

DEPARTMENT OF HEALTH

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ENVIRONMENTAL MANAGEMENT PLAN

**AS REQUIRED BY
SECTION 11(2) OF THE
NATIONAL ENVIRONMENTAL MANAGEMENT ACT
1998
(ACT 107 OF 1998)**

**FOURTH EDITION
2020-2025**

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GLOSSARY OF ABBREVIATIONS

ACSA	Airports Company South Africa
CDC	Communicable Diseases Control
CSIR	Centre for Scientific and Industrial Research
DBE	Department of Basic Education
DOH	Department of Health
DSD	Department of Social Development
DDT	Dichloro diphenyl chloro ethane
DMR	Department of Mineral Resources
DFFE	Department of Fisheries, Forestry and the Environment
DAFF	Department of Agriculture
DWS	Department of Water and Sanitation
DHS	Department of Human Settlements
EH	Environmental Health
EIA	Environmental Impact Assessment
EHIA	Environmental Health Impact Assessment
EHP	Environmental Health Practitioner
EMP	Environmental Management Plan
HCRW	Health Care Risk Waste
HG	Mercury
HSA	Hazardous Substances Act, 1973 (Act 15 of 1973)
IHR	International Health Regulations 2005
IRS	Indoor Residual Spraying
MHS	Municipal Health Services
NCCM	National Committee on Chemicals Management
MNORT	Medical National Outbreak Response Team
MRC	Medical Research Council
NCCRP	National Climate Change Response Policy
NEMA	National Environmental Management Act, 1998 (Act 107 of 1998)
NDOH	National Department of Health
NHA	National Health Act, 2003 (Act 61 of 2003)
NHC	National Health Council
NDP	National Development Plan
NSST	National Sanitation Task Team
PDOH	Provincial Departments of Health
UNICEF	United National Children's Fund
SDGS	Sustainable Development Goals
SANS	South African National Standards
SABS	South African Bureau Services
SAHPRA	South African Health Product Regulatory Authority
UNFCCC	United Nations Framework Convention on Climate Change
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation

EXECUTIVE SUMMARY

The Section 41(1)(c) of the Constitution of the Republic of South Africa, 1996 (Act 108 of 1996) binds all sphere of government and organs of state for ensuring an effective, transparent, accountable and coherent government for the Republic as a whole, and places emphasis on intergovernmental relations and governance for effective cooperation and collaboration. In putting this into effect, the Intergovernmental Relations Framework, 2005 (Act 13 of 2005) establishes a framework for the national, provincial and local governments to promote and facilitate intergovernmental relations that ensures mechanisms and procedures for settlement of intergovernmental disputes.

In the spirit of promotion of intergovernmental relations, the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), provide for promotion of co-operative environmental governance by establishing procedures for coordinating environmental functions exercised by organs of state, and therefore lists in Schedule 1 and 2, national departments and provinces with environmental management functions and impacting functions that are required to develop and implement an Environmental Management Plan and/or Environmental Impact Plan (EMP/EIP). The National Department of Health is listed in Chapter 3, Schedule 2 of the National Environmental Management Act, 1998 (Act 107 of 1998) as one of the national departments exercising functions that relates to the management of the environment, and is therefore required to develop an Environmental Management Plan (EMP). In line with NEMA, the EMP must be reviewed at least every five (5) years to align to the Medium Term Strategic Framework (MTSF) planning cycle. The 2020-2025 plan represents the fourth Edition EMP for the NDOH, following the third Edition EMP published in the government gazette on 16 February 2016.

The fourth edition EMP outlines the department's plans, policies and programmes in respect of environment, underpinned by known or plausible cause-and-effect relationships between the environment and human health. Section 2 of the EMP outlines environmental management functions of the DOH which are mainly positioned within its environmental health policies, plans and programmes such as water quality monitoring, communicable diseases control and environmental pollution control, amongst others, mainly focused on the identification, assessment and control of environmental (physical, biological, chemical) factors in the environment that may impact human health adversely. Programmes and activities of the NDOH with a potential to impact negatively on the environment if not properly managed are also outlined, with specific plans on the minimisation, avoidance and management thereof.

Section 3 of the EMP outlines the legislative mandate of the NDOH including legislation under the portfolio of the Minister of Health as well as legislation administered by other government departments, which have a bearing on human health. These would include the National Environmental Management Act, 1998 (Act 107 of 1998) on issues of air quality and waste management and the Agricultural Remedies Act on issues of hazardous substances and chemicals.

Section 4 and 5 describes of policies, plans and programmes of the NDOH designed to ensure compliance by others and priorities regarding compliance with the NDOH policies by others.

Section 6 deals with compliance by other stakeholders.

Section 7 describes arrangement for cooperation with other national departments and spheres of government on matters of environment to ensure consideration of human health.

Section 8 outlines proposals for the promotion of the objectives and plans for the implementation of the procedures referred to in chapter 5 of NEMA with emphasis on integration of health impact assessments in environmental decision-making.

Section 9 outlines key priority indicators for the NDOH for the period 2020-2025, focusing on health, environment and climate change adaptation indicators.

SECTION 1: INTRODUCTION AND BACKGROUND

1. Introduction and background

South Africa's population is expected to grow by about 6% (from 58.6m in 2019 to 63m by 2024) over the next 5 years, and by 15.9% over the next 11 years (58.6m in 2019 to 67.9m by 2030). There are absolute increases in population across all 9 provinces. However, the rate of absolute growth differs. It is expected that Gauteng will experience the highest absolute growth (28.5%), with the lowest absolute growth in the Eastern Cape (0.9%) against the average growth projected nationally (15.9%). The current life expectancy at birth for males is estimated at 61.5 years and females at 67.7 years. There has been an increase in life expectancy for both males and females since 2007, which may be attributable to HIV interventions, which started in 2005. These interventions increased the survival rates of children and infants. The percentage AIDS related deaths declined from 40.4% in 2007 to 23.4% in 2019.

Population health is a primary goal for sustainable development and the World Health Organisation (WHO) estimates that up to 70% of childhood deaths in Africa are attributable to environmental risk factors. The contributing factors to environmental related diseases in Africa, including in South Africa, include poor hygiene and sanitation practices due to lack of adequate sanitation facilities, poor management of waste, pollution of water and contaminated ambient and indoor air quality. Diarrhoea and respiratory diseases are still amongst the top causes of death in the country, and Malaria, although being eradicated in most of the provinces, is still a problem in some parts of the country.

The effects of climate change are becoming a global problem that requires careful consideration as the result thereof has a large impact on emerging and re-emerging environmental factors and public health. Human beings are directly exposed to the negative impacts of climate change through extreme weather events, such as droughts, rising sea levels, floods, cyclones and hurricanes, and indirectly through weather and climate related impacts on food, water, air, infrastructure, agriculture, ecosystems and livelihoods. These impacts may lead to malnutrition, impacts on child growth and development, injury and diseases due to heat waves, floods, fires, an increased burden of water-borne, water-washed and food-borne and vector-borne diseases, and other infectious diseases.

Person-centeredness requires adoption of the perspectives of individuals, families and communities, in order to respond to their needs in a holistic manner, by providing them with services required to improve their health status. The task of improving the health outcomes of South Africa's population is not that of the health sector alone, but is reliant on achievement of targets in other policy agendas, such as provision of basic water and sanitation amongst others.

In improving the health status of South Africans, the Department of Health therefore has a responsibility to -

- (a) Provide leadership in the formulation of health policy and legislation, including the development of a National Health System;

- (b) provide leadership in quality assurance, including the formulation of norms and standards;
- (c) build the capacity of the provincial health departments and municipalities, to enable them to ensure the provision of effective health services, including environmental health services;
- (d) ensure equity in the allocation of resources to the provinces and municipalities and their appropriate utilisation;
- (e) provide leadership in planning for and the strategic management of the resources available for health care;
- (f) provide services which cannot be cost-effectively delivered elsewhere;
- (g) develop coordinated information systems and monitor the progress made in the achievement of national health goals;
- (h) provide appropriate regulation of the public and private health sectors, and regulate health-related activities in other sectors;
- (i) Lobby and advocate with other departments and stakeholders in improving the social determinants of health, especially amongst vulnerable population groups, to improve health of communities due to social conditions.

1.1 Strategic overview

1.1.1 Vision

A long and healthy life for all South Africans.

1.1.2 Mission

To improve health status of South Africans through the prevention of illnesses and promotion of healthy lifestyles and to consistently improve the health care delivery system by focusing on access, equity and sustainability.

1.1.3 Values

The Department subscribes to the Batho Pele principles and values.

- **Consultation:** Citizens should be consulted about the level and quality of the public services they receive and, wherever possible, should be given a choice regarding the services offered;
- **Service Standards:** Citizens should be told what level and quality of public service they will receive so that they are aware of what to expect;
- **Access:** All citizens have equal access to the services to which they are entitled;
- **Courtesy:** Citizens should be treated with courtesy and consideration;
- **Information:** Citizens should be given full, accurate information about the public services to which they are entitled;
- **Openness and transparency:** Citizens should be told how national and provincial departments are run, how much they cost, and who is in charge;
- **Redress:** If the promised standard of service is not delivered, citizens should be offered an apology, a full explanation and a speedy and effective remedy; and when complaints are made, citizens should receive a sympathetic, positive response; and
- **Value for money:** Public services should be provided economically and efficiently in order to give citizens the best value for money.

1.1.4 Organisational environment

The organisational structure of the National Department of Health is designed with the aim to ensure an alignment with strategic priorities of the health sector and to improve the department's

oversight function across the health system. The organisational structure has been reviewed to maximise achievement on the departmental strategic priorities.

Table 1: Organisational structure of the DOH

PROGRAMMES/BRANCH	PROGRAMME PURPOSE
Programme 1: Administration	Provide strategic leadership, management and support services to the department.
Programme 2: National Health Insurance	Achieve universal health coverage by improving the quality and coverage of health services through the development and implementation of policies and health financing reforms.
Programme 3: Communicable and Non-Communicable Diseases	Develop and support the implementation of national policies, guidelines, norms standards and the achievements the targets for the national response needed to decrease morbidity and mortality associated with communicable and non-communicable diseases. Develop strategies and implement programmes that reduce maternal and child mortality.
Programme 4: Primary Health Care (PHC) Services	Develop and oversee the implementation of legislation, policies, systems, norms and standards for a uniform, well-functioning district health system, including for emergency, environmental and port health services.
Programme 5: Hospital Systems	Develop national policies and plans for all levels of hospital services to strengthen the referral system and facilitate the improvement of hospitals. Ensure that the planning, coordination, delivery and oversight of health infrastructure meet the country's health needs.

1.1.5 Public health entities

The Minister of Health is responsible for overseeing health related entities that have been established to provide services to support the mandate of the DOH, through funded and non-funded statutory bodies and organisations.

Table 2: Public health entities and objectives

PUBLIC ENTITY	MANDATE	OBJECTIVES AND SERVICES RENDERED
Compensation Commissioner for Occupational Diseases (CCOD)	The CCOD was established in terms of the Occupational Diseases on Mines and Works Act, 78 of 1973. In terms of the act, the commissioner is mandated to compensate workers or ex-workers in controlled mines and works for occupational diseases of the cardio-respiratory organs and reimbursement for loss of earning incurred during tuberculosis treatment.	The CCOD is responsible for payment of benefits to workers and ex-workers or their beneficiaries in controlled mines and works who have been certified to be suffering from cardiopulmonary diseases because of work exposures.
South African Medical Research Council (SAMRC)	The South African Medical Research Council was established in 1969 in terms of the South African Medical Research Council Arts, 58 of 1991. The intellectual Property Rights from Publicly Financed Research and Development Act (2008) also informs the council's mandate.	To improve the nation's health and quality of life through promoting and conducting relevant and responsive health research. The council's strategic focus is determined in the context of the priorities of the Department of Health and government. The council's research therefore plays a key role in responding to government key outcome 2 (a long and healthy life).
National Health Laboratory Services (NHLS)	The NHLS was established in 2001 in terms of the National Health Laboratory Services Act (2000).	Provide for cost effective and efficient laboratory services to all public sector health care providers, other government institutions and any private health care provider in need of its service; support health research and provide training for health science education.
Office of the Health Standards Compliance (OHSC)	The OHSC is an independent public agency that was established in terms of Section 79(A) of the National Health Act, 2003 (Act 61 of 2003) as amended.	The OHSC monitors public health services and address complaints of non-compliance, while developing guidelines and providing information on the implementation of set health service standards. In terms of the NHA, the duties of the OHSC include amongst others, advising the Minister on matters relating to the determination of norms and standards to be prescribed for the national health system and the review of such norms and standards; and inspect and certify health establishments as compliant or noncompliant with prescribed norms and standards or, where appropriate and necessary,

		withdraw such certification. As the sector quality watchdog, the OHSC leads the much-needed improvement in health service quality, change in public healthcare management, and institution of core health standards in public and private service providers, which lays the groundwork for the rollout of the National Health Insurance initiative. Provides for the monitoring, evaluation, regulation, investigation, inspection, registration, and control of medicines, scheduled substances, clinical trials, medical devices, in vitro diagnostics and related matters in the public health interest.
South African Products Regulatory Authority (SAHPRA)	Established in terms of the Medicines and Related Substances Act and brings the medical devices industry, cosmetics and foodstuffs as well as pharmaceuticals under the jurisdiction of SAHPRA. The SAHPRA is established as a Section 3A Public Entity and thus retain funds from application fees to employ experts to evaluate applications on a full time basis. The Council for Medical Schemes was established in terms of the Medical Schemes Act (1998), as a regulatory authority responsible for overseeing the medical schemes industry in South Africa.	Provides for the protection of the interests of beneficiaries, controlling and coordinating the functioning of medical schemes, collecting and disseminating information about private health care, and advising the Minister of Health on any matter concerning medical schemes. Promotes the improvement of quality of care and the reduction of costs of in the private health care sector, encourages effective risk pooling and conducts policy driven research, monitoring and evaluation of the medical schemes industry.
Council for Medical Schemes		

1.2 Considerations in developing the 2020-2025 EMP

In developing the 4th Edition EMP, the following documents were considered and taken into account in order to ensure alignment with other national health related plans and policies, including other international and regional health obligations;

- Health sector priorities as set out in the National Development Plan Vision 2030;
- Health related Sustainable Development Goals, vision 2030;
- National Health Strategic Plan 2020-2025;
- The Joint External Evaluation National implementation Plan;
- Mercury Eradication Plan;

1.2.1 Health Sector Strategic Framework

The Department of Health's programme of work is located within the NDP and its strategic framework is designed to respond to the nine (9) priority areas for health, identified in the NDP. Where appropriate, the NDP targets have been considered in developing strategic goals of the department.

