THE REPUBLIC OF UGANDA

OFFICE OF THE AUDITOR GENERAL

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# REGULATION AND MONITORING OF ENVIRONMENTAL IMPACT ASSESSMENTS IN THE PETROLEUM SECTOR

A REPORT BY THE AUDITOR GENERAL

DECEMBER, 2015

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# AUDITOR GENERAL'S MESSAGE

31st December 2015

The Rt. Hon. Speaker of Parliament
Parliament of Uganda
Kampala

**VALUE FOR MONEY AUDIT REPORT ON REGULATION AND MONITORING OF ENVIRONMENTAL IMPACT ASSESSMENTS (EIAs) IN THE PETROLEUM SECTOR BY THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)**

In accordance with Article 163 (3) of the Constitution of the Republic of Uganda 1995 (as amended), I hereby submit my report on the value for money audit undertaken on the Regulation and Monitoring of Environmental Impact Assessments (EIAs) in the Petroleum Sector by NEMA.

My office intends to carry out a follow – up at an appropriate time regarding actions taken in relation to the recommendations in this report.

I would like to thank my staff who undertook this audit, the consultants from Office of the Auditor General Norway for the technical support provided, and the staff of NEMA and Ministry of Energy and Mineral Development for the assistance offered to my staff during the period of the audit.

John F. S. Muwanga
**AUDITOR GENERAL**

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# ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| CNOOC | China National Offshore Oil Corporation |
| D/EMC | Director, Department of Environmental Monitoring and Compliance |
| DEO | District Environment Officer |
| E&P | Exploration and Production |
| EA | Environmental audit |
| EIA | Environmental impact assessment |
| EIS | Environmental Impact statement |
| MEMD | Ministry of Energy and Mineral Development |
| MEO | Municipal Environment Officer |
| NEMA | National Environment Management Authority |
| DoP | Directorate of Petroleum |
| DPEDP | Department of Petroleum Exploration Development and Production |
| DPSD | Department of Petroleum Supply and Distribution |
| TEP | Total E&P Uganda |
| TUOP | Tullow Uganda Operations Pty Ltd |

# EXECUTIVE SUMMARY

Uganda's Petroleum sector has experienced rapid growth over the years, with the establishment of several projects for exploration and development of oil and gas wells in the highly eco-sensitive Albertine Graben, and the construction of thousands of fuel stations and storage tanks countrywide. However, the potential impacts of Petroleum Sector projects on ecosystems, and the risks they pose to the safety of human beings, their property, and to plants and animals, is widely documented.

Recognizing the above, the Government requires all developers that set up these projects to conduct Environmental Impact Assessments (EIAs) to assess their possible environmental impacts, and propose adequate measures to mitigate them. The National Environment Management Authority (NEMA), together with the developers themselves and other Government entities, is required to ensure that these EIAs are of appropriate quality, and that the proposed mitigation measures are implemented.

The objective of this audit was to assess the efforts of NEMA in ensuring that EIAs in the Petroleum sector are effectively regulated and monitored. We collected data for this audit through review of documents, and interviews with Government officials, Oil Companies, Fuel Station Managers and Environmental Practitioners. However, this audit was limited by challenges from obtaining complete information from NEMA due to gaps in information management.

## KEY FINDINGS

### REVIEW OF ENVIRONMENTAL LEGISLATION

NEMA is undertaking review of legislation to incorporate emerging issues including oil and gas. However, this review was not completed according to schedule, and the Authority has set new timelines for its completion.

### PREPARATION OF EIAs FOR PROJECTS IN THE PETROLEUM SECTOR

EIA approval was obtained from NEMA for all projects in the upstream before their commencement. However, this was not the case in the downstream: out of 118 projects granted construction permits by the Department of Petroleum Supply and Distribution (DPSD) from 2010/11 to 2014/15, 85 (72%) had EIA certificates of approval from NEMA, while 33 (28%) did not.

### CONDUCTING AND REVIEW OF EIAs IN THE PETROLEUM SECTOR

NEMA takes a shorter time to approve upstream projects than those downstream, although the review time for the latter has gone down over the years.

Delays in review are mainly caused by the heavy workload of the EIA review team at NEMA, lack of facilitation by Lead Agencies to their staff to conduct site verification inspections, and the poor quality of some EIAs submitted.

The above notwithstanding, the stipulated review time for EIAs in Uganda is significantly longer than in Kenya and Rwanda, and is considered too long by several stakeholders.

There have been significant improvements in the quality of EIAs conducted in the oil and gas sector due to increased exposure, training and interaction between the different stakeholders. However, some gaps remain because of inadequate access to baseline data by the practitioners; absence of ready information on existing and planned investments/ activities in project areas;inadequateskills and limited investment in technology (software) by EIA Practitioners. In the upstream, this is exacerbated by the fact that the EIA process commences after many project details such as processes, design and technology have been discussed and approved by the Advisory Committee Meeting (ACM) which limits the ability of practitioners to propose alternatives. The EIA reviewis also affected by the inadequate skills to review and monitor petroleum-sector EIAs by some government personnel, especially the District/ Municipal Environment Officers (DEOs/MEOs).

**MONITORING EIA IMPLEMENTATION AND FEEDBACK TO DEVELOPERS**

Monitoring and inspection of upstream projects is regularly undertaken by NEMA and the Department of Petroleum Exploration, Development and Production. The Oil Companies have also complied with quarterly self-monitoring requirements. However, NEMA neither gives regular nor timely written feedback to the developers on areas for improvement.

There are significant inadequacies in the methodology and quality Environmental audits undertaken by the developers.

On the other hand, monitoring and inspection of downstream Petroleum Sector projects has not been adequately prioritised and coordinated by NEMA, the Department of Petroleum Supply and Distribution (DPSD), the DEOs/MEOs, and Environmental Inspectors. The developers downstream have also not submitted self-monitoring reports or audits to NEMA.

# KEY RECOMMENDATIONS

1. NEMA should prioritise and expedite the on-going development of an effective system for management of records and information in order to support the process of EIA Regulation and Monitoring.
2. NEMA should strive to adhere to the revised timelines for finalisation of the internal review of environmental legislation, and engage the other stakeholders (PCE, Cabinet, Solicitor General and Parliament) to ensure timely approval of the legislation.
3. NEMA should improve coordination with DPSD to ensure that all downstream projects obtain EIA certificates of approval from NEMA before commencement. This will require improvement in sharing of information regarding EIAs between the two entities.In addition, NEMA should investigate and consider taking appropriate action against the companies that started activities without EIA approval.
4. NEMA should sensitize the stakeholders on the availability and accessibility of data for use in the EIA process.In addition, NEMA should work with the Uganda Association of Environmental Impact Assessors, and the Committee of Environmental Practitioners of Uganda to strengthen the regulation of the profession through enforcing Continuous Professional Development, and more stringent review of applications for certification or renewal of registration for certified Environmental Practitioners.
5. NEMA should dialogue with MEMD and the Oil Companies to explore the possibility of conducting EIAs before project details such as processes, design and technology have been discussed and approved by the ACM in order to save time and costs;

6. NEMA should continue to work with local governments in the Albertine Graben and other lead agencies to ensure that more of their staff (including DEOs and MEOs) receive the necessary training for review of EIAs in the petroleum sector;
7. NEMA should engage MoFPED, MWE and Lead Agencies to ensure that they plan, budget for and fund environmental management activities in LAs and districts, such as EIA review and monitoring activities.
8. NEMA should enforce the requirement for all developers do regular self-monitoring, self-reporting and auditing.In addition, NEMA should ensure timely, written feedback is given to developers following inspections or when they submit reports in order to encourage compliance with stipulated mitigation measures and EIA conditions of approval.

## OVERALL AUDIT CONCLUSION

NEMA has made good strides in regulation and monitoring of EIAs in the Petroleum sector; specifically in the upstream, resulting in improvements in the quality of EIAs and the compliance of upstream developers with reporting requirements. However, NEMA does not give timely feedback to developers on areas of improvement after monitoring. In the upstream, practitioners also face a challenge of not easily accessing baseline data and other information for use in the EIA process.

In the downstream because of lack of coordination between NEMA and the Lead Agencies, some projects commence without EIA approval, while the approved projects are not regularly monitored as required. There are also delays by NEMA to complete review and approval of EIAs due to internal staffing challenges and failure by districts to budget and fund EIA review and monitoring activities.

Quality being a critical issue in the EIA process, it is important that NEMA strengthens its oversight role to ensure improvement in the quality of work produced by the Environmental Practitioners.

# CHAPTER ONE

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# CHAPTER ONE

# INTRODUCTION

## 1.1 BACKGROUND

It is a requirement of the government of Uganda that all persons or entities (also known as "developers") who intend to undertake activities that are likely to, or will have significant impacts on the environment conduct an environmental impact assessment (EIA)[1]. The National Environment Policy, 1995, provides for a system of Environmental Impact Assessment (EIA) and environmental monitoring so that adverse environmental impacts can be foreseen, eliminated or mitigated.[2] Following enactment of this Policy and (subsequently) the National Environment Act, Cap. 153, it became a requirement for all developers to assess possible environment impacts of proposed projects.

The use of EIA ensures that environmental impacts are considered during conception, planning, design as well as during implementation of development policies, projects and activities, at the same time that their financial technical and institutional aspects are also taken into account.[3] EIA is a systematic and inter-disciplinary evaluation of the potential positive and negative environmental effects of a proposed action and its practical alternatives on the physical, biological, cultural and socio-economic attributes of a particular geographical area.[4] The developer is responsible for the EIA in accordance with the general guidelines on the conduct of the assessment and in compliance with the provisions of the law.[5] The National Environment Management Authority (NEMA) has the overall responsibility to review and approve EIAs conducted in accordance with the provisions of the National Environment Statute, 1995.

## 1.2 MOTIVATION

Government recognizes that the country's natural resource base is a crucial factor in the socio-economic transformation process and is committed to developing the economy whilst protecting the environment. Uganda's development prospects were greatly enhanced with the confirmation of commercially viable oil deposits in 2006.[6] The discoveries made to date can support an estimated production of 100,000 barrels of oil per day for 25 years[7], sufficient to justify a large-scale refinery in the country. Cumulative investments in petroleum exploration since 1998 are estimated at USD 1.7 billion, while investments in the production and refining phases of development are likely to be in excess of USD 10 billion.[8] This discovery of oil will enable the country to cut back on fuel imports and finance large-scale infrastructure

1 EIA Guidelines; Page 1
2 Ministry of Natural Resources, 1995: The National Environment Management Policy; Section 3.8; Objective
3 EIA Guidelines; Page 1
4 Ibid.
5 Ibid.
6 Cf. MEMD, 2008: National Oil and Gas Policy for Uganda; Page ii
7 MoFPED, 2013: Millennium Development Goals for Uganda 2013; page 12. Also, NEMA (2010): State of the Environment Report for Uganda, 2010; Page 125
8 MoFPED, 2013 (ibid.)

projects, but also have a big impact on the environment owing to the nature of the petroleum activities and the close proximity and current placement of the oil fields and exploration activities in an area of rich biodiversity, that is, the Albertine Graben. Therefore, efforts must be taken to limit the environmental impact and biodiversity loss in this area.[9] These efforts must also extend downstream, to ensure that operation of fuel stations and storage tanks does not result in adverse environmental degradation, or endanger the lives of humans, plants and animals.

Government and stakeholders have spearheaded concerted efforts to progressively integrate the principles of sustainable development in national policies and programmes, and to ensure that EIAs are undertaken and monitored for all projects in the Petroleum Sector.

However, several actors have pointed out gaps in the above efforts. For instance, International Alert, an NGO involved in oil and gas advocacy raised concerns about lack of meaningful public and stakeholder involvement in the current EIA process.[10] They reported that NEMA relies on the Department of Petroleum Exploration Development and Production (Department of PEDP) and Uganda Wildlife Authority (UWA) for its EIA review and does not carry out monitoring as required.[11]

There is also outcry by environmental experts that the EIA process is marred by delays, shortage of technical expertise, and conflict of interest by EIA consultants who seek to please the developers who hire them. In addition, it has been reported that the available experts do not diagnose the right impacts for some projects and do not recommend the right mitigation measures for others.[12]

With the above gaps, it is feared that environmentally sustainable exploitation of oil in the Albertine Graben will prove to be a challenge. Consequently, the disturbances arising from the exploitation activities are likely to be of such magnitude and frequency that they will overwhelm the resilience of the natural ecosystems. Some of the possible impacts include noise and vibrations from equipment; vegetation clearance leading to soil erosion and possible changes in surface hydrology and drainage; disturbances to the local population and wildlife; contamination of soil, water and the air through discharges, emissions, chemicals used and wastes.[13] Another issue that may emerge from development of the oil industry in the Graben is the elimination of connectivity between natural habitats negatively impacting on wildlife movements and possibly leading to eventual endangering or extinction of species. This development also involves a certain element of habitat destruction and thus contributing to loss of biodiversity[14].

Downstream, a media report[15] highlighted the operation of fuel reservoirs and stations with clearance from NEMA and MEMD but located in residential areas, or along busy highways, posing a big threat to the residents and motorists since they stock thousands of litres of

9 MoFPED, 2013 (ibid.)
10 International Alert (September, 2009): Investing in Peace; Issue No. 2; Harnessing Oil for Peace and Development in Uganda; Page 27
11 Ibid.
12 International Alert (September, 2009): Investing in Peace; Issue No. 2; Harnessing Oil for Peace and Development in Uganda; Pages 27-28
13 NEMA (2010): State of the Environment Report for Uganda, 2010; Page 110
14 Ibid.
15 Sunday Vision (Jul 15, 2013): Flirting with disaster

flammable fuel and highly explosive gases.

In light of the issues noted above, the Office of the Auditor General found it necessary to conduct an Environment Audit on regulation and monitoring of Environmental Impact Assessments (EIAs) in the Petroleum Sector by the National Environment Management Authority (NEMA), and thereby make recommendations to improve performance in the sector.

## 1.3 DESCRIPTION OF THE AUDIT AREA

### 1.3.1 General Description

Environmental Impact Assessment (EIA) is part of the project planning process. It involves a systematic examination to determine whether or not a project will have any adverse impact on the environment. The EIA then identifies steps that can be taken to avoid, prevent or minimize any adverse impacts identified before they occur. The EIA is conducted by the developer and based on the results from this process, NEMA, after consultation with relevant lead agencies, makes a decision on whether to approve the project, approve it with specified conditions, or disapprove it, depending on the potential impacts and proposed mitigation measures. Following approval, NEMA spearheads monitoring of potential impacts, implementation of mitigation measures and compliance with Conditions of Approval.

### 1.3.2 Regulatory Framework for Implementation and Monitoring of EIAs

The National Environment Act (NEA), Chapter 153, mandates NEMA to promote and ensure compliance with sound environment management practices in Uganda. As part of this mandate, the Act requires NEMA to ensure that EIAs are undertaken for all projects which may have, are likely to have, or will have significant impacts on the environment. Such projects are laid out in Schedule 3 of the same Act, and include all upstream, midstream and downstream petroleum projects.

The Environmental Impact Assessment Regulations, 1998, contain requirements that should be satisfied in the process of conducting, reviewing and approving EIAs. Implementation of approved EIAs by the developer is governed by the mitigation measures identified in the EIA, the EIA conditions of Approval issued by NEMA, and all applicable legislation.

The relevant Lead Agencies,[16] together with NEMA, are mandated by the NEA, Cap. 153 to monitor implementation of approved EIAs. They are guided in this by the mitigation measures identified in the EIA, the EIA Conditions of approval, the Waste Management Regulations, The National Environment Regulations for Discharge of Effluent, The Water Act, The Mining Act, as well as all other relevant legislation.

### 1.3.3 Government Objectives in relation to EIA[17]

The National Environment Policy, 1995, lists EIA as one of the Cross-Sectoral Policy Objectives, Principles and Strategies for management of resources and the environment.[18] Specifically, the policy objective in relation to EIAs is: To provide a system of Environmental Impact Assessment (EIA) and environmental monitoring so that adverse environmental impacts can be foreseen, eliminated or mitigated.[19]

16 According to the NEMA Act,"lead agency" means any Ministry, department, parastatalagency, local government system or public officer in which or inwhom any law vests functions of control or management of anysegment of the environment;

17 GoU, 1995: National Environment Policy; Chapter 3; Section 3.8

18 GoU, 1995: NEP: CHAPTER III CROSS-SECTORAL POLICY OBJECTIVES, PRINCIPLES AND STRATEGIES

19 Section 3.8

To achieve the above objective, the policy set out the following guiding principles:

- Public and private sector development options should be environmentally sound and sustainable; any environmental consequences should be recognized early and taken into account in project design;
- EIAs should consider not only biophysical/ environmental impact but address the impact on existing social, economic, political and cultural conditions;
- EIAs for all public and private sector development activities should be required in order to determine the "environmental threshold" of a particular activity;
- Environmental Impact Statements (EISs) should be required for all activities where the EIA has determined a negative environmental threshold;
- Environmental Audits (EAs), including inspections and record-keeping, should be required for activities as might be determined by the EIS; and
- The environmental impact assessment process should be administered by NEMA in consultation with line ministries, departments and the private sector.

