

UGANDA WILDLIFE AUTHORITY



OPERATIONAL GUIDELINES FOR OIL AND GAS EXPLORATION AND PRODUCTION IN WILDLIFE PROTECTED AREAS

January 2014

Foreword

The Albertine Graben is known for its richness in flora and fauna. It consists a number of protected areas and some of these are of national and international importance including the Ramsar sites, the World Heritage sites and Biosphere reserves. The Abertine Graben is also important for tourism which is the leading foreign exchange earner for the country.

In the recent past government has intensified the oil and gas exploration in the Albertine Graben and a number of discoveries have been made. Some of the oil deposits have been discovered in the wildlife protected areas. Oil and gas exploration and production is likely to result in negative environmental impacts which may be detrimental to the existence of protected areas. If oil/gas and conservation are to co-exist, a number of tools need to be put in place to minimise the impacts associated with oil and gas operations. It is against this background that Uganda Wildlife Authority has prepared the guidelines for oil and gas operations within the protected areas.

The guidelines are intended to act as a guiding tool to oil companies working within the protected areas to minimise impacts from their activities. The guidelines tackle a number of operational aspects that UWA requires companies to observe and comply to, for smooth implementation of the oil and gas activities within the protected areas. In addition the guidelines give guidance to oil companies on how best to operate within the protected areas in order to minimise the negative impacts to the environment in general and the wildlife in particular.

These guidelines have been prepared with the full participation of all relevant stakeholders including the oil companies. This therefore makes them easy to implement since they were agreed upon by all the actors.

UWA believes that when used appropriately by all relevant stakeholders, these guidelines will go a long way in ensuring that the protected areas remain functional as oil and gas is exploited for the benefit of all citizens.

Dr. Andrew Seguya
EXECUTIVE DIRECTOR
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APPROVAL

The Uganda Wildlife Authority Board of Trustees approved these oil and gas guidelines for implementation at its sitting of

Chairman, Board of Trustees
Uganda Wildlife Authority

Executive Director
Uganda Wildlife Authority

ACCENT TO THE GUIDELINES

The oil companies will accent to the guidelines to show commitment to addressing environmental issues within PAs.

Acronyms

CSR	Corporate Social Responsibility
EIA	Environmental Impact Assessment
NDP	National Development Plan
NEMA	National Environment Management Authority
PA	Protected Area
PEPD	Petroleum Exploration and Production Department
SEA	Strategic Environmental Assessment
UWA	Uganda Wildlife Authority

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DEFINITION OF TERMS

“Company” shall mean Oil Company operating within wildlife protected areas

“Sub-contractors” shall mean individuals, or companies that are hired by the Company to provide goods, services and works related to oil and gas activities

“Authority” shall mean Uganda Wildlife Authority

“Executive Director” shall mean the Chief Executive Officer of Uganda Wildlife Authority

“The Act” shall mean The Uganda Wildlife Act Cap 200 of the laws of Uganda 2000

“Wildlife Protected Areas” shall mean any national park, wildlife reserve, community wildlife area or wildlife sanctuary as defined in the Uganda Wildlife Act.

1 INTRODUCTION

Uganda has discovered petroleum deposits in commercially viable quantities. Most areas where petroleum has been discovered overlap with wildlife and nature conservation areas with high biodiversity and sensitive ecosystems. Negative impacts on the ecology and integrity of protected areas including tourism have already been registered. These range from destruction of biodiversity and associated ecological processes to intrusive infrastructure that obstruct the pristine nature of the protected areas. This therefore requires that petroleum developments in these areas are carried out with minimal impacts to preserve the integrity of these areas including sensitive ecosystems, breeding areas, animal corridors among other environmentally and socio-economically vulnerable places.

These guidelines have been developed to complement the Albertine Graben Sensitivity Atlas, the Strategic Environment Assessment (SEA) tool, approved Environmental Impact Assessments (EIAs), various regulations and policies relevant to petroleum developments in order to ensure minimal negative impacts on the environment. Where necessary, specific Memoranda of Understanding shall be developed between the Oil Company and the Authority to compliment these guidelines and further detail implementation mechanisms.