1.2.2 NDP 2030 vision: health sector

The NDP of the country is aimed at eliminating poverty and reducing inequality in the country by 2030, with the promotion of health and provision of quality health care for all South Africans being amongst the key priority areas. The NDP clearly states that South Africa's health challenges are clearly more than medical, as behaviour and lifestyle contribute to ill health amongst South Africans. The environment that people are born, grow up, live in and work has being highlighted as upstream health determinants that contribute largely to the attainment of overall health and well-being. Some environmental contributing factors are polluted environments, inadequate housing, poor indoor and ambient air quality, housing, energy and lack of basic water, sanitation and hygiene services. The functioning of a health system also determines the success in the treatment of illness and disorders, and the longevity and quality of life of the population.

The NDP sets out nine (9) long-term health goals for South Africa. Five of these goals relate to improving the health and well-being of the population, and the other four deals with aspects of health systems strengthening.

Health Sector Goals: Vision 2030

Goal 1: Raised the life expectancy of South Africans to at least 70 years

Goal 2: Progressively improve TB prevention and cure

Goal 3: Reduce maternal, infant and child mortality

Goal 4: Significantly reduce prevalence of non-communicable diseases

Goal 5: Reduce injury, accidents and violence by 50 percent from 2010 levels

Goal 6: Complete Health system reforms

Goal 7: Primary healthcare teams provide care to families and communities

Goal 8: Universal health care coverage

Goal 9: Fill posts with skilled, committed and competent individuals

Priorities to achieve Vision 2030

The NDP states explicitly that there are no quick fixes for achieving the nine goals outlined above. The NDP also identifies a set of nine (9) priorities that highlight the key interventions required to achieve a more effective health system, which will contribute to the achievement of the desired outcomes. The priorities are as follows:

Priority 1: Address the social determinants that affect health and diseases

Priority 2: Strengthen the health system

Priority 3: Improve health information systems

Priority 4: Prevent and reduce the disease burden and promote health

Priority 5: Financing universal healthcare coverage

Priority 6: Improve human resources in the health sector

Priority 7: Review management positions and appointments and strengthen accountability mechanisms

Priority 8: Improve quality by using evidence

Priority 9: Meaningful public-private partnerships

1.2.3 The 2030 Agenda for Sustainable Development

The Sustainable Development Agenda that came into effect on 01 January 2016 recognizes that eradicating poverty in all its forms and dimensions, including extreme poverty is the greatest global challenge and an indispensable requirement for sustainable development. The 17 SDGs and their targets demonstrate the scale and ambition of the new universal agenda and seek to build on the Millennium Development Goals (MDGs) and complete what they did not achieve and furthermore seek to realize the human rights for all.

The SDGs are founded on the principle that they are integrated and indivisible, and aim to balance economic, social and environmental dimensions of sustainable development. Therefore, progress in one is reliant on progress in others.

SDG Goal 3: Attain a healthy life for all at all ages

Targets:

- 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
- 3.2: By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12/1,000 live births, under 5 mortality to at least as low as 25/1000 live births;.
- 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, waterborne diseases and other communicable diseases.
- 3.4: By 2030, reduce by one child, premature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing.
- 3.5: Strengthen the prevention and treatment of substance abuse, including narcotic and drug abuse and harmful use of alcohol.
- 3.6: Halve the number of global deaths and injuries from road traffic accidents.
- 3.7: By 2030, ensure universal access to sexual and reproductive health care services, including family planning, information and education, and the integration of reproductive health into national strategies and programmes.
- 3.8: Achieve health coverage including financial risk protection access to quality essential health care services and access to safe, effective, quality and affordable, essential medicines and vaccines for all.
- 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.
- 3. a: Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control, as appropriate.
- 3. b: support research and development of vaccines and medicines for the communicable and non-communicable, provide access to affordable essential medicines and vaccines.
- 3. c: sustainably increase health financing, and the recruitment, development, training and retaining health force.
- 3. d: strengthen the capacity for early warning, risk reduction and management of national and global health risks.



To achieve health sector goals, deliberate action is required to influence governance in many policy agendas, such as water and sanitation, agriculture, environment, housing and energy amongst others. The concept of “health in all policies” is critical in adopting an approach to public policies that systematically takes into account human health in plans, policies, programmes and decisions and avoid harmful health impacts in order to improve population health and address social determinants of health. Targets in other SDGs are directly related to upstream health determinants and should be given special attention in other sector’s policies, plans and programmes to achieve the overall health goal.

SDG Goal 6: Ensure availability and sustainable management of water and sanitation for all.

- 6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- 6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defaecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- 6.3: Improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and sustainably increasing recycling and safe reuse globally.

SDG Goal 7: Ensure access to affordable, reliable and sustainable modern energy for all.

- 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services.

SDG Goal 13: Take urgent action to combat climate change and its impacts.

- 13.1: Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries.
- 13.2: Integrate climate change measures into national policies, strategies and planning.

1.2.4 Medium Term Strategic Framework 2019-2024

The NDOH's plan comprehensively responds to the priorities identified by the Cabinet of 6th administration of democratic South Africa, which are embodied in the Medium-Term Strategic Framework (MTSF) for period 2019-2024. It is aimed at eliminating avoidable and preventable deaths (**survive**); promoting wellness, and preventing and managing illness (**thrive**); and transforming health systems, the patient experience of care, and mitigating social factors determining ill health (thrive), in line with the United Nation's three broad objectives of the Sustainable Development Goals (SDGs) for health. Over the next 5 years, the NDOH's response is structured to deliver the MTSF 2019-2024 impacts, and the NDP Implementation Plan 2019-2024 goals. They are well aligned to the Pillars of the Presidential Health Summit compact, as outlined in the table below:

Table 3: Medium-Term Strategic Framework 2019-2024

MTSF 2019 – 2024 Impacts	Health sector's strategy 2019-2024		Presidential Health Summit Compact Pillars
Life expectancy of South Africans improved to 66.6 years by 2024, and 70 years by 2030	Goal 1: Increase Life Expectancy improve Health and Prevent Disease	Improve health outcomes by responding to the quadruple burden of disease of South Africa. Inter sectoral collaboration to address social determinants of health	None
Universal Health Coverage for all South Africans progressively achieved and all citizens protected from the catastrophic financial impact of seeking health care by 2030 through the implementation of NHI Policy	Goal 2: Achieve U*HC by implementing NHI Policy.	Progressively achieve Universal Health Coverage through NHI	Pillar 4: Engage the private sector in improving the access, coverage, and quality of health services; and Pillar 6: Improve the efficiency of public sector financial management systems and processes.
	Goal 3: Quality Improvement in the Provision of care	Improve quality and safety of care.	Pillar 5: Improve the quality, safety and quantity of health services provided with a focus on to primary health care.
		Provide leadership and enhance governance in the health sector for improved quality of care	Pillar 7: Strengthen Governance and Leadership to improve oversight, accountability, and health system performance at all levels.
		Improve community engagement and reorient the system towards Primary Health Care through Community based health Programmes to promote health	Pillar 8: Engage and empower the community to ensure adequate and appropriate community-based care
		Improve equity, training and enhance	Pillar 1: Augment Human Resources for Health Operational Plan
		Improving availability to medical products, and equipment	Pillar 2: Ensure improved access to essential medicines, vaccines, and medical products through better management of supply chain equipment and machinery Pillar 6: Improve the efficiency of public sector financial management systems and process
		Robust and effective health information systems to automate business processes and improve evidence-based decision-making.	Pillar 9: Develop an Information System that will guide the health system policies, strategies, and investments.
	Goal 4: Build Health Infrastructure for effective service delivery.	Execute the infrastructure plan to ensure adequate, appropriately distributed and well-maintained health facilities	Pillar 3: Execute the infrastructure plan to ensure adequate, appropriately distributed, and well-maintained health facilities.

To contribute to the realisation of set targets and goals, the NDOH also relies on partnership with communities and other stakeholders in the prevention of diseases and promotion of health and wellness, as well as for a patient-centred system of care that emphasises quality and effectiveness. The five-year strategic goals are also to:

1. Prevent disease and reduce its burden, and promote health.
2. Reorganize the National Department of Health, optimize functions and achieve efficiency gains.
3. Re-engineer primary healthcare by: increasing the number of ward based outreach teams and, contracting general practitioners.
4. Improve the quality of care by setting and monitoring national norms and standards, improving system for user feedback, increasing safety in health care, and by improving clinical governance.
5. Improve financial management by improving capacity, contract management, revenue collection and supply chain management reforms.
6. Develop an efficient health management information system for improved decision-making.
7. Improve environmental health services in all 52 districts and metropolitan municipalities in the country Improve environmental health services in the country Improve Environmental Health Services in the country.
8. Improve the provision of port health services in points of entry in line with International Health Regulations minimum requirements.

SECTION 2: A DESCRIPTION OF FUNCTIONS OF THE DOH IN RESPECT OF THE ENVIRONMENT

2. ENVIRONMENTAL MANAGEMENT FUNCTIONS OF DOH

Environmental factors are a root cause of a significant burden of death, disease and disability, globally and especially in developing countries (WHO). These factors ranges from poor water quality and access, poor sanitation and hygiene, air pollution, vector borne diseases, toxic chemical exposures, to climate change impacts. The incidence of infectious diseases can be sensitive to climate conditions due to a number of factors. Human health is influenced by many factors like nutritional, biological, chemical or psychological. The environment has a direct impact on those living in it and many diseases are the outcome of man's maladjustment to his environment.

The DOH has a responsibility to provide health services for all South Africans, a mandate directly derived from the Constitution. Health care services are defined in the National Health Act, 2003 (Act 61 of 2003) to mean;

- (a) health care services, including reproductive health care and emergency medical treatment, contemplated in Section 27 of the Constitution;
- (b) basic nutrition and basic health care services contemplated in Section 28(1)(c) of the Constitution;
- (c) medical treatment contemplated in Section 35(2)(e) of the Constitution; and
- (d) Municipal health services.

2.1 Environmental Health Services

As part of preventative health services, the DOH exercises various environmental health functions that relate to the management of the environment as part of municipal health services, for protection of public health. These functions involve the identification, assessment, monitoring and control of those conditions in the environment (physical, chemical, social and biological threats)

that may have a negative impact on human health, if not properly managed. Environmental health functions are performed by Environmental Health Practitioners at all spheres of government (National, Provincial and Municipality), in line with national legislation and policy. The Scope of Profession of Environmental Health Practitioners, R698 of 26 June 2009 (as amended) published under the Health Professions Act 1974 (act 56 of 1974), outlines the functions of environmental health to include the following:

- Food control;
- Water quality monitoring;
- Prevention and control of communicable diseases;
- Port health services;
- Waste management and general hygiene monitoring;
- Environmental pollution control;
- Disposal of the dead;
- Malaria Control;
- Health surveillance of Premises;
- Hazardous substances control;
- Chemical safety; and
- Vector control.

In addition to these functions, the DOH implements promotive health services, with a focus on health promotion and healthy lifestyles. Table 1 below; outlines environmental management functions of the DOH and their objectives;

Table 4: list of environmental management functions of the DOH

List of environmental functions of the department	Objective of the function
Control and Monitoring of Hazardous Substances	▪ To ensure compliance with legislation for the control of hazardous substances which may cause injury, ill health, or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitising or flammable nature.
Chemicals Safety management	▪ To promote the sound management of chemicals through the entire life cycle for protection of human health from poor chemicals management because of the manufacture, display, sale, application, use or disposal of chemicals.
Environmental Pollution Prevention and Control, including noise pollution	▪ To ensure sustainable hygienic working, living and recreational environments, free from pollution (air, water, land and noise) that promote the health and safety of human beings, through the identification of polluting agents, assessment of human health impacts and application of pollution prevention and control measures.
Climate Change and Health	▪ To develop adaptation implementation strategies for the management of the impact of climate change on human health.
Waste Management and General Hygiene Monitoring	▪ To promote environmentally sound and safe management of waste for protection of human health
Port Health Services	▪ To promote public health response to the international prevention of diseases with minimum interference to World Trade, through the provision of national surveillance and response.
Water Quality Monitoring	▪ To ensure water safety for human consumption in the short term and over a lifetime of consumption. ▪ To ensure sustainability of livelihood through the promotion of the provision of adequate quantities of water for domestic purposes.
Malaria and Vector Control Monitoring	▪ To provide vector control and management for the

	prevention and spread of vector-borne diseases, in the interest of public health, through the removal and remedying of conditions resulting in or favouring the prevalence of or increase in vectors.
Health Surveillance of Premises	To ensure environmental health conditions that does not constitute hazards and risks to human health, through the identification, assessment, monitoring, prevention and abatement of such conditions on premises.
Surveillance and Prevention Control of Communicable Diseases	To ensure the prevention and monitoring of environmentally induced diseases and communicable diseases through the strengthening of environmental health surveillance and health education programmes.
Food control	To ensure the safety of food in respect of acceptable microbiological and chemical quality for human consumption, through the application of food control monitoring programmes.
Management and control of the disposal of the dead	To ensure proper practices about the handling, storage, transportation and disposal of human remains to ensure the prevention of the spread of diseases for protection of public health, including the control of importation and exportation thereof.
Radiation Monitoring and Control	To control the use, transportation and disposal of ionising and non-ionising radiation sources for protection of public health.
Tobacco control	To restrict the growth, sale and use of tobacco products thereby reducing its related morbidity and mortality and the impact thereof on the environment.
Occupational Health and Hygiene	To promote occupational health and safety in working environments, through the identification, assessment and control of health hazards in the workplace; and facilitate medical examinations and compensation of persons suspected of having contracted occupational diseases in mines and works.
Control and prevention of Tuberculosis	To strengthen TB management in order to contribute to the disease burden, by adopting and implementing cost-effective prevention, treatment, care and support interventions.
Medicine and Related Substances Control	To ensure careful management of pharmaceuticals in order to ensure safety, efficacy and quality of medicines to address public health concerns.
Health Promotion and Education	To promote environmental health awareness and education, in order to empower communities to take control of own health.
Hospital Services and Management	To ensure delivery models and clinical protocols for hospitals and emergency medical services.
Infection Prevention and Control	To facilitate infection prevention control measures in the environment to ensure the protection of those that might be vulnerable to acquiring infection in various settings.
Infrastructure Development	To ensure that planning for health infrastructure and health technology meet the health needs of service users and contribute to environmental sustainability.
District Health Services	To facilitate the delivery of primary health care services in line with set norms and standards in order to achieve key population indicators.

