



KWAZULU-NATAL PROVINCE

HUMAN SETTLEMENTS
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Policy, Research and Product Development

KZN HUMAN SETTLEMENTS ENVIRONMENTAL POLICY

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DEFINITIONS:

'Department' refers to the KwaZulu-Natal Department of Human Settlements.

'Environmental impact' refers to the degree of change in an environment resulting from the effect of an activity on the environment, whether desirable or undesirable.

'Environmental Impact Assessment (EIA)' is a public process that is used to identify, predict and assess the potential Environmental Impact of a proposed housing development.

'Environmental Impact Report' is a report that describes the process of examining the environmental effects of a development proposal, the expected impacts and the proposed mitigating measures.

'Energy-efficient' used to describe things that use only as much energy as is needed without wasting any.

'Housing Development' a project approved in terms of Volume 2, Chapter 3, Part 3 of the National Housing Code for the servicing of land and construction or provision of housing appropriate for sale/lease to beneficiaries using housing subsidy funds.

'Independent consultant' refers a consultant that is not in the permanent service of the Department whose payment for services rendered is not dependent upon the successful authorisation of the application.

'Interested and Affected Parties (I&APs)' refers to individuals, communities or groups, other than the Developer or his agents or the authorities, who are concerned with a proposed development and its consequences, and whose interests may be positively or negatively affected by the development.

'Monitoring' is the repetitive and continued observation, measurement and evaluation of environmental data to follow changes over a period of time to assess the efficiency of control measures.

'Relevant Authority' refers to the environmental authority on national, provincial or local level entrusted in terms of the Constitution of the Republic of South Africa (Act 108 of 1996) and in terms of the designation of powers in Notice No. R. 1184 of 5 September 1997 under the Environment Conservation Act (Act 73 of 1989) with the responsibility for granting approval to a proposal or allocating resources.

'Rainwater harvesting' is the collection and storage of rain water that runs off from roof tops, parks, roads, open grounds etc. which can be stored in a tank or recharged into the ground water.

'Stakeholders' a subgroup of the public, including the Developer and his agents, authorities and Interested and Affected Parties, who are concerned with a proposed development and its consequences, and whose interests may be positively or negatively affected by the development.

ABBREVIATIONS:

ABT	-	ALTERNATIVE BUILDING TECHNOLOGY
DFFE	-	DEPARTMENT OF FORESTRY, FISHERIES AND ENVIRONMENT
DWS	-	DEPARTMENT OF WATER AND SANITATION
EAP	-	ENVIRONMENTAL ASSESSMENT PRACTITIONER
EIA	-	ENVIRONMENTAL IMPACT ASSESSMENT
EIP	-	ENVIRONMENTAL IMPLEMENTATION PLAN
IA	-	IMPLEMENTING AGENT
KZN	-	KWAZULU-NATAL
MEC	-	MEMBER OF EXECUTIVE COUNCIL
NBR	-	NATIONAL BUILDING REGULATIONS
NDP	-	NATIONAL DEVELOPMENT PLAN
NEMA	-	NATIONAL ENVIRONMENTAL MANAGEMENT ACT
NHBRC	-	NATIONAL HOME BUILDERS REGISTRATION COUNCIL
NWMS	-	NATIONAL WASTE MANAGEMENT STRATEGY
RWH	-	RAINWATER HARVESTING
SABS	-	SOUTH AFRICAN BUREAU OF STANDARDS
SANS	-	SOUTH AFRICAN NATIONAL STANDARDS

1. INTRODUCTION

The development of human settlements is a land use process that has significant impacts on the environment. These impacts range from the disturbance and fragmentation of ecosystems, high demand for natural resources and energy, air and water pollution, contamination of water ecosystems, demands for transport, which leads to carbon emission, as well as many other environmental impacts associated with human settlements development. For this reason, compliance with environmental regulations, norms and standards applicable to human settlements is pertinent.

Over and above compliance with regulations, the development of environmentally sound human settlements that is characterised by good air quality, energy and water efficient homes, greening and even food security is imperative. These may be seen as healthy, sustainable settlements which provide quality living environments. The promotion of settlements with these attributes would bring social, economic and environmental benefits on an international, national, provincial and local level.