2 REGULATORY FRAMEWORK

These operational guidelines are made in cognition of the legal provisions and mandate as enshrined in national laws, policies as well as in the international conventions to which Uganda is party. The guidelines are therefore formulated to operationalize the provisions of these laws and policies and guide the day to day activities of oil companies within wildlife PAs. This will ensure that oil and gas activities in Uganda's PAs do not negatively impact on their integrity, intrinsic values and purpose for which they were gazetted. Relevant provisions within the following laws, policies and conventions are cited below to give a legal basis of these guidelines.

2.1 The Constitution of the Republic of Uganda 1995.

The overall government policy on natural resource conservation in Uganda is enshrined in the Constitution of the Republic of Uganda 1995. The principles are spelt out in the National Objectives and Directive Principles of State Policy. The purpose of the objectives is to provide a legal foundation upon which future policies and juridical interpretation of the substantive constitutional provisions must be based. The relevant constitutional provisions in the National Objectives and Directive Principles of State Policy include the following:

- (a) Principles of State Policy XXVII (iv) (a) mandates the State (both central and local government) to create and develop parks, reserves and recreational

- areas, and to ensure conservation and (b) promote the rational use of natural resources so as to safeguard and protect the bio diversity of Uganda;
- (b) Article 237 (2) (b) of the Constitution provides that the Government or local government, as determined by Parliament by law, shall hold in trust for the people and protect, natural lakes, rivers, wetlands, forest reserves, game reserves, national parks and any land, to be reserved for ecological and touristic purposes for the common good of all citizens;
 - (c) Under Article 245, the Constitution further provides that the utilization of natural resources of Uganda shall be undertaken in such a way as to meet the development and environmental needs of present and future generations of Ugandans and, in particular, the State shall take all possible measures to prevent or minimize damage and destruction to land, air and water resources resulting from pollution and other causes.

2.2 National Policies

2.2.1 Uganda Wildlife Policy, 1999

The overall aim of the Uganda Wildlife Policy 1999 is to promote the long term conservation of the country's wildlife and biodiversity in a cost effective manner which maximizes the benefits to the people of Uganda. The policy aims at achieving this through promoting conservation and sustainable utilisation of wildlife throughout Uganda.

2.2.2 National Environment Management Policy, 1994

The policy promotes sustainable economic and social development that enhances environmental quality without compromising the ability of the future generations to meet their needs. The policy states that an environmental assessment should be conducted for any project that is likely to have adverse impacts on the socio-cultural, physical and biological environment.

2.2.3 National Oil and Gas Policy 2008

The oil and gas activities are guided by the national oil and gas policy which was approved in 2008. Objective 9 of this policy provides for ensuring that oil and gas activities are undertaken in a manner that conserves the environment and biodiversity. as such, one of the strategies to achieve this objective is to ensure availability of the necessary institutional and regulatory framework to address environment and biodiversity issues relevant to oil and gas activities. Under the policy, uwa is charged with monitoring compliance of oil and gas activities to regulations governing operations in wildlife protected areas and monitor the impacts of oil and gas activities on wildlife protected areas, among others.

2.2.4 National Land-use Policy

Although the National Land Policy does not make any specific provision for oil and gas exploration and production, it recognises the need to ensure deliberate actions are

taken to restore the environment and minimize the health risks from mining, quarrying and excavation activities.

2.3 NATIONAL LAWS

2.3.1 The Uganda Wildlife Act Cap 200 of 2000

The Uganda Wildlife Act cap 200 of the laws of Uganda 2000, was enacted by an Act of Parliament to provide for sustainable management of wildlife; to consolidate the law relating to wildlife management; to establish a coordinating, monitoring and supervisory body for that purpose and for other matters incidental to or connected with wildlife management. The law covers all wildlife protected areas and wildlife outside PAs.