2.2 Programmes of the DOH that may potentially impact on the environment negatively if not properly managed;

In addition to environmental management functions for protection of human health, the DOH through provision of health care services implements various programmes in health establishments that may potentially impact negatively on the environment if not properly managed. It is therefore in the interest of the NDOH and its mandate to ensure that these services are rendered in line with the principles of NEMA, in order to promote the protection of the environment as well as to promote the objectives and plans as set out in chapter 5 of the NEMA. This includes among others the identification, prediction and evaluation of all actual and potential impacts emanating from health services so that alternatives and options for their abatement may be explored. In this regard due consideration must be to ensure and reinforce on placing people's needs at the forefront of health services.

Table 5: Environmental impacting activities associated with provision of health care services, including administration

Programme	Identified Potential Environmental Impacting activities	Potential Impacts	Magnitude and extent of Impacts	Feasible/ possible mitigation alternatives
Hospital Services, Primary Health Care Services, Emergency Medical services	- Health Care Risk Waste generation; - Hazardous waste generation, e.g. chemotherapy and antineoplastic chemicals, solvents, formaldehyde, photographic chemicals, radionuclides, and waste anaesthetic gases and dental amalgam; - Use of amalgam dental fillings; - Use of mercury based medical equipment (thermometers and blood pressure cuffs); - Use of coal powered boilers; - Hazardous material used for diagnosis, treatment, cleaning and Infection control; - The presence of mercury, dioxin, and other persistent, bio-accumulative toxics, include mercury spillage from mercury based thermometers; - Electronic waste from all health care facilities; - Water consumption; - Energy consumption; - Uncleaned Filters in	- Biophysical impacts; - Air quality Impacts; - Water quality impacts; - Impact on the environmental aesthetics; - Environmental Pollution impacts; - May cause injuries and transmit diseases; - Poisoning and environmental contamination; - Recirculation of polluted air and spread of disease.	National	Environmental management system that includes the following key aspects: - Improved waste management; - Reduction of waste generated; - Buying environmentally friendly products; - Managing waste (separation of different kinds of waste; recycling); - Reducing the amount of polyvinyl chloride (PVC) containing products or equipment; - Phasing out of mercury based devices; - Audit energy use identify areas/equipment/systems having maximum energy consumption develop and implement projects such as buying and installing energy-efficient equipment perform preventive maintenance; - Selection of safe and environmentally friendly management options; - Water management by identifying areas to reduce water use; - Waste water management by raising awareness of personnel on the impacts of hospital works on the sewer system by reducing pollutants in hospital waste water; - Environmentally preferable purchasing; - Upgrading boiler systems; - Strict monitoring of HCW contractors to ensure adherence to tender specifications; - Green hospitals programmes implemented - Green procurement strategies developed and implemented; - Development and implementation of SOPs to manage mercury waste such as spillages and redundant mercury based medical equipment;

Malaria Control	mechanical ventilation ducts. Use of Chemicals such as DDT for indoor residual spraying for control of malaria vector.	- Environmental persistence and contamination; - Contamination of drinking water and food if incorrectly used.	Provincial (Site specific)	- Development of HVAC maintenance programmes. - Ensure proper usage and storage of chemicals; - Report usage in line with multi-lateral agreements; - Investigate alternatives; - Monitor resistance; - Improve monitoring through inclusion into MHS chemical safety programme; - Adhere to the WHO guidelines.
Pathology Services	- Pathological waste; - Disposal of pathology waste in sewer; - Use of hazardous chemicals.	- Waste water impacts; - Environmental contamination.	National	- Environmentally preferable purchasing; - Waste water management by raising awareness of personnel on the impacts of hospital works on the sewer system by reducing pollutants in hospital waste water.
Health facilities wastewater treatment	On-site treatment of wastewater.	Environmental pollution (water, land).	Provincial	- Proper management of on-site wastewater treatment plants; - Ongoing training of plant operators.
Office administration and buildings	- Water consumption; - Energy consumption; - General waste generation; - Disposal of obsolete assets; - Use of linear fluorescent lamps for general lighting purposes, tribant phosphor (T8s) with <watts and mercury content exceeding 5mg per lamp or halophosphate phosphor (T5s) with <40 or mercury content exceeding 10mg per lamp.	- High water demand; - High energy demands; - High carbon footprint; - Environmental impacts.	National	- Introduction of energy efficient lights and equipment with less mercury content; - Introduction of water saving technologies; - Adoption of green procurement strategies; - Introduction of recycling and re-use systems.

SECTION 3:

A DESCRIPTION OF ENVIRONMENTAL POLICIES, PLANS AND NORMS AND STANDARDS, INCLUDING NORMS AND STANDARDS CONTEMPLATED IN SECTION 146(2) (b) (I) OF THE CONSTITUTION, SET AND APPLIED BY THE DOH

3. LEGISLATIVE FRAMEWORK AND OTHER MANDATES

To ensure the effective stewardship of the national health system, a number of enabling legislations were enacted by Parliament to support the achievement of the vision of improved health status and longevity for all South Africans. The legislative mandate of the Department of Health is derived from the Constitution, the National Health Act, 2003 (Act 61 of 2003) and several pieces of legislation passed by parliament.

3.2 Constitutional Mandates

The Constitution of South Africa places obligations on the state to progressively realise socio-economic rights, including access to health care. In terms of the Constitutional provisions, the following sections and schedules, among others, guide the Department of Health:

Schedule 4 of the Constitution reflects health services as a concurrent national and provincial legislative competence

Section 9 of the Constitution states that everyone has the right to equality, including access to health care services. This means that individuals should not be unfairly excluded in the provision of health care.

- People also have the right to access information that is held by another person if it is required for the exercise or protection of a right;
- This may arise in relation to accessing one's own medical records from a health facility for the purposes of lodging a complaint or for giving consent for medical treatment; and
- This right also enables people to exercise their autonomy in decisions related to their own health, an important part of the right to human dignity and bodily integrity in terms of sections 9 and 12 of the Constitutions respectively

Section 24 of the Constitution states that (a) "everyone has a right to an environment that is not harmful to their health and wellbeing"; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-

- prevent pollution and ecological degradation;
- promote conservation; and
- secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Section 27 of the Constitution states as follows: with regards to Health care, food, water, and social security:

- (1) Everyone has the right to have access to –
 - (a) health care services, including reproductive health care;
 - (b) sufficient food and water; and
 - (c) social security, including, if they are unable to support themselves and their dependents, appropriate social assistance.
- (2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights; and
- (3) No one may be refused emergency medical treatment.

Section 28 of the Constitution provides that every child has the right to ‘basic nutrition, shelter, basic health care services and social services’.

3.2 Legislation falling under the Minister of Health’s portfolio and administered by the department of health

3.2.1 The National Health Act, 2003 (Act 61 of 2003) as amended

The National Health Act, 2003 (Act 61 of 2003) provides a framework for a structured uniform health system within the Republic, considering the obligations imposed by the Constitution and other laws on the national, provincial, and local governments regarding health services.

The objects of the NHA 2003 are to:

- Unite the various elements of the national health system in a common goal to actively promote and improve the national health system in South Africa
- Provide for a system of co-operative governance and management of health services, within national guidelines, norms, and standards, in which each province, municipality and health district must address questions of health policy and delivery of quality healthcare services
- Establish a health system based on decentralised management, principles of equity, efficiency, sound governance, internationally recognised standards of research and a spirit of enquiry and advocacy which encourage participation
- Promote a spirit of co-operation and shared responsibility among public and private health professionals and providers and other relevant sectors within the context of national, provincial and district health plans; and
- Create the foundation of the health care system, and understood alongside other laws and policies which relate to health in South Africa
- Provides for the protection of environmental health through provision of environmental health services by national, province and municipality, through
 - ✓ Provision of port health services, hazardous substances control, malaria control, Water quality monitoring, Food control, Waste Management, Health surveillance of premises; Surveillance and prevention of communicable diseases, excluding immunisations, Vector control, Environmental pollution control, Disposal of the dead and Chemical safety management; and
- Promote adherence to norms and standards with regards to environmental conditions that constitutes a health hazard; and facilitate the provision of indoor and outdoor environmental pollution control services.

3.2.3 The Occupational Diseases in Mines and Works Act, 1973 (Act 78 of 1973)

Provides for medical examinations of persons suspected of having contracted occupational diseases, especially in controlled mines and works, and for compensation in respect of those diseases.

3.2.4 Hazardous Substances Act, 1973 (Act 15 of 1973)

Provides for the control of hazardous substances which may cause injury or ill health or deaths of human beings by reason of their toxic, corrosive, irritant, strongly sensitising or flammable nature or the generation of pressure thereby in certain circumstances, and for the control of certain electronic products to provide for the division of such substances or products into groups, in relation to the degree of danger; to provide for the prohibition and control of importation, manufacture, sale, use, operation, application, modification, disposal or dumping of such substances and products.

3.2.5 The Tobacco Products Control Amendment Act, 2008 (Act 63 of 2008)

Provides for the control of tobacco products, prohibition of smoking in public places, labelling and advertisement of tobacco products, as well as sponsoring of event by the tobacco industry and to prohibit the sale of tobacco products to and by persons under the age of 18 years.

3.2.6 The Foodstuffs, Cosmetics & Disinfectants Act, 1972 (Act 54 of 1972)

Provide for the regulation of foodstuffs, cosmetics, and disinfectants, setting quality and safety standards for the sale, manufacturing, and importation thereof. The Act also seeks to ensure that food, cosmetics, and disinfectants are managed in such a way that they do not cause harm to life and the environment.

3.2.7 Medicines and Related Substances Control Amendment Act, 1977 (Act 90 of 1997)

Provide for the registration of medicines and other medicinal products to ensure their safety, quality, and efficacy. The act also provides for transparency in the pricing of medicines. This Act has a provision for the control of medicines and “scheduled” substances regarding good manufacturing practices to combat environmental and associated health hazards. The Act also provides for the environmentally sound disposal or destruction of ‘scheduled’ substances that have become unfit for use to ensure that the commodities they regulate have environmental integrity.

3.2.8 Human Tissue Act, 1983 (Act 65 of 1983)

Provide for the donation or the making available of human bodies and tissue for the purposes medical or dental research or therapy in general, for post-mortem examination of certain human bodies, for the removal of tissues. Chapter 1, section 10 and Chapter 3, section 26 refer to disposal of the bodies of deceased persons as well as the blood and blood related substances. It is important that these substances be handled properly to ensure the integrity of environment and the health of people.

3.2.9 The Pharmacy Act, 1974 (Act 53 of 1974)

Provides for the regulation of the pharmacy profession, including community service by training and registration of pharmacists, trainee pharmacists, pharmacy students, unqualified assistants, and pharmaceutical technicians; to provide for the control of the practice of pharmaceutical profession; and to provide for matters incidental thereto, including the destruction and disposal of medicines.

3.2.10 National Policy for Health Act, 116 of 1990

Provide for control measures with a view to promoting the health of the inhabitants of the Republic, and for that purpose to provide for the determination of a national policy for health, for the establishment of a Health Matters Committee and a Health Policy Council, and for matters connected therewith.

3.2.11 South African Medical Research Council Act, 58 of 1991

Provides for the establishment of the South African Medical Research Council and its role in relation to health research, technology transfer, to promote the improvement of the health and the quality of life of the population of the Republic and to perform such other functions as may be assigned to the MRC by or under this Act.

3.2.12 Choice on Termination of Pregnancy Act, 92 of 1996 (as amended)

Provides a legal framework for the termination of pregnancies based on choice under certain circumstances. Recognising the values of human dignity, the achievement of equality, security of the person, non-racialism and non-sexism, and the advancement of human rights and freedoms, which underlie a democratic South Africa.

3.2.13 Sterilisation Act, 44 of 1998 (as amended)

Provides a legal framework for sterilisations, including for persons with mental health challenges. To make provision for a medical opinion in certain circumstances to provide for additional information to be considered when contemplating sterilisation.

3.2.14 Medical Schemes Act, 131 of 1998

Provides for the regulation of the medical schemes industry to ensure consonance with national health objectives and to consolidate the laws relating to registered medical schemes; the establishment of the Council for Medical Schemes as a juristic person to make provision for the registration and control of certain activities of medical schemes; to protect the interests of members of medical schemes.

3.2.15 National Health Laboratory Service Act, 37 of 2000 (as amended)

Provides for a statutory body that offer laboratory services to the public health sector. To provide for the establishment of a juristic person to be known as the National Health Laboratory Service, to provide for the abolition of the South African Institute for Medical Research, the National Institute for Virology, the National Centre for Occupational Health, certain forensic chemistry laboratories and all provincial health laboratory services.

