

**BUSITEMA
UNIVERSITY**
Pursuing Excellence

FACULTY OF ENGINEERING

DEPARTMENT OF MINING

FINAL YEAR PROJECT REPORT

DEVELOPING A REHABILITATION PLAN FOR MINED OUT AREAS IN TIIRA.

(CASE STUDY: TIIRA, BUSIA DISTRICT)

By

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A final year project report submitted to the Department of mining engineering in partial fulfillment for the award of the Bachelor of Science in Mining Engineering degree at Busitema University.

Abstract

This study was carried out to develop the rehabilitation plan of mined out areas in Tiira town council, Busia District. Surface mining methods around the area over time has caused much damage on the environment which has left the surrounding with many abandoned pits, heaped waste rock stockpiles, unconsolidated soils/rocks among others, as a result, several accidents occur from time to time leading death of humans and animals, loss of agricultural production, loss of surface/top soils, surface and groundwater pollution.

In order to develop the rehabilitation plan, the materials excavated from the sites were characterized, mapping of the mine sites was done and appropriate landforms were designed. Quantitative and qualitative methods of data collection and processing were used achieve the main purpose of the study and the include; particle size distribution, soil pH analysis, GPS surveys, Microsoft excel, AutoCAD Civil 3D, ArcMap among others.

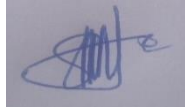
Base on the materials characterization, the soils available on site can support plant growth with an average pH ranging between 6.83and 6.92

Key words: **Damage, environment, Rehabilitation plan.**

DECLARATION

I **ETOL SIMON**, declare that this report has been made from my own research work and it has never been submitted to any higher learning institution for any academic award.

Signature:

A handwritten signature in blue ink, appearing to be 'ETOL SIMON', enclosed within a rectangular box.

Date: 21st Nov, 2024.

APPROVAL

This is to certify that this final year project report has been approved of my supervisors listed below and it is to be submitted to the Mining Engineering Department, Busitema University for examination.

SUPERVISOR

MR. KIDEGA RICHARD

SIGNATURE: 

DATE: 21/11/2024

TUGUME WYCLIFF

SIGNATURE:

DATE:

ACKNOWLEDMENT

First and foremost, I would like to extent my gratitude to GOD Almighty for the gift of life and good health, I also thank him for enabling me reach this far in my academic journey.

Sincere thanks to my fellow students and other lecturers for their continuous generous support.

Special thanks to my supervisors Mr Kidega Richard and Mr Tugume Wycliffe for their continuous guidance towards the development of this idea.

“May the good Lord bless you abundantly.

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