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Dear Sir,

RE: Terms of Reference for Environmental Audit

Reference is made to your letter with Ref No: 294/2022/CIM/SHERQ requesting for Terms of reference to conduct Environmental Audit for your 3 quarrying projects located in Rusizi district, Western Province;

fter a site visit conducted by our services to your quarrying sites located in the above-mentioned address and considering the nature of the project; kindly be informed that you are allowed to conduct the Environmental Audit. Therefore, I have the pleasure to send the attached Terms of Reference for the development of the Environmental Audit study.

The final audit reports shall be submitted at REMA via e-mail: <a href="mailto:info@rema.gov.rw">info@rema.gov.rw</a> and copied to <a href="mailto:compliance\_enforcement.division@rema.gov.rw">compliance\_enforcement.division@rema.gov.rw</a>. The final decision on the issuance of an EA certificates will be communicated to you after analysis of the EA report.

Sincerely,

Juliet KABERA

**Director General** 

-Permanent Secretary, Mol

**KIGALI** 

-Mayor of Rusizi District

**RUSIZI** 





### TERMS OF REFERENCE (ToRs) FOR ENVIRONMENTAL AUDIT (EA) OF QUARTZITE, TRAVERTINE AND CLAY QUARRIES OPERATED BY CIMERWA Ltd IN RUSIZI DISTRICT

#### A. Introduction

CIMERWA Ltd has applied to Rwanda Environment Management Authority (REMA) for Environmental Audit of three quarries:

- Quartzite quarry at Mashyuza and Gaseke Cells, Nyakabuye Sector, Rusizi District,
- Clay Quarry at Shara Cell, Muganza Sector, Rusizi District,
- Travertine Quarry at Mashyuza and Gaseke Cells, Nyakabayue Sector, Rusizi District.

In the framework of protection, conservation and promotion of environment in Rwanda, basing on Law N°48/2018 of 13/08/2018 on Environment, Article 32 stipulating that every project that may have significant impact on the environment must undergo an environmental audit during and after its implementation; basing also on REMA Guidelines for Environmental Audit in Rwanda, these terms of reference have been prepared for a twofold purpose:

Key findings from site during the inspection conducted by REMA that need to be addressed in the EA development:

### Quartzite quarry at Mashyuza and Gaseke Cells, Nyakabuye Sector, Rusizi District

- Put in place erosion and landslide prevention measures
- Put in place dust emission control measures
- Put in place stormwater drainage systems
- Assess the impacts of vibrations and noise impacts and recommend appropriate mitigation measures with emphasis on affected communities
- Develop a comprehensive progressive rehabilitation plan and ensure its implementation
- Put in place measures to protect the amashyuza natural springs
- Fence the concession

## Travertine quarry at Mashyuza and Gaseke Cells, Nyakabuye Sector, Rusizi District

- Develop a comprehensive progressive rehabilitation plan and ensure its implementation
- Assess the impacts of vibrations and noise impacts and recommend appropriate mitigation measures with emphasis on affected communities
- Put in place measures to prevent vibration, air and noise pollution
- Establish soil erosion prevention measures

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Put in place measures to protect the amashyuza natural springs

### Clay Quarry at Shara cell, Muganza Sector, Rusizi District

- Develop a comprehensive progressive rehabilitation plan and ensure its implementation
- Establish erosion prevention measures
- Put in place stormwater management measures

The purpose of this EA is threefold:

- To help CIMERWA LTD to find out whether the quarry activities comply with the environmental standards and other statutory requirements through audit findings;
- Assess the overall effectiveness of environmental laws and regulations as well as best practices and propose remedial measures to overcome and operate the projects in environmental friendly way;
- To prepare for review by REMA, an EA report and develop an action plan to address audit findings according to national EA Guidelines and Regulations.

Therefore, the following are specific issues to address in the EA study.

#### B. Terms of reference for the EA

The developer is requested to produce comprehensive EA reports for **EACH** quarry and submit it to REMA for review and approval.

The following terms of reference have been prepared to not only facilitate determination of the magnitude and extent of negative environmental impacts of the projects but also t identify corresponding mitigation measures that will be put in place to offset, reduce c\_minimize the impacts that is potential, or likely to arise in the cause of project implementation.

### 1. Project description

The EA Expert should provide a description of all the activities of the quarries exploitation and its interaction with the surrounding environment. The description should be in sufficient details to benefit stakeholders and decision-makers. Policies, legislation, regulations directly relevant to the quarry stone should be discussed in the EA report.

## 1.1. General description of the projects should include:

- Name and address of the owner (Individual, company or enterprise)
- Year of establishment or registration (attach registration evidence)
- Are the premises owned or leased?
- Indicate the dates, ownership, and use(s) of the properties prior acquisition or lease by this organization







- Outline below the environmental organisation at the site (use chart if possible or attach separate sheet)
- Provide the spatial and temporal boundaries, location (location address like village, cell, sector etc).

