance of the wastewater irrigation system (Regulation 2.11(1)). These practices include the prevention of the waterlogging of soil and the pooling of wastewater on the surface of the soil; nuisance conditions such as odour, mosquitoes or flies, or any form of secondary pollution; the entering of wastewater into any surface water resource, the unreasonable chemical or physical deterioration of, or damage to the soil of the irrigation site; and the unauthorised use of the wastewater by members of the public. Additionally the Authorisation states that 'all reasonable measures' are to be taken for the storage of the wastewater used in the irrigation process when the irrigation is not undertaken (Regulation 2.11(2)), for the collection of stormwater runoff containing waste or wastewater emanating from the area under irrigation (Regulation 2.11(5)), and to provide for

malfunctions and failures of the wastewater irrigation system (Regulation 2.11(4)). Suspended solids must be removed from the wastewater, and disposed of according to the requirements of relevant legislation and regulations (Regulation 2.11(3)).

This authorisation will be applicable for a period of three years from 8 October 1999, unless it is officially reduced, or extended or removed altogether (Regulation 2.5).

*(iii) Discharge of waste or water containing waste into a water resource through a pipe, canal, sewer or other conduit; and disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process*

This authorisation replaces the need for a water user to apply for a licence in terms of the National Water Act 36 of 1998 provided the discharge falls within the limits and conditions set out in the authorisation (Regulation 3.1). However, this authorisation does not apply to the discharge of wastewater through sea outfalls, to an aquifer, or to any other groundwater resource (Regulation 3.2). Certain areas, or drainage regions, excluded from this General Authorisation for discharges to water resources are provided in Table 3.1 of the Schedule. Further information regarding these regions can be

obtained from the Department of Water Affairs and Forestry, on written request. It does not exempt a person from compliance with the requirements for the disposal of trade effluent in terms of section 7(2) of the Water Services Act 108 of 1997 (Regulation 3.3(1)(c).

Any lawful land user or occupier, falling outside the exclusion areas outlined above, may discharge not more than 2000 cubic metres of wastewater in a single day into a water resource that is not a listed water resource, as outlined in Table 3.4 of the Schedule. This is subject to certain conditions, namely that the discharge complies with the General Limit Values applicable to the discharge of wastewater into a water resource, as provided in the Schedule (Table 3.2), that the discharge does not alter the natural ambient water temperature of the receiving water resource by more than 2 degrees celcius, and that the discharge is not a Complex Industrial Wastewater (as defined in the authorisation). Any person may discharge stormwater runoff from any premises into a water resource, provided that the runoff does not contain waste or wastewater resulting from industrial activities and premises (Regulation 3.7(2)).

The authorisation allows for the discharge of up to 2000 cubic metres of wastewater on any given day into a listed

(Table 3.4) water resource, provided this is done at the higher Special Limit Value Standard set out in Table 3.2.

Any person discharging wastewater into a water resource is required to register with the Department of Water Affairs and Forestry prior to the commencement of discharge (Regulation 3.8(1)).

In terms of record keeping and the disclosure of information, the registered user is required to establish monitoring programmes that monitor the quantity of discharge on a weekly basis, and the quality of domestic and industrial wastewater discharges on a monthly basis (Regulation 3.9(1)).

Precautionary practices adopted under this authorisation state that the registered user is to follow acceptable construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the discharge (Regulation 3.10(1), and all reasonable measures are to be taken to provide for malfunctions and failures of the discharge system (Regulation 3.10(2)).

This authorisation will be applicable for a five year period from 8 October 1999, unless it is officially reduced extended or removed (Regulation 3.5).

*(iv) Disposing of waste in a manner which may detrimentally impact on a water resource*

The need for a water user to apply for a license in terms of the National Water Act 36 of 1998 for the disposal of waste is replaced, provided that the disposal conforms to specific limits and conditions set out in the authorisation (Regulation 4.1). This authorisation, however, does not apply to any person who is not the lawful occupier of the land on which this disposal takes place (Regulation 4.2). Additionally, it does not exempt a person from compliance with section 7(2) of the Water Services Act 108 of 1997 for the disposal of trade effluent, the provisions of the National Building Regulations and Building Standards Act 103 of 1977 (for the construction, operation and maintenance of any structure used for the collection, treatment or disposal of waste), or any other provision in the National Water Act, unless stated otherwise in the notice (Regulation 4.3(2). However, any person using water in terms of this authorisation is exempt from compliance with section 22(2)(e) of the National Water Act 36 of 1998 (Regulation 4.3(2)).

The authorisation is not applicable to any subterranean government water control area as defined in the Water Act 54 of 1956, prior to its repeal, as set out in Table 4.1 of the Schedule (Regulation 4.4).

The storage of specified quantities of domestic and/or biodegradable industrial wastewater for the purpose of reuse or disposal is permitted in areas other than those identified for exclusion from this General Authorisation for the disposal of waste. The owner or lawful occupier of the land in an appropriate area may store up to 5000 cubic metres of such wastewater for reuse or up to 10 000 cubic metres (or 50 000 cubic metres in a wastewater pond system) for the purpose of disposal. Up to 1000 cubic metres of such domestic and/or biodegradable industrial wastewater in these areas may be disposed into a wastewater pond system or an evaporation pond system (Regulations 4.7, 4.8, and 4.9).

Such wastewater may also be disposed of into a wastewater irrigation system as set out in General Authorisation 2 or to an on-site disposal facility for grey water generated by a single household, up to one cubic metre of biodegradable industrial wastewater on any given day; and domestic wastewater to a communal septic tank serving up to 50 households. Additionally, domestic wastewater generated by a single household not permanently linked to a central waste collection, treatment and disposal system may be disposed of to an on-site disposal facility, and stormwater may be allowed to runoff from any premises provided it does not contain

waste or wastewater from industrial activities and premises (Regulation 4.9).

The disposal of mine waste or residue, except that emanating from a Category A mine (defined in the Authorisation), must at all times to be done in accordance with GN704 of 4 June 1999 and the SABS Code 0286 (Regulation 4.10).

Registration of wastewater storage and disposal is to be completed prior to the commencement of storage, if more than a 1000 cubic metres are stored for disposal, if more than 500 cubic metres are stored for reuse and if more than 50 cubic metres of domestic wastewater or biodegradable industrial wastewater is disposed of in a single day (Regulations 4.11 and 4.12). It is the responsibility of a local authority to submit a registration form to the Department of Water Affairs and Forestry for areas where in excess of 5000 households are served by on-site disposal sites, the density of on-site disposal sites is greater than 10 per hectare or where areas are served by communal septic tanks. The registered user is then required to comply with section 26(1)(c) of the National Water Act 36 of 1998.

Wastewater storage dams must be located outside watercourses, on land that does not overlie a Major

Aquifer, and above the 1:100 year flood line or more than 100 metres from the edge of a water resource or a borehole used for drinking water or stock watering (Regulation 4.13).

**(d) Regulations requiring that a water use be registered (GNR1352, GG20606 of 12 November 1999)**

The National Water Act 36 of 1998 lists a variety of activities which constitute "water use". They are:

(a) taking water from a water resource;
(b) storing water;
(c) impeding or diverting the flow of water in a water course;
(d) engaging in a stream flow reduction activity contemplated in Section 36;
(e) engaging in a controlled activity identified as such in Section 37(1) or declared under Section 38(1);
(f) discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit;
(g) disposing of waste in a manner which may detrimentally impact on a water resource;

(h) disposing of any manner of water which contains waste from, or which has been heated in, any industrial or power generation process;

(i) altering the beds, banks, course or characteristics of a water course;

(j) removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people; and

(k) using water for recreational purposes.

(Section 21(a) – (k))

Any person using water in terms of section 21 of the Act is required to register such use (Regulation 3). Subject to section 39(1) of the Act, different water users may be required to register specific water uses at different times and in different geographical locations (Regulation 4). Notices calling for registration in several water management areas have already been published.

The discontinuation of a registered water use requires an application, to the responsible authority, for its deregistration (Regulation 8(1)).

Exemptions from registration of water use are provided for any water use under Schedule 1 of the Act, where

registration is not required in terms of the General Authorisation outlined above, and for any person obtaining water from a bulk water supplier, a water management institution or from a communal scheme (Regulation 10).

A registered user is required to, within one month of any change in the water use reflected in the registration certificate, report the proposed change to the responsible authority (Regulation 11(1)). For the purpose of these regulations, however, seasonal or cyclical fluctuations in water use are not regarded as a change in the water use (Regulation 11(3)).

Any person failing to comply with these regulations may be guilty of an offence and liable on conviction to a fine or to imprisonment for a period not exceeding five years (Regulation 13).

**(e) Establishment of a Pricing Strategy for Water Use Charges in terms of section 56(1) of the National Water Act 36 of 1998 (GNR1353, GG20615 of 12 November 2000)**

The pricing of water in South Africa is at present under review. It is important, however, that the authority responsible for the implementation of pollution charges takes cognisance of these water levies (Taviv et al, Water Research Commission).

This Strategy refers to the pricing of first tier water, namely the use of raw water from ground and surface water resources, as opposed to the pricing of water services, which is addressed in the Water Services Act 108 of 1997. The pricing strategies relating to water are implemented as a means of attempting to achieve equitable and efficient allocation and utilisation of the country's scarce water resources. The following broad principles contained in Chapter 5 of the National Water Act 36 of 1998 highlight the approach to the pricing of water use in line with the wise use of non-renewable resources and the sustainable use of renewable resources:

- *Social Equity*

  This demands that all population groups have fair and reasonable access to affordable water resources. However, from an economic standpoint, it is necessary that the use of this water be paid for. Pricing strategies are designed to differ amongst geographical areas, categories of water users or individual water users in an attempt to achieve social equity in the form of a more equitable pricing mechanism, under which the costs of resource use incorporates internalised costs, to be borne by the user, instead of being regarded merely as economic externalities to be borne by the general public in equal amounts. The water use charges generated finance the direct and related costs of water resource

management, development and use, thus attempting to achieve an equitable and efficient allocation of water.

- *Ecological Sustainability*

South Africa needs to develop in such a manner that it provides for the basic needs of its population but is, at the same time, environmentally sustainable. Thus, the spirit of the philosophy of the new South Africa embraces the marrying of the concepts of development and environmental sustainability through the wise use of non-renewable resources and the sustainable use of renewable resources. This is to ensure that future generations, both human and biophysical, will inherit an

adequate supply and quality of resources that promotes well-being. Water distribution within the country is highly dispersed, and water is considered to be a scarce resource. Thus, measures are required that ensure compliance with prescribed standards and water management practices according to economic instruments such as the polluter pays and user pays principles, thereby internalising the environmental costs incurred.

Water use charges are used as a means of encouraging a reduction in waste, and provision is made for

incentives for effective and efficient water use - non-payment attracts penalties, including the possible restriction or suspension of water supply from a waterwork or of an authorisation to use water.

- *Financial Sustainability*

Fluctuating environmental and economic conditions existing in South Africa at present have resulted in a high inflation rate, previously unaccounted for. This has resulted in a decrease in the value of tariffs which previously paid for water consumption and little or no provisions were made for refurbishment and asset replacement. The new approach to water pricing holds that the full financial cost of water supply should be retrieved from water users, and this includes the cost of capital. This approach is to be phased in by taking into consideration constraints of various user sectors to adapt to price increases.

- *Economic Efficiency*

The pricing strategies relating to water are implemented as a means of attempting to achieve equitable and efficient allocation and utilization of the country's water resources, and to the capital resources within water

infrastructure. Failing to price the water at its scarcity value may result in inadequate incentives being created for the conservation of water resources leading to their exploitation.

Section 56(1) of the National Water Act 36 of 1998 makes provision for the Minister, with the concurrence of the Minister of Finance, to establish a pricing strategy for charges for any water use, such as:

- for funding water resource management;
- for funding water resource development and the use of waterworks; and
- for achieving equitable and efficient allocation of water.

(Section 56(2))

The pricing strategy is applied to water management areas where annual water use has been registered or licensed. Water resource management charges relate to all the water utilised within the water management area, and as such, the costs are borne by all the users within that area. Conversely, the costs of water resource development and the use of waterworks charges are to be borne by the user sectors of specific government water schemes or systems, and schemes funded by water management institutions, the levy of which is

based on the costs associated with such schemes.