Although a wide range of policies, strategies, programmes and plans to address housing challenges exists, thus far not much has been done to encourage any consideration of environmentally sound practices that enforce existing regulations and also take the impacts of climate change on human settlements into consideration. The National housing programmes address the housing backlog and demand through various subsidy schemes. Through these, hundreds of low-income houses are being built every day, but most of these are built without any consideration of environmentally sound principles. If these interventions are taken into account at the inception phase of each project, it would ensure that environmental obligations are met. It is also important that environmental factors are considered during all stages of the housing project process as well as all public administration operations.

The policy provides an overview of the legal framework that should be considered by all interested and affected parties as well as key environmental considerations that should be taken into account when planning, designing, constructing and handing over housing projects.

2. PURPOSE

The main purpose of the policy is to enable the Department to:

- a) Measure and manage its impact on the environment in all operations and services that facilitate the delivery of public housing;
- b) Encourage compliance with relevant environmental legislation and regulations;
- c) Encourage the development of environmentally sound housing to provide an improved quality of life.

3. POLICY PRINCIPLES

The KZN Department of Human Settlements is committed to continuously improving the environmental standards in the provision of public housing and related services. In achieving this objective, the Department has adopted the following environmental principles:

- a) To promote healthy living and a green environment;
- b) To strictly comply with and fully implement all relevant environmental legislation and regulations;
- c) To address environmental concerns and incorporate environmental initiatives in planning and design, construction and demolition;
- d) To minimise environmental impacts from our operations (air, dust, noise, waste and water) on residents and the public;
- e) To review procurement policies to minimise the use of resources and achieve cost effectiveness;
- f) To promote environmental awareness and participation among staff, residents and contractors through consumer education programmes; and

- g) To develop and seek continual improvement on the implementation of an environmental implementation plan.

4. APPLICATION OF THE POLICY

The policy shall apply in the following instances:

- a) To all Departmental officials, municipalities, developers and contractors/service providers.
- b) To all stages (1, 2 & 3) of the housing project process.
- c) The implementation of all housing programmes within the National Housing Code of 2009.
- d) To all housing administration operations where environmental considerations may be incorporated.
- e) To all planning and construction of Greenfield developments and the demolition, rectification and retrofitting of existing developments.

5. LEGISLATIVE FRAMEWORK

The following provides a summary of the important pieces of national legislation that are generally applicable to new housing developments, and which constitute the minimum legislative requirements to which a housing project must comply.

5.1 THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998)

The National Environmental Management Act (Act 107 of 1998) aims to give effect to the environmental right contained in the Constitution by providing framework legislation for environmental management in South Africa. It sets out the principles for environmental management in South Africa, and is administered by the Department of Forestry, Fisheries and Environment (DFFE). The principles contained in Chapter 1 of this Act apply to all organs of state that may significantly affect the environment and shall inter alia serve as guidelines by reference to which organs of state shall exercise their functions. Government is specifically required to comply with the principles. The principles will furthermore guide the interpretation, administration and implementation of this Act. An overarching principle in Chapter 1 emphasises that development must be environmentally, socially and economically sustainable.

Chapter 5 of National Environmental Management Act (Act 107 of 1998) deals with integrated environmental management and section 24 provides for the formulation of new Environmental Impact Assessment requirements for identified activities. The Act introduces a new benchmark in that it provides for the “best practicable environmental option” i.e. the option that provides for the most benefit and causes the least damage to the environment as a whole as one of the benchmarks for integrated environmental management.

5.2 ENVIRONMENT CONSERVATION ACT (ACT 73 OF 1989)

Housing developments in South Africa are classified as a listed activity in terms of section 21, 22 and 26 of the Environment Conservation Act, 1989. Compliance with the relevant sections of this act and other relevant legal requirements is therefore mandatory for all housing developments. The legally prescribed process for Environmental Impact Management should therefore be followed for all new housing development projects.

- a) Waste must be disposed of at a waste disposal facility licensed in terms of the provisions of the Act. Any hazardous waste such as paints, varnishes, waste oils etc accumulated at the construction sites must be disposed of at hazardous waste sites. If waste dumps are established

for housing developments, a waste disposal licence will be required from the Department of Water Affairs and Forestry.