### 1.2. Key biophysical, resources use and socioeconomic issues of the project

- Description of the geographic area of the project includes the map;
- Project aims, objectives, and size;
- Give a brief description of the operational activities;
- State any process modifications or expansions currently being planned;
- Describe the major pollution facilities employed at your site and those planned in the future;
- List any areas of non-compliance associated with your operations over the last six months;
- Explore if there is any link between the incident of Mashyuza pool dying out

#### 2. Baseline data

Analysis, evaluation and presentation of the current state of the site on relevant environmental characteristics of the study area

- Description of the study area;
- Detailed description of the existing environment;
- Description of present land use of the project and areas contiguous to it;
- Summarize the information on the status of the location;
- Provide the current number of staff and those planned in the future (by department or location):
  - Professional:
  - Technical/Field:
  - Others (specify):

#### 3. Legislative and Regulatory Framework

Identification of laws, regulations and guidelines (national and international), that govern the conduct of Environmental Audit. This includes standards and norms related to waste disposal, site location, quarry exploitation standards/construction practices and technologies, operational regulations and standards, etc.

#### 4. Environmental impacts

Description of direct and indirect impacts of the project on the environment:

- Description of the methods used in the analysis, description and classification of impacts;
- Analysis of direct and indirect environmental impacts of the projects;
- Description of the likely significant effects of the project on the environment;
- Identification and description of the potential adverse impacts and environmental risks

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associated with implementation of the projects,

- Identification and evaluation of effects, description of their impact on biological and physical environment and on the sensitive ecosystems such as air quality, water, river, wetland, forests;
- Descriptions of the impact of the project on the socio economic environment.

### 4.1. Material management

- Is there any company policy to enable reviews of supplies and materials for Environmentally friendly alternatives:
  - i. Eliminate/minimise use of 'environmentally unfriendly' materials
  - ii. Eliminate/minimise storage of 'environmentally unfriendly' materials
  - iii. Eliminate/minimise waste generation
  - iv. Recycling and reuse (i.e. soil debris and stones debris etc.)
- Is there a control system on materials introduced to departmental premises (e.g. garage, repair workshops of the trucks, etc)
- Describe any practice on management of materials by your company/facility leading to good environmental performance (e.g. soil and stone debris reuse, energy saving lamps, etc)

### 4.2. Waste management

- Provide details of wastes at your premises (including waste samples brought in for analysis, used, etc)
  - i. Dangerous waste
  - ii. Chemical waste
  - iii. Biological/infectious waste
  - iv. Solid waste (including obsolete equipment)
  - v. Radioactive waste
  - vi. Other wastes (specify)
- List the sources of waste (Solid and liquid), current and future type of waste and daily volumes.
- Provide details of any on-site waste disposal system or pre-treatment systems
- Briefly describe any waste recycled (i.e. type, source, characteristics, treatment use).
- Briefly describes any current waste minimisation programmes (i.e., reduction, reuse and recycling) and indicates responsible staff.
- Provide information on any off-site facilities used for waste treatment, storage or disposal
- Is there any programme for compliance audit in place? Describe briefly
- Has there been any internal investigation in relation to waste generation, storage handling or disposal? If so, describe briefly.





#### 4.3. Energy management

- Provide the commitment intend to be used during the introduction of the modern technology in order to reduce energy use.
- Put in place the programmes to monitor energy use and to quantify reduction.

#### 4.4. Biodiversity conservation

- Describe the biodiversity (fauna and flora) status of the site before the project with its various components and functions
- Describe the current status of biodiversity and the expected status during operation and appreciate the impact that has been caused by the project and that to be caused
- Describe corresponding impacts and mitigation measures

### 4.5. Air pollution: monitoring and Control

- Describe any policy on air quality (e.g., dust, etc).
- Describe if any measure has been planned to minimise and control dust emissions during the operation of the stone quarry;
- Is air pollution monitored? If so provide records
- Is there a programme to monitor the air quality at this premise? If so, describe briefly.

### 4.6. Noise monitoring and control

- Identify all operations or activities that may generate substantial noise levels beyond normal premise background levels;
- Measure and monitor the noise levels and compare with standards
- Identify the affected communities that should be relocated
- Describe any current or planned practices to reduce noise levels at the premises;
- Have there been any noise monitoring programmes undertaken at the site? If so, describe briefly.
- Have there been any formal complaints received on noise generated within the area? If so, provide details.