Chapter 7(1) of the pricing strategy makes provision for a differential rate for waste discharges, based on the 'polluter pays principle', thus providing an incentive to reduce water pollution. As stated in Section 56(5) of the National Water Act of 1998, this strategy may take into account:

(a) the characteristics of the waste discharged;

(b) the amount and quality of the waste discharged;

(c) the nature and extent of the impact on a water resource caused by the waste discharged;

(d) the extent of permitted deviation from prescribed waste standards or management practices; and

(e) the required extent and nature of monitoring the water use.

### 3.2.4 *Water Act 54 of 1956 (repealed)*

The remaining provisions of this Act were repealed on 1 October 1999 (GNR102, GG20513 of 1 October 1999).

In terms of the National Water Act 36 of 1998 any regulation made under the Water Act remains in force despite the Act's repeal and is considered to have been made under the

National Water Act to the extent that it is not inconsistent with this Act, and until it is repealed by the Minister (Section 163(4)).

This retention of regulations is important as national water standards were prescribed in terms of regulations promulgated under the Water Act in 1984 for the purification of wastewater or effluent. These regulations have been amended on several occasions subsequent to this. In terms of these regulations a special and a general standard have been prescribed detailing water quality standards for wastewater and trade effluent.

These water quality standards therefore remain in effect so far as they are not inconsistent with the National Water Act, and until such time as a new water quality standard is prescribed.

### 3.2.5 *Water Services Act 108 of 1997*

Like the National Water Act, this Act contains many rights and duties applicable to business South Africa. For instance, Section 3 states that everyone has a right of access to basic water supply and basic sanitation and that water services institutions must take reasonable measures to realise these rights. Section 11 expands on this right by stipulating that every water services authority has a duty to all consumers or potential consumers in its area of jurisdiction to progressively ensure efficient, affordable, economical and sustainable access to water services.

To list all rights and duties contained in the Act would not be practical, and consequently, and in keeping with the theme of this document, only the principal sections relevant to pollution control will be discussed. However, permit holders are encouraged to peruse the entire Act or to obtain assistance in identifying all rights and duties applicable to them.

Duties

- Every person who uses water services provided by a water services provider does so subject to any applicable

  condition set by that water services provider (Section 4(4)).

  "Water services" is defined as water supply services and sanitation services (Section 1(1)(xix)). "Sanitation services" is in turn defined as the collection, removal, disposal or purification of human excreta, domestic wastewater, sewage and effluent resulting from the use of water for commercial purposes (Section 1(1)(xvi)).

  "Water services provider" is defined as any person who provides water services to consumers or to another water services institution, but does not include a water services intermediary (Section 1(1)(xiii)). Interestingly, a "water services institution" is defined as including a "water

services authority" which is in turn defined as including a municipality (Section 1(1)(xx) and (xxi)).

- No person may use water services from a source other than a water services provider nominated by the water services authority in the jurisdiction in the area in question, without the approval of that water services authority (Section 6(1)).

- Ordinarily no person may obtain water for industrial use from any source other than the distribution system of a water services provider nominated by the water services authority having jurisdiction in the area in question, without the approval of a water services authority (Section 7(1)).

- Likewise no person may ordinarily dispose of industrial effluent in any manner other than that approved of by the water services provider nominated by the water services authority having jurisdiction in the area in question (Section 7(2)).

  A person who, at the commencement of this Act, obtained water for industrial use or disposed of industrial effluent from a source or in a manner requiring the approval of a water services authority as set out above, may continue to do so:

(i) for a period of sixty days after the relevant water services authority has requested the person to apply for approval; and

(ii) if the person complies with the request in terms of paragraph (i) above within the sixty day period, until the application for approval is granted, or the expiry of a reasonable period determined by the water services authority, if the application is refused (Section 7(3)).

Importantly, no approval given by a water services authority under this section relieves anyone from complying with any other law relating to the use and conservation of water and water resources, or the disposal of effluent (Section 7(4)). In other words the provisions of the National Water Act 36 of 1998 or any other relevant conservation or pollution related legislation will still apply.

Relevant Authorities

Various bodies are given authority in terms of the Act, however the principal authorities would appear to be the following:

- A "water services authority", as described above.
- The Minister of Water Affairs and Forestry has various powers and duties in terms of the Act including acting as a water services provider; providing water services in emergency situations; performing the functions of a water

- services authority where they fail to perform or inadequately perform their duties; and the establishing of a national information system on water services (See Sections 73 to 76 generally).
- Other authorities listed which may or may not have relevance include a “water services institution” which was discussed above. “A water services intermediary” means any person who is obliged to provide water services to another in terms of a contract where the obligation to provide water services is incidental to the main object of the contract (Section 1(1)(xxii)). A “water services provider” described above, is also of relevance.

Powers of the Authorities

Some of the powers of the authorities in terms of this Act include:

- The water services authority whose approval is required in terms of Section 6 or 7 (See “Duties” above) may not unreasonably withhold approval, but may give the approval subject to reasonable conditions (Section 8(1)).

  This power is a particularly important one in a pollution context. As administrative control of pollution is set to become the principal pollution management mechanism, it is likely that the local authority will attach onerous pollution prevention or waste minimisation provisions to its sewage

disposal permits. Failure to adhere to these conditions may result in the permit being withdrawn, thereby effectively preventing the discharge of any trade effluent to the sewage disposal system.

The Act gives an idea of what constitutes "reasonable". As such, it determines that a water authority must consider the following factors, to the extent that the water services authority considers them to be relevant:

(i) the cost of providing;
(ii) the practicability of providing;
(iii) the quality of;
(iv) the reliability of;
(v) the financial, technological and managerial advisability of providing;
(vi) the economic and financial efficiency of; and
(vii) the socio-economic and conservation benefits that may be achieved by providing,

the water services in question.

The authority may also take into consideration any other relevant factor (Section 8(3)).

- The Minister of Water Affairs and Forestry may, from time-to-time, prescribe compulsory national standards relating, *inter alia*, to:

(i) the quality of water taken from or discharged into any water services or water resources system;

(ii) the effective and sustainable use of water resources for water services; and

(iii) the nature, operation, sustainability, operational efficiency and economic viability of water services.

(Section 9(1)(b), (c) and (d)).

In terms of the above the Minister can effectively prescribe stricter water quality standards to ensure that it is able to meet the more onerous provisions. Importantly, the local authority is not obliged to increase its standards when the national authority does. However it would have to be satisfied that it would be able to cope with the treatment of trade effluent received from its permit holders in order to meet the stricter standards imposed on it by national government and where it could not, it would be forced to increase its standards.

Importantly, the Act stipulates that the standards which may be prescribed in terms of the powers set out above may differentiate between:

(i) different users of water services; and

(ii) different geographic areas, taking into account, among other factors, the socio-economic and physical attributes of each area.

(Section 9(2)).

If interpreted correctly, this provision would seemingly allow the Minister to prescribe different effluent disposal standards for different areas in South Africa depending on certain factors.

In prescribing water quality standards, the Minister is obliged to, *inter alia*, consider:

(i) any other laws or any standards set by other governmental authorities;
(ii) any guidelines recommended by official standard setting institutions;
(iii) any impact which the water services might have on the environment;
(iv) the obligations of the national government as custodian of water resources.
(Section 9(3)(e), (f), (g) and (h)).

- The water service authority may impose reasonable limitations on the use of water services (Section 11(6)).

  In the context of this document, this may involve limitations upon permit holders with regard to the impact their effluent may have on the receiving environment or on the local authority's ability to purify and dispose of effluent discharged to its sewage system.

- Certain duties also attach to water service authorities. For instance they were under a duty, within one year of the commencement of this Act, (although this period has apparently been extended), to prepare a draft water services development plan for their respective areas of jurisdiction (Section 12(1)).

  Every draft water services development plan must contain, *inter alia*, details of the following:

  (i) existing industrial water use within the area of jurisdiction of the relevant water services authority;
  (ii) existing industrial effluent disposed of within the area of jurisdiction of the relevant water services authority;
  (iii) information regarding the future provision of water services and water for industrial use and the future disposal of industrial effluent; and
  (iv) existing and proposed water conservation, recycling and environmental protection measures.
  (Section 13(e), (f), (h) and (j)).

  Once statutory preliminary procedures have been complied with, the relevant water services authority must adopt and implement the water services development plan (Section 15).

- Each water service authority has license to make bylaws and it is in fact obliged to do so in respect of certain listed issues which include:
  (i) the circumstances under which water services may be limited or discontinued and the procedure for such limitation or such discontinuation; and
  (ii) the prevention of unlawful connections to water services works and the unlawful or wasteful use of water.
  (Section 21(1)(f) and (g)).

  In terms of (i) above these bylaws will probably include provisions relevant to information which must be supplied to the water service authority before the issue of a sewage disposal permit, or the conditions which may attach with regard to the prevention of water pollution. In regard to (ii) above it is important to note that many industrial facilities have illegal connections to the respective sewage disposal systems, often without realising that this is the case. A careful audit by permit holders of their sites to determine whether these illegal connections exist should be conducted on an ongoing basis.

- All water service authorities are furthermore under a duty, with regard to industrial effluent disposal, to make bylaws providing for at least:
  (i) the standards of service;

(ii) the technical conditions of provision and disposal;
(iii) the determination and structure of tariffs;
(iv) the payment and collection of monies due; and
(v) the circumstances under which the provision and disposal may be limited or prohibited.
(Section 21(3)).

- The Minister must ensure that a national information system on water services is established (Section 67(1)). This information system may form part of a larger system relating to water generally (Section 67(2)).

  Importantly the public is entitled to reasonable access to information contained in the national information system, although this right is subject to limitations necessitated by the rights enshrined in Chapter 2 of the Constitution (Section 67(3)).

- The Minister of Water Affairs and Forestry, the Province, or the water service authority may:
  (i) at any reasonable time and without prior notice, enter any property and inspect any water services works in order to ascertain whether this Act or any regulation or directive made under it is being complied with;
  (ii) after reasonable notice to the owner or occupier of any property, enter that property with the

necessary persons, vehicles, equipment and materials to, *inter alia*, repair, maintain, remove or demolish any water services work belonging to or operated by the relevant authority; or

(iii) to search, excavate, bore or carry on any activity necessary for the recovery or measurement of water (Section 80(1)).

Offences / Penalties

The following offences are prescribed in terms of the Act:

(i) The continuation of the wasteful use of water after being called upon to stop by a relevant authority.

(ii) The intentional utilisation of water services or the using of water or disposing of effluent in contravention of Sections 6 or 7.

(iii) Intentionally obstructing any person exercising or attempting to exercise any right of entry and inspection of the property.

(iv) Failing or refusing to give information, or giving false or misleading information when required to give information in terms of this Act.

(v) Failing to provide access to any books, accounts, documents or assets when required to do so in terms of the Act.

(Section 82(1)).

Any person convicted of an offence is liable to a fine or imprisonment or to both a fine and imprisonment (Section 82(2)). The Act does not prescribe a maximum amount for either the fine or the term of imprisonment.

When an act or omission by an employee or agent constitutes an offence in terms of the Act, and takes place with the express or implied permission of any employer, the employer shall, in addition to the employee or agent, be liable to conviction for that offence (Section 82(3)(a)).

Furthermore, whenever any act or omission by any employee or agent would constitute an offence by the employer in terms of this Act, the employee or agent shall in addition to that employer be liable to conviction for that offence (Section 82(3)(b)).

## 4. Methods to reduce corporate and personal environmental liability

Environmental management and in particular environmental risk management appears to be a field which is growing almost as fast as the body of laws which are being promulgated to create environmental liabilities and duties. A company which has elected to face its environmental management issues and to deal with them, has numerous consultants from various sources available to select from. There are what may be classified as traditional environmental

consultant companies which appear to be principally made up of engineers and other scientists who offer environmental services. Furthermore a growing number of traditional financial auditing companies now offer environmental services. Likewise the large insurance companies or insurance brokering companies are establishing or aligning themselves with environmental risk management companies. Law firms are also increasingly offering environmental services.