- b) The Minister has made regulations under the Environment Conservation Act with regard to the control of noise, vibration and shock. These regulations define noise, vibration and shock and make provision for the prevention, reduction or elimination of them. In terms of the National Noise Regulations to the Environment Conservation Act (Act 73 of 1989), a "noise nuisance" is a noise that disturbs or impairs the peace or convenience of any person. Noise from a construction site which may unreasonably disturb or interfere with the amenity of the neighbourhood, unless authorised to do so by the local authority.

5.3 THE NATIONAL HOUSING CODE (2009)

Volume 2, Chapter 3 of Part 3 of the National Housing Code requires that:

an environmental impact assessment will be conducted on all land offered for development in response to a land availability call from a municipality. It may be conducted in one or two stages, and the first stage report will be compiled as a minimum requirement. The two stages are:

- a) *A pre-feasibility scan of identified risks and potential flaws, commissioned by an applicant.*
- b) *Detailed environmental studies, commissioned by a developer, which could comprise detailed scoping, including mini-risk, or comprehensive environmental impact assessment.*

5.4 THE NATIONAL WATER ACT (ACT 36 OF 1998)

It is advised that the Department of Water Affairs and Forestry be consulted as to their licensing requirements for each development. A Water Use License Application (WULA) must be submitted where extraction of water is required as well as a development that is a certain distance from a water body (streams, wetlands and perennial water courses) which may be negatively affected by the development project. Licences are not required where water is obtained from the district municipality or another bulk water supplier.

A person is prohibited from establishing a township unless the layout plan shows, in a form acceptable to the local authority, the 1/100 year flood level, for the purposes of ensuring that all persons who might be affected have access to information regarding potential flood hazards.

5.5 NATIONAL BUILDING REGULATIONS AND BUILDING STANDARDS ACT (ACT 103 OF 1977)

The National Building Regulations and Building Standards Act 103 of 1977 sets out the requirements for the installation of water, electricity and any housing product used in the provision of homes for housing consumers. If necessary, an application to the local authority has to be made and granted, and conditions attached to such authorisation must be complied with.

In terms of environmental compliance, the Act makes provisions for:

- a) The control and disposal of accumulated storm water which may run-off from any earthworks, buildings, paving and establish minimum requirements for storm water facilities.
- b) Precautions in the working area and on surrounding roads and footways to limit to a reasonable level the amount of dust arising from the construction of housing developments.

5.6 NATIONAL FOREST ACT (ACT 84 OF 1998)

Housing developments in some cases require the clearance of land parcels which may be home to indigenous plants. In terms of the National Forest Act 84 of 1998, there is a prohibition against damaging

or cutting protected indigenous trees unless a licence has been obtained or an exemption has been published in the Government Gazette. Therefore, for all housing developments that require vegetation clearance, the applicable license must be obtained.

6. KZNDHS COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

6.1 Volume 2, Chapter 3 Part 3 of the National Housing Code in line with the National Environmental Management Act No. 107 of 1998 requires that:

“An environmental impact assessment (EIA) be conducted on all land offered for development in response to a land availability call from a municipality. It may be conducted in one or two stages, and the first stage report will be compiled as a minimum requirement. The second stage will be conducted to the extent directed in the report in the first stage.” The two stages are detailed below and illustrated in **Annexure A**:

- a) A pre-feasibility scan of identified risks and potential flaws, commissioned by an applicant who in this case refers to KZNDHS.
- b) Detailed environmental studies, commissioned by a developer, which could comprise detailed scoping, including mini-risk, or comprehensive environmental impact assessment.

6.2 It is mandatory that a feasibility study is undertaken in stage 1 of the housing project process as illustrated in **Annexure B** to determine the level of EIA required.

6.3 The planner responsible for a project must ensure that all necessary environmental requirements are taken into account during the feasibility study as per the National Environmental Management Act No. 107 of 1998.

6.4 The application for an EIA submitted by the Department or on behalf of the Department by the Implementing Agent (IA) must be in accordance with the EIA regulations. The IA must appoint an Environmental Assessment Practitioner (EAP) to manage the application. The EIA regulations require that an EAP must:

- i. Be independent
- ii. have expertise in conducting EIAs including knowledge of the relevant law
- iii. perform the work objectively
- iv. comply with the relevant law
- v. take into account all the matters required by NEMA in compiling the report; and
- vi. disclose all material information that may influence the decision on the application or that may influence the objectivity of the report.

