Legislative Framework

- National Environmental Management Act
  - Section 28 – Duty of Care
  - Section 30 – Control of emergency Incidents
- The National Environmental Management: Waste Act
  - Chapter 4 Part 4 – Waste Management Activities
  - Chapter 4 Part 8 - Contaminated Land
- National Water Act
  - Section 19 – Protection of Water Resources
NEMA

- The duty of care and remediation of environmental damage is defined in Section 28 of the Act;
  - 1) Every person who causes, has caused or may cause significant pollution or degradation of the environment must take *reasonable measures* to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped and rectify such pollution or degradation of the environment.
  - NB No clear definition of significant pollution
The measures required in terms of subsection (1) may include measures to –

- investigate, assess and evaluate the impact on the environment;
- 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;
- cease, modify or control any act, activity or process causing pollution or degradation;
- contain or prevent the movement of pollutants or the causant of degradation;
- eliminate any source of the pollution or degradation; or
- remedy the effects of the pollution or degradation.
Section 24: Environmental Authorisations

Section 21[23] The decommissioning of existing facilities or infrastructure, other than facilities or infrastructure that commenced under an environmental authorisation issued in terms of EIA Regulations, 2006 made under Section 24(5) of the Act and published in Government Notice No R385 of 2006

- ....(c) industrial activities where the facility or the land on which it is located is contaminated or has the potential to be contaminated by any material which may place a restriction on the potential re-use of the site for a different purpose.

- ....in respect of which the investigation, assessment and communication of the potential impact of the activities must follow the procedure as described in Regulations 22 to 26 of the EIA Regulations of 2006 promulgated in terms of Section 24(5) of the Act.
Control of emergency incidents, Section 30 of the Act;

“incident” means 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;

The responsible person or, where the incident occurred in the course of that person’s employment, his or her employer, must, 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 cleanup procedures;
- (c) remedy the effects of the incident;
- (d) assess the immediate and long-term effects of the incident on the environment and public health.
NEM: Waste Act Definitions

- **Acceptable exposure**
  - The exposure of the maximum permissible concentration of a substance to the environment that will have a minimal negative effect on health or the environment
    - Minimal effect implies that there is a risk-based ‘de-minimis’ level that is safe.
    - Implies guidelines/regulations will be needed to define ‘acceptable exposure’
NEM: Waste Act Definitions

- **Contaminated**
  - The presence in or under any land, site, buildings or structures of a substance or micro-organism **above the concentration which is normally present** in or under that land and which substances directly or indirectly affect or may affect the quality of the soil or the environment **adversely**.
    - Relates to both background concentrations and an adverse effects level that defines an unacceptable environmental impact (‘pollution’).
NEM: Waste Act Definitions

- **Waste**
  - Means any substance, whether or not that substance can be reduced, reused, recycled and recovered, that
    - (i) is surplus, unwanted, rejected, discarded, abandoned or disposed of
    - (ii) the generator has no further use of - for the purposes of production, reprocessing or consumption;
    - (iii) that must **be treated** or **disposed** of; or
    - (iv) is identified as a waste by the Minister;
  - But
    - (i) a by-product is not considered a waste, and
    - (ii) any portion of waste, once re-used, recycled and recovered is not considered to be waste
NEM: Waste Act

- Part 4, Section 20.
  - No person may commence, undertake or conduct a waste management activity, except in accordance with
    - (a) the requirements or standards determined in terms of section 19(3) for that activity; or
    - (b) a waste management licence issued in respect of that activity, if a licence is required
Waste Management Activities

- GN 718 – List of Waste Management Activities that have or are likely to have a detrimental effect on the environment.
  - Waste management activities in respect of which a waste management licence is required
  - No person may commence, undertake or conduct a waste management activity listed in this schedule unless a licence is issued in respect of that activity.
Waste Management Activities

- **Category A**
  - A person who wishes to commence, undertake or conduct an activity listed under this Category, must conduct a basic assessment process, as stipulated in the environmental impact assessment regulations made under section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as part of a waste management Licence application.
  - Treatment of Waste
    - (12) *The remediation of contaminated land.*
Contaminated Land

- **NEM:Waste Act - Part 8 (Pending)**
  - This part applies to the contamination of land even if the contamination
    - (a) occurred before the commencement of this Act;
    - (b) originated on land other than land referred to in section 38;
    - (c) arises or is likely to arise at a different time from the actual activity that caused the contamination; or
    - (d) arises through an act or activity of a person that results in a change to pre-existing contamination
Investigation Areas