Furthermore, the policy set out the following strategies:

1) Create by law an EIA process which requires, as appropriate, environmental impact assessments, environmental impact statements and environmental audits for all private and public development projects;
2) Lodge the EIA oversight function in the National Environmental Management Authority (as approved) but leave implementation to the relevant line ministries and departments; and
3) Develop EIA capacity/capability in sectoral ministries and departments.

### 1.3.4 NEMA's Vision and Mission[20]

**Vision**

NEMA's vision is: "To be an efficient Agency, with people in Uganda living in a clean, healthy, productive and sustainable environment".

**Mission**

NEMA's mission is: "To promote and ensure sound environmental management practices for sustainable development".

### 1.3.5 NEMA's Activities

In ensuring the implementation and monitoring of EIAs, NEMA does the following:

1) NEMA proposes policies and legislation for proper environment management to guide the EIA process;
2) NEMA acts as the Secretariat to the Committee of Environmental Practitioners of Uganda which approves and certifies qualified practitioners to conduct EIAs
3) Reviews Project briefs submitted by developers
4) Reviews Terms of Reference for EIAs
5) Reviews EIAs submitted in consultation with relevant stakeholders
6) Approves/ disapproves EIAs
7) Reviews self-monitoring reports and Environment Audit reports submitted by developers in line with the mitigation measures identified in the EIA and conditions of approval
8) Reviews monitoring and inspection reports submitted by Lead Agencies
9) Conducts periodical inspections to monitor implementation of mitigation measures in EIAs and compliance with the EIA conditions of approval
10) Takes appropriate action based on monitoring results.

### 1.3.6 Organization Structure

The Executive Director (ED) is the head of NEMA and is assisted by the Deputy Executive Director (DED). NEMA has four departments, of which that of Environmental Monitoring and Compliance takes the lead in review, approval, monitoring and follow-up of

20 NEMA, 2009: Strategic Plan 2009/10-2013/14; Page 67

EIAs. It is headed by a Director, who supervises the Environmental Assessment Manager, Principal Environment Inspector and three (3) Natural Resource Management Specialists. The above officers also supervise others below them, as detailed in the organogram attached in Appendix I.

## 1.4 AUDIT OBJECTIVE

The main audit objective was to assess the efforts of NEMA in ensuring that EIAs in the Petroleum sector are effectively regulated and monitored.

## 1.5 AUDIT SUB-OBJECTIVES

i. To assess the progress of review of the environmental legislation and its impact on regulation and monitoring of EIAs in the Petroleum Sector.
ii. To establish whether EIAs were prepared for all eligible projects in the Petroleum sector.
iii. To assess whether the EIA fees are collected, allocated and utilized for the intended purpose.
iv. To establish whether EIAs in the Petroleum Sector were conducted and reviewed in accordance with the EIA Regulations and guidelines.
v. To assess how effectively NEMA and the Lead Agencies monitor implementation of EIA mitigation measures and conditions of approval by developers.
vi. To assess the extent to which NEMA coordinates with the other Lead Agencies in ensuring effective implementation of EIAs.

## 1.6 AUDIT QUESTIONS

i. What is the progress of review of the environmental legislation and how has it impacted on regulation and monitoring of EIAs in the Petroleum Sector?
ii. Were EIAs prepared for all eligible projects in the Petroleum sector?
iii. Were the required EIA fees collected, allocated and utilized for the review, approval and monitoring of PBs/EIAs?
iv. Were EIAs in the Petroleum Sector conducted and reviewed in line with the EIA Regulations and guidelines?
v. Do NEMA and the Lead Agencies monitor compliance with EIA mitigation measures and Conditions of Approval?
vi. Does NEMA give timely feedback to developers after monitoring of EIA implementation?
vii. To what extent does NEMA coordinate with the other Lead Agencies in ensuring effective implementation of EIAs?

## 1.7 AUDIT SCOPE

The audit focused on the National Environment Management Authority (NEMA), being the authority responsible for review, approval and monitoring of EIAs, and Ministry of Energy, and Mineral Development (MEMD) the ministry in charge of regulating the petroleum sector. It focussed on the upstream and downstream phases of the petroleum sector value chain. The study covered a period of five (5) financial years of 2010/11, 2011/12, 2012/13, 2013/14 and 2014/15 for both the upstream and downstream, in order to establish and assess the trend of regulation and monitoring of EIAs by NEMA in collaboration with the Lead Agencies. However, for aspects that had partially been tackled in the previous VFM audit on NEMA,[21] this audit only looked into performance for the period after that audit, as detailed in the methodology (Chapter 2).

21 OAG, 2014: Regulation and Monitoring of Drilling Waste Management in the Albertine Graben by NEMA

The Albertine Graben was the point of focus for upstream activities since it is here that they have been undertaken to-date. Data collection for the downstream phase was conducted countrywide, with fuel stations and storage tanks from all regions being selected for the audit.

# CHAPTER TWO | 2

CHAPTER TWO

# CHAPTER TWO

# AUDIT METHODOLOGY

The audit was carried out in accordance with the International Organisation of Supreme Audit Institutions (INTOSAI) standards and guidelines. The standards require that the audit is planned in a manner which ensures that an audit of high quality is carried out in an economic, efficient and effective way and in a timely manner.

## 2.1 SAMPLING

Since NEMA regulates and monitors EIAs countrywide, the downstream petroleum projects in NEMA's Records from July 2010 to June 2015, as well as those of the Department of Petroleum Supply and Distribution (DPSD) for the same period, were categorized by region (North, East, Central and West) and 38 projects were randomly selected for audit purposes. The upstream activities are confined to the Albertine Graben, and a total of 15 PBs/EIAs undertaken by the Oil companies from 2010/11 to 2014/15 was selected. District Environment Officers (DEOs) and Municipal Environmental Officers (MEOs) from 19 districts and Municipal Councils countrywide were contacted for responses. They were from: Upstream Districts: (Nwoya, Hoima, Buliisa); Downstream Districts: Western Region (Kabarole, Kasese, Mbarara), Northern Region (Arua, Gulu, Lira), Eastern Region (Jinja, Iganga, Mbale, Tororo, Soroti), Central Region (Entebbe, Kampala, Wakiso, Mukono, Masaka).
However, only the DEOs of Arua, Gulu, Kasese, Hoima, Iganga, Masaka, Mbale, Tororo and Jinja, and the MEOs of Iganga and Jinja responded.

Environmental Practitioners from Eco and Partner and Atacama were also interviewed for this audit, since they conducted several EIAs and Environmental audits in the Petroleum Sector, particularly the Upstream.

Audit also conducted interviews and reviewed records at NEMA headquarters, Department of Petroleum Exploration, Development and Production (PEDP) and Department of Petroleum Supply and Distribution (DPSD).

To corroborate the information obtained from interviews and document review from the above stakeholders, Audit conducted field visits to fifteen (15) fuel stations in Eastern Uganda: Tororo (Oil Well Service Station, Burar Petrol Station, Jadid Petrol Station); Mbale (Aran Fuel Station, Mega Oil, Sagal petrol station, Igal fuel station, Bongo-oil); Iganga (Bongo-oil, Shell); Jinja (Jafra service station, Oilcom, Kobil, Shell Viral, and Ultra Petrol Station). Since the results were consistent with the information from document review and interviews with officials from NEMA, Lead Agencies and the DEOs from all regions, the observations were considered to reflect the situation at fuel stations in other parts of the country.
No field visits were conducted for the upstream since NEMA, PDEDP and the Oil companies stated that no active operations were on-going at the time of audit.

## 2.2 DATA COLLECTION METHODS

The study relied upon document review, interviews and inspection to obtain relevant information to answer the audit questions as detailed sections in 2.2.1- 2.2.7.

### 2.2.1 To assess the progress of review of the Environmental Legislation and how it has impacted on Regulation of EIAs in the Petroleum Sector

Audit conducted interviews with NEMA officials to establish the causes for the observed delays to complete the review of environmental legislation. Then, audit conducted interviews with NEMA, Environmental Practitioners and Oil Companies to establish some of the existing gaps in the law due to the delays, and how these have affected review, implementation and monitoring of EIAs in the Petroleum Sector. Environmental Impact Statements (EISs) and Environmental Audit reports were also reviewed to supplement this information.

### 2.2.2 To assess whether EIAs were prepared for all eligible Projects in the Petroleum Sector

Interviews were conducted with NEMA, Department of PEDP and the Oil companies to determine whether all upstream projects conducted EIAs before commencement. For downstream projects, the number of petrol stations established from 2010/11 to 2014/15 was established through review of construction permits issued by the Department of Petroleum Supply and Distribution (DPSD), MEMD. The team then compared this with the list of petroleum-sector projects for which EIA certificates of approval were granted by NEMA, in order to establish how many had due approval.

In addition, comparison was made between the dates when Construction permits were granted by DPSD versus when the EIAs were approved by NEMA to establish whether permission was at times granted to commence construction activities before EIAs were conducted/ approved, or if Construction Permits were granted long after EIA approval. The team then interviewed the District Environmental Officers and MEMD officials to establish the reasons for the above discrepancies.

### 2.2.3. To Assess the Collection, Allocation and Utilisation of fees for all Project Briefs (PBs)/ Environmental Impact Statements (EISs)

To assess whether the correct EIA fees had been collected, the team selected a sample of thirty eight (38) Petroleum-sector projects submitted to NEMA during the review period with a view to establish their respective project costs. Thereafter, the corresponding expected EIA fees for each project were extracted from Schedule 3 of the EIA regulations, 1998. NEMA project assessment records, invoices and receipts were then reviewed to establish whether the expected fees had been paid for each project.

To assess allocation and utilization of EIA fees, the team reviewed the total EIA fees payable (billed) for all projects submitted to NEMA from Financial Year 2010/11 to 2014/15. NEMA's annual work plans and budgets over the same period were also reviewed to establish how much of the NEF funds were allocated by the NEMA Board to facilitate review and monitoring of EIAs by NEMA and the Lead Agencies, and what the rest of the funds were allocated for. This was compared to the practice in South Africa, Ghana and Norway. Audit then interviewed NEMA, MEMD and District/Municipal Environment Officers to assess the impact of the Board decisions regarding utilization of EIA fees on effectiveness and efficiency of the EIA process.

### 2.2.4. To assess whether EIAs in the Petroleum Sector wereconducted and Reviewed in line with the EIA Regulations and Guidelines

Interviews were conducted with NEMA to establish whether the EIA process was duly followed as stipulated in the law. 15 PBs and EIAs for upstream projects and 38 for downstream projects were sampled with the aim of establishing whether they covered key areas stipulated in EIA regulations and guidelines. Thereafter, the Oil companies and the EIA Practitioners were interviewed to obtain views on the quality of the EIAs produced and the reasons for the observed deficiencies. Furthermore, the time taken during each stage of review (i.e. ToRs and EIAs) was established through interviews and/or analysis of data from NEMA's records to establish whether there were delays, and at which stages of the process this mainly occurred. To calculate time taken by NEMA to approve EIAs after submission, 16 upstream projects and 63 downstream projects, respectively, were randomly selected from NEMA's records. The causes for observed anomalies were established through interviews with officials from MEMD, NEMA, Districts EIA Practitioners, and the Oil companies.

### 2.2.5. To establish whether NEMA and Lead Agencies Monitor Compliance with EIA Mitigation Measures and Conditions ofApproval

To answer this question, Audit interviewed NEMA officials to establish whether the Authority had developed the Inspection Ranking Model required to prioritize and schedule inspections based on the risks associated with individual projects, and whether this was done in consultation with Lead Agencies. Also, NEMA work plans, budgets, releases and expenditures were reviewed to establish whether inspections were adequately budgeted for, prioritized and funded. NEMA officials were also interviewed to establish whether Inspection Checklists for use in the petroleum sector inspections had been developed.

In addition, Audit reviewed self-monitoring reports submitted to NEMA by Oil Companies for the period July 2013 to September 2015 since the earlier period was covered by the previous audit.[22] Managers at fuel stations were also interviewed to establish whether they receive visits from NEMA and the Lead Agencies, whether they carry out self-monitoring, and if these reports are submitted to NEMA. Inspection and monitoring reports by NEMA were also reviewed to determine the extent to which monitoring of projects in the petroleum sector is undertaken. This was further corroborated through interviews with developers in the selected districts.

### 2.2.6. To assess whether NEMA gives timely feedback to developers after Monitoring of EIA Implementation

Audit interviewed developers (Oil companies and Fuel Station Managers) to find out whether they receive any feedback from NEMA following monitoring and inspection visits, and how long it takes.

### 2.2.7. To assess Coordination

Assessment of coordination focused on three areas:

- We conducted interviews with NEMA and lead agencies such as DEOs, Department of PEDP and DPSD to establish the extent to which they coordinate in ensuring that comprehensive EIAs are conducted, and that their implementation by developers is monitored. We interviewed the same entities to establish whether they share information from monitoring visits.
- Secondly, we reviewed the List of Gazetted Environmental Inspectors to establish whether

22 i.e. OAG, 2014: Regulation and Monitoring of Drilling Waste Management in the Albertine Graben by NEMA

all key Lead Agencies in the Petroleum Sector had Inspectors gazetted by NEMA. Also, we conducted interviews with NEMA and the Gazetted inspectors in the districts visited to establish whether they submit reports or share information from inspections with NEMA.

- Finally, we interviewed NEMA officials as well as EIA and Environmental Audit Practitioners to establish how they coordinate to regulate EIA and Environmental Audit Practitioners to ensure that they produce quality EISs and Environmental Audits.

Details of persons interviewed and documents reviewed and observations at fuel stations visited are indicated in Appendices II to IV respectively.

# CHAPTER THREE

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# CHAPTER THREE

# SYSTEMS AND PROCESS DESCRIPTION

## 3.1 ROLES AND RESPONSIBILITIES OF KEY PLAYERS

**Executive Director, NEMA**

The Executive Director (ED) of the National Environment Authority (NEMA) is the Chief Executive of the Authority and is responsible for its day-to-day operations. He/she is responsible for monitoring the performance of the Authority and its funds. He/ She is charged with ensuring compliance to sound environment management practices throughout the country.

**Director, Environmental Monitoring and Compliance (D/EMC)**

The D/EMC:

- Guides the process of EIA review and monitoring to ensure that all activities with potential impacts to the environment are identified and appropriate action taken;
- Supervises the EIA Section and conducts quality assurance to ensure that high quality EIAs review is done and advises the ED on whether or not to approve the projects.
- Supervises the section for Monitoring and Inspection section and conducts quality assurance to ensure that Self-monitoring reports, Environmental Audits and Inspections/ Monitoring visits by NEMA staff capture key environmental aspects and propose adequate mitigation measures.

**EIA Section**

This section is headed by the Environmental Assessments Manager, and its functions include the following:

- Review all Terms of Reference for EIAs and advise the D/EMC on their adequacy, or recommendations for improvement;
- Assess Environmental Impact Statements (EISs) submitted to assess compliance with Terms of Reference (ToRs) and NEMA guidelines, comprehensiveness and adequacy of suggested interventions to mitigate potential environmental impacts;
- Liaise with Lead Agencies for comments on the Project Briefs (PBs)/EISs
- Conduct baseline verification inspections where necessary to guide review.

**Section for Monitoring and Inspections**

This section is headed by the Principal Environment Inspector and is responsible for:

- Conducting inspections of all projects to monitor compliance with best environment management practices, EIA mitigation measures and conditions of Approval;
- Writing Inspection reports and advising NEMA Management on appropriate actions to take.
- Follow up to ensure that entities submit self-monitoring reports to NEMA as required
- Reviewing all Terms of Reference for EAs and advises the D/EMC on their adequacy, or recommendations for improvement;
- Assessing comprehensiveness of EAs submitted and adequacy of suggested interventions

to mitigate observed environmental impacts;
- Reviewing all EAs submitted to ensure that they meet the standards laid out in the law and guidelines issued by NEMA; and
- Drafting feedback to monitored entities and/or Compliance Agreements in consultation with the Legal Department NEMA Management.

Currently, the Principal Environment Inspector represents NEMA on the Committee of Environmental Practitioners of Uganda which vets and certifies EIA and Environment Audit (EA) Practitioners. He is the secretary to this committee.

**Natural Resource Management Specialists (NRMS)**

NEMA has Natural Resource Management Specialists for: Biodiversity, Wetlands and Land Use. Their role is to give expert/technical guidance to the SEI, EIA Coordinator and D/EMC on aspects pertaining to their respective areas of specialization when any EIA or EA report is submitted for NEMA's consideration.

**Ministry of Energy and Mineral Development (MEMD)**

Ministry of Energy and Mineral Development (MEMD) is the Lead Agency charged with oversight over all upstream, midstream and downstream petroleum activities. The MEMD is required to monitor compliance of all players in the sector with existing laws, regulations and agreements on environment. MEMD also reviews Project Briefs (PBs), Scoping Reports, Terms of Reference (ToRs), Environmental Impact Statements (EISs) and Environmental Audit (EA) Reports pertaining to the Petroleum Sector once forwarded by NEMA, and gives appropriate feedback to NEMA. In MEMD, the Department of Petroleum Exploration Development and Production (Department of PEDP) is responsible for the upstream, while the Department of Petroleum Supply and Distribution (DPSD) is charged with the downstream. Both fall under the Directorate of Petroleum. However, the roles of Department of PEDP will be taken up by the Petroleum Authority of Uganda (PAU) once it becomes constituted (By the time of Audit- December 2015- the Board had been approved, though recruitment of staff had not yet been undertaken).