6.5 Once the environmental report has been compiled by the EAP, a compulsory consultation session shall take place between the planner together with relevant officials from the Department of Economic Development, Tourism and Environmental Affairs (EDTEA).

6.6 Recommendations made in the EIA report may necessitate the redesign of some project components, require further studies, suggest changes which alter the economic viability of the project or cause a delay in project implementation.

6.7 Project monitors and construction managers shall be involved in the audit process to determine whether recommendations and requirements made by earlier EIA steps were incorporated successfully into the project implementation. Lessons learnt in an audit can greatly assist in future EIAs and build up the expertise and efficiency of the concerned institutions.

7. ENVIRONMENTAL GUIDELINE FOR SUSTAINABLE HUMAN SETTLEMENTS IN TERMS OF THE HOUSING PROJECT PROCESS

When planning, designing and constructing housing projects, consideration must be given to the development of environmentally sound housing. The cost constraints imposed by the subsidy quantum make it difficult to meet this requirement. However, there are several principles that, if followed, will enhance the environmental aspects of a development at minimal cost. The following guide detailed hereto shall apply to all stages within the housing project process and shall also be applied to existing developments where a retrofit may be required.

7.1 PLANNING & DESIGN STAGE

7.1.1 During the planning stage of a project, proper **site selection** and planning must be considered taking the following environmental factors into account:

- a) Local climatic conditions such as rainfall patterns and prevailing winds should be considered when planning a housing development.
- b) When identifying possible site locations, criteria such as elevation, slope, aspect (the direction the site faces), distance from roads and towns, proximity to natural resources, distance from rivers and other water supplies, risk to environmentally unique locations (e.g., parks or reserves), and distance from industrial or mining sites must be applied and considered.
- c) The actual layout of the site should be designed by matching the physical layout of the site with the infrastructure to be constructed.
- d) Plans should be developed for the use of natural resources (materials) within or near the site as the site is developed.
- e) Long-term environmental risks as a result of climate change must be identified for all sites.
- f) Site planning needs to be sensitive to the principles of both energy and water-efficiency.

7.1.2 To develop environmentally sound housing, the following **energy-efficiency** principles must be applied during the planning stage of the project:

- a) The orientation of houses should be an integral part of planning and design.
- b) Energy efficient technology and materials may be used to influence energy efficiency in housing developments.
- c) The planning, location and orientation of the housing must be maximised to influence energy efficiency and to maximise climatic forces.
- d) Housing units should be designed so that the smallest wall area is exposed to the outside and the units should be as close to a square shape as possible.
- e) Windows and doors should be placed in the north side of the house to ensure that sunlight enters the house and warms the floor.
- f) A roof overhang must be built on the northern side of the house to shade the windows in summer.
- g) Living spaces should be arranged so that the rooms where people spend most of their hours are located on the northern side of the unit.
- h) Energy-efficient lighting must be installed in all new housing projects.

7.1.3 During the planning and design stage, sustainable **water management** practices must be incorporated:

- a) All plumbing layout and design in low-cost housing should be determined in conjunction with the design of the structure.
- b) Water pressure must be reduced to an optimal level according to the specifications for the devices used in the plumbing system.

- c) Consideration should be given to the use of secondary water sources such as greywater or rainwater when designing any new water installation. The specifications set out in the KZNDHS rainwater harvesting policy directive must be applied.
- d) Consideration must be given to the use of a low-volume or dual flush toilet system.
- e) A low flow tap fitted with a ventilator / flow controller or spray nozzle must be chosen.
- f) Low flow rate shower heads should be specified for all new installations.

7.1.4 **Greening** of Human Settlements projects

During the planning stage of a housing development, the creation of green open spaces must be considered within a close proximity of the housing development.

The Department must establish partnerships with key stakeholders to facilitate and implement the following greening initiatives:

- a) Inclusion of plants and trees in walkways and open spaces within a development.
- b) A gardening initiative to enable beneficiaries to engage in farming activities.
- c) The installation of solar geysers and solar panels to power the development.
- d) The installation of smart meters and other energy saving components.