What is set out below represents a general synopsis of services which all environmental consultants would, and if they do not, should, offer to their clients. There are however several preliminary issues which companies should consider when selecting their external environmental consultants which are highlighted briefly:

(a) A company should decide whether it needs an external consultant at all. This will obviously depend on the size and nature of the company. It may feel that it is adequately equipped internally to deal with any environmental issues which arise. There is clearly nothing wrong with this approach, and there is certainly no need to spend money on an external consultant where there is no need to do so. However, it should be borne in mind that there are very few companies which have no impact or very limited impact on the environment.

Unfortunately, the environment is a diverse and fragmented subject and the effects of pollution are not always easy to identify. If a company really wishes to satisfy itself that it has dealt with its risks adequately, it may be an idea to obtain the opinion of at least one external consultant, if for no other reason than to verify what the internal mechanisms have identified and dealt with.

(b) If it is determined that a company needs to obtain external assistance, then it needs to decide with whom it wishes to consult. Given the nature of environmental liability, and its potentially massive financial repercussions for both the company and its consultant, it is suggested that the best way of dealing with this issue is to make use of an environmental team which has all of the diverse skills required to deal adequately with the risks posed. Alternatively, the company should consult one external consultant, whom it appoints as a team leader, and whose function is to make use of the services of other consultants in order to obtain a complete picture of the risks and liabilities the company faces.

Environmental consultants, in whatever guise they may arise, are expensive. Once again therefore it may be that a company is not in a financial position to

afford a “team” of consultants, and that it can at best afford one consultant.

The consultant selected obviously depends on the company itself and the person whom they feel most comfortable with and who they believe will supply them with the information, service or products that they are looking for.

However, in selecting a consultant bear in mind, as will be set out below, that one of the principal functions of the consultant is to identify and assess the environmental risks a company poses. Current environmental legislation dictates that much of this information must be made available to the relevant authorities, and even to the public at large. Unless some sort of privilege can be claimed for this information, a company will be exposed to having to hand over information which may indicate that the company is causing or has caused environmental harm. This information may then be used against the company in a prosecution or in a civil action. Although no finite or absolute statement can be made, (as privilege will depend on each case), it is most likely that a company would be able to claim privilege where its environmental documents are compiled by its legal advisor. A company should therefore consider

ensuring that it structures its environmental management program in such a way that it makes use of either its internal or external lawyers to manage the process in order to stand the best possible chance of ensuring that this information remains privileged.

Of course, many companies will wish to publicise environmental information relevant to themselves for marketing reasons. However, a company should at least ensure in as many instances as possible, that the choice of publishing the information is its own, and not that of the public authorities or of concerned environmental groups.

The following are the suggested principal environmental management issues companies should deal with:

### 4.1 Company acceptance of environmental responsibility at boardroom level

No company will properly deal with its environmental management concerns unless commitment to the process is given at the highest level. Traditionally environmental issues have been seen as non-profit making and have frequently been delegated down the line to a lower level of management.

Without boardroom commitment, many SHE officers, environmental officers or risk officers engage in fruitless exercises of asking for budgets to meet the environmental management needs of the company. Environmental management mechanisms are not cheap and where directors or owners of businesses have not themselves accepted the need for these systems, they often refuse to budget large sums of money on exercises which appear to hold no hope of generating income in the future.

Therefore directors must fully understand the nature of the impact which their company has on the environment, and once this is understood they must accept that it is as much their responsibility as any other employee's to deal with these issues on a day-to-day basis. Fortunately the law has assisted in encouraging directors to fulfill this role. The National Environmental Management Act 107 of 1998, as discussed in Chapter 1.5.3, now obliges directors to take "all reasonable steps" to ensure that the company does not cause environmental harm or degradation. A recent amendment to the Companies Act 61 of 1973 poses a further obligation on a public company to appoint a company secretary whose duties, *inter alia*, include ensuring that they advise directors of their responsibilities as well as of the responsibilities of the company itself.

Almost as dangerous as the boardroom failing to take notice of environmental issues at all, are the instances where directors or owners of companies acquire a distorted image of the positive effect which environmental management can have. Many, and often large companies, particularly those who deal with overseas competitors on a regular basis, will have noticed the marketability of having an environmental management system in place. As a result they then embark on massive marketing drives to emphasise that their companies operate in an environmentally friendly manner. However, often very small portions of these budgets actually reach the pollution problems themselves and the company continues to operate in an environmentally unfriendly manner whilst deceiving both itself and the public into believing that the issue has been dealt with.

Boards should therefore consider first dealing with the environmental problems they may have, whether they be past, present or future, as only then will the company be in a position to safely advertise its compliance. The environmental harm which is ignored is often more expensive to remedy once the company is caught. Arguably the company's image will be tarnished to an even greater extent where it has misled the public into believing that it has dealt with its environmental concerns.

Finally, once a board of directors or the owners have accepted the company's environmental management role they should

ensure that they retain this function at boardroom level by appointing at least one director or owner to administer this function. His or her role should be to ensure that they oversee the environmental management which takes place on a day-to-day basis within the company.

### 4.2 Develop and publish a corporate environmental policy, adopted by the company and its board of directors

This heading speaks for itself, and there is little need to dwell on this point, save to say that this policy is essentially the environmental ethos which a company selects. Importantly the policy should set out the reasons why the company wishes to deal with its environmental concerns, as frequently companies engage in large and expensive environmental management programs without actually understanding the objective. Certain companies require very small environmental management programs given the nature of their business, whilst others require massive programs in order to reduce their impact and to remediate historic harm. Consequently, unless the company's objective has been identified, it is often found that companies with large environmental problems only deal with part of them, whilst small companies will implement unnecessarily large programs out of ignorance.

The environmental management policy will also form the beginnings of an education process for the company

employees. It will hopefully give the employees a sense of pride and direction to assist them with their day-to-day tasks which may impact on the environment or on their personal health and safety.

### 4.3 Conduct an environmental risk and compliance assessment of the company, its suppliers, its customers, its products and its waste, effluent and emissions

Like any other risk in order to deal with environmental issues a company firstly needs to identify what the problems are. Arguably the principal method for doing this is to conduct an environmental risk audit or other form of environmental assessment. This can be performed internally or externally. It may be more cost effective to initially conduct an internal assessment, and to thereafter have this verified and expanded upon by an external consultant.

The initial assessment should be conducted through a careful consideration of all products, processes and waste streams. It involves not only the technical aspects of the facility, but also an assessment of all contracts it has entered into, as well as of issues such as the historic use of the land on which the company is presently situated.

Consideration should also be given to conducting an assessment or audit of a company's suppliers, and if needs

be, of its customers. This is due to the nature of environmental liability discussed in Chapter 1, which frequently impacts on a pool of potentially responsible parties, many of whom will not directly have caused the environmental harm, but who are associated with the polluter.

Once the assessment has been completed, it is suggested that the company should conduct an environmental legal compliance audit of the identified risks. This is in order to highlight the degree of legal compliance and the liabilities which attach to each risk, (if any), in order to assist the company to prioritise its risks. It is possible that what may appear to be a very large environmental threat, in fact holds very little legal liability for the company. Conversely what appears to be a very small environmental threat may in fact expose the company to a very large liability.

The legal compliance component of the audit will identify the degree to which the company has complied with its environmental administrative requirements. As such a determination of all environmental licences, permits, certificates and authorisations should be made, and the extent to which the company is complying with them emphasised.

The environmental assessment as well as the legal assessment will allow the company to decide which issues to

deal with first, and will also assist in the manner by which the company chooses to deal with its environmental concerns.

### 4.4 Introduce an environmental management system

This recommendation does not necessarily mean that a company needs to purchase one of the formal environmental management systems which are currently available. It will depend on the outcome of the risk and compliance assessment as well as on factors such as the size of the company and the nature of its business. It will also depend on issues such as costs and relevance.

A company can formulate its own internal environmental management system based on the environmental risk assessment. It may also elect not to introduce a complete environmental management system, but merely formulate emergency response programs and a general education of staff. Conversely, particularly for companies with large environmental risk exposures, as well as those companies which have foreign interests or who trade overseas, a formal environmental management system may be selected in order to satisfy investors or customers that they have adequately dealt with their environmental concerns. The most commonly used formal environmental management system presently available is the ISO 14001.

The purposes of these systems include:

- To educate the company and its employees.
- To set up a satisfactory system of delegation of environmental responsibility from the most senior management down to the factory floor level.
- To review environmental management progress and to confirm that implementation of procedures and technology is having the desired effect.
- To monitor on a continuous basis the impact which the company has on the environment.
- To introduce cleaner technology, reduce reliance on natural resources, remove or reduce waste streams, limit the company's use of toxic or hazardous substances.

The above list is not exhaustive, and there will be many other reasons why companies implement environmental management systems.

### 4.5 Risk transfer

Hopefully by taking some or all of the above steps (and others), a company will be able to reduce its environmental risks to a minimum if not altogether. Where it is unable to do so, the use of risk reduction tools will limit the chances of the risk becoming a reality.

The following is a very brief summary of the types of methods a company may consider to satisfactorily deal with or transfer

its risks where they cannot be overcome or to safeguard them from future harm which may result in liability:

- An environmental management system, or even simply an emergency response program should reduce the company's risk if it is properly implemented and maintained. As highlighted under 4.5 it involves steps such as changing chemicals used to less toxic ones, using recycled paper, introducing cleaner technology and reducing waste streams.
- Ensure that a careful analysis of all historic insurance policies, contracts and other agreements entered into with insurance companies, former land owners, suppliers, investors etc. are scrutinised to ascertain whether they contain clauses which adequately indemnify the company.
- Given that environmental responsibility is retrospective in terms of the current statutory regime, this risk transfer mechanism is particularly important. Companies would be surprised to find how many old insurance policies contain indemnification clauses which are potentially wide enough to provide them with insurance cover for environmental harm which occurred during the period of their currency. Once this assessment has been made, the company should ensure that all of these insurance policies, contracts and agreements are retained in a safe and easy to obtain place for use in appropriate circumstances.

- Depending on the size of the company, careful consideration should be given to purchasing specific environmental insurance policies. The reason for this is that many current third party or first party (own property) policies specifically exclude environmental harm from cover, or only provide sudden and accidental cover. Whilst this limited cover is important, it is often the gradual or historic contamination which will incur far greater costs for the company. Moreover, a consideration of the experience in foreign countries indicates that some insurers will frequently attempt to escape the responsibility of having to pay a claim where there is any doubt in the policy wording as to whether a particular environmental event is covered or not. A specific environmental insurance policy will hopefully remove any doubt as to precisely what cover has been arranged.

  The larger companies will be in a position to avoid having to take out cover for all of their environmental risk, and will be able to finance some of their risk through other mechanisms. There are several new and innovative products currently available, which include the formation of a captive insurance company or other forms of internal funding mechanisms which avoid a company having to spend large sums of money on insurance policies annually. Generally, however, these mechanisms involve

at least part of the risk being transferred through "pure" insurance policies.

- Careful consideration should be given when entering into any contract to whether environmental liability may arise from the agreement. Where this is the case, the company should ensure that it incorporates the necessary and relevant terms including warranties and indemnities. Obvious contracts which require these types of clauses include those entered into between a company and the waste disposal company it uses given the "cradle-to-grave" responsibility for waste. Less obvious instances include those where a company purchases land which was previously operated by a potentially hazardous industrial concern. In this instance a company should ensure that the seller indemnifies it adequately for any degradation which may have occurred, but which has not been identified at the time of the sale.

### 4.6 Director due diligence

The director's personal duties were highlighted in Chapter 1 of this document. Given that a director faces paying for environmental harm personally, and even faces a potential prison term, the following risk reduction and risk transfer methods should be considered:

- As discussed above, directors should recognise the environmental responsibility of the company and commit to dealing with the issue.