3.2.16 Council for Medical Schemes Levy Act, 58 of 2000

Provides a legal framework for the Council to charge medical schemes certain fees. The Council for Medical Schemes referred to in section 1 of the Council for Medical Schemes Levies Act, 2000 (Act No. 58 of 2000) after consultation with the Minister of Health and with the concurrence of the Minister of Finance.

3.2.17 Mental Health Care Act, 17 of 2002

Provides a legal framework to provide for the care, treatment and rehabilitation of persons who are mentally ill, to set out different procedures to be followed in the admission of such persons, to establish Review Boards in respect of every health establishment, to determine their powers and functions, to provide for the care and administration of the property of mentally ill persons.

3.2.18 Nursing Act, of 2005

Provides for the regulation of the nursing profession.

3.2.20 International Health Regulations 2005

South Africa is party to the International Health Regulations (IHR) 2005, which provides for legislative tools for public health response to international prevention of diseases with the minimum interference to World Trade. The IHR set guidelines, make recommendations regarding the spread of communicable diseases of international concern, such as cholera, yellow fever plague and malaria, and includes recommendations on provision of port health services. Through these regulations, the DoH monitors the importation of goods into the country for compliance to national legislation.

3.3 Other legislation applicable to DOH

The following legislation has a direct bearing on human health and although custodianship lies with other government departments, the DOH operates within the framework of this legislation for protection of human health.

3.3.1 National Environmental Management Act, 1998 (Act 107 of 1998)

NEMA provides for cooperative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote cooperative governance and procedures for co-ordinating environmental functions organising. Population

health is a primary goal for sustainable development; therefore, the environment has an influence on population health outcomes health and environmental management are intimately interconnected in that the environment influences health through physical, chemical, or biological factors.

3.3.2 NEM: Waste Act, 2008 (Act 59 of 2008)

Provides for the reform of the law regulating waste management to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation.

3.3.3 NEM: Air Quality, 2004 (Act 39 of 2004)

Provides for the reform of law regulating air quality to protect the environment by providing reasonable measures for the prevention of pollution and ecological degradation. The quality of air, both indoor and ambient air are key determinants of air in that poor air quality can affect human health adversely and result in poor health outcomes of affected communities.

3.3.4 National Water Act, 1998 (Act 36 of 1998) and the Water Services Act, 1997 (Act 108 of 1997)

Provide for fundamental reform of the law on water resources and for the right of access to basic water and sanitation, respectively. Water is life and, therefore the availability, quantity and quality of water is paramount for improved health outcomes.

3.3.5 NEM: Biodiversity Act, 2004 (Act 10 of 2004)

Provide for the management and conservation of South Africa's biodiversity within the framework of NEMA 1998, and the protection of species and ecosystems that warrants protection. The release of Genetically Modified Organisms in the Environment can enter the human food supply and may pose a human health risk and therefore contribute to poor health outcomes because of introduced allergens, increased toxicity, decreased nutrition, and antibiotic resistance.

3.3.6 Agriculture and Stock Remedies Act, 1947 (Act 36 of 1947), as amended

The act provides for the registration of fertilizers, farm feeds, agricultural remedies, stock remedies, sterilizing plants, and pest control operators; to regulate or prohibit the importation, sale, acquisition, disposal or use of fertilizers, farm feeds, agricultural remedies, and stock remedies; to provide for the designation of technical advisers and analysts. The use, sale of pesticides if not properly managed, can have a negative impact on health because of accidental or non-accidental poisonings.

3.3.7 Occupational Health and Safety Act, 85 of 1993

Provides for the requirements that employers must comply with to create a safe working environment for employees in the workplace.

3.3.8 Criminal Procedure Act, Act 51 of 1977, Sections 212 4(a) and 212 8(a)

Provides for establishing the cause of non-natural deaths.

3.3.9 Children's Act, 2005 (Act No. 38 of 2005)

The Act gives effect to certain rights of children as contained in the Constitution; to set out principles relating to the care and protection of children, to define parental responsibilities and rights, to make further provision regarding children's court.

3.3.10 Compensation for Occupational Injuries and Diseases Act, 130 of 1993

Provides for compensation for disablement caused by occupational injuries or diseases sustained or contracted by employees in the course of their employment, and for death resulting from such injuries or disease.

3.3.11 The National Roads Traffic Act, 93 of 1996

Provides for the transportation of hazardous/dangerous goods, including the management of spillages, and further provides for testing and analysis of blood samples of offenders in relation to driving under the influence.

3.3.12 Border Management Authority Act, 21 of 2020

Provides for certain sections (7, 8, 9, 10, 11, and 12) into operation as proclaimed by the President of the Republic. To establish, organise, regulate, functions and control of Border Management Authority.

3.4 Environmental management related norms and standards

This section of the EMP list the environmental management related norms and standards as set by the DOH and those proposed by the DOH to provide guidelines for better management of health services for improved health outcomes and to provide means whereby compliance with health standards can be measured or assessed. These also include Regulations published by the DOH, Guidelines as well as strategies in relation to environmental management for health.

Table 6: Norms and Standards prescribed by DOH and Regulations published in terms of health legislation in relation to the environment

ENVIRONMENTAL NORMS AND STANDARDS	OBJECTIVES OF THE NORMS AND STANDARDS	DATE OF COMMENCEMENT OF IMPLEMENTATION
Norms and standards for environmental health surveillance of premises and acceptable monitoring standards for Environmental Health Practitioners	- To promote compliance to environmental health related legislation by others; - To provide a national approach in standardizing activities in the delivery of environmental health services and establish a level against which environmental health service delivery can be assessed and gaps identified; - The providing means for setting a benchmark of quality against which delivery of environmental health services can be monitored; - To facilitate the attainment of the highest possible level of environmental health and environmental health services by all involved.	2016
Health Infrastructure Norms and Standards Guidelines	To provide public reference information and for application by provinces in planning and implementation of public sector facilities in relation to building engineering services and infrastructure design for waste management in health facilities and emergency centres.	2014
Health Infrastructure Norms and Standards Guidelines	The guidelines are for public reference information and for application by Provincial Departments of Health in the planning and implementation of public sector health facilities in relation to Adult Physical Rehabilitation; Paediatrics and Neonatal Facilities; Maternity Care Facilities; Hospital Mortuary Services; CSSD; Catering Services; Facilities for Surgical Procedures; Mental Health; Linen and Laundry; TB Services; Inclusive Environments; Administration and Related Services; Training and Resources Centre; General Hospital Support Services; Adult Critical Care; Adult Inpatient Services; Nursing Education Institutions; Information Technology and Infrastructure; Materials and Finishes - a) Internal Floor Finishes, b) Internal Ceiling Finishes; c) Internal Wall Finishes; Security; Primary Health Care; Decommissioning; Maintenance; Facility Assembly Schedule Toolkit (FAST) User Guide; Order of Magnitude Estimator for Upgrades to Clinics; Order of Magnitude Estimator for New Clinics; Order of Hospitals; Order of Magnitude Estimator for New Clinics; Order of Magnitude Estimator for New Hospitals; and Space Guidelines - Professional Service Provider Instructions for Quantity Surveyors and Architects.	2014
Norms and standards Regulations applicable to different categories of health establishments	To guide, monitor and control critical risks to the health and safety of users by means of required systems and relevant supportive structures within different categories of health establishments, in order to provide safe, quality services to citizens.	2017

National core standards for health establishments	Provides for setting the benchmark of quality care against which the delivery of health services can be monitored and provide for a national certification for compliance for health establishments with mandatory standards.	2011
Primary health care package for South Africa, a set of Norms and standards	Provide for standards for facility based and community based clinic initiated services to ensure the provision of health services at acceptable levels.	March 2000
Ideal clinic framework and manual	Sets out the standards for PHC facilities to provide good-quality health services.	Version 19 of July 2020
Ideal hospitals framework	Sets out the standards for regional and districts hospitals to provide good-quality health services.	Version 1.8 of 2019

Table 7: Departmental Environmental Management Related Regulations

ACT	ENVIRONMENTAL REGULATION	OBJECTIVES	DATE OF COMMENCEMENT OF IMPLEMENTATION
National Health Act, 2003 (Act 61 of 2003)	Regulations Relating to the Management of Human Remains, R363 of 2013.	Provide for the regulation of any public or private mortuaries, funeral undertakers premises, crematoriums, and private and public burial sites for protection of the environment and human health.	16 May 2013
	Regulations relating to the control of communicable diseases and the notification of Notifiable medical conditions, R495 of 1999.	Provides for the prevention and restriction of the control of communicable diseases.	30 October 1987
	Regulations for Group 1 Hazardous Substances	Provides for the regulation in respect of licensing of hazardous substance dealers and conditions of sale and for supply of Group I hazardous substances.	25 March 1977
Hazardous Substances Act	Declaration of Leaded Paint as a Group I Hazardous substance	Provide for the declaration of leaded paint as a Group 1 Hazardous substances and conditions of sale, handling and storage of lead containing substances.	31 July 2009
	Regulations relating to Group III Hazardous Substances	Provide regulation for the sale of electronic products.	14 April 1989
Food stuffs, Cosmetics and Disinfectants Act,	Regulations relating to the powers and duties of inspectors and analysts conducting	Provides for powers of inspectors and analysts in conducting inspections and analysis of food premises	20 April 2007

Health Professions Act,	inspections and analysis of food premises		
	Regulations relating to Labelling and Advertising of foodstuffs	Provides for the regulation of the labelling of foodstuffs, cosmetics and disinfectants for protection of public health	19 November 2010
	Regulations governing general hygiene requirements for food premises and the transport of food	Provides for certification of food handling premises, requirements for the transport of food and standards and requirements for food premises	23 November 2012
	Regulations defining the scope of profession for environmental health	Defines environmental management related functions to be performed by Environmental Health Practitioners to include; ➤ Water quality monitoring ➤ Food control ➤ Waste management and general hygiene monitoring ➤ Communicable diseases control ➤ Radiation control ➤ Health surveillance of premises ➤ Noise control ➤ Port health services ➤ Hazardous substances control; and ➤ Chemical safety	GG No 2009 amended

3.5 Description of DOHs POLICIES

The provision of health services, including environment health services in the country are underpinned by various policies, the aim thereof is to strengthen the health system in health services provision. The White Paper for the Transformation of health Systems in South Africa 1997 emphasizes key principles and implementation strategies towards the attainment of health services for all that aim to address disparities and inequalities in health care amongst South Africans.

The following Principles and implementation strategies outlined in the White Paper underpins the provision of health services, including environmental health in the country;

- All South Africans should be equipped with the information and the means for identifying behavioural change conducive to improvement of their health;
- People should be afforded the opportunity of participating actively in various aspects of the planning and provision of health services and updates on progress, results and emerging issues related to the health sector;
- Every South African has the right to a living and working environment which is not detrimental to his/her health and well-being;
- All persons should have access to knowledge on environmental health matters and the services available to them;
- Environmental health services should be accessible, acceptable, affordable and equitable, and must be implemented with the active participation of the communities;
- Environmental health services should contribute positively towards sustainable physical and socio-economic development;
- The establishment of effective environmental health surveillance is essential to determine whether the services are functional and effective and have a positive health impact.

The white paper also emphasizes the principles of cooperative governance and the need thereof in the implementation of strategies to promote environmental health as an implementation strategy. In view of the multidimensional and multidisciplinary nature of the interactive process between the environment and health, the Integrated Environment Health Management Strategy should interface with all sectors, which play a role in environmental health risk reduction. Existing mechanisms for intersectoral collaboration on various matters affecting environmental health such as water, sanitation and hygiene, hazardous substances management, chemical safety, climate change and communicable diseases control must be utilised to promote intersectoral action.

The DOH has published various policies, strategies and plans to provide a framework for provision of health services and for providing guidelines for protection of public health from environmental and other factors with a potential to spread or cause the onset of disease.

This section below outlines the description of DOHs policies that are designed to ensure compliance by others organs of state or persons for protection of human health.

Table 8: DOH policies with a bearing on environmental management

NAME OF POLICY, PLAN OR PROGRAMME	WHAT THE POLICY IS ABOUT	HOW DOH ENSURE COMPLIANCE TO POLICY, PLAN OR PROGRAMME	LIST OF AFFECTED ORGANS OF STATE	RESPONSIBILITIES OF THE AFFECTED ORGANS OF STATE	RESOURCES AVAILABLE TO ENSURE COMPLIANCE	LIFESPAN OF THE POLICY, PLAN OR PROGRAMME
White paper on the Transformation of the Health System in South Africa, 1997	Policy provides for a set of objectives and principles upon which the Unified National Health System of South Africa must be based, including ensuring the establishment of effective environmental health surveillance, which is essential to determine whether the services are functional and effective and have a positive health impact.	- Formulated norms and standards for provision of health services. - Developed coordinated health information systems to monitor the progress of national health goals. - Through regulation of health activities.	Provincial DOH, Private health sectors, and Municipality health authorities	Provision of primary health care services Provision of environmental health services	Financial and physical resources	Since 1997
Yellow Fever Policy	To prevent the introduction of Yellow fever into South Africa in line with the requirements of the International Health regulations (2005).	- Control measures exercised in all points of entry. - By obtaining vaccination certificates from individuals travelling from areas determined by the WHO to be at risk of yellow fever transmission. - Travellers	DHA ACSA	Border management Immigration	Financial and physical resources	Updated 2011