**District Local Governments/District Environment Officers (DEOs)**

These carry out day-to-day monitoring of projects in the petroleum sector for their impact on the environment inspections. Most District and/or Municipal Environment Officers who are gazetted by NEMA as Environment Inspectors have the powers to stop any activity which is leading to destruction of the environment.

They also provide review comments on EIAs and EAs to NEMA for their districts, and are required to conduct site-verification inspections to inform their reviews.

**Management of Oil Exploration and Production (E&P) Companies; Storage Tanks and Fuel Stations**

Currently, there are three (3) Oil E&P Companies operating in Uganda, namely: Tullow Uganda Operations Pty Limited (TUOP), Total E&P Uganda (TEP) and CNOOC Uganda Limited (CUL). These, together with the Management of Fuel Storage Tanks and Fuel Stations, are charged with:
- Developing appropriate Terms of Reference for EIAs and EAs in consultation with NEMA;
- Ensuring compliance with EIA mitigation measures, conditions of approval and best environment management practices;
- Carrying out continuous self-monitoring to keep track of compliance with environmental management and international best practice; and

- Submission of regular self-monitoring reports to NEMA and other relevant Lead Agencies in accordance with the law.

**EIA and Environment Audit practitioners**
These are private practitioners vetted and certified by the Committee of Environmental Practitioners of Uganda. They conduct EIAs and EAs for developers. They are contracted by developers, carry out assessment of planned, on-going or completed projects, and advise on how to mitigate potential or actual impacts to the environment.

**Multi-stakeholder Inspection team**
This comprises officials from different Lead Agencies mandated to monitor different aspects of environmental management in the Upstream phase of the Petroleum Sector. They are required to carry out quarterly inspections of upstream projects to monitor impacts of oil exploration activities on the environment, as well as compliance to sound environmental management practices.

**Lead Agencies**
A Lead Agency is any Ministry, department, parastatal agency, local government system or public officer in which or in whom any law vests functions of control or management of any segment of the environment.[23]

Lead agencies are either at the ministry or Local Government level, and upon request by NEMA, they conduct site verification inspections and advise the Authority on the adequacy of Project Briefs, Scoping Reports, Terms of Reference, EISs, Environmental Audits and Self-monitoring reports submitted by Developers for NEMA's consideration. They are also required to conduct routine monitoring of activities within their ambit to ensure compliance with required mitigation measures and good environmental management practice.

The main Lead Agencies in the Petroleum Sector are: Department of Petroleum Exploration, Development and Production (Department of PEDP) and Department of Petroleum Supply and Distribution (DPSD) under the Directorate of Petroleum, MEMD; Uganda Wildlife Authority (UWA); Wetlands Division under Ministry of Water and Environment (MWE); and Department of Occupational Safety and Health (OSH) under Ministry of Gender Labour and Social Development (MGLSD), and District Local Governments where the petroleum projects are located.

**Communities/ the General Public**
The role of these is to give their input to the developers and to NEMA during the EIA consultation process. They should also report any changes or impacts of project activities to the District Environment Officer, NEMA or any other Lead Agency.

## 3.2 PROCESS DESCRIPTION

**a) The Environmental Impact Assessment process**
The basic components of the EIA process consist of three interconnected phases: screening, environmental impact study and decision making.
First, the developer submits a project brief (PB) which NEMA reviews in consultation with the

23 National Environment Act, Cap. 153; Part 1: Interpretation

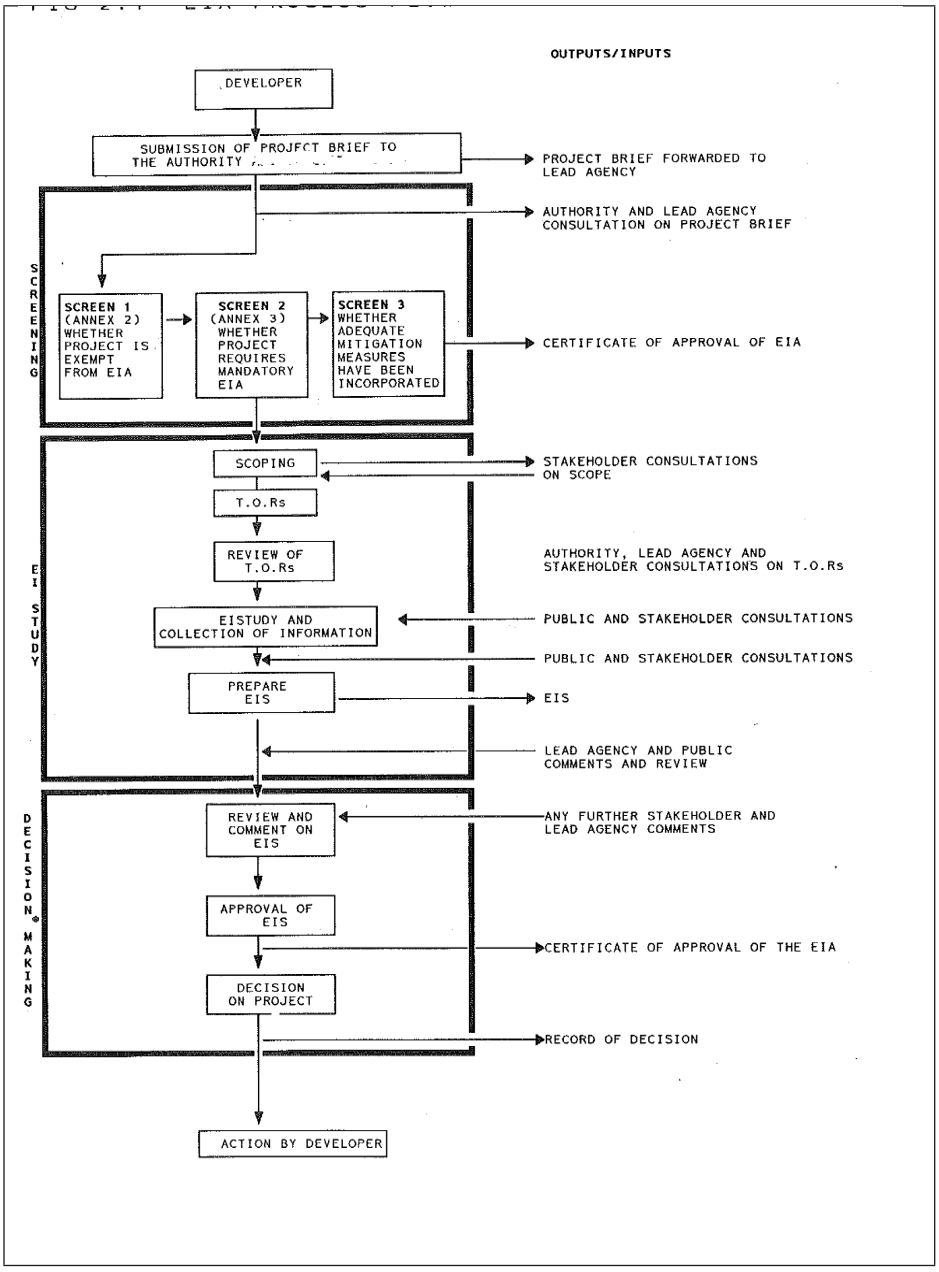
relevant Lead Agencies to the level of environmental assessment required. This is known as screening, and NEMA should communicate its decision to the developer within 21 working days.

Where NEMA decides that an Environmental Impact Study is required, the developer contracts EIA Practitioners who conduct a scoping report. This is submitted to NEMA, together with the terms of reference for the assignment, indicating the main aspects to be covered in the Environmental Impact Study, the EIA practitioners procured for the assignment, and their qualifications. NEMA reviews these in consultation with the Lead Agencies before approval is granted.

After the scoping report and ToRs are approved by NEMA, the EIA practitioner conducts the EIA on behalf of the developer and this is submitted to NEMA for review. The Authority should communicate its decision on the EIA submitted within 180 days.

A summary of the entire EIA process is illustrated in Figure 1 below, and details are in Appendix V.

**Figure 1: Flow chart of the process for Environmental Impact Assessment**




Source: NEMA EIA Guidelines, 1997

**b) Monitoring of EIAs**

One of the key aspects of Environmental monitoring is assessment of on-going activities for their impact on the environment. It is done through Self-monitoring by the regulated entities and Inspection by NEMA and relevant Lead Agencies.

### Self-monitoring

The regulated entities in the petroleum sector carry out self-monitoring in the manner and frequencies specified in their respective Environmental Monitoring Plans and EIA conditions of approval, and submit these to NEMA. In addition, they conduct annual Environment Audits of their activities to assess compliance with the conditions of approval, and report on any other observed impacts of the project on the environment. However, serious incidences of environmental non-compliance should be reported to NEMA within the shortest time possible.

### NEMA Inspections

NEMA conducts inspections to monitor activities in the petroleum sector. The authority carries out scheduled and ad hoc inspection of facilities. A scheduled inspection ensures that the facility operator presents him/herself to the inspector. Ad hoc inspections are carried out in response to public complaints or correspondences from the District Environment Officers (DEOs).

Inspection of upstream petroleum projects should be undertaken at least three (3) times a year, while downstream projects are inspected on the basis of NEMA's internal environmental risk assessment criteria. It is on the basis ofthese considerations that the Department of EMC should come up with targets for the number of projects to be inspected in the petroleum sector each year.

Prior to any inspection, the inspectors should formulate a checklist of major environmental issues to look out for, including adherence to mitigation measures stipulated in the EIAs and EIA Conditions of approval. They also look out for unforeseen impacts of the activities.

Upon completion of the inspection, the findings and mitigation measures should be communicated, in writing, to the management of the Facility. At times, NEMA signs a Compliance Agreement with the management, issues an improvement notice, or closes the facility in cases of gross non-compliance.

Follow up after an inspection should be done by NEMA officials, gazetted environmental inspectors or District Environment Officers, to ascertain whether the recommended mitigation measures arising out of the inspection are being implemented. The inspector has the discretion to determine when to follow up after inspection of a Facility.

**c) Capacity Building/ Training of NEMA Staff to review and monitor EIAs**

The training needs of staff relevant to the EIA process are identified annually and included in their respective departmental work plans and budgets for the year. The departmental work plans are then integrated into the annual work plan and budget of the Authority for approval by the Board of Directors. Training is then carried out in line with the approved plan.

# 4

# CHAPTER FOUR

# CHAPTER FOUR

# FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

In this section, Finding 4.1 casts the spotlight on the level of information management in NEMA, while the subsequent findings (4.2-4.8) relate to the audit questions developed for the audit.

Overall, our findings show that over the years, NEMA has made steady progress in managing this sector, with significant achievements in the following areas:

1. NEMA has prioritised regulation and monitoring of the Oil and Gas sector, providing for it in its structure, staffing and funding.
2. The Authority has opened a field office (in Masindi) and hired four extra staff to monitor environmental aspects of Oil and Gas activities in the upstream more closely.
3. The quality of EIAs and Environmental Audits (EAs) conducted in the sector has improved significantly over the years, according to interview responses from NEMA, Department of PEDP, the Oil Companies, Practitioners, and from Audit's own assessment.
4. According to the Oil companies and Practitioners, the quality and practicability of NEMA's review comments and feedback has also improved significantly.
5. Total and CNOOC have greatly improved on submission of quarterly self-monitoring reports to NEMA since the last VFM Audit.
6. For downstream projects, review time for EIAs has gone down over the years, although the average time is still above the stipulated timeframe.

However, the findings also document several gaps and areas for improvement:

## 4.1 MANAGEMENT OF INFORMATION RELATING TO THE EIA PROCESS AND AUDIT IN NEMA

The National Environment Act (NEA), Cap. 153, states that every person shall have freedom of access to any information relating to the implementation of the Act submitted to the authority or to a lead agency. This pre-supposes that the information is stored in a way that makes it easily retrievable upon demand, in line with good data management practice. Particularly, The National Audit Act, 2008 grants the Auditor General right of access to documents and information relevant to the performance of his or her functions.

Audit noted that the management of records in the Authority is inadequate, and as a result some important information requested for was not availed to audit as detailed in APPENDIX VI. NEMA explained that the information was not easily retrievable because many of the past records were stored in the attic, in no particular order, and that the staff currently employed are overwhelmed by volumes of documents submitted for NEMA's consideration, and this has affected their availability to concentrate on the management of records.

Audit also noted that information pertaining to EIA review, approval and monitoring was kept by the different responsible sections, namely: the EIA Section, Audits section, Office of the Director EMC, Records, and Accounts. However, none of the sections had developed a proper filing system to enable easy retrieval of information upon demand, and neither was there any evidence that all the sections were working together to ensure consistent coding to ease tracking of pre-approval and post- approval information pertaining to the same project. This is in spite of the fact that in FY 2012/13, NEMA allocated UGX 37 million to establish and maintain a functional national EIA database.

As a result of the incomplete documentation availed to audit, it was not possible for Audit to corroborate information received from interviews for the following areas:

- Adherence to the EIA review process by NEMA;
- Review of Environmental Audit reports;
- Prioritisation of areas for inspection and monitoring by NEMA;
- Information received from Lead Agencies on their activities in environmental monitoring; and
- Action taken and feedback following inspection and monitoring.

**Management Response**

The challenge of accurate keeping and retrieval of records is acknowledged. For the EIA records, management has set up an EIA Library and here documentation of environmental assessments from the start of NEMA are being kept for easy access; however space availability has limited transfer of all records.

Management has also introduced a record system akin to that of procurement where a file is opened for each EA for which a decision has been made containing all correspondences regarding the specific project and this is now being applied to all new projects.

In addition, management has recently also started the process of improving data management through electronic means; a data base development is in advanced stages of development with staff being trained on it. The database will be completed within one year, and will capture all information to do with EIAs. It will be accessible to Lead Agencies and will be linked to the one-stop centre of the Uganda Investment Authority.

**Conclusion**

There is lack of a system for proper management of records and information in NEMA and this makes it difficult to retrieve and access key documentation related to the EIA review, approval and monitoring process. This has created a limitation in scope of this audit.

Inadequate management of information and records can also affect NEMA's ability to keep track of approved projects and plan for their monitoring and inspection.

**Recommendation**

- NEMA should prioritise and expedite the on-going development of an effective system for management of records and information in order to support the process of EIA Regulation and Monitoring. Management should ensure that this activity is completed in one year as committed.

## 4.2 REVIEW OF ENVIRONMENTAL LEGISLATION

Section 2(2)(g) of the NEA requires NEMA to establish adequate environmental protection standards. Since December 2012, NEMA has been undertaking legislative review to, among other things, incorporate emerging issues including oil and gas. In their responses to audit

findings in March 2014, NEMA stated that this review would be complete by December 2014. Comprehensive legislation is essential as it provides guidance on what should be covered during the EIA process.

Through review of the submission dates for the final drafts from the consultants and interviews with NEMA, it was noted that the Authority has made significant progress in review of the legislation, and the final draft legislation was submitted by the consultants to NEMA by December 2014. However, NEMA has still not finalized the legislation.

According to NEMA, the Authority is still fine-tuning the legislation with technical support from development partners. They explained that the extra work involves co-relating all the updated drafts to ensure that they do not contradict each other, as well as other national legislation. In addition, given the cross-cutting nature of the law, they deemed it necessary to conduct four (4) regional workshops countrywide to capture more stakeholder views on the legislation. So far, they have only conducted one. After this, the legislation will be submitted to the top policy organ at Ministry of Water and Environment, the Policy Committee on Environment (PCE), to Cabinet and finally to the Solicitor General. Thereafter, it will be submitted to Parliament for deliberation.

Audit noted that the inclusion of some activities which had not been planned for earlier, such as the regional consultative workshops, contributed to the delayed finalisation of the legislation.

It is also noteworthy that the National Environment Act (NEA) is being reviewed concurrently with the other legislation. NEMA explained that since the NEA is the framework law, they considered this to be the most effective mechanism to avoid inconsistencies and/gaps in the law, since any additions to the other legislation would then be added to the revised draft of the NEA. NEMA also stated that for the Oil Spill regulations, these would only be finalised after the National Oil Spill Contingency Plan was completed.

As a result of the delays in review of legislation, NEMA and the Lead Agencies continue to govern the EIA process in the petroleum sector using the existing legal framework, which was already found to have gaps that have affected the oversight function of the sector. Through document review and interviews with NEMA, the Department of PEDP officials, Oil companies and DEOs, it was noted that gaps in the current legislation, such as, lack of Air Quality standards, comprehensive Waste Management regulations for oil and gas activities, noise and vibration standards for activities in game parks and protected areas, guidelines for monitoring the quality of ground water, to mention just a few, continue to hinder proper regulation and monitoring of EIAs in the sector. For instance, audit noted that in some Environment Audits conducted by the Oil companies, they did not bother to measure the air quality, since (they said) their findings would not be binding without legislation. Also, without guidelines or standards for monitoring quality of ground water, practitioners measured the quality of water discharged against standards for potable (drinkable) water, which is inaccurate.