- Once the above has taken place, directors should ensure that they fully appraise themselves of all environmental laws, policies and regulations applicable to the company. As has been highlighted in this document, the most recent amendment to the Companies Act has assisted by obliging public companies to appoint company secretaries whose functions, *inter alia*, include the updating of directors of their personal as well as of the company's legislative and other legal responsibilities.
- Ensure that environmental management reports are submitted to the board monthly, and if need be weekly, or even daily in relevant circumstances.
- Directors should ensure that they react where it is brought to their attention that the company is causing environmental harm. The quicker and more comprehensive the reaction by the director, the less likely are the prospects of a court holding that he or she failed to take "reasonable steps". However, directors should bear in mind that "reasonable steps" are not necessarily limited to "reactive" measures, but may also include "proactive" measures. As a result where any initial audits or assessments of the company's environmental risks expose particular areas of threats or harm, directors should ensure that they introduce adequate mechanisms such as cleaner technology or waste minimisation to reduce the chances of these threats becoming realities.

- Insisting or ensuring that the company introduces environmental risk reduction mechanisms will also reduce a director's potential personal responsibility such as where they insist on historic contamination being cleaned up, the introduction of environmental management systems, the education of employees, and ensuring that adequate insurance and contractual cover is obtained.
- Finally, directors should also ensure that they obtain their own environmental director and officer insurance cover. The same reasons set out above regarding the company purchasing specific environmental insurance applies to directors purchasing this specific cover as opposed to relying on any existing director and officer cover they may hold.

## 5. Future trends

If the legislative and policy developments which have been described in this document leave the reader somewhat awe-struck, it will come as little consolation to know that the process of the development of pollution-related laws and policies is not yet at an end. What may provide some solace is the fact that the current developments are aimed at creating a more integrated, less fragmented and less haphazard body of law to deal with pollution management. Set out below is a very broad and general summary of developments that are in the process of being finalised, and what is still to take place.

Whereas historically the approach towards pollution management has been reactive, the modern approach is going to be proactive. In other words instead of government attempting to merely punish pollution offenders and remediate harm which has been caused, its aim is now to prevent pollution occurring altogether where possible, and where it is not, to ensure that the impact of pollution on the environment and public health will be minimised. Only thereafter will it set about punishing offenders and remediating harm which has been caused. This objective can be seen in all the developments which are discussed below.

Perhaps the two most important documents which will deal with pollution management and waste minimisation are the White Paper on Integrated Pollution and Waste Management for South Africa: A Policy on Pollution Prevention, Waste Minimisation, Impact Control and Remediation (GNR227, GG20978 of 17 March 2000), and the National Waste Management Strategy (PMG130, PSC69 Version C of 15 October 1999). Both of these documents aim to give effect to the environmental right contained in our Constitution as well as to the principles, goals and objectives of the White Paper on an Environmental Management Policy for South Africa. As such their aim is to achieve sustainable development through, *inter alia*, the prevention of pollution and ecological degradation whilst promoting justifiable economic and social development.

The White Paper on Integrated Pollution Control and Waste Management ("IPC and WM") has several important "pollution" aims, some of which include:

(a) A holistic, integrated and therefore a cross-media approach to the system and process of pollution and waste management.

(b) To prevent pollution and to strive for minimisation at source.

(c) To manage the impact of pollution and waste management on the receiving environment.

(d) To remediate damaged environments.

(e) To achieve institutional horizontal and vertical integration of government departments.

(f) To achieve public sector involvement in pollution and waste management.

(g) To ensure that waste management extends over the entire waste cycle, from cradle-to-grave.

(h) To ensure that "responsible parties" for pollution are held accountable.

The IPC and WM Policy sets out various mechanisms it intends using to ensure the shift towards pollution prevention. These include the traditional "command and control" approach through enforcing regulatory instruments such as standards, permits, other licences and land use controls. It also involves introducing more innovative market based instruments such as tax incentives for cleaner production and lower waste streams,

and even considers voluntary agreements entered into between industry and the authority. Bear in mind however that the lastmentioned is not to be seen as a potential replacement for government control, but would be a system which would operate alongside the more traditional "command and control" approaches.

The National Waste Management Strategy is aimed at giving practical effect to many of the goals and objectives set out in the draft IPC and WM Paper. It was finalised and adopted at the end of 1999, and consists of 8 action plan documents, namely:

(a) National Waste Management Strategy;
(b) Capacity building, education, awareness and communication;
(c) General waste collection;
(d) Implementing instruments;
(e) Integrated waste management planning;
(f) Waste treatment and disposal;
(g) Waste information system; and
(h) Waste minimization and recycling.

The National Waste Management Strategy has set out a plan for introducing legislative and regulatory changes to pollution and waste management in South Africa. This program will take several years to complete, however it is interesting to note that

during the course of 2000 the following legal amendments are envisaged:

(a) Waste information systems: Whereby waste will be classified for the purposes of requiring reporting (this will be given effect through regulations to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989);

(b) Waste collection: This will involve regulations for the control of transportation of hazardous waste (to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989); and regulations for the initiation or collection and transfer facilities for hazardous waste (to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989);

(c) Waste minimization and recycling: Regulations on licencing and waste minimization assessments (to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989); regulations to amend the existing EIA regulations (to be enforced through Chapter 5 of the National Environmental Management Act and Section 21 of the Environment Conservation Act); regulations to enforce environmental agreements (in terms of Sections 35 and 45 of the National Environmental Management Act 107 of 1998); and the enforcement of the requirement for waste minimization

plans and permit requirements (through new legislative developments).

(d) Waste treatment and disposal: Regulations to reveal a classification system for waste treatment and disposal facilities (eg incinerators and landfills) (to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989 and Section 44 of the Atmospheric Pollution Prevention Act 45 of 1965); regulations to develop a register of treatment facilities (to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989); regulations on emission standards for incinerators (to be promulgated in terms of Section 44 of the Atmospheric Pollution Prevention Act 45 of 1965); regulations for the implementation of a hazardous waste manifest system (to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989); regulations enforcing responsibility for time frames within the permit system (to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989); and permitting, auditing and closure requirements for mining and power station waste disposal sites (to be promulgated in terms of Section 24 of the Environment Conservation Act 73 of 1989 and in terms of the Minerals Act 50 of 1991).

The National Waste Management Strategy envisages more specific legislative effect being given to pollution and waste management through the promulgation of an act which has up until now been given the title of Integrated Pollution and Waste Management Act. However more recently it appears that a separate act will not in fact be created for waste management, but that a substantial amendment to the National Environmental Management Act 107 of 1998 will be made, and a chapter included for dealing with waste management.

There are many other laws or draft laws and policies which will have direct or indirect bearing on pollution management. For instance, the Promotion of Access to Information Act 2 of 2000, which is still to be given effect, aims to enforce the constitutional right of improved access to information. Important to this development for business is that it will allow both the government, and probably the public at large, greater degree of access to a company's pollution related information. It will enhance existing environmental laws which allow for the creation of national pollution registers, which may, if foreign trends are followed, result in lists of contaminated land being established.

Furthermore the Promotion of Administrative Justice Act 3 of 2000, which came into effect on 30 November 2000, will hopefully assist companies who make applications for environmental licences, permits, certificates etc, in ensuring

that these are issued in an administratively fair and timeous manner.

Chapter 5 of the National Environmental Management Act 107 of 1998 requires steps by the National Minister of Environmental Affairs and Tourism as well as the relevant provincial ministers to give effect to an enhanced environmental assessment process for proposed land use and activity development.

Business in South Africa should also pay attention to the development of the White Paper for Sustainable Coastal Development for South Africa (March 1999) and the Green Paper on Development and Planning (GN626, GG20071 of 21 May 1999). There have also recently been publications of draft amended Lead and Asbestos Regulations in terms of the Occupational Health and Safety Act 85 of 1993 (GNR959, GG20359 of 16 August 1999 and GNR926, GG20325 of 16 August 1999 respectively). This list is not exhaustive, and companies are advised to ensure that they are kept appraised of all proposed pollution-related laws and policies. The fragmented and diverse nature of environmental law unfortunately means that pollution laws are going to arise from various sources from the pure environmental to safety and health, planning, nature and conservation, natural resources and even company law to name but a few.

There will be some companies who will recall the lack of enforcement of the multitude of environmental, and specifically pollution related laws, in the past. They should however bear in mind that along with an enhanced pollution management system involving stricter standards and controls, our government is gearing itself towards improving its administrative capabilities to ensure it is adequately able to enforce laws. It should also be borne in mind that this development is not based purely on the goodwill of our environmental authorities alone, but they are in fact obliged in terms of our Constitution and other national legislation to properly enforce laws which have been designated as part of their functions. Government has become far more accountable to the public, and consequently where it fails in its duties individuals are entitled to take action in many instances.

As such, business would be well advised to take the latest and future trends in pollution management seriously. As was set out in Chapter 1 business in South Africa can see the liability and enforcement regime which either exists or is on the horizon, and therefore has an opportunity to gear itself towards bringing itself as close to compliance as possible. It is also fortunate in having had the experience of very similar laws being enforced overseas to determine the type of impacts this can have. This window of opportunity should be used. It should however be used in a positive manner as companies electing to align themselves with the first world environmental

liability regime which is being created for pollution management have much to gain, not only morally, but also financially.

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## 6. Brief explanation of the South African legislative process

In making a change in policy, our government will often first put forward its proposals in a Green Paper, which is a discussion document on policy options. This paper will have originated in the department of the Ministry concerned and is then published for comment and ideas. A submission date is usually given for input from civil society. This document forms the basis for a White Paper which is a broad statement of government policy. Comment from interested parties may once again be illicited for the finalisation of the White Paper process.

Once these inputs have been taken into account, the Minister and officials within the State department concerned may draft Legislative Proposals. These proposals are also considered by the Cabinet and may be gazetted as a Draft Bill, for comment by a defined date by the public, or given to certain organisations for comment. The State Law Advisers then check the proposals in detail and their consistency with existing legislation. The proposals are then printed by Parliament, given a number and are then tabled to be introduced in either the National Assembly or the National Council of Provinces. The document is now a Bill and after its first reading, it goes to a Committee for consideration. The committee discuss the Bill, and may if required call expert

witnesses or invite submissions to help refine it. They are then allowed to amend the Bill.

Once the Committee has approved the Bill, it goes for debate in the House in which it was tabled. Once that House has agreed to the Bill, it is transmitted to the other House and the same procedure is followed.

When both Houses have passed the Bill it is allocated an Act number and then goes to the State President to be signed. It is then published in the *Government Gazette* as an Act and it becomes law.

It should however be borne in mind that there are instances where an Act is passed, but effect is not given at the same time. The Act may stipulate that in order for effect to be given the President needs to publish its commencement date in the *Government Gazette*. In these instances it will only have implications from the date on which it is published.

## 7. List of environmental legislation and permits

There are currently in excess of one hundred laws directly or indirectly relevant to the environment, (national and provincial Acts, Provincial Ordinances, Local Bylaws, Regulations, Standards etc.) which have application to the environment. The list below does not include all of these laws. As this document is a service to South African businesses, and having been commissioned by the Water Research Commission, the list will be limited to laws which principally have an effect on pollution caused by business in urban areas. Cognisance has however been taken of the fact that certain industries may impact on agricultural or nature conservation areas given their location. Some of the environmental laws from non-pollution areas have been included for interest. Furthermore, certain Regulations have been included in the list due to their importance with regard to pollution management. Once again, the list of Regulations is not meant to be exhaustive, and should accordingly therefore not be treated as such.

### 7.1 National Laws

#### 7.1.1 *General*

- Promotion of Access to Information Act 2 of 2000.
- Promotion of Administrative Justice Act 3 of 2000.
- National Nuclear Regulator Act 47 of 1999.
- Nuclear Energy Act 46 of 1999.

- Local Government: Municipal Structures Act 117 of 1998.
- National Environmental Management Act 107 of 1998.
- National Veld and Forest Fire Act 101 of 1998.
- South African National Roads Agency Limited and National Roads Act 7 of 1998.
- Constitution of the Republic of South Africa Act 108 of 1996.
- National Road Traffic Act 93 of 1996.
- Local Government Transition Act 209 of 1993.
- Nuclear Energy Act 131 of 1993.
- Compensation for Occupational Injuries and Diseases Act 130 of 1993.
- Occupational Health and Safety Act 85 of 1993.
- Environment Conservation Act 73 of 1989.
- General Policy in terms of the Environment Conservation Act 73 of 1989 (GN51, GG15428 of 21 January 1994) (it is not clear whether this policy was repealed with the repeal of the relevant section in the Environment Conservation Act which gave it legal effect)
- Fire Brigade Services Act 99 of 1987.
- Electricity Act 41 of 1987.
- Conservation of Agricultural Resources Act 43 of 1983.
- Agricultural Pests Act 36 of 1983.
- Fertilizers, Farm Feeds and Agricultural Remedies Act 36 of 1947.
- Human Tissue Act 65 of 1983.