Under the Act (section 5), UWA has the legal mandate to conserve and manage wildlife in the country and enforce wildlife laws and regulations. The Act specifically mandates UWA to control and monitor industrial and mining developments in wildlife protected areas

2.3.2 The National Environment Act, Cap. 150 of 2000

The National Environment Act is the framework piece of legislation in the field of environmental management in Uganda. This Act lays down the principles of environmental management which include; the right to a healthy environment, public participation, sustainable use of the environment, reclamation of lost or degraded ecosystems, undertaking of environmental assessment of proposed projects that may impact the environment significantly. To this effect the law requires that environmental impact assessments be conducted for all projects in natural conservation areas as one of the tools for ensuring sustainable environment management. Under the 3rd schedule of this Act, petroleum developments are listed as projects that require mandatory EIA to be conducted before implementation.

2.3.3 Occupational Health and Safety Act, 2006

Section 13(1) (a) of the Act states that “it is the responsibility of an employer to take as far as is reasonably practical, all measures for protection of his or her workers and the general public from the dangerous aspects of the employer’s undertaking at his or her own cost.” It further stipulates (Section 13(1) (b) that it is the responsibility of the employer “to ensure, as far as is reasonably practicable, that the working environment is kept free from any hazard due to pollution by employing technical measures applied to new plan or process in design or installation or added to existing plant or processes; or employing supplementary organisational measures.

2.3.4 National Forestry and Tree Planting Act, 2003

Section 38 of the National Forestry and Tree Planting Act requires any person intending to undertake a project or any activity which may, or is likely to have a significant impact on a forest shall undertake an environmental impact assessment.

2.3.5 The Land Act, 1995

Section 43 provides for management and utilisation of land in accordance with the Uganda Wildlife Act and other laws. Section 44 (i) mandates the government or local governments to hold in trust for the people and protect national parks, wetlands, forest reserves among others for ecological and touristic purposes for the common good of the citizens of Uganda

2.3.6 The Petroleum (Exploration and Production) Act, 1995

Under this Act, it is the duty of the company to carry out exploration operations in a proper, safe and in accordance with good oil field practices and to take reasonable steps necessary to secure the safety, health and prevent pollution or any other waste products or effluence that may occur; and where pollution occurs, the company should treat or disperse it in an environmentally acceptable manner

2.4 Relevant International Laws and Conventions

2.4.1 Convention on Biological Diversity, 1992

Under the convention, each contracting party is expected to develop national strategies, plans or programs for the conservation and sustainable use of Biological diversity.

2.4.2 Convention on Conservation of Migratory Species of Wild Animals (CMS), 1979

The convention on migratory species recognises that states must protect migratory species that live within or pass through their jurisdictional boundaries. Some of the Protected Areas within the oil graben are transitory homes of migratory species.

2.4.3 The Convention on Wetlands of International Importance, called the Ramsar Convention, 1971

The Convention on Wetlands (Ramsar, Iran, 1971) is an intergovernmental treaty that embodies the commitments of its member countries to maintain the ecological character of their Wetlands of International Importance and to plan for the "wise use", or sustainable use, of all of the wetlands in their territories. Under the Convention, contracting parties commit themselves to:

Work towards the wise use of all their wetlands through national land-use planning, appropriate policies and legislation, management actions, and public education;

Designate suitable wetlands for the List of Wetlands of International Importance ("Ramsar List") and ensure their effective management; and

Cooperate internationally concerning transboundary wetlands, shared wetland systems, shared species, and development projects that may affect wetlands

3 Institutional Framework

The National Oil and Gas Policy, 2008 stipulates roles of different institutions in regulating, supervising, coordinating and monitoring oil and gas activities in Uganda. UWA will work with these institutions in ensuring the guidelines are adhered to by the companies.