**Management Response**

Other reasons for the delays to complete the process of review include the fact that there were delays to release funding from the Oil for Development Programme, which is administered by the Department of PEDP; also, the Ministry of Water and Environment (MWE) guided that the National Environment Policy be finalised first. Revised timelines were developed and according to these, NEMA is required to complete stakeholder consultation and submit the draft legislation to MWE by 22nd January, 2016. The Ministry will in turn consider the legislation by the end of January before it is passed on to the Policy Committee on Environment (PCE), chaired by the Rt. Hon. Prime Minister. The PCE will consider the draft legislation after the elections, and it is estimated that Parliamentary approval will be granted by June, though this is not within NEMA's control.

**Conclusion**

NEMA did not complete legislative review on schedule, due to introduction of previously unforeseen activities, the wait for finalisation of the revised draft national environment policy, and delayed release of funds.

The delays to finalise the review of legislation are a serious cause for concern as Uganda heads to most environmentally-risky phases of activity in the Upstream. Lack of an updated regulatory framework may influence the effectiveness of NEMA's regulatory role in the Petroleum Sector.

**Recommendations**

- NEMA should strive to adhere to the revised timelines for finalisation of the internal review of environmental legislation, and engage the other stakeholders (PCE, Cabinet, Solicitor General and Parliament) to ensure timely approval of the legislation.
- NEMA should coordinate with the Department of PEDP to ensure timely release of funding for legislative review activities.

## 4.3 PREPARATION OF EIAs FOR PROJECTS IN THE PETROLEUM SECTOR

NEMA, in consultation with relevant lead agencies, should put in place adequate mechanisms to ensure that EIAs are conducted for all projects in the Petroleum Sector that need them before construction (implementation) starts. Also, starting in February 2012, NEMA requires that project implementation should commence no more than 24 months (2 years) years after EIA approval. Otherwise, NEMA should be informed so that it can advise on whether the project should proceed, or whether changes in the surrounding environment necessitate another assessment.

Through interviews with officials from MEMD (Department of PEDP and DPSD) and the districts (DEOs and MEOs), Audit noted that all Lead Agencies were aware of the requirement to have each project approved by NEMA before commencement.

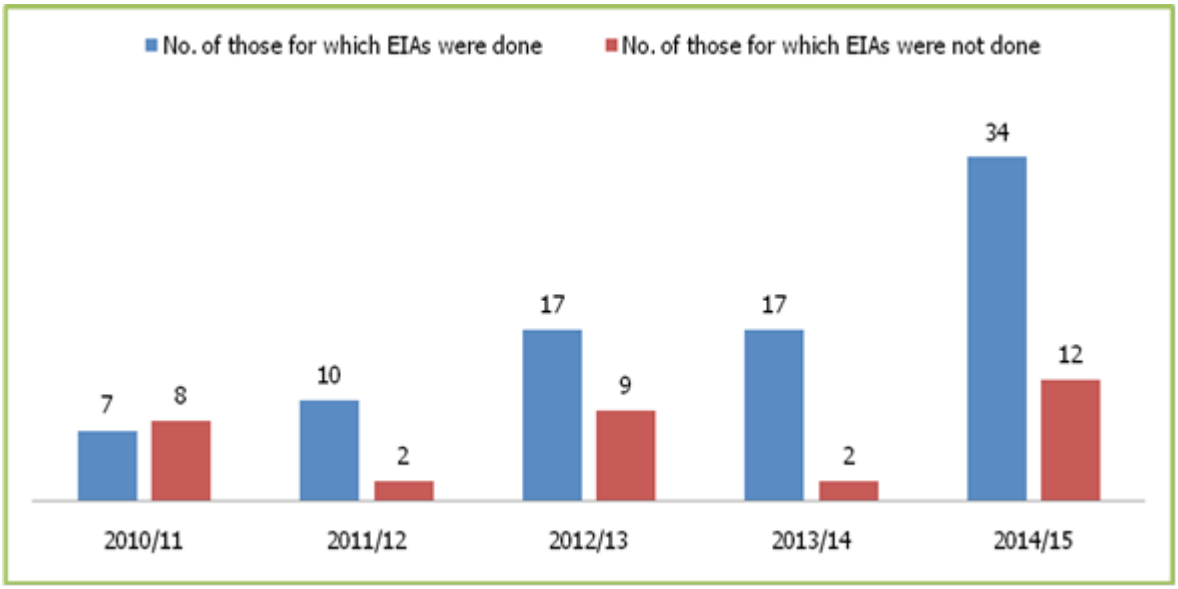
Officials interviewed from NEMA, Department of PEDP and the oil companies stated that EIAs are conducted for all projects in the upstream.

However, stakeholders interviewed[24] stated that this was not the case in the downstream.

24 Interviews with NEMA, DEOs and MEOs

They said that some projects in the downstream commence without EIA approval from NEMA. Audit comparison of construction permits issued by MEMD from FY 2010/11 to 2014/15 with the EIA certificates of approval availed seems to confirm this: out of 118 projects granted Construction permits by DPSD from 2010/11 to 2014/15, 85 (72%) had EIA certificates of approval from NEMA, while 33 (28%) did not. Figure 2 below compares the number of projects with EIA certificates of approval versus those without over the 5-year period:

**Figure 2: Showing downstream petroleum projects granted construction permits after EIA approval vs. without EIA approval from NEMA**




Source: OAG Analysis of the list of Construction certificates issued by MEMD from July 2010-June 2015; NEMA records of projects granted EIA certificates of approval and Application files for construction certificates from MEMD

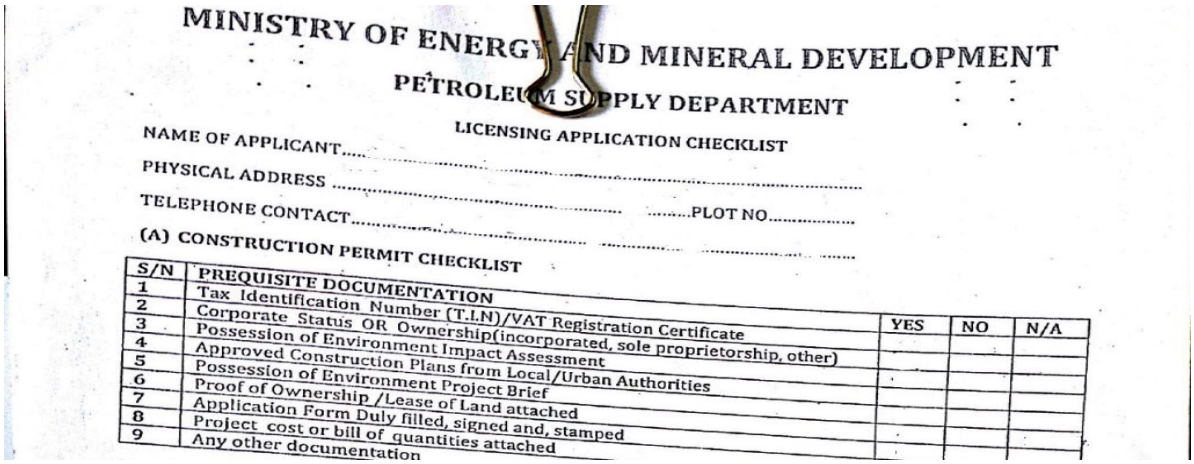
From the figure above, it can be seen that, over the years, the number of downstream projects which have been granted construction permits following NEMA approval has been on the rise. However, it can also be seen from the figure that the proportion of downstream projects that commenced without EIA certificates of approval from NEMA versus those that did tended to fluctuate over the five-year period. This means that the overall compliance with the NEMA requirement is not consistent.

In addition, audit noted that for five (5) of the projects during the period from FY 2010/11-2014/15, NEMA's approval came after MEMD had given them the green light to start construction. Audit noted that NEMA had delayed to approve all the affected projects (See APPENDIX VII for details), even after DPSD, which is the Lead Agency for downstream projects, had conducted field verification inspections, and submitted its review comments to NEMA. However, there was no evidence that DPSD had engaged NEMA in any way to discuss the delays or expedite the review.

Also, Audit noted that between February 2012 and June 2015, 43 out of 45 projects had been granted Construction Certificates by DPSD within the required timeframe (less than two years from the time the EIA certificate of approval was granted by NEMA). In two (2) cases, however, the Construction Certificates came after the two years had elapsed, without any go-ahead sought from NEMA.

Through document review, audit noted that MEMD's checklist for approval of applications for construction permits does not require the project to have an EIA certificate of approval from NEMA (only an EIS is sufficient), and neither does it require the reviewer to consider when NEMA approval was granted before issuing the permit. A photograph of the checklist is shown below:

**Picture 1: Showing the MEMD (DPSD) Construction Permit Checklist**



MINISTRY OF ENERGY AND MINERAL DEVELOPMENT

PETROLEUM SUPPLY DEPARTMENT

LICENSING APPLICATION CHECKLIST

NAME OF APPLICANT.....

PHYSICAL ADDRESS .....

TELEPHONE CONTACT..... .....PLOT NO.....

(A) CONSTRUCTION PERMIT CHECKLIST

| S/N | PREQUISITE DOCUMENTATION | YES | NO | N/A |
|---|---|---|---|---|
| 1 | Tax Identification Number (T.I.N)/VAT Registration Certificate | | | |
| 2 | Corporate Status OR Ownership(incorporated, sole proprietorship, other) | | | |
| 3 | Possession of Environment Impact Assessment | | | |
| 4 | Approved Construction Plans from Local/Urban Authorities | | | |
| 5 | Possession of Environment Project Brief | | | |
| 6 | Proof of Ownership /Lease of Land attached | | | |
| 7 | Application Form Duly filled, signed and, stamped | | | |
| 8 | Project cost or bill of quantities attached | | | |
| 9 | Any other documentation | | | |

Source: Department of Petroleum Supply and Distribution (DPSD)

When projects commence without EIA approval, there is a risk that some potential project impacts on the environment have not been identified and properly mitigated. In addition, where projects take long to start after EIA approval, there is a risk that the EIA observations, predicted impacts and mitigation measures may be overtaken by changes to the environment, best environment management practices, or technology.

### Management Response

This is a matter of procedure overlaps. Approval of Construction permits before EIA approval or more than 2 years after the EIA Certificate of Approval was granted was done in error. Management shall consult with the Ministry of Energy and Mineral Development to agree on the work method and on what action to take for the cases cited above.

### Conclusion

Although EIA approval from NEMA was obtained for all sampled projects in the upstream prior to implementation, this was not the case in the downstream. In addition, the decision by DPSD to go ahead and approve projects without contacting NEMA to discuss delays in EIA approvals indicates a coordination gap that needs to be addressed. The same can be said for DPSD's decision to go ahead and issue construction permits more than 2 years after approval of their EIAs, without seeking NEMA's advice.

### Recommendation

- NEMA should improve coordination with DPSD to ensure that all projects have EIA certificates of approval from NEMA before DPSD approves them. This will require improvement in sharing of information regarding EIAs between the two entities.
- In addition, NEMA should investigate and consider taking appropriate action against the companies that started activities without EIA approval.

## 4.4 COLLECTION, ALLOCATION AND UTILIZATION OF EIA FEES

Regulation 37(a) of the EIA regulations requires any person who submits a project brief or an Environmental Impact Statement for NEMA's review to pay a specified fee to the National Environment Fund (NEF), depending on the nature and cost of the project. The fees for different projects are detailed in Schedule 4 of the same regulations.

### 4.4.1 Collection of EIA fees

Through review of the project payment information availed by NEMA, Audit noted that generally, NEMA assessed the amounts payable correctly, and collected the amounts due.

### 4.4.2 Rationale for allocation of EIA fees

According to Environmental Management Practice in several countries including South Africa, Norway and Ghana, EIA fees are principally meant to recoup the actual cost of processing (reviewing and approving) the EISs submitted.[25] In Ghana, the EIA fees also contribute to the monitoring of projects following approval (Post-EIA monitoring and inspection),[26] and the Ghanaian Environmental Regulatory body is required to commit at least 25% of the EIA fees to cater for processing and monitoring of approved projects.

In Uganda, the National Environment Act charges the NEMA Board with the responsibility of managing all funds deposited to the National Environment Fund,[27] and this includes EIA fees. As opposed to the practice in the countries mentioned above, the law gives complete discretionary powers to the Board to decide what to utilize the funds for. However, the Board may, on the advice of the Executive Director, provide funding for any Government department involved in the field of environmental conservation and natural resources management.[28]

Exercising its mandate, the Board approved, in principle, funding under the NEF for five broad categories of activities. These include:[29]

1. Restoration of degraded ecosystems
2. Protection of green belts
3. Construction of a commercial incinerator on a Public-Private Partnership
4. Support to lead agencies in undertaking their functions related to EIA reviews, environment inspections and audits; and
5. Environment Education and Public Awareness

By comparing the amount of money allocated to EIA review, approval and post-approval monitoring with the total EIA fees payable (billed) over the five-year period, Audit found that the EIA-related activities in Uganda are only allocated 7-10% of the EIA fees, as detailed in Table 1 below:

25 Cf. Department of Environmental Affairs, Republic of South Africa (2014): Guidance document on the Fee Regulations. Page 14; and Amuron, D. and Koojo C. (2014) Consultancy services for reviewing and amendment of the Environmental Impact Assessment Regulations, S.I. No. 153-1, presented to NEMA. Pages 8-9 and pg. 23

26 Amuron, D. and Koojo C. (2014): Ibid; pg. 23

27 Section 89 (1)

28 NEA, 89(2)

29 NEMA, June 2012: The NEMA Work plan and Budget for 2012/2013; Page 19

**Table 1: Percentage of EIA fees allocated to EIA review and Monitoring activities**

| FY | EIA FEES PAYABLE/ BILLED (Million UGX) | ALLOCATION TO EIA ACTIVITIES (Million UGX) | PERCENTAGE |
|---|---|---|---|
| 2010/11 | 1,302 | 0 | 0% |
| 2011/12 | 2,093 | 200 | 10% |
| 2012/13 | 6,684 | 470 | 7% |
| 2013/14 | 5,497 | 528 | 10% |
| 2014/15 | 11,259 | 884 | 8% |
| **Total** | **26,835** | **2,082** | **8% (Average)** |

Source: OAG Analysis of NEMA data for EIA fees payable/ billed, and allocation of NEF funding obtained from NEMA Annual Work plans and Budgets, FY 2010/11-2014-15

### 4.4.3 Use of EIA fees to fund EIA reviews and post-approval monitoring by Lead Agencies

As per the Board resolution above, one of the priority areas for NEF funding should be giving support to lead agencies in undertaking their functions related to EIA reviews, environment inspections and audits.

Audit noted that from FY 2010/11 to 2014/15, the Board allocated a total of UGX 2.082 billion to EIA-related activities, of which UGX 840 million was specifically earmarked as support to Lead Agencies to carry out EIA baseline inspections, EIA review, and post-EIA inspections.

However, the DEOs/MEOs interviewed stated that they had not received any funding from NEMA to facilitate the above activities. DPSD and Department of PEDP also reported that they did not receive any financial support from NEMA for their activities.

NEMA explained that they do not disburse the funds to the districts or Lead agencies; rather, they budget for facilitation of the relevant officials from Lead Agencies and to accompany them when they are conducting baseline verifications or post-approval inspections. NEMA further emphasised that environmental management is a decentralised function, and so the districts and lead agencies are required to plan and provide funds for baseline verification of EIAs and post-approval inspections and not rely on NEMA to provide funds for these activities.

The decision of the NEMA Board to allocate most of the EIA fees (90-93%) to funding of other activities, other than facilitation of EIA review and monitoring, has the overall effect of hindering the review and monitoring of EIAs. Several DEOs/ MEOs interviewed stated that many times, due to absence of funding from districts for Environmental activities, they are delayed or completely unable to undertake site verification inspections to inform EIA review requests from NEMA as a result of financial constraints. Also, the post-approval inspections are affected.

**Management Response**

Monies collected in the National Environment Fund in addition to funding obtained from Government of Uganda are meant to support priority areas as approved by the Board which include the EIA review process, environmental monitoring, among others. The delay in review processes is not due to lack of adequate funds in totality; shortage of staff at NEMA to effectively match the level investments is the main cause.

**Conclusion**

Audit notes the response from NEMA Management. However, the delay referred to here arises from lack of funding for Lead Agencies and DEOs and not from staffing shortages at NEMA, and deserves attention.

NEMA has not prioritised utilisation of the EIA fees to facilitate review, approval and monitoring of EIAs. This has contributed to delays in the EIA process, since Lead Agencies are sometimes unable to conduct site verification inspections and provide comments in time.

**Recommendation**

- The NEMA Board should consider using EIA fees to a larger extent to support NEMA and the Lead Agencies to conduct the EIA review and approval and the monitoring and follow-up of approved projects.

## 4.5 CONDUCTING AND REVIEW OF EIAs IN THE PETROLEUM SECTOR

All EIAs should be conducted and reviewed in line with the EIA regulations. The purpose of this is to ensure that the EIAs comprehensively assess possible environmental impacts and propose adequate measures to mitigate them, and that the review is completed within a reasonable timeframe.