## 4.7 Mitigation of Vibration

- Assess the levels of vibration during blasting and use od machines
- Assess the affected communities
- Compare with standards and assess the number of communities to be relocated

### 4.8 Environmental information Publicity

- Do the staff members responsible for publicity of environmental information have relevant experience and adequate training?
- Are there formal procedures to review the adequacy of publicity materials?
- How do you ensure up to date correctness of information in the publicity materials?

## 4.9 Response to Public Enquiries and Complaints

- Describe any formal procedures or guidelines for enquiry (i.e. both internal and

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external)

 Does your company have any procedure in place to handle enquires on environmental information of public interest? If so, describe the procedure

- Are there any procedures or guidelines available to handle complaints received from the public? If so, describe briefly.

#### 4.10 Public consultation

- Conduct public consultation of neighbouring communities and local authorities regarding the projects' activities

- Include the public consultation report with findings and proposed measures addressing the impacts

### 5. Mitigation measures

For each impact and point of concern identified above, identify an appropriate mitigation measure; The expert should pay particular attention to identifying and recommending measures or practices for avoiding, minimizing or managing negative impacts of the operations to enhance potential environmental and socio-economic benefits. Any potential measures or practices identified by the EA Expert should be brought to the attention of the operational of the project for possible inclusion in project implementation.

Measures envisaged avoiding, reducing, minimizing or compensating potential adverse impacts of the project

 Detailed description of the appropriate mitigation and compensatory measures and operational procedures (as appropriate) to respond to these impacts or to avoid or reduce risks.

## 6. Environmental management plan:

Develop an Environmental Management Plan. The management plan will include in addition to identified impacts and mitigation measures; required resources (human and financial), timelines, responsibilities and means of monitoring and evaluation.

In particular, after the completion of the on-site audit assignments the auditors will prepare a summary of the audit findings detailing concerns, compliance, risk, remedial -options, etc. The EA Expert should estimate the costs of implementing this plan, including all capital, operating and training costs.

Description of the modalities provided in the project for the implementation of the proposed mitigation measures to its potential negative impacts:

 Description of the methods that will be used in monitoring including the indicators and evaluating the state of the environment before and during the implementation of the project,

- This Environmental Management Plan should be summarized in a table format

7. Rehabilitation plan and its monitoring





Develop a rehabilitation Plan and its monitoring for the progress implementation of the project. The rehabilitation plan will include in addition to identified progress activities, technics to be used during the rehabilitation process, required resources (human and financial), timelines, responsibilities and indicators for monitoring and evaluation.

The Rehabilitation Plan should be summarized in a table format

### 8. Reporting requirements

The developer is expected to carry out an EA and produce the EA report, which shall form an integral part of the project write up document. The report shall be based on the terms of reference elaborated above, and will have to be submitted to REMA for analysis and approval.

The audit report should be dated and signed by the lead auditor and key team members. The audit report should contain the audit findings with reference to supporting evidence. Subject to agreement between the lead auditor and the client, the audit report may include the following:

#### a. Executive Summary:

- Name and location of the project
- Name of the developer
- Name of expert preparing the report
- Main findings identified
- A Summary of the audit process including any obstacles encountered and Mitigation measures
- Prioritized recommendations in environmental monitoring plan.

#### b. Introduction:

- Author presentation include the auditor's representatives who participated in the audit and the name and responsibilities of each audit team member
- Developer presentation
- Objective, scope and plan of the study
- Methodology used for conducting the EA
  - c. Legislative and Regulatory Considerations
  - d. Baseline data: Summary of information on the status of the location
  - e. Project description:
- Location, description of the current use of the location, project size
- Project Objective, detailed description of the project and its possible extension/expansion plans (if any), extend in time and space,
- Description of all activities related to the project,
- Description of prevention and security measures during the exploitation phases and

## f. Environmental Impacts:

The environmental effects of the project;

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- Description of the effects of the project on the environment resulting from wastes evacuation, noise, dust, air and water pollution;

Description of the proposed measures to reduce, to avoid or to compensate those impacts.

### g. Mitigation plan:

- Identification and description of environmental adverse impacts and effects of the project,
- Detailed description of mitigation and compensation measures proposed,
- Plans, equipment and operational procedures appropriate to respond to those impacts.

### h. Environmental Management Plan:

- Detailed description of the modalities provided in the project for the implementation of the proposed mitigation measures to its potential negative impacts.

i. Rehabilitation plan and its monitoring

Detailed description of the progressive technics will be used during the rehabilitation process, required resources (human and financial), timelines, responsibilities and indicators for monitoring and evaluation.

j. Conclusions and Recommendations:

The report should also include all information necessary to the project review such as lists of data sources, and any other relevant information to which the consultant's attention should be directed.

#### Annex:

The EA Expert should include in the report the following annexes:

- Public consultation report
- List of participants in public consultation
- ToRs