4 Purpose and objectives of the guidelines

4.1 Purpose

The purpose of the guidelines is to ensure that the oil and gas activities do not negatively impact on the integrity of the PAs

4.2 Objectives

The objectives of these guidelines are to:

- i. To minimize long and short - term negative impacts of oil and gas developments on the integrity of protected areas and associated ecological processes.
- ii. To minimize potential negative impacts of oil and gas development activities on tourism
- iii. To guide, coordinate and regulate activities of oil companies within protected areas
- iv. To enhance awareness and appreciation of conservation among the oil companies

5 The Guidelines

The following guidelines have been formulated to guide the operations of oil companies within wildlife protected areas including dual management areas and are categorised under four major themes; Operations and coordination, Infrastructure, Tourism and Ecosystem health. All oil and gas operations within wildlife protected areas shall be conducted in line with the provisions of the Act. Where these guidelines contradict the EIAs, the guidelines shall take precedence.

5.1 Operations and coordination

Oil companies require UWA staff to provide security to their (company) staff against dangerous wildlife such as elephants and buffalos. On the other hand UWA is mandated to monitor activities of the oil company to ensure that the companies comply to the mitigation measures. In order to ensure smooth coordination and operation of both oil and wildlife activities within the protected areas, the following shall be adhered to:

5.1.1 Staff time

- i. All operations of companies that may have impacts on the conservation of biodiversity within protected areas shall be monitored by UWA staff to ensure compliance with issued guidelines, permits and any other requirements.
- ii. UWA staff needed by oil companies shall be requested for at least a week in advance to enable proper planning and deployment.

- iii. The time spent by UWA staff on oil and gas activities on request by oil companies will be compensated for by the respective companies at agreed terms between UWA and the companies.
- iv. Companies shall not enter into private arrangements with UWA staff for any assignment, work or negotiation.

5.1.2 Company obligations

- i. Companies shall take full responsibility of the security and protection of their property and installations within protected areas from environmental hazards such as fires and destruction by wildlife.
- ii. The companies shall compensate for damages or destruction of existing PA infrastructure such as bridges, roads, ferry, arising out of company operations.

5.1.3 Coordination

- i. All companies operating in a PA shall obtain necessary permits from the Executive Director or his/her designated officer in line with section 22 (3) of the Act before commencement of activities and after fulfilling all the necessary approval processes by NEMA. These include park entry, site acquisition, ferry crossing, landing permits and any other permits as shall be stipulated from time to time.
- ii. Company staff and vehicles shall pay entry fees as agreed on by UWA and company
- iii. UWA shall be consulted at all stages during Environmental Impact Assessment (EIA) process.
- iv. Companies and their contractors shall share their work programs with UWA and other relevant stakeholders before commencement of their operations for planning and coordination purposes
- v. Companies shall accord full access to authorized UWA staff with proper identification, to carry out monitoring within and outside the oil and gas development facilities within protected areas at any reasonable time.
- vi. Companies shall be required to formally introduce their subcontractors before commencement of their activities.
- vii. Companies shall consult with UWA on CSR projects implemented close to protected areas

5.1.4 Health and safety risks

- I. Companies shall cover insurance of UWA staff requested for and injured during deployment on oil and gas activities where such accidents and injuries are not covered under the existing UWA medical scheme.
- II. UWA shall not be liable for any accident, injury or death that happens to oil company staff while operating in the protected areas.

- III. Companies shall be required to provide protective gear to UWA staff requested for and deployed for oil related activities

5.1.5 Awareness and commitment to environmental issues

- i. Companies shall conduct regular environmental and wildlife awareness to their staff and subcontractors in collaboration with UWA

5.1.6 Technologies

- i. Companies shall as much as possible use the most appropriate and practically available technologies and support cleaner production techniques in order to minimize environmental damage such as subsurface oil well heads, directional drilling, automatic shutdown valves and extraction equipment

5.1.7 Subcontracting

- i. All staff of the subcontractors shall be required to have a corporate identity and their presence within the PAs justified.
- ii. Companies and subcontractors shall maintain updated register of their staff and shall be subject to security scrutiny at any time.
- iii. Companies and their sub-contractors shall be required to display EIA certificates of approval at all operational areas.
- iv. Companies shall be liable for any action and conduct of their sub contractors.

5.1.8 Existing contractual obligations

- I. Where oil company activities overlap with the existing concession between UWA and private sector activities, the concession shall take precedence.
- II. In the event that there are disagreements arising from such overlaps, mutual agreement shall be reached by the parties through mediation by relevant government institutions including PEPD and UWA.