### 4.5.1 Compliance with the EIA review process

Regulations 5 to 26 of the Environmental Impact Assessment Regulations, 1998, outline the procedures to be followed by the Authority during the review and approval of submitted Environmental Impact Statements (EISs). The scoping report and terms of reference (ToRs) for the Environmental Impact Study should be developed in consultation with the stakeholders and the Authority. The Study should be carried out by certified EIA practitioner(s) and the public should also be consulted. Also, NEMA should consider review comments from lead agencies, and also call for written public comments on proposed projects by notice in a newspaper having national or local circulation. It is also good for the Authority and/or the Lead Agencies to carry out field verification inspections of an EIA site before approval is granted. The EIA Guidelines also detail the process to be followed in conducting and reviewing an EIA.

According to responses from NEMA officials, the Authority generally ensures that the above process is adhered to except in the following instances:

- Where Lead Agencies do not submit their review comments for ToRs, PBs or EISs, NEMA may go ahead and make a decision without their input, as this is permitted by the law.
- Site verification is not undertaken for all EIA documents submitted to NEMA for consideration. Approval in this case is based on review comments submitted by the relevant Lead Agencies, and the comments also include the findings of their site verification inspections.
- According to NEMA, they are not bound to call for written public comments for all projects. They only do it if the stakeholder consultation by the developer is deemed inadequate, or to verify the authenticity of any complaints from concerned stakeholders concerning a certain project. Where deemed necessary, a public hearing may be held.

However, Audit was unable to corroborate the interview responses given by NEMA on the above section because there was no project for which we received the complete chain of information needed to carry out this analysis.

### 4.5.2 Comprehensiveness of the EIAs submitted to NEMA

Section 14 of the EIA regulations spells out broad areas that should be included in the Environmental Impact Statement (EIS). The EIA Guidelines[30] also outline the minimum contents of an EIS. The following key aspects that should be covered by the EIA were assessed in a sample of 15 PBs and EISs for upstream projects[31] and through interviews with Oil companies and EIA Practitioners:

- Description of the baseline characteristics of the proposed project location;
- Description and evaluation of project alternatives (in terms of location, design, processes, technology and economic benefits vs. environmental costs);
- Evaluation of cumulative and/or combined impacts; and
- Impact prediction.

Generally, all projects touched on the areas assessed above, but we noted the following:

**a) Baseline Characteristics:**

This should include a description of the plant and animal species on site as well as in the surrounding area, air, soil and water characteristics, population characteristics and settlement patterns in the project neighbourhood, sources of community livelihood, among others. On the whole, most of the sampled projects described the above characteristics, though the level of detail varied from project to project.

The oil companies and EIA practitioners put forward the following reasons to explain the different levels of detail in the baselines, as well as the deficiencies noted in others:

- Different projects may have different levels of detail for the baseline because in doing the baseline study, they only document the parameters/ species that will be significantly affected by the activity, and not everything within the area.
- There is limited data available from districts and other government agencies on the biological, physical and social characteristics of many areas in the Graben that would provide an overall baseline/starting point for studies, and this makes it difficult to get extensive baseline data in the short time given for the EIAs. In fact, for major projects such as the Kingfisher Field Development Plan (by CNOOC) and the Nile-River crossing geophysical and Geotechnical survey (Total), the oil companies have invested significant amounts of time and money to conduct extensive baseline studies since very little data on the characteristics of the areas existed before.

**b) Project Alternatives:**

Audit noted that most EIAs considered only one option (the one proposed by the developer), as well as the "no project" alternative. This arose because most practitioners only considered project location during alternatives analysis and did not describe and evaluate alternative designs, processes, and technologies.

- In one EIA reviewed, it was stated that only one Project location was considered because the activities for example, well-testing or appraisal drilling are site-specific. However, through interviews with Oil companies and the EIA Practitioners, it was stated that this statement was made in error since even for well-pads, it is possible to propose alternative locations within a certain radius, after which the design and technology used would be adjusted accordingly.
- Regarding the failure to evaluate alternative designs, processes and technologies, the

30 Pages 12-13

31 Obtained from Department of PEDP

EIA practitioners explained that this gap occurs because the consultants are involved after the work programme for the year has been discussed and approved by the Advisory Committee Meeting (consists of MEMD and Oil Company representatives), and specific designs, processes and technologies have been agreed upon. In some instances, even the equipment has already been procured.

- Through interviews, we also concluded that there is confusion regarding whose role it is to propose project alternatives. Some EIA practitioners believe it is the duty of the Oil companies to avail them all available locations, designs, processes and technology, leaving the Practitioners the duty of evaluating them to assess the one that is most environmentally sound and economical. However, the Oil companies and other Practitioners disagreed with this submission, stating that the Practitioners are hired precisely so that they can propose different alternatives to the client and advise accordingly.

**c) Cumulative Impacts:**

Assessing cumulative impacts enables one to assess how the addition of each new project, in interaction with other projects/ activities in the vicinity, will impact on the environment as a whole whether positively or negatively. From the review of the EIAs and interaction with the oil companies, it was noted that many studies did not comprehensively evaluate these.

The EIA Practitioners explained that it is a challenge to evaluate cumulative impacts because there is no consolidated master plan for the different areas where the planned investments/ activities by different players e.g. government, land owners in surrounding areas, and investors are disclosed. They can only evaluate the cumulative impacts for projects revealed to them during interviews with the oil companies or other players.

**d) Impact Prediction:**

A major concern noted in interviews with oil companies, as well as correspondences between the Department of PEDP and the oil companies was that the upstream EIAs fell short when it came to quantification of data and use of scientific/ computer models for prediction of impacts. The studies mainly relied on qualitative predictions which are largely subjective.

In interviews with the oil companies and review of correspondences between the same companies and NEMA, it was stated that the above deficiencies in EIA quality majorly arose from the skills gaps among the environmental practitioners, especially in the area of quantitative impact prediction and modelling.

The EIA practitioners, on the other hand, stated that even now, they already do some modelling where the need arises. However, they explained that they are not able to do advanced impact prediction required for large-scale investments because obtaining advanced modelling technology and software updates is very expensive, as well as the training on how to operate these. Thus, they said, it is not economically viable for them to invest in this since very few projects (even in the Oil and Gas sector) require such advanced modelling.

Persons interviewed also stated that there were other weaknesses in the EIAs which included evaluation of ecosystem services, and that (especially for earlier EIAs), some of the report-writing was below standard and involved duplication of material from other reports.

Through Interviews[32] and document review[33], other cross-cutting causes of the gaps mentioned in the EIAs were noted, including the following:

- As the industry took off, there was a challenge of limited skills for conducting and reviewing EIAs for oil and gas activities by the practitioners and NEMA, respectively. Some gaps remain in this area, especially among DEOs/MEOs;
- At times, there is an expectation gap between the different players (Oil companies, EIA practitioners, NEMA, and other Lead Agencies) on what should be done in line with the Terms of Reference for the studies, and the level of detail required.
- There is limited time availed to conduct many of the EIAs.

The results of the gaps in the EISs produced are numerous: Without an adequate description of the baseline characteristics, it is impossible to accurately evaluate the likely impacts of the project on the environment, or to conduct meaningful audits in future. Failure to describe project alternatives denies NEMA the option to compare various alternatives, and thus determine which one represents the most desirable balance between environmental and economic costs and benefits. Without accurate impact prediction, it becomes difficult to come up with adequate mitigation measures. In fact, one of the oil companies expressed reservations concerning the ability of the EIAs conducted in the Upstream to withstand increasing international scrutiny.

**Overall assessment of comprehensiveness of EIAs**

Having stated the above weaknesses, it is important to mention that our (Audit) review showed marked improvement in the quality of EIAs and PBs with the advance of the years. This observation corresponds with the assessment of all upstream stakeholders interviewed (namely, Department of PEDP, NEMA, the Oil companies, and the Practitioners). They all submitted that the EIAs conducted in more recent years were more comprehensive than those conducted earlier, and attributed the improvements to the following factors:

- Working with the Oil Companies (especially Total), the Practitioners have adopted IFC standards for conducting EIAs that are more in line with international best practice;
- The EIA practitioners have acquired some vital equipment for collection of quality data, including advanced GIS software, equipment for on-site air quality measurement, among others.
- The decision by NEMA to encourage oil companies to first do an area-wide EIA covering several projects in the same area allows them to invest time in a detailed baseline study of the entire area, and assess cumulative impacts for the different projects. It also saves time later since the same data then acts as a starting point when Project Briefs/ EIAs are conducted for the individual projects;
- Early involvement of Practitioners in the design of some recent projects, such as, the Kingfisher Field development plan by CNOOC. This is referred to as Front-end Engineering Design (FEED), whereby the developers share details of the intended project with the practitioner, and the practitioner evaluates different project alternatives and their respective potential impacts. The engineers then design the project such that it suits the preferred alternative, and re-design existing equipment to minimise project impacts based on the Practitioner's predictions;
- Adoption of more stringent criteria for registration of EIA Practitioners;
- ncreased stakeholder engagement by Practitioners during EIAs and more detailed consideration of the social impacts of projects; and
- Some staff in NEMA, Lead Agencies and some Practitioners have undertaken further

32 With Total, CNOOC, Eco & Partner, Atacama

33 MEMD, 2013: Strategic Environmental Assessment of oil and gas activities in the Albertine Graben, Uganda; Page 239

training relating to Oil and Gas.

**Management Response**

There is on-going capacity building among environmental pillar institutions (including districts) staff on environmental aspects of oil and gas including EIA with the support from the Norwegian government.

Regarding Baseline information, studies have been conducted on the fisheries, forests, wildlife and socio-economic aspects of the area by NEMA, UWA, UBOS and Oil Companies, such as, Total. The Practitioners can refer to these for baseline data.

It is the responsibility of the Practitioners to propose different Project alternatives to the developers. Where it is not done, it is due to capacity gaps on the side of the practitioners, and so they should build capacity in this area. NEMA is also starting a certification programme to equip Practitioners with requisite skills before re-certification. That notwithstanding, during the EIA review process, NEMA and the Lead Agencies evaluate alternatives proposed; it can lead to changes in site location, designs even after approval by ACM. Examples include: a Ramsar site in Murchison Falls National Park, which the company was asked to abandon because of its sensitivity.

Regarding Cumulative impacts, it is a challenge to predict these, currently, because the oil and gas activities are still in their infancy, and the area is mostly virgin/ undeveloped. Furthermore, an EIA is, by nature, mostly site-specific and cannot present extensive analysis of cumulative/combined impacts. Therefore, the Strategic Environmental Assessment (SEA) of the Albertine Graben was conducted to assess the cumulative impacts over the entire Graben. The Practitioners can refer to these during the EIA.

Also, where impacts cannot be satisfactorily predicted (e.g. on the basis of experience from past projects, or simple logical models), we normally opt for the Precautionary Principle, where we decline to approve the project, or request the developer to re-locate it.

**Conclusion**

There have been significant improvements in the quality of EIAs conducted in the oil and gas sector due to increased exposure, training and interaction between the different stakeholders. However, the fact that some Practitioners cite lack of baseline data as a gap hindering the process provides an opportunity for NEMA to work with them to ensure that they access the said information.

Also, though NEMA states that changes have been made to project designs or locations after the ACM, Audit points out that this has cost implications, and these will be paid back as recoverable expenditure. Such deviations could be minimised if the EIAs were undertaken and approved before the budgets of the Oil Companies were passed by the Advisory Committee.

Other issues include divergence of opinion between some practitioners and oil companies regarding whose role it is to propose project alternatives; absence of ready information on existing and planned investments/ activities in project areas; lack of discussion between the different stakeholders on what is expected from an EIA following approval of the terms of reference; inadequate investment by EIA Practitioners in software and training for impact modelling; and some personnel in government entities (especially local governments) lack the necessary skills to review petroleum-sector EIAs. These have impacted on the quality of the EIAs produced to date and will continue to do so unless addressed.

**Recommendations**

- NEMA should sensitize the stakeholders on the availability and accessibility of data for use in the EIA process.
- NEMA should work with the Uganda Association of Environmental Impact Assessors, and the

Committee of Environmental Practitioners of Uganda to strengthen the regulation of the profession through enforcing Continuous Professional Development, and more stringent review of applications for certification or renewal of registration for certified Environmental Practitioners.

- NEMA should dialogue with MEMD and the Oil Companies to explore the possibility of conducting EIAs before project details such as processes, design and technology have been discussed and approved by the ACM in order to save time and costs;
- NEMA should continue to work with local governments in the Albertine Graben and other lead agencies to ensure that more of their staff (including DEOs and MEOs) receive the necessary training for review of EIAs in the petroleum sector;
- Following approval of Terms of reference for EIAs, NEMA should consider meeting the Developer and the selected Practitioners to ensure that they understand clearly what is expected of them from the EIA.

### 4.5.3 Delays in the EIA review process

The EIA Guidelines (Pg. 9) indicate that NEMA should undertake review at two stages: Review of the Terms of Reference for the EIA (TORs), and review of the Project Brief or Environmental Impact Statement (EIS). The guidelines recommend that the TORs be reviewed in a maximum of 21 working days (which translates to about one month). The EIA Regulations (1998), on the other hand, stipulate that review of EISs should take no more than 180 days.

EIA Practitioners and the Oil company representatives interviewed explained that there were delays in the review of Scoping Reports and Terms Reference (ToRs) for projects in the Petroleum Sector. One Practitioner, however, noted that there has been an improvement in recent times. Also, both the EIA Practitioners and NEMA stated that there are more delays in reviewing ToRs in the downstream than in the upstream.

Audit could not corroborate these statements through document review due to incomplete information availed by NEMA.

However, when it comes to review of Environmental Impact Statements (EISs), NEMA generally completed the review of upstream projects well within the stipulated time, while the review of downstream EISs was delayed. Table 2 below summarises the review time for upstream and downstream EISs, and the frequency of delays.

**Table 2: Showing average time taken to review EISs and frequency of delay**

| Phase | Expected review time (days) | Actual (average) review time over the years in days | | | | |
|---|---|---|---|---|---|---|
| | | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
| Upstream | 180 | - | - | 112 | 117 | - |
| Downstream | 180 | 426 | 232 | 329 | 174 | 183 |

Source: OAG analysis of NEMA records of dates of EIS submission vs. approval dates

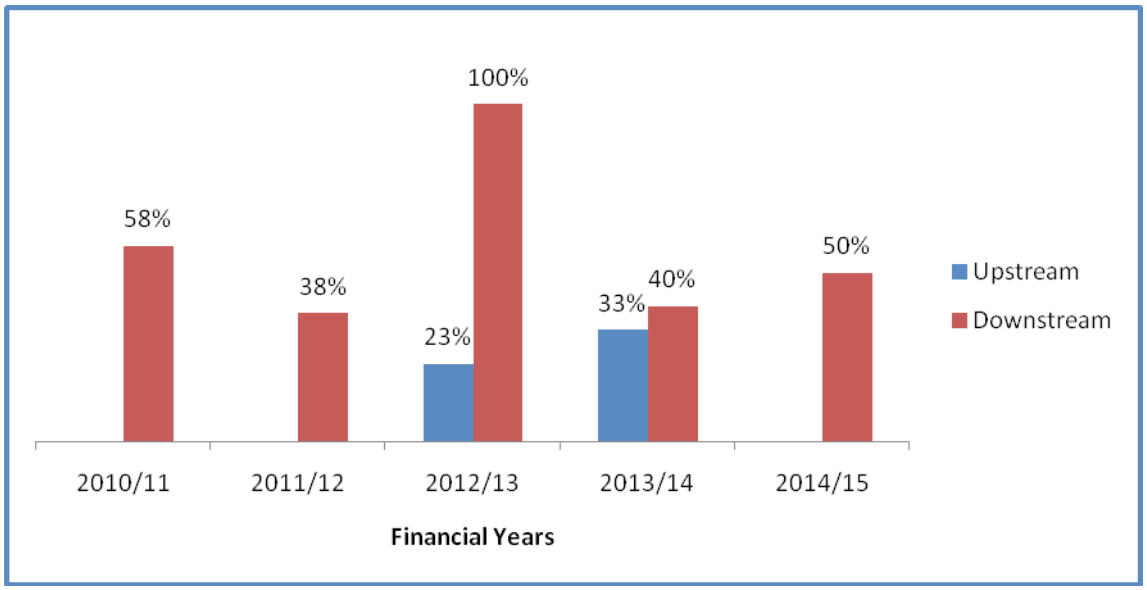
The table above shows that the average review time for downstream projects mostly exceeded 180 days, as opposed to upstream projects which were mostly reviewed in time. Also, the frequency of delays was higher in the downstream.

The records availed by NEMA to audit[34] did not contain complete information to allow the calculation of the average time taken to review EISs for upstream projects in FYs 2010/11, 2011/12 and 2014/15. However, through the review of available records for 13 projects in 2012/13 and 3 in 2013/14, we noted that in both years, NEMA (on average) reviewed the projects well within the stipulated timeframe (112 and 117 days, respectively).