7.1.5 Use of **Alternative Building Technologies (ABTs)** in Human Settlements projects

The Department must implement appropriate and feasible ABTs in line with the provincial ABT guidelines that must meet specific sustainability criteria and contain all the relevant certifications.

7.2 CONSTRUCTION STAGE

7.2.1 The environmental considerations for green building practices as extensively stipulated in the National Housing Code of 2009 must be applied during the construction of “Environmentally Sound Housing”.

7.2.2 The National Development Plan (NDP) of 2030 further provides clear direction for a more environmentally sustainable future through specifying actions to be implemented to reduce impacts of housing construction on the environment which must be applied in all housing construction.

7.2.3 The environmental performance of appointed contractors must be monitored to ensure compliance with environmental requirements. This will enable the Department to be in a better position to adequately control the identified risks and impacts of a project or activity.

7.2.4 In addition to the Environmental Regulations for Workplaces (1987) the Department must ensure that in accordance with the Construction regulations (2014) contractors must ensure that suitable housekeeping is continuously implemented on each construction site, including:

- a) The proper storage of materials and equipment;
- b) The removal of scrap, waste and debris at appropriate intervals;
- c) Ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
- d) Ensuring that materials which are no longer required for use, do not accumulate on and are removed from the site at appropriate intervals.

7.2.5 Contractors must be advised to monitor their own environmental performance on a daily basis and that of all its subcontractors throughout mobilization, the main construction phase, operation, and demobilization.

- 7.2.6 Contractors must be advised to ensure that embodied resources, such as the energy or water used to produce and transport the materials in the building are minimised so that buildings are truly low impact.
- 7.2.7 Contractors must be advised to make use of locally-sourced materials. This is meant to reduce the carbon footprint, and creates a far more efficient construction process.
- 7.2.8 Every contractor must develop and submit a waste management plan (WMP) to the Department which details the waste disposal measures to be undertaken in accordance with the National Waste Management Strategy (NWMS). The objective of this is to avoid high disposal costs, reduce the amount of material consumption, and to reuse and recycle as much of the discarded material as possible. Implementing a waste management strategy will reduce these project costs in the short term and ultimately the environmental costs in the long term.
- 7.2.9 Contractors must be advised to make subcontractors responsible for their own waste which must be in accordance with the NWMS.
- 7.2.10 The National Building Regulations; Environmental Sustainability (SANS 10400X) must be applied in cases where retrofitting is required.
- 7.2.11 There must be continuous auditing and alignment of appropriate environmental policies, plans and programs with the strategic objectives of the Department.
- 7.2.12 The appointed project environmental officer must ensure that the environmental audit reports are submitted to the Department of Forestry, Fisheries and Environmental Affairs and a copy must be submitted to the Department's Integrated Planning Directorate.

7.3 HANDOVER TO BENEFICIARIES STAGE

- 7.3.1 As part of the compulsory Consumer Education Programme, beneficiaries must be educated about sustainable living and environmental responsibilities as detailed below:
 - a) Beneficiaries must be made aware of general household reuse and recycling principles and must be encouraged to do so.
 - b) Information on general household energy efficiency and water management practices must be shared with beneficiaries.
 - c) Sustainable consumer behaviour and attitude must be encouraged.
 - d) Pamphlets with environmental information must be shared with beneficiaries to guide them in leading environmentally friendly and sustainable lifestyles.

8. ORGANIZATIONAL ENVIRONMENTAL POLICY CONSIDERATIONS

This section details environmental requirements that should be practiced in the Departments office environment which involves all public administration operations.

8.1 ENERGY USAGE

It is mandatory for all employees to adhere to the following energy minimization requirements in the office environment:

- a) During periods of inactivity, employees must ensure that all office lighting and equipment are switched off. Line managers must regularly monitor and enforce staff compliance.
- b) All employees must ensure that the power saving mode on their computer systems are enabled. The IT Department must provide support in this regard.
- c) The usage of air-conditioning systems must be limited to warm weather conditions and must be used upon request of staff.