5.1.9 Concessions with third parties

- i. Companies shall not enter into agreement with third parties for services such as installation of telephone masts, erecting accommodation facilities for tourists within protected areas except with permission from the Executive Director.

5.2 Infrastructure

- i. Establishment of infrastructure is a prerequisite for successful implementation of any oil and gas exploration and production operations. However, careful planning, design, construction and use of such infrastructure shall as much as possible meet the following requirements:

5.2.1 Construction and operation of access roads and pipelines

- i. Access roads and pipelines shall be limited to only those that are approved and where practically possible use existing roads, railways and pipelines shall be subsurface. In case of unforeseen access roads the company shall seek approval from National Environment Management Authority (NEMA) in consultation with UWA
- ii. Routing of approved access roads shall be done in consultation with UWA staff
- iii. The company shall be required to install appropriate signage restricting access to their installations in colors that blend with the environment
- iv. All approved civil works for each site should be monitored by designated UWA staff

5.2.2 Extractive use of park resources such as murram, sand, stones

- i. Construction materials shall be got from outside Protected Areas
- ii. Where alternatives outside the park are not available permission and approval from the Executive Director, shall be sought in writing prior to any extraction of Protected Area resources

5.2.3 Base camps and other supportive infrastructure

- i. All support infrastructure (base camps, material storage facilities, parking yards, washing bays) shall as much as practically possible be located outside the PAs.

5.2.4 Drill sites

- i. The drill sites/pads shall not exceed 100x100 meters in order to reduce on the foot print. Any exceptions shall be with permission from the Executive Director
- ii. New wells shall as much as practical be drilled using existing facilities (including roads, drill-pads, camps etc)

5.2.5 Installations

- i. Companies shall be liable for properties abandoned in the PAs.
- ii. Oil and gas collection and processing centres, terminals and refineries shall as much as practically possible be placed outside national parks and wildlife reserves.

5.3 Tourism

Tourism operations generate revenue to government and proceeds are ploughed back into conservation and community development. Visitors come because of the pristine nature of the protected areas. The contribution of tourism in 2008 was 9.2% of GDP which translated into (\$1,161.0). Real GDP growth for the travel and tourism sector was 4%. Tourism contributed to 7.4% of total employment (420,000 jobs). Wildlife based tourism and conservation employs about 80,000 persons. Tourism arrivals increased from 512,000 in 2004 to 844,000 in 2008, an increment of 65% (NDP, 2010).

In order to ensure the continuous flow of visitors, the integrity of these areas should be maintained as much as possible. Oil and gas exploration and production should therefore be done by use of environmentally sustainable methods to ensure continued survival of tourism in the country. To this effect, the following guidelines shall help to minimize the impact of oil and gas activities on tourism.

5.3.1 Increased presence of human and motorized equipment

- i. Companies shall ensure tourism vehicles have right of way
- ii. Companies shall be required to maintain only essential staff and equipment on site at any one time during petroleum development activities.
- iii. Companies shall as much as possible use internal monitoring/supervisory techniques for its drivers to maintain minimum vehicular speeds (40km/hr within protected areas)

5.3.2 Visual intrusion

- i. All structures and equipment shall as much as possible blend with the surroundings e.g. paint well heads green as opposed to the current red color. Structures/installations lasting beyond 1 year shall be concealed from tourism facilities by planting a hedge of indigenous tree species or any other suitable measures

5.3.3 Interference with tourism activities

Tourism has two peak seasons (June – August and December – March). Therefore, to minimise the impacts on tourism;

- i. Companies shall as much as possible concentrate their activities during low tourism seasons.
- ii. Company vehicles shall move at agreed scheduled times to avoid interference with animal and tourist movements

5.3.4 Illegal tourism

- i. Company staff and subcontractors are presumed to have entered the PA to undertake oil related activities. Any company staff or sub-contractors involved in tourism activities shall pay for such activities as per existing UWA tariffs.
- ii. Companies shall not erect or use any of their facilities for tourism purposes
- iii. Companies shall be restricted to designated access routes (No off-track driving allowed) unless prior permission is sought from the Executive Director or his designate.