Regarding the downstream, the results of analysis in the table above shows that overall, NEMA takes more than 180 days to make a decision on an EIS submitted in the downstream. In the last two years, NEMA has managed to bring down the average review time. In 2013/14, it stood at 174 days, the only time in the 5-year review period that the average review time was within the stipulated timeframe; in 2013/14, it rose 183 days, meaning that on average, an EIA in this year was approved 3 days later than the expected date. This is an improvement from 2010/11 to 2012/13 where average review time ranged from 232-428 days, implying that approvals delayed by 52-248 days during that period.

However, considering the likelihood of delayed approval for individual projects shows mixed results, as shown in Figure 3 below:

**Figure 3: Showing Percentage of projects whose EIA approval was delayed**




Source: OAG analysis of NEMA records of dates of EIS submission vs. approval dates

The figure above shows that fewer projects in the upstream had their approval delayed than in the downstream. For instance, in 2012/13, approval of 23% of upstream projects delayed, compared to 100% for the downstream, while in 2013/14, the figure stood at 33% versus 40%. The figures for the downstream also show that over the years, the percentage of individual projects whose approval was delayed has kept fluctuating, ranging from 38% to 100%.

In interviews with NEMA, Oil companies and the EIA practitioners, the shorter review time in the upstream was due to establishment of the Oil and Gas section manned by four staff, who undertake review of the PBs and EIAs for the upstream, in addition to other tasks related to oil and gas.

The delays to review scoping Reports and Terms of Reference, as well as the EIASs downstream, were mainly attributed to the exponential increase in EIAs submitted to NEMA over the years, compared to the available staff to review them.

34 MS-Excel record with fields for Project Name, Location, Submission date; and List of Approved EIAs

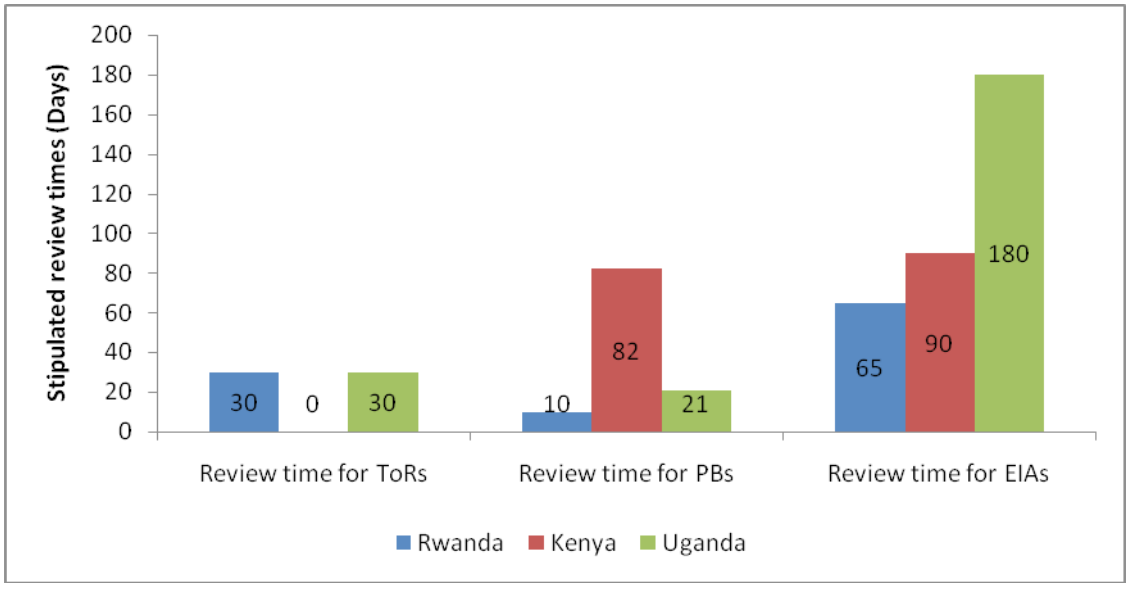
According to NEMA, other reasons why delays occur include:

- Delay by Lead Agencies to submit their review comments on EIAs to NEMA. The DEOs and MEOs cited inadequate funding to conduct the necessary site verification inspections to inform their review comments. Department of PEDP stated that they sometimes delay to give feedback due to other competing engagements at work.
- Significant inadequacies in the EIAs which necessitate that NEMA sends them back to the developers for improvement. According to practitioners, this may arise from lack of competence, or differences in expectations regarding the Terms of Reference between the practitioner and NEMA.
- slow courier service;
- the need for NEMA to carry out site verifications before a decision can be made;
- a controversial proposed project for which a public hearing is required.

Comparison of statutory review period in Uganda with that in neighbouring countries
Although, as noted above, NEMA sometimes completed reviews in time, the general opinion of both upstream and downstream stakeholders (developers, practitioners, and DPSD) is that the reviews at NEMA take too long. Some specifically mentioned that 180 days is an unduly long time to take reviewing an EIA. They also suggested that NEMA can designate persons or partnerships as EIA reviewers and outsource review of some EIAs where it gets overwhelmed. Part of the EIA fees paid would be used to meet this cost.

To further explore the perception that the review time by NEMA is too long, we compared the legally stipulated review times in Uganda with those from Kenya and Rwanda, and our findings are presented in Figure 4 below:

**Figure 4: Comparison of review times in Rwanda, Kenya and Uganda**




Source: OAG analysis of review times in the Environment laws for Rwanda, Kenya and Uganda

The figure above shows that the stipulated review time for EIAs is significantly longer in Uganda than in Rwanda and Kenya. It is about 3 times longer than the time stipulated in Rwanda, and twice that in Kenya.

However, the review time for ToRs in Rwanda and Uganda is the same, while Kenya's law

is silent on how long it should take. When it comes to Project briefs, Uganda's stipulated review time is twice as long as Rwanda's, but four times shorter than Kenya's.

Delayed review of PBs and EISs results in delayed Project implementation, and this may result in implementation of project activities by some developers prior to approval, as noted in finding 4.2. According to the oil companies[35] delayed approvals may also have in cost implications as payments are made for stand-by time of rigs and other equipment pending approval of EIAs for planned projects. This would be a loss to the government since this is computed as recoverable expenditure. Also, developers who have acquired loans from financial institutions would be affected.

**Management Response**

Management acknowledges that there is a delay in the review of some of the EIA in the petroleum sector as in others. Inadequacy of staff to match the level of investments requiring EIA is the main challenge in addition to the logistical issues.

Management has introduced several measures towards reducing review time over the last three years. For instance, Management introduced, as a routine, EIA verification inspections regime for most of the investments by NEMA staff to stem off conflicting data that was also a cause of delays. Recently, we have initiated electronic distribution EIA reports to reviewers in the districts and lead agencies in order to reduce on transmission postal delays that were identified as a bottle neck.

Also, NEMA obtained a no-objection from the Ministry of Public Service regarding its proposed revised staff structure to enable it recruit more staff. However, the Ministry of Finance Planning and Economic Development (MoFPED) did not approve it, citing unavailability of funds for this recruitment.

**Conclusion**

On the whole, NEMA takes longer to approve downstream projects than those upstream. In the upstream, delays mainly occur at the stage of approving Scoping reports and ToRs. Furthermore, the stipulated review time for EIAs in Uganda is significantly longer than that in Kenya and Rwanda, and is considered too long by several stakeholders. The delays are mainly caused by the heavy workload of the EIA review team at NEMA, lack of facilitation by Lead Agencies to their staff to conduct site verification inspections, and poor quality EIAs submitted.

**Recommendations**

- NEMA should continue to engage MoFPED to allow them recruit more staff to facilitate EIA review, in line with the recommendations made during the Institutional Review exercise by Ernst & Young[36].
- NEMA should engage MoFPED, MWE and Lead Agencies to ensure that they plan, budget for and fund environmental management activities in LAs and districts, such as EIA review and monitoring activities.
- NEMA should constantly engage developers and practitioners, and the Uganda Association

35 Interviews with Total and Correspondences with NEMA and DPEDP

36 NEMA Institutional Review Report February, 2011, pg. 52

of Environmental Impact Assessors to ensure continuous improvement in quality of EIAs. Penalties should be considered for practitioners who consistently submit sub-standard EIAs.

# 4.6 MONITORING EIA IMPLEMENTATION

### 4.6.1 Self-monitoring

According to NEMA's EIA Guidelines (page 35), the developer is required to conduct self-monitoring, self-record-keeping and self-reporting, and the information gathered through monitoring should be stored and made available during inspection. Also, Section 22(3) of the NEA requires the owner of the premises or the operator of a project for which an environmental impact statement has been made to keep records and make annual reports to NEMA describing how far the project conforms in operation with the statements made in the environmental impact statement. NEMA may prescribe any other reporting requirements as it deems fit.

**a) Routine Self-monitoring**

**In the downstream**

Through audit inspections to 10 fuel stations, it was noted that only one of them (Shell Iganga) conducted self-monitoring. This fuel station kept records of the amount of used oil and number of filters generated, waste collection schedules, and levels of fuel in the tanks. The other fuel stations did not do any self-monitoring, though they claimed they checked on the levels of fuel every day. Also, they said the used oil was collected by locals, though they had no contacts of these people, nor details of what they used the oil for. Failure to conduct self-monitoring means that there is no regular record of the extent of day-to-day compliance with EIA conditions of approval, mitigation measures stipulated in the Environmental Management Plans and best environment management practice. Also, unforeseen impacts are not documented. As a result, risky practices at fuel stations may go on unchecked, making them vulnerable to environmental disasters. Also, the extent of pollution cannot be determined if it happens. Furthermore, lack of self-monitoring reports limits the ability of environment audit teams or inspectors to identify chronic weaknesses in the environment management practices on site and come up with recommendations that can better guarantee long-term improvement in performance. In fact, one DEO in particular (DEO Mbale) stated that this has made her unenthusiastic about inspections to fuel stations, since the ultimate impact is limited.

Furthermore, only Oilcom (Jinja) and Bongoils (Iganga) had the EIA Certificate of Approval on site. The others had neither this, nor the Environment Management Plan, saying these were kept at their Head Offices. Without these, it is difficult for the station managers to know which areas they are required to comply with.

**In the upstream**

**Quarterly self-monitoring reports**

Through interviews with NEMA, Audit noted that the upstream developers (Tullow, TEP and CUL) are required to submit quarterly self-monitoring reports on environmental performance.

For purposes of this audit, we assessed submission of quarterly self-monitoring reports submitted to NEMA for the period following the previous Environmental Audit by the OAG. It

was noted that there was an improvement in compliance by all the Oil Companies. Tullow's performance rose from 58% to 100%, while Total's and CNOOC's rose from 50% to 100% and from 0% to 77% respectively, as shown in Table 3 below:

**Table 3: Submission of self-monitoring reports by E & P companies**

| COMPANY | FY | | | | | | | | | % REPORTS SUBMITTED |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2013* | | 2014 | | | | 2015** | | | |
| | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | |
| TUOP | √ | √ | √ | √ | √ | √ | √ | √ | √ | 100% |
| TEP | √ | √ | √ | √ | √ | √ | √ | √ | √ | 100% |
| CNOOC | × | × | √ | √ | √ | √ | √ | √ | √ | 77% |

Source: OAG analysis of self-monitoring reports submitted to NEMA

*Q1 and Q2 were already reported on in the previous VFM audit (OAG, 2014; Regulation and Monitoring of Drilling Waste Management in the Albertine Graben by NEMA)

**Q4 (2015) was not yet complete at the time of audit

As seen above, Audit noted that overall, compliance with the requirement to do self-monitoring and report on performance quarterly was best adhered to in 2015. Audit also noted that Total E&P went further than the requirement, and shared even monthly self-monitoring reports with NEMA. CNOOC also mentioned that the self-monitoring reports for Q3 (Jul-Sep) and Q4 (Oct-Dec) 2013 were not produced because no activity was going on at their sites for much of that time. They explained that activities resumed in December 2013, and these were reflected in the report for Q1 (Jan-Mar) 2014. However, this contradicts the view of NEMA that even non-operational sites should be monitored by the oil companies.[37]

According to NEMA management, the improved performance was realised because the Authority (NEMA) continually engaged the staff to ensure they complied with the requirement to self-monitor and self-report quarterly.

### b) Environmental audits

For both upstream and downstream projects, Environmental Audits are supposed to be undertaken annually, or if the project life is less than one year, immediately the project is completed (common in the upstream).

Audit noted that out of 53upstream projects approved from 2012-2014, audits for 50 out of 53 of them were completed or on-going, while 3 had not been undertaken. Of the audit reports submitted, 13 were submitted within the stipulated time, while 37 were submitted to NEMA past the stipulated date, with delays ranging from 2 to 520 days.[38]

In the downstream, none of the 38 sampled projects had submitted Environmental Audit reports.

However, even where the audits were conducted, review of the reports and interviews with

37 Cf. NEMA's feedback to Total E&P on the self-monitoring report for Q1 2014 EA-1 and EA-1A (dated 18th June 2014)

38 Audit made the assumption that an Environmental Audit report for each site should be submitted latest one year after the EIA date of approval by NEMA.

representatives from the oil companies revealed some significant gaps including the following:

- Failure to compare baseline characteristics, for example, of soil and water quality with the results after the activity. This would inform both the developers and NEMA on whether there are any changes in the air, water or terrestrial environment even when parameters still fall within national standards.
- Most audit reports did not review, investigate, evaluate and report on the findings contained in the self-monitoring reports produced by the oil companies, as well as the compliance monitoring conducted by NEMA and the other Lead Agencies. As a result, no assessment of environmental performance at the completed project stages (e.g. construction) is made. Also, the audits do not reflect the overall trend of environmental performance and compliance with different parameters over the course of the project life/ year.
- Some of the audits did not investigate concerns or follow up on requests made by stakeholders, such as, surrounding communities and the Department of PEDP, and neither did they give reasons to justify such omissions.

Regarding the failure to compare baseline characteristics with actual conditions at the time of audit, the Environmental Audit Practitioners interviewed explained that this happens because most times, changes occur during project implementation, and these make it irrelevant to make comparisons with most of the baseline data. For instance, a well pad may be moved about 200m away from the originally planned spot, and so the risk to some features identified in the EIA ends up being insignificant. Also, they added that in some instances, they find that the EIA baseline data collected by the other practitioners was of poor quality and cannot be relied upon.
However, in none of the reports reviewed did the practitioners document their reasons for failing to compare baseline characteristics with actual conditions at the time of audit.

In interviews with the Environmental Audit practitioners, one of them stated that they do review self-monitoring reports. However, Audit could not confirm this, since review of the methodology for the sampled Environmental Audits reports conducted by this particular firm did not contain any statement to the effect that self-monitoring reports would be reviewed, and the chapters on audit findings did not contain evidence that the same had been reviewed.

Other practitioners mentioned that they call for records of self-monitoring for one or two randomly selected dates (e.g. records of amounts of water abstracted) and this enables them to verify whether the developer complied with the mitigation measures and conditions of approval for the particular parameter in question. However, audit noted that doing this cannot enable the practitioners to draw meaningful conclusions about environmental performance over the entire period.

**Management Response**

NEMA has increased the inspections on downstream projects at all stages of their operations and there is a corresponding increase in the number of audits being submitted.

NEMA agrees that the quality of audits conducted is still lacking, and is not to the standard of EIAs. In order to improve on the quality of work and reports by practitioners, a new certification training program approved by the Board for all practitioners shall

start soon. The training will become a requirement for renewal of practicing license.

**Conclusion**

The consistency of self-monitoring by all three upstream companies has improved greatly since the last audit. However, the fuel stations and storage tanks are mostly non-compliant with only Shell Iganga keeping self-monitoring records, though they are not transmitted to NEMA.

Furthermore, there are significant inadequacies in the methodology and quality of Environmental Audits conducted by developers, which need to be addressed. Also, Audit could not verify NEMA's assertion concerning increased inspection and submission of audit reports for downstream projects since neither inspection reports by NEMA nor Audit reports from the developers were availed to Audit for any of the projects sampled.

**Recommendations**

- NEMA should enforce the requirement for all developers do regular self-monitoring, self-reporting and auditing.
- NEMA should ensure timely, written feedback is given to developers following inspections or when they submit reports in order to encourage compliance with stipulated mitigation measures and EIA conditions of approval.
- NEMA should explore ways to ensure that the project phases that end before the close of the project are documented, assessed and reported on.
- In addition to NEMA's current efforts, the Authority should engage Environmental Audit Practitioners to come up with workable options to improve the quality of Environmental Audit Reports.

### 4.6.2 Monitoring and inspection of Petroleum Projects by NEMA

**a) Prioritisation of areas for inspection**

In NEMA's Compliance Monitoring and Enforcement Strategy 2008 (pg. 23), the Authority set out to develop an Inspection Ranking Model. This model was to be used to prioritize and schedule inspections. It was to be based on a comprehensive survey of all approved projects and a point system that identifies facilities that pose a higher risk to human health or the environment. The model would be used as a guide to develop an annual inspection plan (pg. 24). The Authority aimed to inspect all licensed facilities at least once every three years (pg. 23). The Authority was required to liaise with lead agencies on alternative inspection schedules based on results of the Inspection Ranking Model and to revise frequency of facility inspections when an approved project has demonstrated long-term permit compliance (pg. 24). LAs are also required to conduct inspections/ monitoring and report to NEMA on the state of the environment in their respective jurisdictions at least once every two years (NEA, Section 6(4)(a)).