8.2 RECYCLE

Paper is one of the main sources of waste generated through public administration operations. The Department may establish an office recycling initiative which may be co-ordinated in the following manner:

- a) The appointed cleaning service provider be responsible for separating paper waste collected from each office or the Department installs paper recycling bins on every floor of the building and encourages employees to recycle paper.
- b) The appointed cleaning service provider make arrangements for a recycling company to collect waste paper from the Departments offices. The recycling company chosen must be within a 5km radius of the Departments offices.

8.3 RESPONSIBLE TRAVELLING

Travelling for meetings negatively impacts the environment as well as increases costs incurred by the Department. The following must be considered to reduce Departmental travel:

- a) Travel policies must be amended to give consideration to the environmental impacts of travel which all employees must adhere to.
- a) Employees must request external parties to host virtual meetings where necessary to avoid unnecessary travel.
- b) Vehicles must be properly serviced and maintained to ensure that exhaust emissions are reduced.
- c) The Department must consider purchasing diesel vehicles which emits less carbon-dioxide than gasoline cars.
- d) Travel may only be applied for and granted in instances where virtual meetings are not applicable. Sufficient motivation must be provided by the employee. However, contractual obligations and tax implications must be considered in this regard.

8.4 GREEN PROCUREMENT

Green procurement involves the purchasing of environmentally friendly products and services, the selection of contractors that make environmental commitments and the setting of environmental requirements in a contract. Green procurement policies and programs can reduce expenditure and waste; increase resource efficiency; reduce environmental impacts and improve the public image of the Department. To facilitate the procurement of green goods and services, the Department must consider the following:

- a) Implementing a green procurement programme by reviewing and assessing current purchasing practices and policies and identifying areas in the supply chain where green procurement can be applied.
- b) Suppliers need to be advised of and included in the establishment of a green procurement program.
- c) All officials involved in the procurement process must be trained on how to implement a green procurement programme.
- d) It is important that suppliers be asked to provide the environmental specifications of the products they are offering to allow the Department to select appropriately.
- e) The provincial and municipal supplier database could be extended to include environmental information.
- f) There must be clear communication about the procurement of green goods and services in tender documents.

8.5 EDUCATION AND TRAINING

The Department must undertake the following to improve the understanding of environmental issues and enforce compliance:

- a) The code of conduct must be revised to enforce employee compliance with environmental rules in the workplace.
- b) Induction manuals must be revised to include environmental considerations to ensure that all new employees are made aware from the onset.
- c) Online training programmes must be made available to equip officials with the necessary skills to implement the objectives set out in the environmental policy and/or to adhere to the rules.

8.6 AWARENESS AND COMMUNICATION

Changes to existing policies and operations to account for environmental factors must be clearly communicated to all interested and affected parties:

- a) Mandatory awareness sessions must be hosted to make all employees aware of the Departments environmental commitments and to encourage support. Awareness sessions are to include other stakeholders from sector departments.
- b) Contractors and suppliers must be given a copy of the environmental policy and must be willing to sign a form acknowledging that they have received the information and will be in compliance with the relevant environmental legislation and regulations as set out in NEMA.
- c) Regular internal communication must be undertaken to facilitate information sharing. This can be achieved by circulating emails, uploading information on the intranet and developing posters that may be put up in lifts and foyers of all Department offices.

9. GENERAL ENVIRONMENTAL CONSIDERATIONS

9.1 The Department shall continue undertaking research on environmental related topics that will be beneficial to improve the environmental performance of the Department.

9.2 The development of policies, frameworks, guidelines and implementation plans shall be considered to provide a structured process to implement and comply with environmental requirements.

9.3 The Department shall engage with various stakeholders and role players and enter into partnerships if necessary to obtain funding to undertake green initiatives and environmental projects.

9.4 The Department shall implement this policy in accordance with the following documents:

- a) National Housing Code, 2009 Volume 2 Part 3.
- b) National Housing Department Environmental Services for Housing Developments Guideline.
- c) Department of Public Works Green Building Guideline.
- d) EDTEA Climate Change Policy.
- e) CSIR Red Book on Sustainable Human Settlements Planning and Development.