- National Building Regulations and Building Standards Act 103 of 1977.
- Health Act 63 of 1977.
- Criminal Procedure Act 51 of 1977.
- Companies Act 61 of 1973.
- The Fencing Act 31 of 1963.
- Income Tax Act 58 of 1962.
- Explosives Act 26 of 1956.
- The National Building Regulations (GNR2378, GG12780 of 12 October 1990, as amended).

Regulations in terms of the Occupational Health and Safety Act 85 of 1993

- Major Hazard Installation Regulations (GNR60, GG18608 of 16 January 1998).
- Vessels Under Pressure (GNR1591, GG17468 of 4 October 1996).
- General Administrative Regulations (GNR1449, GG17403 of 6 September 1996).

Regulations in terms of the Machinery and Occupational Safety Act 6 of 1983

- Lead Regulations (GNR586, GG13082 of 22 March 1991).
- Facilities Regulations (GNR2362, GG12777 of 5 October 1990).

- General Machinery Regulations (GNR1521, GG11443 of 5 August 1988).
- Environmental Regulations for Workplaces (GNR2281, GG10988 of 16 October 1987).
- Asbestos Regulations (GNR773, GG10693 of 10 April 1987, as amended).
- General Safety Regulations (GNR1031, GG10252 of 30 May 1986).

### 7.1.2 *Air Pollution*

- Occupational Health and Safety Act 85 of 1993.
- Health Act 63 of 1977 – Section 20.
- Atmospheric Pollution Prevention Act 45 of 1965.

Regulations in terms of Section 21 of the Environment Conservation Act 73 of 1989

- Identification of Activities Which May Have a Detrimental Effect on the Environment (Scheduled Process Activities) (GNR1182, 1183 and 1184, GG18261 of 5 September 1997).

Regulations in terms of the Atmospheric Pollution Prevention Act 45 of 1965

- Regulations Relating to the Inspection of Premises in a Dust Control Area (GNR1922, GG9905 of 30 August 1995).

- Regulations to Prohibit the Damage of Means Adopted to Prevent the Dispersion in the Atmosphere of Matter Which May Cause a Nuisance (GNR1599, GG5716 of 19 August 1977).
- Regulations Concerning the Control of Noxious or Offensive Gases Emitted from Diesel Driven Vehicles (GNR1651, GG4393 of 20 September 1976).
- Regulations Governing Applications for and Forms of Registration Certificates and Provisional Registration Certificates (GNR561, GG5058 of 2 April 1976).
- Smoke Control Areas in terms of Section 14(1).
- Smoke Control Regulations in terms of Section 18.
- The Establishment of Smoke Control Zones in terms of Section 20.
- Dust Control Areas.

### 7.1.3 (a) *Inland Water Pollution*

- National Water Act 36 of 1998.
- Water Services Act 108 of 1997.
- Minerals Act 50 of 1991.
- Conservation of Agricultural Resources Act 43 of 1983.
- Health Act 63 of 1977.
- Lake Areas Development Act 39 of 1975.

**(b) *Marine Pollution***

- Marine Living Resources Act 18 of 1998.
- Maritime Zones Act 15 of 1994.
- Nuclear Energy Act 131 of 1993.
- Legal Succession to the South African Transport Services Act 9 of 1989.
- Sea Fishery Act 12 of 1988.
- Marine Pollution (Intervention) 64 of 1987.
- Marine Pollution (Prevention of Pollution) Act 2 of 1986.
- Marine Traffic Act 2 of 1981.
- Marine Pollution (Control and Civil Liability) Act 6 of 1981.
- Dumping at Sea Control Act 73 of 1980.
- National Parks Act 57 of 1976.
- Lake Areas Development Act of 1975.
- International Health Regulations Act 28 of 1974.
- Sea Birds and Seals Act 46 of 1973.
- Water Act 54 of 1956.
- Merchant Shipping Act 57 of 1951.
- Sea Shore Act 21 of 1935.

**7.1.4 *Waste***

- National Water Act 36 of 1998.
- Nuclear Energy Act 131 of 1993.
- Occupational Health and Safety Act 85 of 1993.
- The Minerals Act 50 of 1991.

- Environment Conservation Act 73 of 1989.
- Legal Succession to South African Transport Services Act 9 of 1989.
- Electricity Act 41 of 1987.
- Conservation of Agricultural Resources Act 43 of 1983.
- Heath Act 63 of 1977.
- Hazardous Substances Act 15 of 1973.
- National Roads Act 54 of 1971.
- Atmospheric Pollution Prevention Act 45 of 1965.
- Advertising on Roads and Ribbons Development Act 21 of 1940.

Regulations in terms of Section 21 of the Environment Conservation Act 73 of 1989

- Identification of Activities Which May Have a Detrimental Effect on the Environment (GNR1182, 1183 and 1184, GG18261 of 5 September 1997): Waste Disposal.

Regulations in terms of the Occupational Health and Safety Act 85 of 1993

- Regulations for Hazardous Substances (GNR1179, GG16596 of 25 August 1995).

Regulations in terms of the Machinery and Occupational Safety Act 6 of 1983

- Lead Regulations (GNR586, GG13082 of 22 March 1991).
- Asbestos Regulations (GNR773, GG10693 of 10 April 1987, as amended).

Regulations in terms of the Hazardous Substances Act 15 of 1973

- GNR73, GG9556 of 11 January 1985, as amended.
- GNR453, GG5467 of 25 March 1977, as amended.

General policy in terms of the Environmental Conservation act 73 of 1989 (GNR51, GG15428 of 21 January 1994): Pollution Control.

### 7.1.5 *Hazardous and Toxic Chemicals*

- Conservation of Agricultural Resources Act 43 of 1983.
- Health Act 63 of 1977.
- Hazardous Substances Act 15 of 1973.
- Food Stuffs, Cosmetics and Disinfectants Act 54 of 1972.
- Medicines and Related Substances Control Act 101 of 1965.
- Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947.

Regulations in terms of the Occupational Health and Safety Act 85 of 1993

- Major Hazard Installation Regulations (GNR60, GG18608 of 16 January 1998).
- Regulations for Hazardous Chemical Substances (GNR1179, GG16596 of 25 August 1995).

Regulations in terms of the Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972

- Regulations Relating to Metals in Foodstuffs (GNR1518, GG15954 of 9 September 1994).
- Regulations Governing the Maximum Limits for Pesticide Residues that may be Present in Foodstuffs (GNR246, GG15486 of 11 February 1994, as amended).
- Regulations Governing Irradiation and Sale of Irradiated Foodstuffs and Cosmetics (GNR257, GG10007 of 15 November 1985, as amended).

Regulations in terms of the Hazardous Substances Act 15 of 1973

- Declaration of Group II Hazardous Substances (GNR1382, GG15907 of 12 August 1994).
- Group III Hazardous Substances (GNR1302, GG13299 of 14 June 1991).
- Regulations Relating to Group III Hazardous Substances (GNR690, GG11823 of 14 April 1989).

- Regulations Relating to the Transport of Hazardous Substances by Road (GNR73, GG9556 of 11 January 1985, as amended).
- Group I Hazardous Substances (GNR452 and GNR453, GG5467 of 25 March 1977, as amended).

Regulations in terms of the Machinery and Occupational Safety Act 6 of 1983

- Lead Regulations (GNR586, GG13082 of 22 March 1991).
- Facilities Regulations (GNR2362, GG12777 of 5 October 1990).
- General Machinery Regulations (GNR1521, GG11443 of 5 August 1988).
- General Safety Regulations (GNR1031, GG10252 of 30 May 1986, as amended).

Regulations in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947

- Declaration of Certain Substances (GNR383, GG8561 of 25 February 1983).

### 7.1.6 *Noise Pollution*

- Minerals Act 50 of 1991.
- Environment Conservation Act 73 of 1989.
- Road Traffic Act 29 of 1989.
- Standards Act 30 of 1982.
- Aviation Act 74 of 1962.

Regulations in terms of Section 25 of the Environment Conservation Act 73 of 1989

- Noise Control (GNR154, GG13717 of 10 January 1992).

Regulations in terms of the Machinery and Occupational Safety Act 6 of 1983

- Environmental Regulations for Workplaces (GNR2281, GG10988 of 16 October 1987, as amended).

### 7.1.7 *Land Use and Planning*

- Development Facilitation Act 67 of 1995.
- Nuclear Energy Act 131 of 1993.
- Physical Planning Act 125 of 1991.
- Minerals Act 50 of 1991.
- Conservation of Agricultural Resources Act 72 of 1989.
- National Parks Act 57 of 1976.
- Lake Areas Development Act 39 of 1975.
- Mountain Catchment Areas Act 63 of 1970.
- Subdivision of Agricultural Land Act 70 of 1970.
- Physical Planning Act 88 of 1967.
- The Atmospheric Pollution Prevention Act 45 of 1965.
- Land Survey Act 9 of 1927.

The above touch on many, but not all, environmentally related issues which in some way deal with physical planning implications.

The following list of other areas of legislation should also be considered:

- Informal settlements.
- Building restrictions.
- Categories of land use in nature conservation.
- Restrictions imposed on ownership title.
- Expropriation.
- Roads.
- Natural resources law.
- Subdivision of agricultural land.

### 7.1.8 *Nature Conservation and Animal Protection Legislation*

- The Marine Living Resources Act 18 of 1998.
- National Forests Act 84 of 1998.
- Development Facilitation Act 67 of 1995.
- Game Theft Act 105 of 1991.
- Environment Conservation Act 73 of 1989.
- The Sea Fishery Act 12 of 1988.
- Forests Act 122 of 1984.
- National Parks Act 57 of 1976.
- Lake Areas Development Act 39 of 1975.
- Sea Birds and Seals Protection Act 46 of 1973.
- National Monuments Act 28 of 1969.
- Animals Protection Act 71 of 1962.

- The Defence Act 44 of 1957.
- Performing Animals Act 24 of 1935.

### 7.1.9 *Cultural and Heritage Environment Conservation*

- The National Heritage Resources Act 25 of 1999.
- National Heritage Council Act 11 of 1999.
- Cultural Affairs Act (House of Assembly) 65 of 1989.
- Culture Promotion Act 35 of 1983.
- National Monuments Act 28 of 1969.

### 7.1.10 *Environmental Research*

- National Research Foundation Act 23 of 1998.
- Scientific Research Council Act 46 of 1988.
- Water Research Act 34 of 1971.
- Human Sciences Research Act 23 of 1968.

## 7.2 Selected Provincial Laws

A list of selected provincial acts and ordinances is provided in Schedule 1 of the document.

## 7.3 *Local Bylaws*

A list of the local bylaws which will principally have an effect on pollution caused by business in the urban areas is provided for Durban, Pietermaritzburg, Richards Bay, Port Elizabeth, Cape Town, Bloemfontein and Johannesburg in Schedule 2 of the document.

***Others***

## 7.4 Selected environmental permits / licences / certificates / authorisations

### 7.4.1 *General*

**7.4.1.1** *National Environmental Management Act 107 of 1998*

- Section 35: Environmental management co-operation agreements.

**7.4.1.2**

- Authorisations in terms of the Identified Activities in the Regulations to the Environment Conservation Act 73 of 1989 (GNR1182, 1183 and 1184, GG18261 of 5 September 1997, as amended)

**7.4.1.3** *Regulations in terms of the Machinery and Occupational Safety Act 6 of 1983*

General Machinery Regulations (GNR1521, GG11443 of 5 August 1988)

- Regulation 8(1): Notification of substances in fixed storage vessel (see also Chapter 7).

Asbestos Regulations (GNR773, GG10693 of 10 April 1987, as amended)

- Regulation 16: Submission of safety and health plan for alteration of any structure containing asbestos lagging or insulation.