					unable to produce the required documentation are recommended for refusal of entry, or quarantined.				
A Policy on Quality in Health Care for South Africa.	Provides for quality assurance in health system to improve quality in health care in both the public and private sectors. Provides a framework within which environmental health services must be rendered in the country.	▪ Availability of monitoring standards.	Provincial DOH, District Health Authorities	Provision of community health care services	Human and financial resources	Since 2007			
National Environmental Health Policy		▪ Development of a national strategy with clear indicators to guide implementation of policy goals and objectives.	Provincial DOH Municipal Health Institutions of higher learning Research Institutions	Provision of provincial and municipal environmental health services	Human and financial resources	Since 2013			
National Health Promotion policy and strategy	Clarifies the role of health promotion within the health sector and other sectors, and collaborative measures to ensure effectiveness of health promotion interventions in the country.	▪ Monitoring of indicators on the national strategy to guide policy implementation objective achievement.	PDOH DBE DSD Private sector DWS	Rendering of health promotion programmes.	Human and financial resources Appropriate education and behaviour change tools	2015-2019			
The framework on Addressing the Social Determinants of Health using a multi sectoral	Promotes the adoption of a multi-sectoral approach in addressing social determinants of health, by linking	▪ National monitoring systems, stats SA, DHIS, national	Government departments DWS, DRDLR,DHS, DSD, DFFE,	Provision of basic services: Water, sanitation, housing, land reform, social grants,	Planning, Organisation, Financial, Policy, Human resources	Since 2014			

approach	determinants to action.	household surveys.	DOEL	regulation of industry,	Financial and Human Resources	Since 2012
Integrated School Health Policy	Provides for preventive and promotive services that address the health needs of school-going children and youth with regard to both their immediate and future health, through the provision of comprehensive, integrated school health programme as part of the PHC package within the Care and Support for Teaching and Learning (CSTL) framework.	▪ Mechanisms for monitoring and evaluation of by joined task team.	PDOH District health DBE Private education sector DSD	Provision of school health services Provision of Primary Health Care Services Social grant security Health Promotion	Financial and Human Resources	Since 2012
National Infection Control and Prevention Policy and Strategy, 2020	To set minimum national standards for the effective prevention and management of health care associated infections, so that hazards associated with biological agents are minimised to patients, visitors and health care personnel in health establishments.	▪ Monitoring of facility infection control plans. ▪ Monitoring of the national surveillance system to monitor nosocomial infections. ▪ Capacity building.	District, Regional and Tertiary health establishments	Provision of health care services PDOH	Financial and Human Resources	Since April 2007
Adolescence and youth health policy	To improve the long-term health outcomes of the nation through targeting the youth as an especially strategic sector of the population,	▪ Monitoring of set indicators and capacity building for health care providers.	sub-district health District Health Provincial levels	Environmental protection School health services Nutrition services Reproductive health Health promotion	Human Resource and Capacity Building Finances	From 2012

Table 9: Plans and strategies

NAME OF PLAN/STRATEGY DESIGNED TO ENSURE COMPLIANCE WITH DOHS POLICIES	WHAT THE PLAN/STRATEGY IS ABOUT	LIST OF AFFECTED ORGANS OF STATE	WHAT ARE THE RESPONSIBILITIES OF THE AFFECTED ORGANS OF STATE	LIFESPAN OF PLAN OR STRATEGY
The Health and Hygiene Education Strategy as it relates to Water Supply and Sanitation Services	To set out a comprehensive approach for the delivery of sustainable and effective health and hygiene education in South Africa, in relation to water supply and sanitation services, particularly at domestic level.	DOH DWS DBE COGTA WSA and WSPs	Provision of Water and Sanitation to communities and Schools; Primary health care and health promotion services; Support to municipalities on service rendering; Ensuring health and safety of the school environment	Since 2006
Climate change and Health Adaptation Plan	To provide a broad framework of health sector action towards the implementation of the NCCRP, and effectively manage inevitable climate change impacts on health through interventions that build and sustain the country's socio-economic and environmental resilience and emergency response capacity.	District and Metropolitan Municipalities Provincial Departments of Health DFHE DRDLR DBE COGTA	DEA is Climate change focal point DRDLR: formulation of database of areas vulnerable to climate change effects DBE: review and mainstream climate, health and environmental linkages in curricula. COGTA: ensure inclusion of climate sensitive health risks under disaster reduction strategy and plans. Ensuring adaptation to human health effects of climate change.	2014-2019
National Environmental Health Strategy.	To provide a practical guide for implementing environmental health services in order to provide equitable and sustainable health for all South Africans.	District and Metropolitan Municipalities Provincial DOH Academia Research Institutions	Rendering of environmental health services Training in environmental health Research in environmental health	Development stages
Environmental Health Impact Assessment of Development projects in South Africa	To ensure full consideration of health aspects in environmental impact assessments of development projects in the country.	PDOH Municipal health DFHE DMR	NEMA competent authorities in the EIA process Provision of health comment on EIA applications Legislative reviews, policies and guidelines	Since 2014
National Lead Prevention	To reduce the risk associated with	Government		Ongoing

Strategy, 2020	human and environmental exposure to lead, in order to ensure protection of human health and environment in South Africa.	Depts DOH, DBE, DEFF, DWS, WHO poisoning information centres and NICD, research, CSIR, MRC, academic institutions, chemical industry, NGOs, civil society	development Legislation compliance monitoring Surveillance and monitoring lead exposure Conducting education and awareness activities	
National Strategic Plan on HIV, AIDS and TB, 2017-2022	To provide a framework to guide the activities of with a responsibility of rendering HIV/Aids and TB services in South Africa. The NSP guides the development of provincial strategic implementation plans, as well as sector implementation plans.	National, provincial and local government departments	Address social, economic, political, cultural and environmental factors that lead to increased vulnerability to HIV, STIs and TB infections. Mainstreaming HIV and TB management into core strategies of all relevant government departments.	2017-2022
Malaria Elimination Strategy for South Africa	The goal of this Malaria Elimination Strategic Plan is to achieve zero malaria transmission in South Africa by 2023.	National	Vector control, indoor residual spraying, effective diagnosis and treatment of cases in endemic and non-endemic areas	2019-2023
Integrated management of childhood illnesses package	Management of childhood illnesses to reduce the rate of child mortality in the country.	PDOH District and PHC	Provision of child health services	
Human resources in health plan	To ensure an appropriate, trained and sustainable health workforce in the country, in order to attain a vision to improve access to health care for all and health outcomes.	NDOH PDOH District Health Municipal Health	Provision of health services.	2012-2017
PHC re-engineering approach	To improve health outcomes through a ward based primary health care outreach approach.	District health	Primary Health Care Services	2011
Guidelines for the	The aim of this document is to outline	Provinces	Diagnosis, treatment, tracing, prevention and	2011

Management, Prevention and Control of Meningococcal Disease in South Africa	an approach to the management of a case of meningococcal disease, in order to strengthen the knowledge of the organism, the disease, the management of cases and contacts and encourage an appropriate public health response.	District	education.	
Public Hygiene Strategy and implementation plan in the context of COVID-19	Provide guidance for public hygiene measures towards the prevention and spread of the virus.	All departments at National, Province, District and the general public	Implement non-pharmaceutical interventions for prevention of the spread of COVID-19.	2020
Guidelines for the management of human remains in the context of COVID-19	Provide measures for management of COVID-19 mortal remains.	Province Municipalities	Implement measures to alleviate risk of infection in handling, preparation and storage of mortal remains	2020
Clinical Management of suspected or confirmed COVID-19 disease	Provides guidelines for testing, contact tracing, quarantine, isolation and treatment of suspected or confirmed COVID-19 disease cases.	National Province, District,	Ensure testing of suspected cases, facilitate quarantine of suspected cases, facilitate isolation of positive cases, tracing of contacts and treatment of confirmed cases.	2020
COVID-19 Environmental Health Response Guidelines	Guides environmental health services response and interventions for the control of the spread of COVID-19.	Municipalities	Monitor compliance to non-pharmaceutical interventions, monitor the handling and storage of mortal remains, public education and awareness	2020
Guidelines for symptom monitoring and management of essential workers for COVID-19 related illnesses	Enable early and timeous identification and diagnosis of workers at risk of COVID-19 infection.	National Province District	Early referral of cases, protection of unaffected workers, consumers, visitors and clients.	2020
Hand hygiene behaviour change strategy	To prevent and reduce the prevalence of diarrhoea and other diseases related to poor WSH, particularly in children under 5 years, through the promotion of safe hand hygiene practices as a key and proven intervention.	NDOH DBE DSD DWS Local government	Implementation of hygiene interventions in-line with the hygiene strategy	2016-2020

SECTION 4:**A DESCRIPTION OF PRIORITIES REGARDING COMPLIANCE WITH THE DOHs POLICIES
BY OTHER ORGANS OF STATE OR PERSONS****4. Health and Sustainable Development**

The importance of investing in the improvement of people's health and supporting environment is a pre-requisite for sustainable development. A supportive environment for health is free from major health hazards, satisfies the basic needs of healthy living and facilitates equitable social interaction.

The WHO Global Strategy on Health, Environment and Climate change advocates for a way forward and priorities to be considered in responding to environmental health risks and challenges until 2030 and to ensure safe, enabling and equitable environments for health by transforming our way of living, producing, consuming and governing. Environmental risks to health are defined as all the environmental physical, chemical, biological and work-related factors external to a person, and all related behaviours, especially the part of the environment that can reasonably be modified. Known avoidable environmental risks cause about one quarter of all deaths and disease burden worldwide, amounting to at least a steady 13 million deaths each year. A healthy environment is vital for human health and development. Air pollution is one of the largest risks to health and alone causes many preventable deaths per year, many the world's population, including in South Africa is still exposed to unsafely managed water, inadequate sanitation and poor hygiene, resulting in preventable deaths, especially in children. A large fraction of malaria cases and other vector-borne diseases is closely linked to the management and manipulation of the environment, such as drainage, irrigation schemes or design of dams, and many workers die each year because their workplace is unsafe, and exposure to chemicals.

For promotion of health, key health priorities that are dependent on programmes in other policy agendas include, meeting basic needs such as water, sanitation and hygiene services, control of communicable diseases; protection of vulnerable groups; meeting urban health challenges; and reducing the risk from environmental pollution and hazards, such as environmentally sound management of toxic chemicals, hazardous substance control, waste management, sewage related issues, which are issues of concern for sustainable development.

Consistent with government outcome-based approach to improving service delivery, enhancing accountability to the public and enhancing performance management, the health sector environmental priorities to ensure attainment of overall health and wellbeing are outlined below;

Table 10: Health priorities and compliance required from others

Health priorities	Extent of compliance required
Address the social determinants that affect health and diseases	- Provision of basic water, sanitation and hygienic services especially to vulnerable members of society and vulnerable settings; - Provision of adequate housing; - Provision of safe water with regards to its microbiological, chemical and physical quality for human consumption; - Ensure safe and adequate waste water treatment; - Ensure safe handling and preparation of foodstuffs meant for public consumption and safe food with regards to its microbiological and chemical quality and availability; - Prevent the pollution of the environment (land and water); - Reduce, eliminate and avoid the pollution of the air; - Provision of adequate housing; - Provision of affordable and modern energy; - Control the breeding of vectors and pests by controlling and managing waste generated.
Improving Maternal and child health - Environmental Health - Primary Health care - Nutrition - Health promotion - Child health - Women's health - HIV/AIDS and Tuberculosis	- Provision of basic water, sanitation and hygienic services; - Provision of adequate housing; - Refuse removal services; - Sewage and waste water management; - Environmental pollution control; - Agriculture; - Provision of modern affordable energy; - Occupational health and safety;
Prevent and reduce the disease burden and promote health	- Improve community health information, education and communication; - Improve health literacy in all sectors; - School nutrition programmes; - Provision of child support grants to end hunger.
End epidemics of malaria and neglected tropical diseases, and combat hepatitis and other waterborne diseases	- Provision of adequate community and institutional water and sanitation services; - Vector control management.
Sustainably reduce the number of illness and deaths from hazardous chemicals, air and water pollution	- Control the use of hazardous substances and chemicals; - Air quality monitoring and management; - Pesticide management.
Tobacco control	Promote the cessation of the use of tobacco products;

Strengthen capacity of early warning, risk reduction and management of national health risks	▪ Health and community information management; ▪ Environmental surveillance;
Strengthen the prevention and treatment of substance abuse, including narcotic and drug abuse and harmful use of alcohol and halve the deaths and injuries from road traffic accidents.	▪ Community awareness and mobilisation by relevant sectors; ▪ Rehabilitation services; ▪ Law enforcement.

SECTION 5:

DESCRIPTION OF ARRANGEMENTS FOR COOPERATION WITH INTERNATIONAL AND OTHER NATIONAL DEPARTMENTS AND SPHERES OF GOVERNMENT

5. Arrangements for cooperation

Extensive environmental legislation has been passed in the country in the past 20 years, and though some sectors of government do address threats to the environment and human health, a number of limitations still exist in integrating environmental and health considerations. Environment and health functions are fragmented, a shared responsibility between various government departments and as a result overlaps, and duplication of functions exists between the various departments. A lack of coordination and cooperation is still a challenge, with silo planning and implementation. The need for a harmonised institutional framework to ensure efficient coordination of environmental shared responsibilities and the effective delivery of services to communities has been identified globally, and there have been various calls for improved cooperation between health and environmental sectors.

Key priorities for cooperation include establishing an environment and health strategic alliance and promotion of joint planning and action, developing frameworks and strategies to address more effectively the issues of environmental impacts on human health, harmonisation of policies, plans and programmes to ensure integration in national strategic plans and strengthening systems for health and environment surveillance to allow measurement of interlinked health and environment impacts and to identify emerging risks, in order to manage them better.

In addition to the national legislation that is applicable to environmental management in South Africa, the country also participates in international organisations and agreement on the management of chemicals, waste, has signed, and ratified a number of international environmental conventions and agreements, of which DEFF is the national focal point. The DOH contributes towards implementation of the provisions of the following conventions and international obligations.

6.1 International obligations and arrangements for cooperation

6.1.1 IHR, 2005 implementation

The International Health Regulations, 2005 calls for a multi-sectoral/multidisciplinary approaches through national partnerships in strengthening health systems and ensure for effective disease prevention, preparedness and response alert and response systems by coordination of nation-wide resources. The IHR requires for countries to develop certain minimum core public health capacities, which includes the capacity to detect, assess, notify and report events; and the capacity to respond to promptly and effectively to public health risks and public health emergencies of international concern. The IHR requires strong cooperation between various government departments, spheres and entities to ensure an integrated country response to health emergencies. The National Joint Operation Committee is a key structure in the country established to respond to national disasters and emergencies, with key departments represented.