5.4 Ecosystem health

The conservation of ecosystem integrity within protected areas is a precursor to sustainable conservation and management. Any unregulated activities carried out in protected areas may cause devastating negative impacts that may jeopardise ecosystem well being. These negative consequences may be expensive to mitigate in the long term or may never be mitigated at all. In order to minimise this occurrence, the under listed measures shall guide implementation of the ongoing activities of all oil companies.

5.4.1 Destruction of habitats

- i. Companies shall be required to minimize vegetation clearance by restricting their activities to approved sites
- ii. All operations including parking shall be confined within approved areas

5.4.2 Interference of wildlife ranging patterns and migratory routes

During dry seasons wildlife move to water points and create visible migratory routes. Some wildlife species have defined breeding grounds, dispersal routes and feeding ranges. Making roads, pipelines and any other linear structures in breeding areas disturbs the reproductive behavior of wildlife

- i. Companies shall restrict their activities during off seasons for migration as shall be indicated by park management
- ii. Companies shall, as much as possible, restrict oil and gas activities (such as opening up access roads, production wells, pipelines) to a minimum of 100metres from ecologically sensitive areas such as wildlife breeding areas, identified wildlife tracks in and outside protected areas. This shall be done in consultation with site-based UWA staff

5.4.3 Waste generation and management

Companies shall have approved waste management plans, storage facilities, transfer, and handle the waste generated in accordance with the National Environment (Waste Management) Regulations, 1999. Waste storage, transportation, and discharge permits

shall be acquired before commencement of waste generating activities within a protected area.

a) *Drill cuttings and drill waste water*

- i. Wastes generated during drilling (mud cuttings and waste water) shall be removed from the protected areas immediately after the drilling exercise and in any case not more than a period of one month. Such waste shall be disposed of outside Protected Areas using approved methods as may be recommended by NEMA.

b) *Domestic waste*

Waste generated as a result of human presence in the camps and at drill sites including sewage, laundry and kitchen water, solid garbage, plastics, tins, and bottles shall be managed according to National Environment (Waste Management) Regulations, 1999 and the National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, 1999. In addition, the following guidelines shall complement the existing regulations while working inside wildlife protected areas.

- i. Companies shall transfer all the non-biodegradable waste outside Protected Areas for appropriate recycling, reuse or final disposal.

c) *Hazardous waste*

This includes waste generated as a result of fuel and oil spills during vehicle servicing, repairs and washing within the base camps.

- i. Companies shall treat the contaminated soil before disposal in case of oil spill or leakage.
- ii. Companies shall sign agreements with approved waste handlers to transfer used oil, spent fuel and oil filters etc for final disposal outside protected areas.
- iii. Companies shall report immediately any oil spills that occur in protected areas to the protected area management in accordance with PEPD standards and manage the spills according to the oil spill contingency plan.

5.4.4 Pollution (air, water, soil)

Pollution may occur due to toxic waste, noise, flaring, and oil spills. The resultant effects may have long-term impacts on the environment. Companies are therefore required to avail all relevant information for purposes of monitoring environmental compliance. In order to minimize impacts from pollution, the following measures shall be adhered to;

- i. Companies shall be required to seal off waste management facilities and ensure that no wildlife access these facilities.
- ii. Companies shall carry out routine water tests and disseminate information from the test results.
- iii. Companies shall sprinkle water on access roads to minimize dust.
- iv. Companies shall observe air, noise, soil and water quality standards as stipulated in the National Environmental Regulations
- v. Companies shall be required not to flare within Protected Areas.

- vi. Companies shall have mechanisms to monitor and respond to oil & gas spills e.g remote sensors, automatic shut-down valves.
- vii. The “polluter pays principle” shall apply to all oil and gas activities in protected areas.

5.4.5 Waste tracking

Wildlife protected areas cover extensive area, some being very remote to the administrative units. To ensure that waste is not dumped in remote areas of the protected areas,

- i. Companies shall be required to display documentation of the movement of waste (dispatch and delivery notes from approved waste handling agencies specifying quantities and categories) from the generating facility to the point of disposal.