**7.4.1.4** *Regulations in terms of the Occupational Health and Safety Act 85 of 1993*

Vessels Under Pressure Regulations (GNR1591, GG17468 of 4 December 1996)

- Regulation 5(1) and (3): Certificate of registration to use a boiler.

Regulations for Hazardous Chemical Substances (GNR1179, GG16596 of 25 August 1995)

- Regulation 5(1) and (2): Assessment of exposure of employee after consultation with relevant health and safety representative or committee, and availability of assessment.

Major Hazard Installation Regulations (GNR60, GG18608 of 16 January 1998)

- Regulation 3(1): Apply for permission to erect a major hazard installation.
- Regulation 3(2): Notify local authority and provincial director of existing major hazard installation.
- Regulation 3(3): Permission to increase an installation storage or production capacity.
- Regulation 5(1) and (3): Carrying out of risk assessments and submission to relevant local emergency services.
- Regulation 6(1)(b): Duty to establish an on-site emergency plan.

**7.4.1.5** *The National Building Regulations and Building Standards Act 103 of 1977*

- Section 4(1): Written approval of a local authority to erect any building in respect of which plans and specifications are to be drawn.

### 7.4.2 *Air Pollution*

**7.4.2.1** *The Atmospheric Pollution Prevention Act 45 of 1965*

- Section 9(1)(a)(i): Application for a scheduled process certificate.
- Section 11(4): Application for a provisional scheduled process certificate.
- Section 9(1)(b): Scheduled process certificate application for the erection of or extension of any building or plant requiring a scheduled process.
- Section 15(2): Written notice to the local authority prior to installing any fuel burning appliance.

**7.4.2.2** *Authorisations in terms of the Identified Activities in the Regulations to the Environment Conservation Act 73 of 1989 (GNR1182, 1183 and 1184, GG18261 of 5 September 1997, as amended)*

- Schedule 1 Item 9: Scheduled processes listed in the second schedule to the atmospheric pollution prevention act 45 of 1965 have been identified as activities which require written authorisation.

### 7.4.3 *Water Pollution*

**7.4.3.1** *National Water Act 36 of 1998*

- Section 22(1)(a) read with Section 40(1) and Section 43(1): Application for a water licence.
- (Reference must also be made to Water use Authorisation Process for individual application, Department of Water Affairs and Forestry, December 2000, ISBN 0 620 26602 3).
- Section 30(1): The compulsory giving of financial security to the relevant authority where a water licence is required.
- Section 35: Application for verification of existing water uses.
- Section 118 read with Section 120: Control and registration of new and existing dams with a risk of causing harm to the public, damage to property or resource quality.
- General authorisations read with Section 39 of the Act.

**7.4.3.2** *Water Services Act 108 of 1997*

- Section 6(1): Approval of a water services authority required to use water services from a source other than a water services provider nominated by the water services authority having jurisdiction in the area in question.
- Section 7(1): Approval of a water services authority required in order to obtain water for industrial use from any source other than the distribution system of a water

services provider nominated by the water services authority having jurisdiction in the area in question.

- Section 7(2): Approval required from a water services provider to dispose of industrial effluent.

### 7.4.4 *Waste*

**7.4.4.1** *The Environment Conservation Act 73 of 1989*

- Section 20(1): Application for a permit to establish, provide or operate any disposal site.

**7.4.4.2** *Authorisations in terms of the Identified Activities in the Regulations to the Environment Conservation Act 73 of 1989 (GNR1182, 1183 and 1184, GG18261 of 5 September 1997, as amended)*

- Schedule 1: Application for authorisation to dispose of waste at a waste disposal site (essentially only has application where the applicant wants to operate its own waste site, transport its own waste to a disposal site, treat its own waste on any of its sites, or store waste on any of its sites for more than ninety days).

**7.4.4.3** *Hazardous Substances Act 15 of 1973*

- Section 3(1): A licence required to sell a Group I Hazardous Substance.

**7.4.4.4** *Atmospheric Pollution Prevention Act 45 of 1965*

- Section 9: Scheduled process certificate or provisional certificate required where waste incineration processes are conducted.

**7.4.4.5** *National Water Act 36 of 1998*

- Section 43: A water licence is required where waste or water containing waste is disposed of to a water resource (as opposed to disposing of it to a local authority's sewage disposal system).
- Section 22(1)(a)(i) read with Schedule 1 of the Act: Sewage disposal permit required from a local authority.
- General authorisations read with Section 39 of the Act.

### 7.4.5 *Hazardous Chemicals And Toxic Substances*

**7.4.5.1** *Hazardous Substances Act 15 of 1973*

- Section 3(1): A licence is required to sell Group I Hazardous Substances; to sell, let, use, operate, or apply any Group III Hazardous Substance; or to install or keep any Group III Hazardous Substances on any premises.

**7.4.5.2** *Regulations under the Hazardous Substances Act 15 of 1973 – Group I Hazardous Substances (GNR453, GG5467 of 25 March 1977, amended by GNR2776, GG9533 of 21 December 1984, GNR1490, GG18412 of 14 November 1997)*

- Regulation 2: Application for a licence re-selling a Group I Hazardous Substance.

**7.4.5.3** *Regulations in terms of the Hazardous Substances Act 15 of 1973 – Regulations relating to Group III Hazardous Substances (GNR690, GG11823 of 14 April 1989)*

- Regulation 3: Application to sell a Group III Hazardous Substance.

**7.4.5.4** *Regulations in terms of the Hazardous Substances Act 15 of 1973 – Regulations relating to the transport of hazardous substances by road (GNR73, GG9556 of 11 January 1985, as amended)*

- See for licences required for the transport of hazardous substances.

**7.4.5.5** *Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947*

- Section 7 *bis* : A permit is required for the acquisition, disposal, sale or use of fertilizers, farm feeds, agricultural remedies or stock remedies.

**7.4.5.6** *Regulations in terms of the Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972 – Regulations Governing Irradiation and Sale of Irradiated Foodstuffs and Cosmetics (GNR257, GG10007 of 15 November 1985, as amended by GNR2644, GG10022 of 29 November 1985) –*

- Regulation 2(1): Written permission is required to irradiate foodstuff.
- Regulation 2(6): Written permission is required to sell irradiated foodstuff.

**7.4.5.7** *Regulations in terms of the Machinery and Occupational Safety Act 6 of 1983 – General Machinery Regulations (GNR152, GG11443 of 5 August 1988)*

- Regulation 8(1): Compulsory notification on prescribed form to be given regarding a substance set out in Column 1 of Schedule A or in the mixture of such substances, in a quantity which at any time is equal to or in excess of the quantity specified opposite that substance in Column 2 or on its premises in a fixed storage vessel.

**7.4.5.8** *Regulations in terms of the Occupational Health and Safety Act 85 of 1993 – Major Hazard Installation Regulations (GNR60, GG18608 of 16 January 1998)*

- Regulation 2: Notification to be given to relevant authority regarding the existence of a major hazard installation.
- Regulation 3: Application to relevant authority for permission to erect or convert an existing installation, or increase an installation storage or production capacity so as to create a major hazard installation.
- Regulation 5: Compulsory risk assessment to be submitted to the relevant local emergency services for major hazard installations.
- Regulation 11: Notification in writing to the relevant authority where a major hazard installation ceases to be one.
- Regulation 8: Suppliers are under a duty to supply a material safety data sheet to a major hazard installation.

**7.4.5.9** *Bylaws relating to fire prevention and flammable liquids and substances PN225 of 1986*

- Section 23(1): A certificate of registration in respect of a premises or vehicle is required before a person may-
  - (a) use any premises as a spraying room or booth or as a dry cleaning room;
  - (b) store, manufacture, sell, use or handle any flammable liquids or substances on any premises

in excess of the prescribed quantities; or

(c) transport or convey any flammable liquid, substance or liquefied petroleum, gas or vapours by means of any vehicle within the city.

- Section 24(1): An application for a registration certificate is to be made to the chief fire officer.

### 7.4.6 *Noise*

**7.4.6.1** *Regulations in terms of Section 25 of the Environment Conservation Act 73 of 1989 – Noise Control (as promulgated in GNR154, GG13717 of 10 January 1992)*

- Regulation 3(c): Permission is required from a local authority to make changes to existing facilities or existing uses of land or buildings or to erect new buildings if they will house or cause activities which will cause a disturbing noise.
- Regulation 3(k): Notification to be given to a local authority to install, replace or modify a plant with a total input power exceeding 10 kilowatts on any premises.
- Regulation 7(3): Written application is required to a local authority for exemption from any provision of the Regulations.

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**DISCLAIMER:**

**Note that this paper does not constitute legal advice. We are available to discuss issues specific to clients, this document was intended merely as an information guide.**

## SCHEDULE 1

### Selected Provincial Environmental Laws

**Gauteng**

***Acts***

- Gauteng Land Administration Act 11 of 1996
- Gauteng Development and Planning Act
- Interim Road Transport Act 2 of 1998

***Ordinances***

- Nature Conservation Ordinance 12 of 1983
- Local Government Ordinance 17 of 1939
- Town Planning and Townships Ordinance 15 of 1986 (will be repealed with the commencement of the Development and Planning Act)
- Division of Land Ordinance 20 of 1986
- Transvaal Board for the Development of Peri-Urban Areas Ordinance 20 of 1943
- Roads Ordinance 22 of 1957

***Regulations***

- Noise Control Regulations N5479, PG75(4) of 20 August 1999.

**Western Cape**

***Acts***

- Western Cape Nature Conservation Board Act 15 of 1998 (amended by Western Cape Nature Conservation Laws Amendment Act 3 of 2000)
- Western Cape Planning and Development Act 7 of 1999 (repeals Land Use Planning Ordinance 15 of 1985)
- Western Cape Housing Development Act 6 of 1999
- Western Cape Land Administration Act 6 of 1998
- Western Cape Cultural Commission and Cultural Councils Act 14 of 1998

***Ordinances***

- Cape Nature and Environmental Conservation Ordinance 19 of 1974
- The Municipal Ordinance 20 of 1974
- Roads Ordinance 19 of 1976
- Control of Inland Waters 357 of 1972

***Regulations***

- Noise Control Regulations PG5309, PN627 of 20 November 1998

**Eastern Cape**

***Acts***

- Nature Conservation Act 10 of 1987 (Ciskei)
- Land Disposal Act 7 of 2000
- Ciskei Land Use Regulation Act 15 of 1987
- Transkei Agricultural Development Act 10 of 1968

***Ordinances***

- The Cape Nature and Environmental Conservation Ordinance 19 of 1974 (The province has produced a draft Green Provincial Environment Green paper and a draft Nature Conservation Bill which will consolidate the nature conservation laws of the former Transkei, Ciskei and Cape Ordinance into an integrated Eastern Cape Nature Conservation Act)
- Land Use Planning Ordinance, 15 of 1985

***Regulations***

- Noise Control Regulations PN627, PG5309 of 20 November 1998

**Northern Cape**

***Acts***

- Northern Cape Planning and Development Act 7 of 1998

***Ordinances***

- The Cape Nature and Environmental Conservation Ordinance 19 of 1974

**North West**

***Acts***

- North West Parks and Tourism Board Act 3 of 1997
- Western Cape Nature Conservation Laws Amendment Act 3 of 2000

***Ordinances***

- The Cape Nature and Environmental Conservation Ordinance 19 of 1974
- Nature Conservation Ordinance 12 of 1983
- Town Planning and Townships Ordinance 15 of 1986 (Transvaal)

**Free State**

***Ordinances***

- Townships Ordinance 9 of 1969
- Roads Ordinance 4 of 1968
- Prohibition of the Dumping of Rubbish Ordinance 8 of 1976

***Regulations***

- Noise Control Regulations PN242, PG67/2 of 7 November 1997
- Noise Control Regulations Proc. 24, PG35 of 24 April 1998. Repealed regulations published under GN154 of 10 January 1992 and PN R242 of 7 November 1997.