During interviews, NEMA management stated that they did develop the inspection ranking model, and that it is what they rely on to schedule, plan and budget for annual and quarterly inspections of facilities in all sectors, including the petroleum sector. However, audit was not availed a copy of the ranking, and neither were there any records to show how it had been utilised to prioritise areas for inspection.

**b) Planning and budgeting for inspections**

NEMA is required to plan and budget for the monitoring and inspection activities conducted by its staff. According to NEMA, this is done on an annual and quarterly basis.

Through review of NEMA's Annual Work plans and Budgets, it was noted that every year, NEMA budgets for inspections, including visits to upstream projects. However, they did not indicate which downstream projects were planned/ funded for inspections. As a result, Audit could not establish whether inspections to fuel stations and storage tanks were budgeted for and/or funded over the years.

**c) Development of inspection checklists**

In the Compliance Monitoring and Enforcement Strategy 2008 (pg. 24), it is stated that the Authority will have available sectoral Inspection Checklists to assist with inspections (e.g. inspections for petroleum products, manufacturing industries, garages, mining and quarry sites, telecom masts and base stations etc.)

Audit noted that before 2015, NEMA had not developed any inspection checklists for upstream or downstream projects. However, in 2015, NEMA developed several checklists for use in monitoring and inspection of activities in the upstream. The checklists include a general one to assess compliance with general requirements in the Oil and Gas sector, as well as specific checklists to monitor seismic survey operations, drilling, well testing and plug & abandon operations as well as waste management. At the time of audit (December 2015), none had been developed for the downstream.

Without inspection checklists, it is likely that some key aspects may be/ have been missed during inspections. In addition, it is unlikely to be consistent in data collection, making it difficult to keep track of performance in similar areas over a period of time.

**Management Response**

Management noted the recommendation; NEMA's inspections are, however, ranked on the basis of pollution risk factors. As a result of this every quarter high risk facilities such as tanneries, breweries, sugar processing factories, steel mills, wetlands are among those frequently inspected. In addition, because of the wide mandate of NEMA, coupled with staff shortage and the number of projects approved to-date, it has not been possible to inspect all downstream petroleum facilities. The checklist for downstream projects is being finalized but it should be noted that fuel stations are not ranked among the high risk projects.

**Conclusion**

Audit notes NEMA's response above. However while the Authority provided a copy of the ranking criteria, no evidence was availed that the criteria had actually been used at any one time to rank and prioritise projects for inspection. Doing this would have enhanced NEMA's ability to ensure that resources are distributed in such a way that the most risky facilities are identified for regular inspection, and that all facilities are inspected at least once in three years. Also, NEMA's budgets and work plans do not show which specific petroleum sector inspections were budgeted for and/or funded over the years. Finally, NEMA has not developed an inspection checklist for downstream projects and this may impact on the quality and consistency of data collection and subsequent monitoring.

**Recommendations**

- NEMA should implement the Inspection Ranking Model to clearly identify projects due for inspection, improve on coverage of inspections, and efficiency of resource allocation.

- NEMA should consider developing inspection checklists for fuel stations and storage tanks.

### 4.6.3 Monitoring and inspection of Petroleum Projects by Lead Agencies

Lead Agencies (LAs) are required to conduct inspections/ monitoring and report to NEMA on the state of the environment in their respective jurisdictions at least once every two years (NEA, Section 6(4)(a)). To further empower officials from the Lead Agencies to conduct inspections, Section 79 of the NEA permits NEMA, by notification in the Gazette, to designate as many officers as it deems fit from duly qualified public officers to be environmental inspectors.

Through review of the Uganda Gazette[39], audit noted that each of the 20 sampled districts/ Municipal Councils had at least one Environmental Inspector designated by NEMA, with KCCA having the largest number (21). Two (2) officers from Department of PEDP were also designated by NEMA as Environmental Inspectors. No one from the Department of Petroleum Supply and Distribution (DPSD) was designated thus.

**a) DEOs**

Responses from MEOs/DEOs in 10 districts indicate that all of them plan for inspections to fuel stations on a quarterly basis. However, the actual conducting of the inspections is dependent on the availability of funds. They all said they had carried out post-EIA inspections of fuel stations from 2010 to date, although none of them provided evidence that they did, stating instead that they made observation of the non-compliances during inspections and gave feedback to the developers verbally. The foregoing makes it difficult to verify the responses by the DEOs especially since only one fuel station (BongoilsIganga) had a visitors' book with evidence that the MEO and DEO had visited. Also, it was only in two districts (Jinja and Iganga) that the Fuel Station Managers reported having been visited by the MEOs/DEOs in the last two years.

**b) Department of PEDP**

Through interviews, the oil companies stated that they are regularly monitored by Department of PEDP, since the Directorate has permanent field staff in all Exploration Areas when they are in operation.

**c) Department of Petroleum Supply and Distribution (DPSD)**

Through interviews with the Commissioner DPSD, Audit noted that the department does not conduct regular inspections to monitor implementation of the EIA Conditions of approval. According to him, that is the role of NEMA, and not of DPSD.

He also made reference to weaknesses in the National Environment Act and the public service structures which do not clearly spell out the roles of the lead agencies vis-à-vis NEMA's, do not specify or provide for collaboration procedures, required staff or funding.

Generally, it was also noted that none of the Lead Agencies or the gazetted environmental inspectors submits any reports on their activities to NEMA every two years as required by law. Also, NEMA has not engaged them to ensure they do.

39 Uganda Gazette, Legal Notice No. 3 of 2014: The National Environment (Designation of Environmental Inspectors) Notice, 2014.

**Management Response**

Management acknowledges the low activity by lead agencies and gazetted inspectors. However, it has been noted that some lead agencies as appropriate do inspect but only a few share their inspection findings with NEMA. A new design and working programme for all gazetted inspectors is being developed that will enable them to become active and report.

**Conclusion**

The Lead Agencies and gazetted Environmental Inspectors have not documented their inspections to projects in the petroleum sector, and neither have they communicated them to NEMA, making it difficult to establish whether they conduct these inspections or not, with the exception of Department of PEDP which the regulated community reported to conduct regular inspections. There is also some lack of clarity regarding the roles of NEMA in post EIA inspection and Monitoring versus that of the Lead Agencies.

**Recommendations**

- NEMA should expedite development of the mechanisms referred to, aimed at ensuring that the Lead Agencies and other gazetted Environmental Inspectors conduct inspections and share their findings with NEMA.
- NEMA should improve coordination with Lead Agencies especially DPSD to ensure that their respective roles are clarified in accordance with the law.

## 4.7 FEEDBACK TO DEVELOPERS AFTER MONITORING OF EIAs

### 4.7.1 Feedback following inspections

NEMA and the LAs should give timely feedback to developers following monitoring/ inspection.
NEMA's Compliance Monitoring and Enforcement Strategy, 2008 (pg.25) requires NEMA to transmit the final Inspection Report to the developer within 10 working days after the inspection or within 20 working days after the inspection if compliance samples were collected to allow time to process the samples and analyze the results. The Inspection Report should clearly note good practice, noncompliance identified, the relevant regulation or statute violated, actions the developer must undertake, and action required to correct problems.

Audit noted that NEMA conducted inspection and monitoring of upstream projects quarterly throughout the review period (July 2013-September 2015)[40] and produced the corresponding inspection reports. However, Audit was only availed 2 out of 27 expected copies of written feedback to the oil companies for these inspections. During interview, the Oil companies stated that although NEMA communicates its findings verbally after each inspection, the Authority rarely sends written feedback.

### 4.7.2 Feedback on self-monitoring and audit reports

Audit noted that out of 25 quarterly Self-monitoring reports submitted to NEMA between July 2013 and September 2015, the Authority only responded to eight (8). In interviews, the oil companies also mentioned that NEMA rarely gives them feedback on their work, and even when it does, the comments tend to come very late. In the case of EAs, NEMA gave feedback for 20 out of the 44 submitted and even then, it did so between 97 and 207 days (about 3-7 months) after the reports were submitted.

According to NEMA, it is not mandatory for them to give feedback on self-monitoring and voluntary audit reports submitted by developers.

Through interviews with the oil companies, they stated that without constant feedback and follow-up by NEMA, they lack guidance on which areas of their operations or of their reports that need improvement. This affects adoption of good environmental management practice.

40 Audit only assessed this period because the earlier one was covered the in OAG's Environment Audit on Regulation and Monitoring of Drilling Waste Management in the Albertine Graben by NEMA (March 2014).

**Management Response**

NEMA gives timely feedback in terms of debriefing immediately after inspection on any facility is undertaken. It also provides written responses after every inspection. The Authority also gives written responses to self-monitoring reports.

**Conclusion**

NEMA gives verbal feedback to developers in the upstream after inspections, though it seldom sends written letters showing areas of improvement. In spite of the response from NEMA management, the Authority did not provide evidence to back the assertion that they provide regular written feedback to developers. Lack of regular and timely feedback may discourage compliance with mitigation measures in the Environmental Management Plans, and the EIA conditions of approval.

**Recommendation**

- NEMA should ensure that timely, written feedback is given to developers following inspections or when they submit reports in order to encourage compliance with stipulated mitigation measures and EIA conditions of approval.

## 4.8 REGULATION OF EIA AND ENVIRONMENTAL AUDIT PRACTITIONERS

The Committee of Environmental Practitioners of Uganda is mandated to appoint Environmental Practitioners for purposes of carrying out Environmental Impact Assessments (EIA), Environmental Audits (EA) and/or to coordinate the conduct of EIA and/or EA respectively, in Uganda.[41] A NEMA representative acts as Secretary to the committee. Also, the Executive Director, NEMA, is required to approve the names and qualifications of the persons who undertake EIAs[42] and Environmental Audits. It is expected that as the appointing and approving authorities respectively, the Committee of Environmental Practitioners of Uganda and NEMA respectively should regulate the conduct of the practitioners in order to ensure that they produce quality work to the satisfaction of NEMA and their clients.

Through document review, Audit noted that every year, the Committee certifies practitioners to undertake EIAs and Environmental Audits in all sectors, including the Petroleum sector. However, as already illustrated above, there are some quality gaps in the EIAs and Environmental Audits produced. This concern was also raised by the oil companies and echoed by the Strategic Environmental Assessment for Oil and Gas activities in the Albertine Graben.

Although stakeholders noted that there were notable improvements in the quality of EIAs conducted in the upstream, interviews with the practitioners revealed that these improvements are due to their own efforts at continuous professional development, prompted by the demands of the Oil companies that they should meet international best standards.

The same practitioners interviewed mentioned that there was no binding requirement by the Uganda Association of Environmental Impact Assessors, or NEMA for practitioners to demonstrate continuous improvements in quality of services provided through training of staff, or purchasing vital equipment. Also, they reported that they do not receive engagement or feedback from NEMA regarding areas of improvement for projects approved. There are also no mechanisms for periodically reviewing the quality of the work of members. Also, there are no clear procedures for de-registering a practitioner who consistently produces sub-standard work.

41 Cf. List ofCertified & Registered Environmental Practitioners in Uganda, 2015; page 1

42 EIA Regulations, 2008; Regulation 11(1)

However, the practitioners explained that the law governing their conduct is currently under development, and it will address the issues raised above.

Without regular feedback on areas of improvement, members are likely to keep repeating the same mistakes over and over again. Also, lack of mandatory requirements for continuous development, nor of de-registering practitioners who consistently produce unsatisfactory work, means that members who do not keep abreast with the latest developments in the field can still be certified, and this affects the overall credibility of the trade. It also has resulted in frequent rejection of reports submitted to NEMA, and has led to delays by NEMA to approve projects. Also, as noted in the cases of reported duplication of work for different sites, it manifests a lack of integrity which may prove very costly for the environment as severe environment impacts are likely to go unpredicted, undetected and/or unmitigated.

**Management Response**

The conduct of Environmental Assessment is governed by the National Environment (Conduct and Certification of Environmental Practitioners) Regulations. A Committee of Environmental Practitioners approves applicants for Registration and Certification. Any penalties for any omissions and commissions are carried under the guide of this law. Already many such punitive actions have been taken against some practitioners

NEMA in conjunction with other relevant lead agencies carries out quality assurance and where there are gaps the information is communicated to the developers and practitioners as a matter of routine. As alluded earlier NEMA has developed a curriculum for training Environmental Practitioners and this should help in enhancing their knowledge and skills

**Conclusion**

The trade of Environmental Practitioners is inadequately regulated, and this has impacted on the quality of work produced by the practitioners.

**Recommendations**

- NEMA should work with the Uganda Association of Environmental Impact Assessors, and the Committee of Environmental Practitioners of Uganda to ensure that quality control is paramount during recruitment and renewal of registration for certification.
- NEMA should give feedback to individual practitioners on the quality of their work and areas for improvement.
- NEMA should work with the Committee of Environmental Practitioners of Uganda to ensure that punitive action is taken against a practitioner who consistently submits poor quality reports and exhibits no efforts at improvement.

# GLOSSARY OF TERMS

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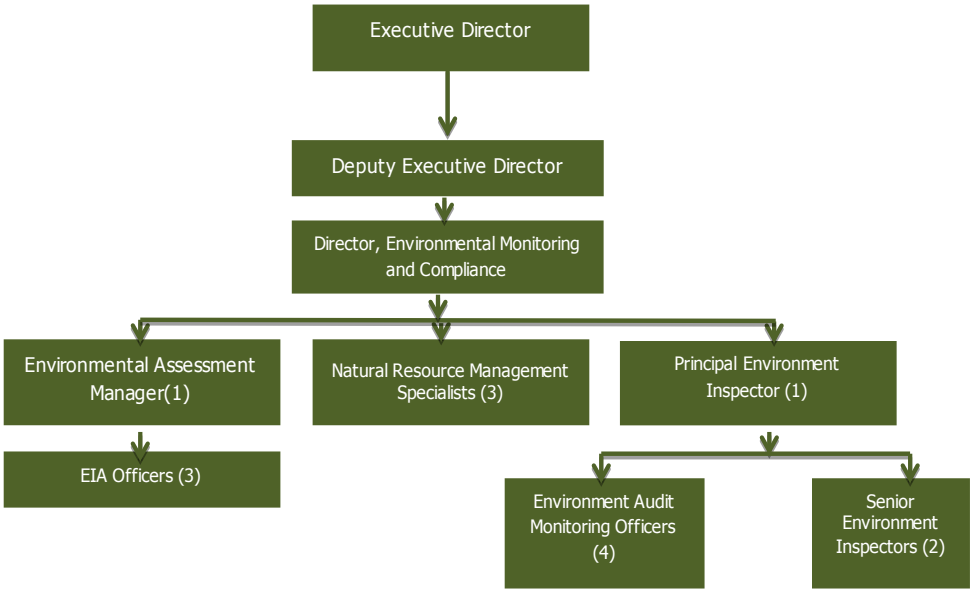
|---|---|
| Albertine Graben | The Albertine Graben is situated in the Northern part of the left arm of the East African Rift valley. It runs from south-western Uganda to North-western Uganda and is covered by water bodies (rivers and lakes). It is also rich in natural resources (minerals, petroleum, fauna and flora), has the largest number of protected areas in Uganda, including game reserves, Ramsar sites and a large number of endemic species. It is also endowed with oil and gas resources with large potential for commercial development. |
| Ecosystem | Biological environment consisting of all the organisms living in a particular area as well as all the non-living physical components of the environment with which the organisms interact such as air, soil, water and sunlight. |
| Environmental Audit | Systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing in conserving the environment and its resources. |
| Environmental Impact Assessment | Systematic examination conducted to determine whether or not a project will have any adverse impact on the environment. |
| Environmental Impact Statement (EIS) | A report produced following an EIA/ Environmental Impact Study. It describes the proposed project (location, inputs, activities, technology, products and by-products, etc), environmental effects of the project, mitigation measures/recommendations and any gaps in knowledge. |
| Inspection | A systematic, documented, planned or unplanned evaluation carried out by an inspector to assess whether the provisions of the National Environment Act are being complied with. |
| Lead Agency | A Lead Agency is any Ministry, department, parastatal agency, local government system or public officer in which or in whom any law vests functions of control or management of any segment of the environment |

## APPENDIX I: ORGANOGRAM




## APPENDIX II: DOCUMENTS REVIEWED

| S/N | Document | Purpose of Document Review (To obtain information on the following :-) |
|---|---|---|
| 1 | The National Environment Management Policy, 1994 | Information for the Background and Motivation for the Audit |
| 2 | National Oil and Gas Policy for Uganda (MEMD, 2008) | |
| 3 | Millennium Development Goals for Uganda 2013 by MoFPED | |
| 4 | State of the Environment Report for Uganda by NEMA | |
| 5 | Investing in Peace; Issue No. 2; Harnessing Oil for Peace and Development in Uganda by International Alert (September, 2009) | |
| 6 | Flirting with disaster (Sunday Vision, Jul 15, 2013) | |
| 7 | Strategic Plan 2009/10-2013/14 (NEMA, 2009) | To extract NEMA's Mission and Vision |
| 8 | OAG, 2014: Regulation and Monitoring of Drilling Waste Management in the Albertine Graben by NEMA | NEMA Commitments to finalize review of environmental legislation |
| 9 | National Environment Act, Cap. 153 | Criteria for audit |
| 10 | The National Audit Act | Requirement for NEMA to provide Information to OAG for audit purposes |
| 11 | The Environmental Impact Assessment Regulations, 1998 | To establish the legal framework governing EIAs. |
| 12 | A guide to environmental Impact assessment process in Uganda. | To establish the process for Environmental Impact assessment. |
| 13 | EIA Guidelines, 1997 | To establish the EIA process, and role of EIA in decision making. |