5.4.6 Changes in wildlife behavior-

Wildlife behavior is affected by stressful factors such as hooting, lighting, vibrations, intentional feeding, and habituation. Oil companies shall not:

- i. Hoot (sound the horn) while in the Protected Areas
- ii. Feed wild animals
- iii. Molest or harm wild animals
- iv. Take, destroy, deface, wild animals
- v. Commit any other offences as provided for under section 21 of the Act.

5.4.7 Poaching

Poaching continues to be one of the management challenges in protected areas. Cases of poaching have been registered involving workers and community members working in and outside protected areas on oil related activities. In order to avert this;

- i. Companies shall ensure regular sensitization of their staff and subcontractors on the value of wildlife and conservation in general in collaboration with UWA
- ii. Companies shall be liable for any illegal activities carried out by their staff and subcontractors
- iii. Offenders shall be prosecuted in accordance with section 21 & 75 of the Wildlife Act

5.4.8 Wild animal kills

Wild animal kills may occur on roads within protected areas due to night visual impairment by vehicle lights, response to vehicular noise and over speeding vehicles. In addition, wild animals especially the lower forms of life that are important in the food chain and nutrient cycling may be killed as a result of trampling during construction of infrastructure and excessive heat during flaring. Intentional killing can be in defense of

company staff or their subcontractors during oil related activities. In order to minimise such incidences;

- i. Companies shall observe speed limits of 40Km/hr
- ii. Animals in the park have right of way
- iii. Companies shall promptly report all accidents involving wild animals to Protected Area management
- iv. Companies shall be liable for any wild animal kills made by the company staff or their subcontractors
- v. Offenders shall be prosecuted in their individual capacity in accordance with section 21 & 75 of the Wildlife Act.
- vi. Companies shall compensate for any wild animal killed as a result of oil and gas related activities at rates agreed upon between companies and UWA

5.4.9 Compensation for Environmental damage and payment for ecosystem services

Oil and gas activities will have severe consequences on the environment. Some of these will be mitigated as per the provisions of the Environment Impact Assessment reports and conditions of approvals issued by NEMA. However for those that cannot be mitigated companies will be expected to compensate for such damage. In addition the services provided by park ecosystem will need to be paid for since management incurs costs to ensure these services are provided. Therefore the following guidelines shall apply:

- i. Any damage to the environment within the PA shall be compensated for at rates that shall be agreed upon between the oil companies and the Authority
- ii. Companies shall pay for ecosystem services e.g. water that they will require from the PA at existing market rates

5.4.10 Site restorations and decommissioning

It is a provision in the EIA that sites are rehabilitated after the accomplishment of the operations. However most times, the drill sites and other construction sites (roads, burrow pits, camps) are left un-rehabilitated for sometime endangering the animals which access these sites. In order to ensure restoration, the following guidelines shall be followed;

- i. Companies shall entirely be responsible for undertaking restoration in accordance with approved restoration plans
- ii. Restoration shall be finalized not more than three months from the time of completion of the activity or according to the time specified in the EIA certificate whichever is earlier.
- iii. The vegetation shall be kept as natural as possible, whilst encouraging natural rehabilitation with indigenous plant species
- iv. Restoration shall be considered satisfactory after certification by NEMA in consultation with other lead agencies
- v. Companies shall officially hand back the restored sites to UWA after certification

- vi. Restoration liability period shall be one year from the date of certification.

5.4.11 Increased health risks for wildlife

- i. The company shall meet all the costs of any wildlife health problem that results directly from their activities as shall be agreed upon by the parties

5.4.12 Exotics and alien species

- i. Exotic and alien species shall not be introduced in the Protected Areas, in accordance with section 26 of the Act

5.4.13 Pets and domestic animals

Companies shall not introduce pets and domestic animals in PAs in contravention of section 21 of the Act

6 Review of the guidelines

These guidelines are subject to review after every 3 years.