- Section 36 deals with the identification and notification of investigations areas.
  - 36(1) The Minister or the MEC in respect of an area which affects the relevant province may after consultation with the Minister of Water Affairs and any other organ of state concerned, by notice in the Gazette, identify as investigation areas:
    - (a) land on which high-risk activities have taken place, or are taking place that are likely, to result in land contamination:
    - (b) land that the Minister or MEC, as the case may be, on reasonable grounds believes to be contaminated.
Investigation Areas

- Section 37 deals with the consequences of identification and notification of investigation areas. The aim is to investigate whether the land has been contaminated, and if contamination has occurred whether the contamination presents a significant risk of harm.
  - Should relate to land use and acceptable exposure and
Site Assessment Report

- 37 (2)
  - (a) A site assessment report must comply with any directions that may have been published or given by the Minister or MEC in a notice contemplated in section 36 (1) or (6) and must at least include information on whether the investigation area is contaminated.
(b) Where the findings of the site assessment report are that the investigation area is contaminated, the site assessment report must at least contain information on whether-

- (i) the contamination has impacted on the environment;
- (ii) the substances present in or on the land are toxic, persistent or bioaccumulative or are in large quantities or high concentrations or occur in combinations;
- (iii) there are exposure pathways available to the substances;
- (iv) the uses of the land and land adjoining increases or is likely to increase the risk to health or the environment;
- (v) the substances have migrated or are likely to migrate from the land;
- (vi) the acceptable exposure for human and environmental receptors in that environment have been exceeded
- (vii) any applicable standards have been exceeded: and
- (viii) the area should be remediated or any other measures should be taken to manage or neutralise the risk.
Consideration of site assessment reports

38.(1) On receipt of a site assessment report contemplated in section 37, the Minister or MEC, .... may decide that –

(a) the investigation area is contaminated, presents a risk to health or the environment, and must be remediated urgently.

(b) the investigation area is contaminated, presents a risk to health or the environment and must be remediated within a specified period:

(c) the investigation area is contaminated and does not present an immediate risk, but that measures are required to address the monitoring and management of that risk,

or (d) the investigation area is not contaminated.
Remediation Orders

- **Orders to remediate contaminated land**
  - 39 (1) A remediation order issued in terms of section 38(2) or an order issued under section 38(3) must describe, to the extent that is applicable—
    - (a) the person who is responsible for undertaking the remediation;
    - (b) the land to which the order applies;
    - (c) the nature of the contamination;
    - (d) the measures that must be taken to remediate the land or the standards that must be complied with when remediating the land;
    - (e) the period within which the order must be complied with;
    - (f) whether any limitations in respect of the use of the land are imposed;
    - (g) the measures that must be taken to monitor or manage the risk; and
    - (f) any other prescribed matter.
Transfer of contaminated land

- **Transfer of remediation sites**
  
  40 (1) No person may transfer contaminated land *without informing the person* to whom the land is to be transferred to that the land is contaminated and, in the case of a remediation site, *without notifying the Minister* or MEC, and complying with any conditions that are specified by the Minister or MEC as the case may be.
Section 1 of the Act defines the term ‘pollution’:

(xv) ‘pollution’ means the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it-

- less fit for any beneficial purpose for which it may reasonably be expected to be used; or
- harmful or potentially harmful-
  - (aa) to the welfare, health or safety of human beings;
  - (bb) to any aquatic or non-aqueous organisms;
  - (cc) to the resource quality;
  - (dd) to property
National Water Act

- Section 19 of the NWA is being amended to read as follows:
  - 19(1) An owner of land, a person in control of land or any person who was responsible for the land or a person who occupies or uses the land on which –
    - (a) any activity or process is or was performed or undertaken; or
    - (b) any other situation exists

which causes, has caused or is likely to cause pollution of a water resource, must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring.
National Water Act

- Section 19 of the NWA is being amended to read as follows:
  - (2) The measures referred to in subsection 1 may include measures to
    - (a) Cease, modify or control any act or process causing the pollution
    - (b) Comply with any prescribed waste standard or management practice
    - (c) Contain or prevent the movement of pollutants
    - (d) Eliminate any source of the pollution
    - (e) Remedy the effects of the pollution
    - (f) Remedy the effects of any disturbance to the bed and banks of a watercourse
Towards Practical Implementation

- **Essential elements for practical implementation:**
  - a decision-supporting tool to define contaminated land status that is land-use based and considers acceptable risk levels based on conservative ‘no-harm’ criteria for a full range of environmental exposure criteria and natural background levels.
  - a phased approach to investigation and reporting that defines norms of technical practice with minimum requirements to ensure the quality and consistency of professional reports.
  - a site specific level of reporting that includes elements of quantitative risk assessment, statistically based quality objectives and is properly integrated with site investigation and remediation planning.
  - the incorporation of socio-economic factors into decision-making and procedures for communication of risk and benefits to relevant stakeholders.