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|---|---|---|
| 14 | Environmental Impact Statements for 15 upstream projects | To assess comprehensiveness of the EIAs, and compliance with the EIA guidelines and EIA regulations |
| 15 | Self-monitoring reports for CNOOC, Total E&P and Tullow from July 2013 to September 2015. | To assess compliance with NEMA reporting requirements; |
| 16 | Environmental Audit (EA) reports for Upstream projects | To assess comprehensiveness of the EAs |
| 17 | Draft reviewed environmental legislation and the final reports submitted by the consultants to NEMA. | To verify the stage reached in the review process for review of environmental legislation |
| 18 | NEMA Annual work plans and budgets for FYs 2010/11, 2011/12, 2012/13, 2013/14 and 2014/15 | Amounts budgeted for activities relating to EIA review, approval and post-approval inspection |
| 19 | NEMA Performance reports for FYs 2010/11, 2011/12, 2012/13, 2013/14 and 2014/15 | Actual amounts spent on activities relating to EIA review, approval and post-approval inspection |
| 20 | Database of projects granted construction permits by MEMD from June 2010 to July 2015 | List of projects granted construction permits by MEMD |
| 21 | List of projects granted EIA Certificates of approval by NEMA from June 2010 to July 2015 | Projects granted EIA Certificates of approval by NEMA |
| 22 | Application form and files for Construction permits | Checklist/ requirements considered by MEMD before granting a construction certificate. |
| 23 | Guidance document on the Fee Regulations by Department of Environmental Affairs, Republic of South Africa (2014) | Utilization of EIA fees in South Africa |
| 24 | Final report on Consultancy services for reviewing and amendment of the Environmental Impact Assessment Regulations, S.I. No. 153-1, presented to NEMA by Amuron, D. and Koojo C. (2014) | Utilization of EIA fees in Norway and Ghana |
| 25 | NEMA data for EIA fees payable/ billed from 2010/11 to 2014/15 | Information on amount of EIA fees expected over the years under review |
| 26 | Strategic Environmental Assessment of oil and gas activities in the Albertine Graben, Uganda (MEMD, 2013) | Causes for gaps in the quality of EIAs |
| 27 | NEMA's MS-Excel record with fields for Project Name, Location, Submission date; and List of Approved EIAs | To analyse delays in review and approval of EIAs |
| 28 | TEP correspondences with NEMA and DPEDP | To obtain views of TEP on quality of EIAs and impact of delays to approval the EIAs. |
| 29 | NEMA Institutional Review Report February, 2011 | Information on recommendations for extra staff for NEMA's EIA Section |

| | | |
|---|---|---|
| 30 | Records of Environmental Audit Reports submitted by Oil Companies and dates of submission | Information on number of Audit reports submitted to NEMA, delays in submission and status of those not submitted |
| 31 | Compliance Monitoring and Enforcement Strategy (NEMA, 2008) | Information on required modalities and frequencies of monitoring. |
| 32 | NEMA Inspection checklists for the upstream i.e. the General checklist to assess compliance with general requirements in the Oil and Gas sector, checklists to monitor seismic survey operations, drilling, well testing and plug & abandon operations as well as waste management. | To obtain information on which checklists have been developed for the petroleum sector |
| 33 | Uganda Gazette, Legal Notice No. 3 of 2014: The National Environment (Designation of Environmental Inspectors) Notice, 2014. | Environmental Inspectors gazette by NEMA, and the Lead Agencies by which they are employed |
| 34 | Written feedback (letters) from NEMA to developers in the petroleum sector following inspection or submission of self-monitoring and/ or audit reports | Frequency and duration taken by NEMA to give to developers |
| 35 | List of Certified & Registered Environmental Practitioners in Uganda, 2015 | List of certified Environmental Practitioners and Partnerships |

## APPENDIX III: INTERVIEWS CONDUCTED

| S/N | Interviewee | Purpose of the interview. |
|---|---|---|
| 1. | Principal Environmental Inspector, NEMA | To assess how EIAs in the Petroleum Sector are monitored and inspected, feedback to developers, and coordination with Lead Agencies. |
| 2. | Environmental Assessment Manager, NEMA | To obtain information on:<br>• Whether EIAs were prepared for all eligible projects in the Petroleum Sector;<br>• Whether EIAs in the Petroleum Sector were conducted and reviewed in line with the EIA Regulations and guidelines. |
| 3. | Senior Environmental Inspector, NEMA | To obtain information on:<br>• Conducting, review and approval of EIAs in the Petroleum Sector;<br>• Monitoring compliance with EIA Conditions of Approval;<br>• Action taken and follow-up after monitoring;<br>• Coordination with other stakeholders in monitoring the Petroleum Sector. |
| 4. | Officers from the Environment Section of PEDP | To obtain information on the EIA process, the role of PEDP in this process, and coordination with NEMA, UWA and other Lead Agencies in monitoring of upstream projects for EIA compliance |
| 5. | Commissioner, Petroleum Supply Department (PSD), MEMD | To obtain information on the role of PSD in the EIA process, and coordination with NEMA in monitoring of downstream projects for EIA compliance |
| 6. | Environment officials in:<br>• Total E&P<br>• CNOOC | To obtain information on:<br>• Adequacy of the existing legislative framework to manage the Oil and Gas Sector and thoughts on the on-going review process;<br>• The quality of current EIAs and Environment Audits conducted in the Oil and Gas Sector, and areas for improvement;<br>• Experiences and challenges implementing EIA conditions of Approval;<br>• Monitoring of EIA implementation (Both Self-monitoring and monitoring by NEMA and Lead Agencies) |
| 7. | Fuel Station Managers in Tororo (Oil Well Service Station, Burar Petrol Station, Jadid Petrol Station); Mbale (Aran Fuel Station, Mega Oil, Sagal petrol station, Igal fuel station, Bongo-oil); Iganga (Bongo-oil, Shell) ; Jinja (Jafra service station, Oilcom, Kobil, Shell Viral, and Ultra Petrol Station) | To assess/ obtain information on:<br>• Awareness of major environmental issues associated with petrol stations<br>• Mitigation measures put in place to address the environmental issues<br>• Level of self-monitoring<br>• Coordination with NEMA and other environmental lead agencies |

| | | |
|---|---|---|
| 8. | Environmental Practitioners from:<br>- Eco & Partner and<br>- Atacama Consulting | To obtain information on:<br>• Review of Scoping Reports and Terms of reference by NEMA<br>• Collection and Analysis of data for EIAs<br>• Collection and Analysis of data for Environmental Audits (EAs)<br>• Feedback on reports submitted<br>• Challenges faced in conducting EIAs and EAs in the Oil and Gas Sector<br>• Adequacy of the existing legislative framework to manage the Oil and Gas Sector and areas that should be reviewed/ included to improve on the EIA/ EA process |

## APPENDIX IV: OBSERVATIONS MADE AT INSPECTED FUEL STATIONS

| S/N | Non-compliance(s) observed | Fuel Station(s) |
|---|---|---|
| 1. | Failure to use registered waste collection and disposal firms, Absence of an emergency response plan and Occupational Safety and Health Policy, open oil interceptors | Oil Well Service Station, Burar Petrol Station, Jadid Petrol Station, Aran Fuel Station, Mega Oil, Sagal petrol station, Igal fuel station, Bongo-oil Mbale, Bongo-oil Iganga, Jafra service station, Oilcom, Kobil, and Ultra Petrol Station |
| 2. | Drainage filled with soil and garbage/ No drainage at all | Drainage filled with soil and garbage: Shell Viral (Jinja), Burar Petrol Station, Jadid Petrol Station, Aran Fuel Station, Mega Oil, Sagal petrol station, Igal fuel station, Bongo-oil Iganga, and Ultra Petrol Station,<br><br>No drainage at all:Jafra service station |
| 3. | Oil spills seen on site | Burar Petrol Station, Jadid Petrol Station, Aran Fuel Station, , Oilcom, Kobil, |
| 4. | No sand buckets on site | Burar Fuel Station, Aran Fuel Station, Sagal petrol station, Bongo-oil Iganga (Some filled, some empty) |
| 5. | Absence of EIA on site | Shell Jinja, Shell Iganga, Oil Well Service Station, Burar Petrol Station, Jadid Petrol Station, Aran Fuel Station, Mega Oil, Sagal petrol station, Igal fuel station, Bongo-oil Mbale, Bongo-oil Iganga, Jafra service station, Kobil, and Ultra Petrol Station |

## APPENDIX V: THE EIA PROCESS (DETAILED)

The basic components of the EIA process consist of three interconnected phases: screening, environmental impact study and decision making. These are briefly described below;

**Screening**

Not all development projects may necessarily cause adverse effects on the environment due to differences in the scale of the operation, nature of the proposed project and its location. Thus not all proposed projects requiring EIA shall undergo the entire process, or necessarily the same level of assessment.

Screening therefore starts with determining whether a proposed project has or does not have significant impacts. If it is determined not to have potential to cause significant environmental impacts, then its excluded from further environmental impact assessment and an appropriate decision is made to approve and implement the project with appropriate recommendations to the developer. If however the project is found to have potential for significant environmental impacts, further screening is conducted to determine if mitigation measures can readily be identified

with further environmental impact review or a full environmental impact study. If in conducting the EIR adequate mitigation measures are incorporated for the identified impacts, the environmental aspects of the project are approved. If, on the other hand, adequate mitigation measures are not identified, the project is subjected to further detailed Environmental Impact Study. The decision to exempt a project or to approve its environmental aspects on the basis of identified mitigation measures is contained in a Certificate of Approval of the Environmental Impact Assessment issued by the NEMA. If, however, after screening, it is determined that the project requires a detailed Environmental Impact Study (EIS), the certificate will only be issued after approval or disapproval of an Environmental Impact Statement (EIS).

**Environmental Impact Study (EIS)**

The initial step in the Environmental Impact Study (EIS) is to determine the scope of work to be undertaken in assessing the likely environmental impacts of a proposed project. Scoping involves identification of potentially significant environmental impacts and/or elimination of insignificant impacts, and is applied to all activities which require a full Environment Impact Study. Consultation is also done by having meetings with potentially affected communities, relevant government agencies, representatives of other interested parties including Non-Governmental Organizations (NGOs), the private sector, independent experts and all other stakeholders including the general public to obtain their comments on what should be included in the study and what alternatives should be considered in order for an adequate Environmental Impact Study to be conducted. The responsibility for scoping lies with the developer in consultation with NEMA, Lead Agencies and other interested parties. The developer is required to prepare a scoping report summarizing the results of scoping, and should constitute the Terms of Reference for the study. These TORs are submitted to NEMA who in-turn forwards them to the appropriate lead agency(ies) for comments. The TORs are reviewed by NEMA in consultation with the responsible Lead Agencies before an Environmental Impact Study is conducted. Based on the information from the scoping exercise and the TORs, an Environmental Impact Study is conducted and an Environmental Impact Statement (EIS) is prepared. The developer is required to submit ten copies of the EIS to NEMA, which in turn forwards copies to the Lead Agency, other stakeholders and interested parties for comments and review, before approval is considered. Any comments received are taken into account in making a decision on the EIS.

**Decision Making**

A decision to approve or disapprove the environmental aspects of a proposed project is made either on the basis of a finding that a project is exempt, appropriate mitigation measures have been incorporated for identified potential environmental impacts, or the preparation of an Environmental Impact Statement. If approved, the necessary action shall be taken by the developer.

In making a decision, NEMA in consultation with an appropriate Lead Agency reviews the contents of the EIS, paying particular attention to identified environmental impacts and mitigation measures as well as the level of consultation and involvement of the affected stakeholders in the EIS process. In this review, the level of address of the Terms of Reference set out for the study shall be considered. Based on the contents of the EIS, and taking into account the Lead Agency review findings and the stakeholder and public comments on the EIS, NEMA approves or disapproves the environmental aspects of the project, or part thereof by issuing a Certificate of Approval of the Environmental Impact Assessment. In certain instances such approval is issued subject to conditions.

If a project is approved, the developer is licensed or permitted to implement the project in accordance with the mitigation measures stipulated in the Environmental Impact Statement and any other terms and conditions attached to the approval. If it is disapproved, the developer may, if such disapproval is based on environmental considerations that can further be improved, be urged to revise the proposed action to eliminate adverse impacts.

# APPENDIX VI: STATUS OF INFORMATION (RECEIVED VS. PENDING) FROM NEMA

| INFORMATION REQUESTED FOR | RESPONSIBLE SECTIONS | REMARKS |
|---|---|---|
| **EIA Monitoring and Compliance** | | |
| 1.EIA files for the sampled projects including:<br>•Project Briefs (PBs)/ Environmental Impact Statements (EISs)<br>•Forwarding letters for the PBs/ EISs to Lead Agencies for comments<br>•Field verification/ site inspection reports from NEMA and/or LAs<br>•Review comments from LAs and NEMA (Details of Pending information attached as Appendix III)<br>•Evidence of stakeholder/ public consultation by NEMA<br>•Certificates of Approval for the PBs/ EISs | EIA, Records | We received some (not all) information relating to:<br>•Forwarding letters for the PBs/ EISs to Lead Agencies for comments<br>•Field verification/ site inspection reports from NEMA and/or LAs<br>•Review comments from LAs and NEMA<br>•Certificates of Approval for the PBs/ EISs<br><br>Missing information includes information for some:<br>•Field verification/ site inspection reports from NEMA and/or LAs<br>•Review comments from LAs and NEMA<br>•Evidence of stakeholder/ public consultation by NEMA<br>•Certificates of Approval for the PBs/ EISs |
| 2.Environment Audit files for:<br>•Terms of Reference (ToRs) for the Audit<br>•Review Comments for ToRs of the Audit<br>•Forwarding letters for ToRs of the Audit to Lead Agencies for comments<br>•Approval letter for the ToRs<br>•Environment Audit Report<br>•Forwarding letters for the EAs to Lead Agencies for comments<br>•Field verification/ site inspection reports from NEMA and/or LAs<br>•Review comments from LAs and NEMA | Audits | No information was availed for all items under this section except for the Scoping Report and ToRs for the Environment Audit on Rock filling Station, and the Approval Letter for the ToRs of the same; and NEMA review comments for some projects |
| 3.Ranking/ prioritization of projects for annual/ quarterly inspection using the risk ranking model from FY 2009/10-2014/15 | Audit, D/EMC | Not availed |
| 4.Checklists for use during inspection of upstream and downstream projects | Audit | Inspection Checklists for Downstream Projects were not received |
| 5.Post-EIA Inspection reports for downstream projects by NEMA (January 2010 to date) | Audit | Not availed |
| 6.Reports on performance of LAs submitted at least once every two years | D/EMC | Not availed |
| 7.Feedback to the developer/ Compliance Agreement after inspections and/or audits | Audit, D/EMC | Some received, not all. No clarification from NEMA on if that which as submitted is all there is. |

## APPENDIX VII: SHOWING PROJECTS WHICH WERE GRANTED CONSTRUCTION PERMITS BY DPSD BEFORE NEMA APPROVAL DUE TO DELAYS BY NEMA

| S/N | PROJECT | LOCATION | PB/EIA | Date of submission to NEMA | Expected approval date | Actual Approval date | No. of days spent | Remarks |
|---|---|---|---|---|---|---|---|---|
| 1. | Sure Oil Limited | NamungoonaVillage, Kasubi Parish, Rubaga Division | EIA | 10-Mar-2011 | 6-Sep-2011 | 25-Jan-12 | 321 | DELAY |
| 2. | DON Uganda Limited | Petroleum Service Station at MpondweLubiriha Town council along Kasese Rd, Kasese District | EIA | 4-Jul-2013 | 31-Dec-2013 | 16-Jan-14 | 196 | DELAY |
| 3. | DON Uganda Limited | Petroleum Service Station at Kigumba Town Council, Kiryandongo District | EIA | 23-May-2013 | 19-Nov-2013 | 5-Mar-14 | 286 | DELAY |
| 4. | KATALE Service Station | Service Station: Plot 1622, Block 266, Seguku Village, Seguku Parish, MakidyeSsabagabo Sub-Coumnty, Kyadondo - Wakiso | PB | 21-Nov-2013 | 20-May-2014 | 24-Jun-14 | 215 | DELAY |
| 5. | Hardrich Investments Limited | Filling station at Kireka Zone B, Kireka-Kinawataka Rd, Kira TC, Wakiso District | No info | No info | - | 12-Feb-14 | - | Incomplete info from NEMA |

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