**Northern Province**

***Ordinances***

- Nature Conservation Ordinance 12 of 1983 (Transvaal)
- Town Planning and Townships Ordinance 15 of 1986 (Transvaal)
- Transvaal Board for the Development of Peri-Urban Areas Ordinance 20 of 1943
- Venda Proclamation 45 of 1990

**Mpumalanga**

***Acts***

- Mpumalanga Nature Conservation Act 10 of 1998
  - Regulations promulgated (ON2, PG409 of 29 January 1999)
- Eastern Transvaal Parks Board Act 6 of 1995

***Ordinances***

- Town Planning and Townships Ordinance 15 of 1986 (Transvaal)

**KwaZulu-Natal**

***Acts***

- KwaZulu-Natal Planning and Development Act 5 of 1998.
- KwaZulu-Natal Nature Conservation Management Act 9 of 1997.
- KwaZulu Nature Conservation Act 29 of 1992.
- KwaZulu Land Affairs Act 11 of 1992.

***Ordinances***

- Prevention of Environmental Pollution Ordinance 21 of 1981.
- Nature Conservation Expenditure Validation Ordinance 12 of 1978.
- Local Authorities Ordinance 25 of 1974.
- Nature Conservation Ordinance 15 of 1974.
- Water Services Ordinance 27 of 1963.

***Regulations***

*Regulations in terms of the Nature Conservation Ordinance 15 of 1974*

- Coastal Fishing Regulations PN22 of 1974.
- Freshwater Fish Regulations PN141 of 1974.
- Control and Management of Game Reserves, Nature Reserves and National Parks by the Natal Parks Board Regulations PN59 of 1979.

- Game Regulations PN451 of 1979.
- View Control Regulations PN88 of 1981.
- Amphibians, Invertebrates and Reptiles Regulations PN91 of 1981.
- Professional Hunters and Hunting Outfitters Regulations PN176 of 1985.
- Conditions of Service Regulations PN28 of 1989.

*Regulations in terms of the Prevention of Environmental Pollution Ordinance.*

- Prevention of Environmental Pollution Regulations PN115 of 1982.
- Regulations in terms of the KwaZulu-Natal Nature Conservation Management Act 9 of 1997.
- Regulations under the KwaZulu-Natal Nature Conservation Management Act 9 of 1997.
- Appointment of Members of the KwaZulu-Natal Nature Conservation Board Regulations PN11 of 1998.

## SCHEDULE 2

### Selected Local Authority Environmental Laws

**Durban**

- Durban Transitional Metropolitan Council Sewage Disposal Bylaws MN27 of May 1999.
- Durban Metro Water Supply Bylaws MN104 of 1996.
- Bylaws Relating to Fire Prevention and Flammable Liquids and Substances PN225 of 1986.
- Refuse Removal Bylaws PN97 of 1985.
- Scheduled Trades and Occupations Bylaws PN134 of 1979.
- Smoke Control Regulations PN1 of 1969.
- Order Declaring Smoke Control Zones PN2 of 1969.
- Bylaws Relating to Dry Cleaners and Dyers Establishments, Laundries and Depots PN430 of 1953.
- Building Bylaws PN82 of 1932, as amended.

**Others**

- Public Health Bylaws
- Milk Bylaws
- Food Bylaws

**Pietermaritzburg**

- Industrial Effluent Bylaws of 19 November 1998
- Bylaws Relating to Fire Prevention and Flammable Liquids and Substances
- Public Health Bylaws of 20 December 1956
- Water Supply Bylaws, PN247 of 1957 as amended
- Noise Abatement Bylaws, PN514 of 1994

**Richards Bay**

- Water Bylaws for Richards Bay PN36 of 8 December 1988
- Drainage Bylaws – discharge of sewage, industrial effluent and other substances MN105 of 10 May 1990
- Nuisance Bylaws PN534 of 8 December 1998
- Borough of Richards Bay Refuse Removal Bylaws PN360 of 20 July 1978
- Public Health Bylaws PN595 of 15 November 1979
- Regulations relating to Offensive Trades GNR1287 of 23 June 1978
- Bylaws relating to Fire Prevention and matters incidental thereto PN323 of 28 June 1984
- Smoke Control Zones declared in terms of Section 20(1) of the Atmospheric Pollution Prevention Act 45 of 1965: Town Council of Richards Bay – First Smoke Control Zone Order PN631 of 2 April 1982

**Port Elizabeth**

- Sewage Acceptance Bylaw PG4672 of 23 November 1990
- Water Supply Bylaws OG4551 of 30 September 1988
- Noise regulations, in terms of the Environment Conservation Act 73 of 1989, R638 of 28 March 1991
- Smoke Control Regulations, in terms of Section 18 (5) of the Atmospheric Pollution Prevention Act 45 of 1965, R928 of 7 June 1974
- Standard Bylaw in terms of Section 17 of the Fire Brigade Services Ordinance, 14 of 1978
- Smoke Control Zones declared in terms of Section 20 of the Atmospheric Pollution Prevention Act 45 of 1965
    - Zone 1 – 21 December 1974
    - Zone 2 – 30 March 1976
    - Zone 3 - 30 March 1976
    - Zone 4 – 18 January 1978
    - Zone 5 - 18 January 1978
    - Zone 6 - 18 January 1978
    - Zone 7 – 23 March 1979
    - Zone 8 - 23 March 1979

**Cape Town**

- Cape Metropolitan Council Wastewater and Industrial Effluent Bylaw, PG5582, PN466 of 15 September 2000.
- Cape Metropolitan Council Waste Management Bylaw, PN466, PG5582 of 15 September 2000.
- Cape Town Transitional Metropolitan Substructure: Water Bylaw, PG5014 of 2 February 1996.
- Bylaws Relating to the Storing and Keeping of Flammable Substances, PN326 of 1922.
- Bylaws Relating to the Prevention and Spread of Fires, PN771 of 1971.
- Cape Town Municipality Regulations relating to Nuisances, PN134 of 1974.
- Noise Control Regulations, PN627, PG5309 of 20 November 1998.

**Johannesburg**

- Johannesburg Municipality Water Pollution Control Bylaws, AN1659 of 17 June 1992
- Standard Water Supply Bylaws AN21, 5 January 1977
- Johannesburg Refuse & Solid Wastes Bylaws, AN249 of 29 March 1961
- Sanitation Bylaws AN195 of 10 March 1965 (sewerage)
- Offensive Trades Bylaws AN2262 of 3 December 1986
- Noise Control Bylaws AN1784 of 29 November 1978

**Others**

- Milk Bylaws
- Meat Bylaws
- Public Health Bylaws
- Cemetery Bylaws

**Bloemfontein**

- Water Supply Regulations AN100 of 25 April 1975, as amended
- Sewerage Regulations Regarding Industrial Effluent and Other Matter, LGN1 of 5 January 1990, as amended
- Refuse Removal Bylaws, PN20 of 1992
- Smoke Control Bylaws, PN252 of 1968
- Public Nuisances Bylaws, PN336 of 1981
- Noxious and Offensive Trades Bylaws, PN82 of 1992
- Public Health Bylaws, PN13 of 1977
- Fire Brigade Bylaws, PN210 of 1970
- Petroleum Liquids Bylaws, PN222 of 1972
- Cleanliness of Plots Bylaws, PN123 of 1974
- Keeping of Pigs Bylaws, PN1 of 1979

# SCHEDULE 3

## Selected Government Department and NGO Contact Details

**The South African Chamber of Commerce (SACOB)**

The Environmental Affairs Committee within SACOB deals with all environmental issues, whether it be nature conservation or those impacting on international trade and economic development. Its contact details, and some of its affiliates, are as follows:

| | |
|---|---|
| Physical Address: | 3rd Floor, JCC House<br>Milpark<br>Corner Empire Road and Owl Street<br>Auckland Park<br>2092 |
| Postal Address: | P O Box 91267<br>Auckland Park 2006 |
| Tel: | (011) 358 9700 |
| Fax: | (011) 358 9773/4 |

**Mpumalanga:**

*Nelspruit & District Chamber of Commerce*

| | |
|---|---|
| Postal Address: | P O Box 361<br>Nelspruit 1200 |
| Tel: | (013) 753 3401 |
| Fax: | (013) 753 2986 |

**Eastern Cape:**

*Port Elizabeth Regional Chamber of Commerce & Industry*
Postal Address: P O Box 2221
North End 6056
Tel: (041) 484 4430
Fax: (041) 487 1851
e-Mail address: nicki@pechamber.org.za

**Free State:**

*Bloemfontein Chamber of Commerce & Industries*
Postal Address: P O Box 87
Bloemfontein 9300
Tel: (051) 447 3368/9
Fax: (051) 447 5064
e-Mail address: bcci@intekom.co.za

**Northern Province:**

*Pietersburg Chamber of Business*
Postal Address: P O Box 53
Pietersburg 0700
Tel: (015) 297 7571
Fax: (015) 297 7572

**North West:**

*Wesvaal Chamber of Business*
Postal Address: P O Box 7
Klerksdorp 2570
Tel: (018) 462 7401
Fax: (018) 454 9291
e-Mail address: chamber@gds.co.za

**Gauteng:**

*Johannesburg Metropolitan Chamber of Commerce & Industry*
Postal Address: Private Bag 34
Auckland Park 2006
Tel: (011) 726 5300
Fax: (011) 482 2000/726 8421
*Pretoria Chamber of Business*
Postal Address: P O Box 40653
Arcadia 0007
Tel: (012) 342 3236
Fax: (012) 342 1486

**Western Cape:**

*Cape Chamber of Commerce & Industry*
Postal Address: P O Box 204
Cape Town 8000
Tel: (021) 418 4300
Fax: (021) 418 1800/ 418 3500
e-Mail address: acs@capechamber.co.za

**Northern Cape:**

*Northern Cape Chamber of Commerce & Industry*
Postal Address: P O Box 350
Kimberley
8300
Tel: (053) 831 1081
Fax: (053) 831 1082

**KwaZulu-Natal:**

*Durban Chamber of Commerce*
Postal Address: P O Box 1506
Durban
4000
Tel: (031) 335 1000
Fax: (031) 332 1288
e-Mail address: chamber@durbanchamber.co.za

**The Institute of Directors**

The Institute has an environmental committee made up of past and present directors, environmental organisations and environmental lawyers.

The national committee's contact details are as follows:

| | |
|---|---|
| Postal Address: | Institute of Directors<br>P O Box 908<br>Parklands<br>2121 |
| Tel: | (011) 643 8086/7 |
| Fax: | (011) 484 1416 |
| Attention: | Kosta Babich |

**Industrial Environmental Forum of South Africa**

| | |
|---|---|
| Physical Address: | Sanlam Arena<br>10 Cradock Avenue<br>Rosebank<br>2192 |
| Postal Address: | P O Box 1184<br>Saxonwold<br>2132 |
| Tel: | (011) 880 0077/9 or 447 9172 |
| Fax: | (011) 447 0848 |
| Attention: | Dr Budnik Lees |
| e-Mail Address: | iefsa@mweb.co.za |
| Website Address: | http://www.ief.co.za |

## DEPARTMENT OF WATER AFFAIRS AND FORESTRY

**National Department of Water Affairs and Forestry**

| | |
|---|---|
| Physical Address: | Sedibeng Building<br>185 Schoeman Street<br>Pretoria |
| Tel: | (012) 336 7500 |
| Fax: | (012) 326 2715 |
| Postal Address: | Private Bag X313<br>Pretoria 0001 |
| e-Mail address: | webmaster@dwaf.pwv.gov.za |
| Web site address: | http://www-dwaf.pwv.gov.za |

***Provincial Departments***

*Mpumalanga Water Affairs & Forestry*

| | |
|---|---|
| Postal Address: | Private Bag X11259<br>Nelspruit 1200 |
| Tel: | (013) 752 4183/4 |
| Fax: | (013) 755 1678 |

*Eastern Cape Water Affairs & Forestry*

| | |
|---|---|
| Postal Address: | Private Bag X68<br>Cradock 5880 |
| Tel: | (043) 643 4352 |
| Fax: | (043) 642 1737 |

*Free State Water Affairs & Forestry*

| | |
|---|---|
| Postal Address: | P O Box 528<br>Bloemfontein 9300 |
| Tel: | (051) 430 3134 |
| Fax: | (051) 430 8146 |

*Northern Province Water Affairs & Forestry*

| | |
|---|---|
| Postal Address: | Private Bag X7420<br>Hennopsmeer 0046 |
| Tel: | (012) 672 2948 |
| Fax: | (012) 672 2936 |