6.1.2 International Programme of Chemical Safety (IPCS)

The DoH is a member of the IPCS, whose overall objectives of the IPCS are to establish the scientific basis for assessing risks to human health and the environment from exposure to chemicals. This is achieved through an international peer review process, as a prerequisite for the

promotion of chemical safety, and to provide technical assistance in strengthening national capacities for the sound management of chemicals. The IPCS works closely with the International Organisation for the Management of chemicals (IOMC) and the Organisation for Economic Cooperation and Development (OECD) on aspects relating to data and information about chemicals. The United States Environmental Protection Agency (US-EPA) is another organisation that provides current reliable toxicity data that is of the utmost importance during the decision-making process.

South Africa is represented in the International Union of Toxicology (IUTOX) through its Toxicology Society, at whose meeting pertinent issues of global concern on toxicity of chemicals are discussed, of which the DOH forms part of the representation in that structure.

6.1.3 SADC protocol on health cooperation

South Africa co-ordinates the Health Sector of the Southern African Development Corporation (SADC) and has ratified the SADC Protocol on Health Co-operation. An implementation strategy for the protocol is finalised, taking into account the reorganisation of the SADC. Among the priority areas are HIV and AIDS for which a regional strategy has been developed.

6.1.4 SADC Malaria Elimination Eight Regional Initiative (E8)

E8 is a coalition of eight countries; Angola, Botswana, Eswatini, Mozambique, Namibia, South Africa, Zambia and Zimbabwe, who are working across national borders to eliminate malaria in the sub-region by 2030. It was formed in 2009 and is led by the Ministers of Health in eight countries; to plan, coordinate, and execute a regional malaria elimination strategy. As the malaria response arm of the Southern Africa Development Community (SADC), the E8 is pioneering an ambitious regional approach and driving collective action to end this deadly disease once and for all. Guided by the belief that countries are stronger when they work together, the E8 is building a model that will inform coordinated efforts in Southern Africa and beyond. Within the E8, member countries collaborate to address challenges that go beyond the scope or mandate of any one country, such as those associated with access to services for mobile and migrant populations, surveillance across connected malaria catchment areas in different countries, and pooling of specialized skills. A Technical Committee supports the E8 Ministerial Committee, and a Secretariat based in Windhoek, Namibia.

6.1.5 Rotterdam Convention

The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade promotes a shared responsibility between exporting and importing countries in protecting human health and the environment from the harmful effects of hazardous chemicals. The responsibility of DOH in implementation of the provisions of this Convention is to investigate and monitor chemical poisoning cases to identify problematic chemicals under local conditions of use and to ensure the hazardous substances legislation is strengthened to support achievement of the objectives of the Convention.

6.1.6 Minamata Convention

The Minamata Convention on Mercury aims to reduce anthropogenic emissions and releases of mercury and mercury compounds. To support the objective of the Convention, the DOH has a role in terms of implementing measures to reduce the use of mercury based products in health care facilities, developing guidelines and management of mercury waste and mercury spillages through developing and implementing SOPs; and conducting education and awareness amongst health professionals and the public.

6.1.7 Stockholm Convention on persistent organic pollutants (POP)

Stockholm Convention is a treaty with an objective of protecting human health and the environment from adverse effects resulting from exposure to POP. In alignment with the Convention, the DOH has to strengthen its hazardous substances legislation to restrict and prohibiting the production, use, and import of chemicals listed in Annex A of the Convention.

6.2 National Strategic Health Cooperation arrangements

Health is a Concurrent National, Provincial and District Legislative Competence and the principle of cooperative governance that underpins this joint endeavour is spelt out in the Constitution. Various structures have been legislated in terms of the National Health Act to ensure cooperation and collaboration between the three spheres of government and ensure a strengthened health system.

6.2.1 National Health Council (NHC)

The NHC is a legislated body established in terms of the National Health Act, 2003 (Act 61 of 2003) as amended. Its membership comprises of the Minister of Health, who acts as chairperson; the Deputy Minister, the relevant members of Executive Councils; one municipal councillor representing organised local government; the Director-General Health and the Deputy Director-Generals of the department, a person employed and appointed by the national organisation contemplated in section 153(a) of the Constitution; and the head of the South African Military Health Services. The NHC advises the Minister on policy concerning any matter that will protect, promote and maintain the health of the population, including amongst others efficient coordination of health services, including environmental health.

The NHA further stipulates the establishment and composition of the Provincial Health Councils in every province and District Health Councils in every health district to deal with matters of health promote cooperative governance and advice executives on matters relating to health and health services in the respective areas.

6.2.3 National Health Council Technical Committee (NHCTECH)

The NHCTECH is an intergovernmental technical structure formulated to advise the NHC on technical matters that relates to National health Policy. The NHCTECH consist of the Director-General of Health as a chairperson, HODs in the 9 Provincial Departments of Health, Deputy Director-Generals and Chief Directors of NDOH. The NHCTECH provides technical support to the NHC on matters of legislation, policy and programme implementation.

6.3 Cooperative arrangements with other stakeholders

This section outlines various environmental and health areas of cooperation and shared responsibilities of DOH and other government departments and entities, and further describes existing arrangement, structures and mechanisms that are coordinated by NDOH and other structures for health and environmental cooperation.

Table 11: Areas of collaboration on DOHs environmental management functions

AREAS OF CO-OPERATION	LEGISLATION	STAKEHOLDERS
- Environmental Management, incl EIAs - Air Quality management - Environmental Pollution control - Control of Hazardous Substances (Including Health Care Risk/General Waste) - Chemicals management - Climate change adaptation and mitigation - Waste management	- NEMA - NEM: Air Quality Act - NEM: Waste Management Act - Hazardous Substance Act	DFFE DOH
Water, Sanitation and Hygiene	- National Health Act - National Water Act	DWS
Human settlements and health (WASH, air quality)	National Health Act	DoHS
Municipal Health Services	National Health Act	COGTA
- Pesticides, - Food security - Animal health	- Hazardous Substance Act - Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act	DALRRD
- Conveyance of Hazardous Substances by Road Tankers and other means of transport; - Health Services at a Point of entry	- National Road Traffic Act - Hazardous Substance Act - IHR 2005	DoT DoHA SARS
- Health, Hygiene and Safety at Workplace - Management of Asbestos Related to Health Problems	Occupational Health and Safety Act	DOEL
- National Outbreak Response - Control of Communicable Diseases - Delivery of health services	- International Health Regulations - National Health Act	SANDF

The table below outlines other existing cooperative arrangements structures between DOH and other government departments, entities and stakeholders on matters that relates to environmental management and protection of human health.

Table 12: Cooperative governance structures/mechanisms

COOPERATIVE COMMITTEE/MOUs	DESCRIPTION OF THE PURPOSE OF CO-OPERATION MECHANISM	LIFESPAN (IF APPLICABLE)	COOPERATIVE MECHANISM PATNERS/ROLE PLAYERS	ARE PARTIES ROLE PLAYERS COMMITTED TO THE MECHANISM
Multistakeholder I Committee on Chemicals Management (MCCM)	To coordinate matters relating to chemicals management and hazardous substances.	Ongoing	DFPE DOH DALRRD, Industry Academia, NGO, DTI, NRCS, DoT, SARS, SABS, DEL	Yes
Border Management Agency	To coordinate all matters that relates to boarder management and the role of relevant departments.	Ongoing	DOT DFPE SARS DALRRD DHA DOH SAPS	Yes
Sub-Committee for EMPs/EIPs	To facilitate compliance with the requirements of Chapter 3 of NEMA: Procedures for Cooperative Governance. All listed national departments and provinces are required to develop EMPs and/or EIPS and report annually on progress with regards to implementation of the published EMPs/EIPs.	Ongoing	All listed national departments and all 9 provinces	Yes
National Sanitation Task Team	To provide oversight to the sanitation sector and coordinate sanitation provision and formulation of the necessary interventions were required by various role players.	Ongoing	DWS(lead) DOH DBE SALGA COGTA	Yes
Medical National Outbreak Preparedness and Response Team	To coordinate disease outbreak preparedness and response.	Ongoing	DOH (lead) DWS NICD DAFF WHO, SANDF	Yes
Integrated School Health	To coordinate on matters of health,	Ongoing	DOH	Yes

Programme	safety and education of children in the school environment.		DBE DSD	
National Climate Change Coordination Committee	To coordinate matters of climate change by sectors departments and stakeholders.		DFEE (lead) DAFF, DOL, DMR, DOL DOH, DWS	Yes
Negotiated Service Delivery Agreement: Outcome 2:	To facilitate agreement for cooperation between NDOH and other key role players in linked to the delivery of health outcomes.	Ongoing	DOH DSD, DWS, DEFF DAFF DOL, DMR, DOL, Correctional Services, NGOs, CBOs	Yes
SANA task team	To promote and foster the environment and health alliance through a Situational Analysis and Needs Assessment for the preparation of Joint Action plans for implementation of the Libreville Declaration on health and environment.	Ongoing	DOH DFEE DAFF	Not fully functional
Water Quality Task Team	To improve intersectoral collaboration on water quality for irrigation and agricultural purposes.	Ongoing	DAFF DWS DOH	Yes/Adhoc
WASH task team	To promote integration of Water, Sanitation and Hygiene aspects in decreasing child mortality rates.	Proposed from 2015	DOH (lead) UNICEF, DBE, DWS, WRC, Industry	Adhoc
National health climate change steering committee	To coordinate the implementation of the climate change and health adaptation plan.	Proposed from 2015	DOH DFEE DAFF Research bodies, DWS	Adhoc
Environmental health Interprovincial forum health	Improve communication and cooperation on Environmental health services provision.	Ongoing	NDOH, PDOH, Municipalities, SALGA	Yes

The DoH also cooperates and collaborates with various NGOs on technical matters, matters concerning health programmes, policy, plans, legislation and related aspects.

Table 13: Health Stakeholders

STAKEHOLDER/PARTNER	AREAS OF COLLABORATION
United Nations Children's Fund (UNICEF)	- Reduction of Child mortality - Reduction of maternal morbidity and mortality - To reduce neonatal morbidity and mortality
WHO (World Health Organisations)	- Improvement of population health - Diseases Control - Environmental Health - Child Health - Health System is strengthening.
STOP TB	Improve TB prevention, diagnosis and treatment amongst South African population at risk
CSIR (Centre for Scientific and Industrial Research)	Health Research
WRC (Water Research Council)	Health Research
STATSSA (Statistics South Africa)	Health statistical support, Burden of disease trends
Medical Research Commission (MRC)	Health Research
NCAS (National Council Against Smoking)	Tobacco control and Smoking cessation
Heart and Stroke Foundation	- Improvement of the management of non communicable diseases - Promotion of health lifestyles
Diabetes SA	- Reduction in the incidence of Diabetes - Improve treatment and management of Diabetes - Promotion of health lifestyles
National Institute for Communicable Diseases (NICD)	Monitoring of Disease Trends, Prevention and Treatment
Institutions of Higher Learning	- Health research - Training and Education
National Regulator for Compulsory Specification (NRCS)	- Provide technical guidance - Test and register products
Universities of Higher Learning	- Health research - Training of health professionals

SECTION 6:**PROPOSALS FOR THE PROMOTION OF OBJECTIVES AND PLANS FOR THE IMPLEMENTATION OF THE PROCEDURES AND REGULATIONS OF CHAPTER 5 OF NEMA****6. Integrated Environmental Management**

Chapter 5 of the NEMA provides for the promotion of the application of appropriate environmental management tools in order to ensure Integrated Environmental Management (IEM) of activities.

The general objectives of purpose of integrated environmental management are to:-

- a) Promote the integration of the principles of environmental management set out in section 2 of NEMA into the making of all decisions which may have a significant effect on the environment;
- b) Identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2 of NEMA;
- c) Ensure that the effects of the activities on the environment receive adequate consideration before action are taken in connection with them;
- d) Ensure adequate and appropriate opportunity for public participation in decisions that may affect the environment;
- e) Ensure consideration of environmental attributes in management and decision-making which may have a significant effect on the environment;
- f) Identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2 of NEMA.

Table 11 below represents environmental health proposals on the implementation of integrated environmental management tools and proposals in which IEM will be implemented to achieve DOHs environmental management mandate.

Table 14: Proposals for the promotion of objectives and plans for the implementation of the procedures and regulations of chapter 5 of NEMA

IEM TOOL	PROPOSALS/ RECOMMENDATIONS FOR IMPLEMENTATION
Environmental Impact Assessment	<u>Emphasis on consideration of potential human health impacts of development through health impact assessment</u> A health impact assessment is defined as “a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population. The development and promotion of instruments for the systematic evaluation and mitigation of health impacts of development is a primary concern and should be considered integrated into the EIA process. While development in various sectors has resulted in tremendous socio-economic progress and improvements in the quality of life, the adverse impacts from these developments on the environment, social structure and human health have however, in most cases not been adequately assessed and addressed. It is therefore critical for the inclusion and integration of Health Impact Assessment in EIA for development projects, both in legislation and implementation, to ensure a comprehensive consideration of both negative and positive health impacts of a proposed development project. The integration of HIA into EIA will promote improved cooperation and collaboration of the health and environment sector with regards to environment and health issues and harmonisation of policies. The proposal is for EIA legislation to emphasise human health as part of the physical environment, therefore identifying HIA as one of the specialist studies required in EIA. Article 12 of the Minamata Convention calls for “development and implementation of strategies to identify assess and manage health and environmental impacts caused by mercury or mercury compounds contaminated sites”. Therefore, collaboration between DOH and DEFF on issues of environmental impact assessments is critical.
Strategic Environmental Assessment	While many health determinants are directly affected by activities of other sectors (including those in which SEA is applied), there is no system in place to ensure involvement of health professionals in decision-making processes of other sectors. The legal provisions for SEA will present the health sector with an opportunity to influence developments in the environmental and development sector and provide a key platform for cross-sectoral dialogue on a range of issues in order to improve people’s health and well-being. Health inclusive SEA can help identify opportunities and adopt action to prevent disease and to avert unnecessary health costs. Recognizing that a substantial share of the global burden of disease could be prevented through interventions that address the environmental root causes of disease, the return on investments made in primary prevention in the environmental domain can be considerable.
Environmental Risk Assessment	Environmental Risk Assessment is a systematic analysis of the likelihood that the environment will experience a specified level of harm as a result of an activity. Environmental decisions and actions will in all likelihood have an impact on human health; therefore, a health risk assessment should be integrated as part of ERA.