10. ROLES & RESPONSIBILITIES

To ensure that the objectives of the environmental policy are met, a concerted effort from the following KZN Human Settlement stakeholders is required with the following key responsibilities outlined below.

In addition, the Department has submitted a Climate Change Implementation Plan to the Department of Economic Development, Tourism and Environmental Affairs (**Annexure C**) that will require a concerted effort to ensure that the environmental obligations set out in the plan are met.

10.1 POLICY, RESEARCH & PRODUCT DEVELOPMENT

The Policy, Research and Product Development Directorate will be responsible for the following:

- a) Developing an Environmental Implementation Plan (EIP).
- b) Undertaking research related to environmental topics on a continuous basis.

- c) Developing policies and guidelines to guide the implementation of environmental initiatives outlined by the Department.
- d) Reviewing the environmental policy and other related policy guidelines/plans as and when required.
- e) Hosting a minimum of two (2) Alternative Building Technology (ABT) sessions per annum to keep updated on new market trends and products that may be considered to assist the Department in achieving sustainability goals.
- f) To represent the Department in meetings, workshops and forums and provide reports.
- g) To assist other components in making provisions for environmental considerations within their existing policy and practices.

10.2 INTEGRATED PLANNING

The Integrated Planning Directorate is an important role player in the implementation of the policy and will be responsible for the following:

- a) Oversee environmental approval, authorization processes and applications for human settlement, bulk infrastructure and other municipal development projects.
- b) Ensuring that the EIA is compiled in accordance with NEMA.
- c) Reviewing the outcome of the EIA report and consulting key stakeholders.
- d) Enforcing recommendations made in the EIA report.
- e) Ensuring that environmentally sustainable measures are considered and included during the planning and designing phases of a project.

10.3 PROJECT MANAGEMENT

Project managers, monitors and construction managers within the Project Management Chief Directorate will be responsible for the following:

- a) Project and construction managers must outline the Departments environmental management expectations to the contractor.
- b) The Department must ensure that contractors implement appropriate environmental policies, plans and programs with the strategic objectives of the Department.
- c) Monitoring all activities on a development site and ensuring that all contractors together with any sub-contractor comply with the requirements of the conditions as stipulated in any environmental authorisation.
- d) Inspecting the construction site and surrounding areas regularly with regards to addressing issues of concern that may have a negative impact on the environment.

10.4 MUNICIPAL SUPPORT AND CONSUMER EDUCATION

The Municipal Support and Consumer Education Directorate will be responsible for awareness and educational programs on environmental management approaches to municipalities and communities including traditional leaders.

10.5 SUPPLY CHAIN MANAGEMENT

The Supply Chain Management Directorate will be responsible for the following:

- a) Evaluate current materials used by the Department and the processes and consider alternatives for an eco-friendly supply chain.
- b) Develop a green procurement programme that will stipulate environmental criteria to be met by suppliers.
- c) Stipulate the environmental compliance requirements of suppliers and service providers in tender application documents and advertisements.
- d) Update supplier databases to include suppliers that have green star ratings.

10.6 HUMAN RESOURCES

The Human Resources Directorate will be responsible for ensuring employee compliance with environmental rules stipulated in the Code of Conduct once revised and be responsible for providing training for relevant officials who are required to implement the environmental policy.

10.7 ALL EMPLOYEES/STAFF

All employees will be responsible for complying with the requirements set out in this policy and show commitment in assisting the Department to achieve the stipulated environmental objectives and principles.

11. EFFECTIVE DATE

The effective date of this policy will be the date of signature by the Honorable MEC.

12. MONITORING & EVALUATION

The Policy, Research and Product Development Directorate will undertake policy reviews after every three (3) years and/or when the need arises to evaluate the effectiveness of the policy and to ensure that the policy is updated with the most recent information necessary for compliance and implementation.

13. IMPLEMENTATION

An Environmental Implementation Plan (EIP) will be developed in line with the National Department of Human Settlements EIP guideline to:

- a) Facilitate the implementation of the environmental requirements outlined in this policy in line with MTSF targets.
- b) Encourage and promote consistency on reporting of environmental actions and plans by the Department as listed in schedules 1 or 2 of the NEMA.
- c) Provide detailed guidelines with respect to the implementation of the environmental considerations outlined in this policy.

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