*North West Water Affairs & Forestry*

| | |
|---|---|
| Postal Address: | Private Bag X5<br>Mmabatho 2735 |
| Tel: | (012) 253 1093 |
| Fax: | (012) 253 1905 |

*Gauteng Water Affairs & Forestry*

| | |
|---|---|
| Postal Address: | Private Bag X8007<br>Hennopsmeer |
| Tel: | (012) 672 2880 |
| Fax: | (012) 672 2885 |

*Western Cape Water Affairs & Forestry*

| | |
|---|---|
| Physical Address: | 17 Strand Street<br>Belville<br>Cape Town |
| Tel: | (021) 950 7128 |
| Fax: | (021) 946 3666 |
| Postal Address: | Private Bag X16<br>Sanlamhof 7352 |

*Northern Cape Water Affairs & Forestry*

| | |
|---|---|
| Postal Address: | Private Bag X6101<br>Kimberley |
| Tel: | (053) 831 4125 |
| Fax: | (053) 831 5682 / 831 4534 |

*KwaZulu-Natal Water Affairs and Forestry*

| | |
|---|---|
| Physical Address: | 88 Field Street<br>Durban |
| Tel: | (031) 336 2700 |
| Fax: | (031) 304 9546 |
| Postal Address: | P O Box 1018<br>Durban 4000 |

## DEPARTMENT OF ENVIRONMENTAL AFFAIRS & TOURISM

**National Department of Environmental Affairs and Tourism**

Physical Address: Fedsure Forum Building
North Tower
Cnr Van der Walt and Pretorius Streets
Pretoria
Tel: (012) 310 3911
Fax: (012) 320 4746
Postal Address: Private Bag X447
Pretoria 0001
Web site Address: http://www.environment.gov.za

***Provincial Departments***

*Mpumalanga Environmental Affairs and Tourism*
Postal Address: Private Bag X11233
Nelspruit 1200
Tel: (013) 759 4083
Fax: (013) 759 4032

*Eastern Cape Economic Affairs Environment and Tourism*
Postal Address: Private Bag X0054
Bisho 5606
Tel: (040) 639 2000
Fax: (040) 639 2002

*Free State Environmental Affairs and Tourism*
Postal Address: P O Box 264
Bloemfontein 9300
Tel: (051) 403 3712
Fax: (051) 448 8361

*Northern Province Agriculture, Land and Environment*
Postal Address: Private Bag X9487
Pietersburg 0700
Tel: (015) 295 7300
Fax: (015) 291 3740

*North-West Tourism, Nature Conservation and Environmental Affairs*

Postal Address: Private Bag X2080
Mmabatho 2735
Tel: (0140) 84 1027/8
Fax: (0140) 84 1029/6

*Gauteng Agriculture, Conservation and Environmental Affairs*

Postal Address: P O Box 8769
Johannesburg 2000
Tel: (011) 333 1900
Fax: (011) 337 2292

*Western Cape Environmental and Cultural Affairs*

Physical Address: Utilitas Building
1 Dorp Street
Cape Town 8000
Tel: (021) 483 4093
Fax: (021) 483 3016
Postal Address: Private Bag X9086
Cape Town 8000

*Northern Cape Health, Welfare and Environmental Affairs*

Postal Address: Private Bag X5049
Kimberley 8300
Tel: (053) 831 1121
Fax: (053) 833 4394

*KwaZulu-Natal Environmental Affairs and Tourism*

Physical Address: Metlife Building
Smith Street
Durban
Tel: (031) 307 6111
Fax: (031) 307 6153
Postal Address: Private Bag X31
Ulundi 3838

## DEPARTMENT OF AGRICULTURE & LAND AFFAIRS

### National Department of Agriculture

| | |
|---|---|
| Physical Address: | Agriculture Building<br>Block DA<br>Cnr Beatrix Str & Soutpansberg Road<br>Arcadia<br>Pretoria |
| Tel: | (012) 319 6000 |
| Fax: | (012) 319 7135 |
| Postal Address: | Private Bag X250<br>Pretoria 0001 |
| Web site Address: | http://www.nda.agric.za |

### Provincial Departments

*Mpumalanga Agriculture, Conservation and Environment*

| | |
|---|---|
| Physical Address: | 1st Floor, 32 Bell Street<br>Nelspruit |
| Tel: | (013) 755 4824 |
| Fax: | (013) 755 4827 |
| Postal Address: | Private Bag X11219<br>Nelspruit 1200 |

*Eastern Cape Agriculture & Land Affairs*

| | |
|---|---|
| Physical Address: | Dukumbana Building<br>10th Floor<br>Bisho |
| Tel: | (040) 639 3008 |
| Fax: | (040) 635 0604 |
| Postal Address: | Private Bag X0040<br>Bisho 5608 |

*Free State Agriculture*

| | |
|---|---|
| Postal Address: | Private Bag X01<br>Glen 9360 |
| Tel: | (051) 861 1245 |
| Fax: | (051) 861 1001 |

*Northern Province Agriculture, Land and Environment*

| | |
|---|---|
| Physical Address: | Wynmeul Building<br>Biccard Street<br>Agriville<br>Pietersburg |
| Tel: | (015) 295 7090/1/2/3/4 |
| Fax: | (015) 295 7028 |
| Postal Address: | Private Bag X9487<br>Pietersburg 0700 |

*North-West Agriculture, Conservation and Environmental Affairs*

| | |
|---|---|
| Postal Address: | Private Bag X2039<br>Mmabatho 2735 |
| Tel: | (018) 389 5146 |
| Fax: | (018) 389 5722 |

*Gauteng Agriculture, Conservation and Environmental Affairs*

| | |
|---|---|
| Postal Address: | P O Box 8769<br>Johannesburg 2000 |
| Tel: | (011) 333 2106 |
| Fax: | (011) 333 0667 |

*Western Cape Economic Affairs, Agriculture & Tourism*

| | |
|---|---|
| Physical Address: | 9 Dorp Street<br>Cape Town |
| Tel: | (021) 483 4757 |
| Fax: | (021) 483 5399 |
| Postal Address: | Private Bag X1<br>Elsenburg 7607 |

*Northern Cape Agriculture, Nature Conservation and Land Reform*

| | |
|---|---|
| Postal Address: | Private Bag X5018<br>Kimberley 8300 |
| Tel: | (053) 831 4012 |
| Fax: | (053) 831 3804 |

*KwaZulu-Natal Agriculture and Environmental Affairs*
Postal Address: Private Bag X9059
Pietermaritzburg 3200
Tel: (033) 355 9112
Fax: (033) 355 9113

## DEPARTMENT OF HEALTH

**National Department of Health**

| | |
|---|---|
| Physical Address: | Civitas Building<br>Cnr Struben and Andries Streets<br>Pretoria |
| Tel: | (012) 312 0000 |
| Fax: | (012) 325 5706 |
| Postal Address: | Private Bag X828<br>Pretoria 0001 |
| Web site Address: | http://www.health.gov.za |

**Provincial Departments**

*Mpumalanga Health*

| | |
|---|---|
| Physical Address: | 19 Hope Street<br>Nelspruit |
| Tel: | (013) 755 3446 |
| Fax: | (013) 755 4706 |
| Postal Address: | P O Box 6312<br>Nelspruit 1200 |

*Eastern Cape Health*

| | |
|---|---|
| Physical Address: | Dukumbana Building<br>Bisho<br>5605 |
| Tel: | (040) 609 3701 |
| Fax: | (040) 635 015 |
| Postal Address: | Private Bag X0039<br>Bisho 5605 |

*Free State Health*

| | |
|---|---|
| Physical Address: | Leboheng Building<br>St. Andrew Street<br>Bloemfontein |
| Tel: | (051) 405 4824 |
| Fax: | (051) 403 3129 |
| Postal Address: | P O Box 227<br>Bloemfontein 9300 |

*Northern Province Health*

| | |
|---|---|
| Postal Address: | Private Bag X9032<br>Pietersburg 0700 |
| Tel: | (015) 295 7055 |
| Fax: | (015) 295 7068 |

*North-West*

| | |
|---|---|
| Postal Address: | P O Box 124<br>Rooigrond 2743 |
| Tel: | (018) 387 5277 |
| Fax: | (018) 384 2727 |

*Gauteng*

| | |
|---|---|
| Postal Address: | Private Bag X85<br>Marshall Town 2107 |
| Tel: | (011) 355 3000 |
| Fax: | (011) 355 4143 |

*Western Cape Health & Social Services*

| | |
|---|---|
| Physical Address: | 4 Dorp Street<br>Cape Town 8000 |
| Postal Address: | P O Box 2060<br>Cape Town 8000 |
| Tel: | (021) 483 3561 |
| Fax: | (021) 483 3599 |

*Northern Cape*

| | |
|---|---|
| Postal Address: | Private Bag X5018<br>Kimberley 830 |
| Tel: | (053) 831 1121 |
| Fax: | (053) 833 4394 |

*KwaZulu-Natal*

| | |
|---|---|
| Postal Address: | Private Bag 9051<br>Pietermaritzburg 3200 |
| Tel: | (033) 355 7686 |
| Fax: | (033) 395 2258 |

## DEPARTMENT OF MINERALS AND ENERGY

### National Department of Minerals and Energy

Physical Address: Mineralia Centre
391 Andries Street
Pretoria
Postal Address: Private Bag X59
Pretoria 0001
Tel: (012) 317 9000
Fax: (012) 322 3416
Web site Address: http://dme.gov.za

### Provincial Departments

*Mpumalanga Minerals and Energy*
Physical Address: Receiver of Revenue Building
3rd Floor
Cnr Paul Kruger Str and Botha Avenue
Witbank
Tel: (013) 656 1448
Fax: (013) 656 1448
Postal Address: Private Bag X7279
Witbank 1035

*Eastern Cape Minerals and Energy*
Physical Address: Auto and General Towers
190 Govan Mbekie Street
Port Elizabeth
Tel: (041) 585 3862
Fax: (041) 585 3881
Postal Address: Private Bag X6076
Port Elizabeth 6000

*Free State Minerals and Energy*
Physical Address: Cnr Ryk and De Kaap Street
Welkom
Tel: (057) 352 8235
Fax: (057) 357 1241
Postal Address: Private Bag X33
Welkom 9460

*Northern Province Minerals and Energy*

| | |
|---|---|
| Physical Address: | Koos Smit Building<br>61 Biccard Street<br>Pietersburg |
| Tel: | (015) 291 5208/9 |
| Fax: | (015) 295 7068 |
| Postal Address: | Private Bag X9467<br>Pietersburg 0007 |

*North-West Minerals and Energy*

| | |
|---|---|
| Physical Address: | PC Pelser Building<br>Room 609<br>Cnr Voortrekker & Anderson Streets<br>Klerksdorp |
| Tel: | (018) 464 1631 |
| Fax: | (018) 462 9036 |
| Postal Address: | Private Bag A 1<br>Klerksdorp 2570 |

*Gauteng Minerals and Energy*

| | |
|---|---|
| Physical Address: | Mineralia Building<br>Cnr. De Korte and de Beer Streets<br>Braamfontein<br>Johannesburg |
| Tel: | (011) 339 4414 X380 |
| Fax: | (011) 339 1858 |
| Postal Address: | Private Bag X5<br>Braamfontein 2017 |

*Western Cape Minerals and Energy*

| | |
|---|---|
| Physical Address: | Customs House<br>Lower Heerengracht<br>Foreshore<br>Cape Town |
| Tel: | (021) 419 6105/8 |
| Fax: | (021) 419 6260 |
| Postal Address: | Private Bag X9<br>Roggebaai 8012 |

*Northern Cape Minerals and Energy*

| | |
|---|---|
| Physical Address: | Standard Bank Building<br>43 Chapel Street<br>Kimberley |
| Tel: | (053) 830 0800 |
| Fax: | (053) 832 5631 |
| Postal Address: | Private Bag X6093<br>Kimberley 8300 |

*KwaZulu-Natal Minerals and Energy*

| | |
|---|---|
| Physical Address: | Talana Building<br>26 Beaconsfield Street<br>Dundee |
| Tel: | (0341) 2 21111 |
| Fax: | (0341) 2 21721 |
| Postal Address: | Private Bag X2014<br>Dundee 3000 |