**SECTION 7:
OUTCOMES AND KEY PRIORITY INDICATORS FOR EMP FOR 2020-2025**

7. Performance assessment indicators and action areas

This section provides performance assessment indicators to be monitored and reported on for 2020-2025 EMP cycle. These EMP indicators are directly aligned to health sector indicators in the NDP, DOHs strategic plan and other mid-term sector priorities and plans.

Table 15: depicts the priority actions for 2020-2025 by the Department with regards to its environmental management functions

OUTCOME/STRATEGIC OBJECTIVE	ACTION/ ACTIVITIES	RESPONSIBILITIES	PROPOSED TARGETS	INDICATORS
Eliminate Malaria by 2023, so that there is zero local cases in the country	Strengthen partnerships and coordination to support the planning, execution and monitoring of elimination efforts; Ensure optimal epidemic preparedness and effective response for Malaria at all levels; Strengthen surveillance systems.	NDOH PDOH	Form partnerships with other key sectors (Government stakeholders, NGOs, Civil society, Tourism and Farmers association); Ensure the timeous and adequate supply of quality assured commodities and equipment required for Malaria elimination. Monitor stock management at provincial and district level to ensure buffer stock is available; Strengthen cross border and inter-district collaboration for Malaria elimination; Establishment of cross border operational committees Synchronisation of cross border operations and harmonization of cross border policy; Development suitable plans for outbreak preparedness and response; Update epidemic thresholds at provincial, districts and sub-district levels;	▪ Strengthened partnerships and coordination to support the planning, execution and monitoring of elimination efforts. ▪ Optimal epidemic preparedness and effective response for Malaria at all levels available – all provinces reporting. ▪ Strengthened surveillance systems and fully functional.

Improve Environmental health and management services			Update national surveillance guidelines and develop capacity through training of surveillance personnel, development of GIS capacity.	
	Capacitate and support provinces and municipalities on implementation of national legislation and policies in rendering of EH services	NDOH	In-service training of approximately 1000 EHPs annually and other professionals on EHAs, HCRW, water quality monitoring, port health and updated legislation.	#EHPs capacitated on various EH areas
	Monitor compliance of health care risk waste generators (public) to national legislation in the management of HCRW	NDOH, PDOH	Assess 20% of health facilities to be on the Implementation of the Health care waste legislation; Facilitate and monitor the appointment HCWO in health establishments (major generators); Assess 52 municipalities for availability of updated waste management plans in place;	% of health facilities compliant with legislation #facilities with HCWO appointed # Municipalities with updated WMPs and in place
	Ensure proper management of liquid waste, including sewage and industrial effluent;	District and Metropolitan Municipalities(DMs&MMs)	Monitor management of liquid waste, including sewage and industrial effluent in all relevant premises;	#industrial premises assessed for proper management of industrial effluent #sewage plants assessed for optimum operation;
	Strengthen legislation on chemicals management	NDOH, PDOH DMs &MMs	Finalize lead in paint Regulations and publish for public comments; Monitor the implementation of Lead Paint Regulations.	Lead in paint regulations gazetted and implemented.

Ensure implementation of South African National Lead Exposure Prevention Strategy	NDOH PDOH		Develop implementation Plan. Establish National Lead Exposure Prevention Working Group. Conduct National workshop on National Lead Exposure Prevention Strategy.	Quarterly implementation report developed. Annual implementation report developed. National Lead Exposure Prevention Strategy Implementation monitored.
	NDOH PDOH	License hazardous substances dealers and monitor compliance of premises to legislation	Renew licenses of compliant Hazardous substances dealers; Monitor hazardous dealers premises; Inspect and issue licenses to new compliant applicants.	# licenses renewed and issued # premises inspected # new applicants assessed and licences issued
	NDOH PDOH	Strengthen climate change and health adaptation implementation	Finalise the review of the Climate Change adaptation plan. Conducting of Vulnerability Assessment. Development of an evidence-based white paper on National Climate Change and a Health Flagship Programme as well as establishing key implementation nodes in provinces and municipalities. Refresher training of national professionals and relevant stakeholders on various climate change and health. Develop the training manual for health sector.	Climate change plan approved Vulnerability assessment report available White paper available Training manual developed Climate change diseases surveillance integrated into existing systems

			Advocate for provision of equipment and supplies to laboratories and research institutions (Sign MOU with institutions). Advocate for specific expertise on health and environment linkages to be developed Review and mainstream (integrate) climate, health, and environmental linkages in curricula for basic education, higher education, and institution of higher learning Meeting and workshop relevant stakeholders i.e. HPCSA, Nursing Council, Tertiary Institutions, etc; Integrate surveillance of all climate-sensitive diseases. Establishment of partnership with WMO and national meteorological services for the implementation of the EWRS under the GFCS framework.		Inventory of emissions developed # nurses, doctors, science students, dental practitioners trained #facilities where mercury use has been eradicated
	Eradication of mercury in health technology	NDOH, PDOH	Develop and maintain an inventory of emissions from relevant sources within health facilities. Training needed for doctors and nurses, science students, dentists, oral hygienists, dental technicians, dental chair assistants on environmental aspects of Hg exposure. Eradicate the use of mercury based medical devices		

Vector Control	NDOH DMs &MMs	Assess municipalities for vector control monitoring plans in the interest of public places.	# Municipalities with vector control monitoring plans in place
Air quality	NDOH PDOH DMs&MMs	Coordination/response to vector borne and other disease outbreaks.	# of Municipalities implementing the DAQG
Monitor the rendering of Municipal health services for compliance with EH National Norms and Standards	NDOH	Implementation of Domestic Air Quality Guidelines (DAQG).	Air quality focus groups established.
Implement Environmental Health and management services	PDOH DMs and MMs	Municipalities compliant with EH Norms and Standards.	# of municipalities assessed for adherence with the Norms and Standards in rendering their EH functions
Monitoring the quality of domestic water supplies	PDOH DMs and MMs	Take monthly samples of domestic water supplies from WSAs;	# of domestic water samples taken for WSAs;
Health surveillance of premises	DMs and MMs	Take monthly samples of domestic water supplies from Non- WSAs;	# of domestic water samples taken for Non- WSAs;
Health surveillance of premises	DMs and MMs	Take monthly samples of domestic water supplies from untreated water sources;	# of domestic water samples from untreated water sources;
Health surveillance of premises	DMs and MMs	Take environmental water samples for environmental disease surveillance (Cholera, Shigella, Hepatitis, Polio, Bilharzia);	# of environmental samples taken;
Health surveillance of premises	DMs and MMs	Monitor and assess premises the compliance of premises to environmental health legislation;	# of Health facilities inspected
Health surveillance of premises	DMs and MMs	Conduct environmental health	# of construction sites inspected

			impact assessment of development project.	# of Early Childhood Development Centres inspected # of Correctional Services centres and Police stations inspected # of Old age homes inspected # of schools and institutions of higher inspected # of offensive traders inspected # of EHAs conducted # of development project sites inspected
	Surveillance and prevention of Communicable diseases, excluding immunisation Reduce the number of people requiring preventive chemotherapy for schistosomiasis	DMs and MMs	Promote health and hygiene aiming at preventing environmentally induced diseases and related communicable diseases; 50% of people requiring preventive chemotherapy for schistosomiasis.	# of community health and hygiene awareness campaigns conducted % of people requiring preventive chemotherapy for schistosomiasis reduced
	Monitoring of the disposal of the dead	DMs and MMs	Monitoring the business of an undertaker, mortuary and/or crematoria for the storage and cremation of human remains; Monitor exhumations and reburials or disposal of human remains;	# of undertakers, mortuaries; # of crematoria inspected; # of exhumations and

			Control the disposal of human remains at sea; Issue permits for importations and exportation of human remains.	reburials monitored; # of permits issued for burials at sea; # of importation and exportation permits issued.
Environmental pollution control	DMs and MMs		Assess municipalities for availability of environmental pollution control in the interest of public health. Comment on environmental impact assessment applications and reports received.	# of municipalities with environmental pollution control plans in place; # of EIA applications and reports reviewed;
Food control management	DMs and MMs		Collect chemical and microbiological food samples; Assess formal food premises for compliance to legislation; Assess the informal food trade for compliance to legislation; Assess milk parlours, dairies and milk sheds for compliance to legislation; Issue COAs to compliant food premises; Withdraw COAs of food premises for continued non-compliance.	# of chemical food samples taken; # of microbiological food samples taken; # of formal food premises inspected; # of informal food traders inspected; # of milk parlours, dairies or milk sheds assessed; # of COAs issued to compliant food premises; # of COAs of non-compliant food premises withdrawn.

Strengthen the provision of Port Health Services	Radiation (ionising and non-ionising) monitoring and control	NDOH	Registration of ionising and non-ionising sources; Ensure proper disposal of all radiation waste materials from hospitals.	# of ionising and non-ionising radiation sources registered; # of disposal overseen or monitored.
	Noise control	DMs and MMIs	Assessing the extent of noise pollution and its effect on human health.	# of complaints received and handled
	Monitor and support to port of entry to ensure provision of health services in the point of entry are compliant with the International Health Regulations; Monitor the implementation of core capacities action plans in points of entry. Assess core capacities at 36 points of entry; Capacitate and train on implementation of legislation and guidelines in the provision of port health services; Strengthen preparedness and core response capacities for public health emergencies in line with IHR 2005;	NDOH	Monitor the implementation of core capacities action plans in points of entry; Monitor adherence to yellow fever policy by travellers from yellow fever endemic countries; Assess core capacities at 36; commercial points of entry; Review, evaluate and disseminate public health contingency plans covering all relevant sectors and services at POE; Screen travellers; 100% international travellers screened on arrival; International conveyances inspected; International consignments inspected; Training provided to port health officials.	# of Points of Entry assessed #POE with updated public health contingency plans # of Points of entry with core capacity action plans in place and implemented. # of international travellers (yellow fever endemic countries) with valid yellow fever certification %consignments inspected %conveyances inspected #port health officials trained #Port health officials trained.

Develop, review and environmental health and management related legislation, policies, strategies and guidelines.	Develop EM strategy for the public health sector Review EHIA Guidelines	NDOH	EM strategies and implementation	EM Strategy available
	Finalise the amendment and publication of the Hazardous substances Act and notices		Update and review HIA guidelines Advocate and monitor the training and appointment of EHPs as EMIs	EHPs trained and appointed as EMIs
	Develop the National health water and sewerage management guiding standards		Finalise and promulgate Hazardous substances Act and notices	HAS gazetted and notices
	Review EH sections of the National Health Act		National health water and sewerage management guiding standards	Guideline distributed
	Develop the National Environmental Health Bill		Review EH sections of the Health Act	NHA review published
	Review EH policy of 2013		Develop the National Environmental Health Bill	NEHB published
	Review the National Environmental health strategy		Review EH policy of 2013	Reviewed policy available
	Finalize the review EH norms and standards		EH Strategy reviewed and implemented	EH strategy reviewed
	EH Regulations finalisation		EH norms and standards reviewed and gazetted	EH norms and standards gazetted
	Port health regulations finalisation		EH Regulations Promulgated under the NHA	EH Regulations gazetted
	Review port health standard operating procedures		Port Health Regulations Promulgated under the NHA	Regulations gazetted
	Finalize the National Climate Change and Health Adaptation Plan 2021-2025		Port health SOPs reviewed	Reviewed port health SOPs available
	Finalize the Heat Health Action Guidelines		National Climate Change and Health Adaptation reviewed and implemented	NCCHAP available
			Heat health action guidelines approved	Heat health action guidelines approved and

					distributed for implementation
	Formulate Policy Directive on the phase out of mercury added products (MAPs) Development and adoption of MAP in Health Care Phase Out Guidelines	Policy Directive Formulated. Guidelines developed and adopted.		Formulate Policy Directive on the phase out of mercury added products (MAPs). Development and adoption of MAP in Health Care Phase Out Guidelines.	Policy Directive Formulated. Guidelines developed and adopted.
Establish a coordinated disease surveillance system for Notifiable Medical conditions	Finalise the surveillance system in collaboration with the NICD Monitor the notification, investigation and tracing of contacts at district level Strengthen collaboration with other sectors for joint planning and response activities Training of outbreak response teams Strengthen health research	NDOH		Strengthen the disease surveillance system Monitor the notification, investigation and tracing of contacts at district level Strengthen collaboration with other sectors for joint planning and response activities Training of outbreak response teams Strengthen health research	Monitoring reports on the notification, investigation and tracing of contacts at district level Strengthen collaboration with other sectors for joint planning and response activities # of outbreak response teams trained Strengthen health research
Reduce maternal, child and neonatal mortalities	Improve access to maternal health Services Protect children against vaccine preventable diseases Improve the Integrated Management of Childhood Diseases services	NDOH PDOH Districts		Improved access to maternal health Services Children vaccinated against preventable diseases Improved Integrated Management of Childhood Diseases Services	<100 per 100 000 live births; <10 per 1,000 live births; <20 per 1000 live births <25 per 1,000 live births
Drive national health wellness and healthy lifestyle campaigns to reduce the burden	Make significant progress towards ending TB by 2035 through improving prevention and treatment strategies Reduce premature mortality from Non-	NDOH PDOH Districts		Significant progress made towards ending TB by 2035 through improving prevention and treatment strategies	95% by 2024/25 8 510 deaths 26%

of disease and ill health	communicable diseases by 10%		Premature mortality from Non-communicable diseases reduced by 10%	
Enabling legal framework created for the implementation of NHI Bill	Progressively review and implement the Equitable share model for financing health care; Progressively review and implement Conditional grants of the health sector	NDOH	Equitable share model for financing health care progressively reviewed and implemented Conditional grants of the health sector progressively reviewed and implemented	Equitable share model for financing health care progressively reviewed and implemented Conditional grants of the health sector progressively reviewed and implemented
Roll-out a quality health improvement programme in public health facilities to ensure that they meet the quality standards required for certification and accreditation for NHI;	Certification of public health facilities by OHSC; Expand the Ideal Clinic Programme; Public hospitals obtaining 75% and above on food service quality assessments;	NDOH	100% of PHC facilities and 60% of Hospitals certified by the OHSC; 100% primary health care facilities qualify as Ideal Clinics; 100% Hospitals obtain 75% and above on the food service quality Assessment.	% of public health facilities certified by OHSC; % of PHC facilities that qualify as ideal clinics; % of public hospitals obtaining 75% and above on food service quality assessments;
Develop and implement a comprehensive HRH strategy 2030 and a HRH plan 2020/21-2024/25 to address the human resources requirements, including filling critical vacant posts	HRH Plan for 2020/21 – 2024/25	NDOH PDOH Districts	HRH Plan for 2020/21 – 2024/25 implemented	HRH Plan for 2020/21 – 2024/25 implemented
Expand the primary healthcare system by integrating community Health Workers into the public health system.	Promote community participation to ensure health system responsiveness and effective management of their health needs	NDOH PDOH	100% of PHC facilities with functional Clinic Committees; 100% of all Hospitals with functional Hospital Boards; 100% of households with low Socio Economic status visited by CHWs	% of PHC facilities with functional Clinic Committees % of Hospitals with functional Hospital Boards

				% of households with low Socio Economic status visited by CHWs
Implement the costed infrastructure plan to improve efficiency and effectiveness of health services delivery	Refurbish, repair and maintain public health facilities	NDOH	80% of public health facilities refurbished, repaired and maintained	% of public health facilities refurbished, repaired and maintained

8.1 Priority Environment and Health monitoring Indicators

Environmental health indicators are based on known or plausible cause-and-effect relationships between the **environment** and **health**. The **indicators** provide information for action, and key evidence to help NDOH in decision-making and raise awareness of environmental health risks for improvement of human health. These indicators help support and monitor policy on environment and health at all levels.

EH Indicators are critical for NDOH to;

- Help monitor trends in the *state of the environment*, in order to identify potential risks to health;
- Monitor *trends in health*, resulting from exposures to *environmental risk factors*, in order to guide policy;
- Compare areas in terms of their environmental health status, so as to help *target action* where it is most needed or and *allocate resources* where they are needed most; and
- Monitor and assess the *effects of policies* or other interventions on public health;

In addition, climate change and health adaptation monitoring indicators are monitored annually. These indicators were developed as part of the implementation of the Climate Change and Health Adaptation Plan, and are critical to NDOH to monitor;

- Health system readiness to deal with health impacts of climate change; and
- Climate change related health conditions;

These indicators however do not monitor health sector mitigation to climate change, which will be included during the 2020-2025 reporting period.

EH indicators:

- Child under 5 years' diarrhoea with dehydration incidence;
- Cholera cases reported/notified Child under 5 years' severe acute malnutrition incidence;
- Domestic water compliance rate;
- Malaria cases reported;
- Food bacteriological compliance rate;
- Food chemical compliance rate;
- Hazardous substance dealer's compliance rate;
- Health care risk waste generator compliance rate;
- Notifiable diseases investigation rate (incidence of reported pesticide, mercury, lead, food, diarrhoea);
- Tobacco premises compliance rate;
- International inspection compliance rate; and
- International conveyance compliance rate;

Significant health events – indicators on mortality and burden of Disease

- Life expectancy;
- Maternal mortality ratio;
- Infant mortality rate;
- Child under 5 mortality rate;
- TB deaths;

Table 16: Climate change and health adaptation indicators

Indicator name	Measure	Indicator definition	Purpose to Climate Change	Source of data
Child under 5 years with severe acute malnutrition incidence	Per 1000	Children under 5 years newly diagnosed with severe acute malnutrition per 1,000 children under 5 years in the population	Children are identified as sensitive to climate change impacts (drought, warm/high temperatures, and floods) which can affect safe drinking water, survival/sufficiency of food crops, food prizes, thereby contributing to malnutrition.	DHIS, Integrated Management of Childhood Illnesses (IMCI)
Child under 5 years with diarrhoea with dehydration incidence	Per 1000/%	Children under 5 years newly diagnosed with diarrhoea with dehydration per 1,000 children under 5 years in the population	Monitors prevention of diarrhoea with dehydration (IMCI classification) in children under 5 years diagnosed once only. Follow-up visits for the same episode of diarrhoea are not counted. Low rainfall and high/warm temperature can influence increase of diarrheal cases.	DHIS, IMCI
Cholera cases reported/notified	Count indicator	Number of reported/notified cholera cases in a province	Monitors the incidences of cholera cases to ensure prevention and stability of cases. Salinity, sunlight, and high temperature influences growth of cholera bacteria while rainfall influences its spread.	Surveillance, CDC, NICD
Notifiable diseases investigation rate (incidence of reported pesticide, mercury, lead, food, diarrhoea);	%	Notifiable medical conditions (NMC) reported to the District Health Office that have been investigated by an EHP.	Monitors the number of NMC that have been reported and investigated for case management and tracing purposes. High temperatures may influence high prevalence of animal and crop pest that would lead to the increased usage of pesticides, food poisoning and diarrhoea incidences	DHIS
Malaria cases reported	Count indicator	Number of reported/notified Malaria cases in a province	Monitors the incidences of Malaria cases in a province to ensure prevention and stability of cases. Unusual high rainfall, humidity and warm temperatures influence survival and reproduction of vectors thereby contributing to spread of malaria cases.	DHIS, Malaria, NICD

Indicator name	Measure	Indicator definition	Purpose to Climate Change	Source of data
Yellow fever cases reported/notified	Count indicator	Number of reported/notified Yellow fever cases in a province	Monitors the incidences of Yellow fever cases in a province to ensure prevention and stability of cases. Unusual high rainfall, humidity and high/warm temperature influence the survival and reproduction of vectors thereby contributing to spread yellow fever.	Surveillance, CDC, NICD.
Dengue fever cases reported/notified	Count indicator	Number of reported dengue fever cases in a province	Monitors the incidences of dengue fever cases in a province to ensure prevention and stability of cases. Unusual high rainfall, humidity and high/warm temperature influence survival and reproduction of vectors thereby contributing to spread of Dengue fever.	NICD, Surveillance, CDC
West Nile virus cases reported/notified	Count indicator	Number of reported West Nile virus cases in a province	Monitors the incidences of West Nile virus cases in a province to ensure prevention and stability of cases. Unusual high rainfall, humidity and high/warm temperature influence survival and reproduction of vectors thereby contributing to spread of West Nile virus cases.	NICD/ Surveillance/CDC
Rift Valley Fever cases reported/notified	Count indicator	Number of reported Valley Fever cases in a province	Monitors the incidences of Rift Valley Fever cases in a province to ensure prevention and stability of cases. Unusual high rainfall influence survival and reproduction of vectors thereby contributing to spread of Rift Valley Fever.	NICD, Surveillance, CDC
Emergency Medical Services (EMS) P1 urban response under 15 minutes rate	%	Emergency P1 calls in urban locations with response times under 15 minutes as a proportion of EMS P1 urban calls. Response time is calculated from the time the call	Monitors compliance with the norm for critically ill or injured patients to receive EMS within 15 minutes in urban areas, to ensure an effective EMS service in urban areas when casualties occur as a result of climate event.	EMS, DHIS

Indicator name	Measure	Indicator definition	Purpose to Climate Change	Source of data
		is received to the time of the first dispatched medical resource arrives on scene		
Mental health case load	%	Mental health care patients as a proportion of total PHC head count in the facility	Monitors access to and utilization of mental health services in the PHC facilities to determine availability of mental health services in case of need by affected disadvantage populations in case of extreme climate events.	DHIS, mental health
EMS P1 rural response under 40 minutes rate	%	Emergency P1 calls in rural locations with response times under 40 minutes as a proportion of EMS P1 rural calls	Monitors compliance with the norm for critically ill or injured patients to receive EMS within 40 minutes in rural areas, to ensure an effective EMS service in rural areas when casualties occur as a result of climate event.	EMS, DHIS

Table 17: Environmental health monitoring indicators

Indicator name	Measure	Indicator definition	Purpose to Environmental Health	Source of data
Domestic water compliance rate;	Count indicator	Domestic water samples collected and analysed from water services authorities and non -water services authorities that complies with SANS 241.	Monitors domestic water samples for fitness for human consumption.	DHIS
Surface water safety;	Count indicator	Surface water samples collected and analysed for presence of diseases circulating in the water environment.	Monitors rivers, streams and other surface waters for presence of environmental indicators for health	DHIS
Food bacteriological compliance rate;	%	Food samples collected for bacteriological analysis in accordance to the Foodstuffs, cosmetics and Disinfectants Act 54 of 1972.	Monitors foodstuffs for microbiological variables and fitness for human consumption.	DHIS

Food chemical compliance rate;	%	Food samples collected for chemical analysis in accordance to the Foodstuffs, cosmetics and Disinfectants Act 54 of 1972.	Monitors chemical levels in foodstuffs for fitness for human consumption.	DHIS
Hazardous substance dealer's compliance rate;	%	Hazardous substances dealers inspected that comply with the Hazardous Substances Act 15 of 1973.	Monitors compliance of hazardous substance dealer's premises to legislative requirements.	DHIS
Health care risk waste generator compliance rate;	%	Health care waste generators inspected for compliance to relevant legislation.	Monitors compliance of health care facilities with waste management requirements.	DHIS
International conveyance inspection rate;	%	International consignment arrivals at each point of entry that have been inspected according to the Port Health Standard Operating Procedures.	Monitors inspections of all international consignments entering the country for control of transboundary movement of communicable diseases.	DHIS
International conveyance compliance rate;	%	International conveyances arrivals at each point of entry that have been inspected and complied with the International health Regulations, 2005.	Monitors all international conveyances entering the country for compliance to health regulations for the control of transboundary movement of communicable diseases.	DHIS

Table 18: Burden of disease and mortality indicators

Indicator name	Measure	Indicator definition	Purpose to Health	Source of Information
Maternal Mortality Ratio (MMR)	%	Maternal death is death occurring during pregnancy, childbirth and the puerperium of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of	Measures deaths of women during the period of birth	Reports produced by the National committee of Confidential Enquiry into Maternal deaths (NCCEMD)

		the duration and site of pregnancy and irrespective of the cause of death (obstetric and non-obstetric) per 100,000 live births in facility			
Neonatal (<28 days) Mortality Rate (NMR)	%	Neonates (0-28 days) who died per 1000 live births	Measures deaths of children in the first 28 days of life	Annual Rapid Mortality surveillance report published by MRC	
Infant (<1 year) Mortality Rate (IMR)	%	Children under 1 years who died as a proportion of all live births	Measures death in children under 1 year	Annual Rapid Mortality Surveillance report published by MRC	
Child (<5 years) Mortality Rate (U5MR)	%	The proportion of children who died before the age of 5 years	Measures death in children before the age of 5 years	Annual Rapid Mortality Surveillance report published by MRC	
Number of TB deaths	Count indicator	Total number of deaths due to TB	Measures number of deaths due to TB complications	StatsSA, Causes of Death Reports	

CONCLUSION

The linkages between the status of the environment and human health cannot be underestimated. When hazards exist in the environment and humans are exposed to these hazards, a relationship is established between the exposure level to these hazards and health outcomes of the particular community. Environmental health is therefore a key practice that seeks to protect human health by combating physical, chemical, social and biological threats in the environment. South Africa is in that era as a developing country, which necessitates improved environmental health management approaches and systems.

The success of environmental health is dependent on improved cooperation and collaboration with other government sectors and stakeholders in ensuring improved community health outcomes.

DOHs 4th Edition EMP align with the purpose and objects of the Chapter 3 of NEMA, which aim to:

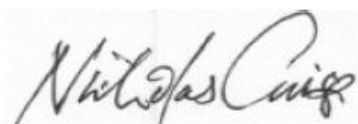
- Give effect to the principles of co-operative governance outlined in Chapter 3 of the Constitution;
- Secure the protection of the environment for sustainable development;
- Monitor the achievement, promotion and protection of a sustainable environment by coordinating and harmonising environmental policies, plans and programmes and decisions by government; and
- Prevent unreasonable actions by provinces in respect of the environment in order to minimise duplication of procedure and functions and to promote consistency in the exercise of functions.

Chapter 3 of NEMA therefore advances the opportunity to strengthen cooperation and collaboration between the DOH and other government departments and spheres particularly on matters in the environment that may impact negatively on human health if not properly managed, through the harmonisation of policies, plans and programmes in relation to the environment and therefore public health.

Therefore, the DOHs 4th Edition EMP outlines existing mechanisms for effective cooperation and collaboration with relevant stakeholders and organs of state on matters that relates to the environment and human health. The DOH through its 4th Edition EMP aim to strengthen these mechanisms and continue to advocate for the consideration of health in all policies, to strengthen compliance monitoring to environmental health legislative prescripts, as well as to improve adherence to procedures and principles of NEMA in the provision of health care services.

The DOH will report on progress made with regards to implementation of its EMP annually in terms of Section 16 (1b), of Chapter 3 of NEMA to the subcommittee for Environmental Implementation Plans/Environmental Management Plan (EIPs/EMPs). Any new priorities, new objectives, change in time-frames and additional commitments, programmes etc will be outlined therein.

The DOH will implement its EMP within existing budget lines and voted funds.



DR N CRISP
ACTING DIRECTOR-GENERAL: HEALTH
DATE: 16/11/2021