
Daily Management of Nduba Landfill



Figure 1: Nduba Landfill

Introduction

Nduba Landfill is located in Nduba Sector in Gasabo District. This landfill has been in operational since May 2012 after the closure of Nyanza landfill. It started with surface area equivalent to 15 ha and since then an additional area of 19 Ha was secured for future expansion of the solid waste management project. Currently, the active landfill is 28.6 ha, and expansion area of the landfill is 24 Ha. The total area of landfill is 52.6 Ha, however the buffer zone to the Landfill is estimated to 18 Ha.

Currently Nduba Landfill receives on daily basis between 500-550 tons of solid waste collected across entire city of Kigali and around 150 to 200 m³ per day of faecal sludge emptied in pits latrines and Septic tanks which are also disposed in the ponds located in the area of landfill.

Current status

Currently the Daily management of Nduba Landfill is done by the contractor (JV DEPOT PHARMACEUTIQUE ET MATERIEL MEDICAL KALISIMBI LTD and COOPED) under the contract signed by WASAC Ltd and the above mentioned companies where WASAC Ltd is supervising the activities related to the daily management of Nduba Landfill.

The daily management of landfill is mainly composed of waste sorting, waste spreading, soil coverage, compaction, leachate management within landfills as well as liquid waste disposal in the ponds excavated in the area of landfill.

Since the management of Nduba Landfill is done on daily basis by WASAC Ltd through the contractor hired by WASAC Ltd, there is much improvement in terms of proper management of leachates, odor control, vector control and so far the landfill is accessible to the extent of having internal road within the landfill in order to ease the disposal of the waste collected by Solid waste collection trucks.

Below there are the old pictures of Nduba Landfill and current pictures highlighting improvement in terms of daily management of Nduba Landfill.



Figure 2: Old pictures of Nduba Landfill



Figure 3: New pictures of Nduba Landfill

So far the works related with daily management of Nduba Landfill is progressing well and the landfill site is well managed.

Future perspective

In order to improve the municipal solid waste management in Kigali, WASAC Ltd has hired the consultant (COWI Danish Company) to conduct the ***Feasibility Study for a Municipal Solid Waste Management System including Detailed Design for the Construction of a Sanitary Landfill***. So far the interim report was submitted. The deliverables expected from this study are the following:

- (i) The feasibility study (FS) for a sustainable municipal solid waste management (MSWM) system and
- (ii) Detailed engineering design (DED) for construction of a sanitary landfill (SLF) and
- (iii) A closure and remediation plan for the two existing dumpsites of Nyanza and Nduba.
- (iv) Tender Document

At the End of the Feasibility study, WASAC Ltd will explore different options whether to go with PPP, EPC or normal procurement Method in order to have Sanitary Landfill at Nduba. This feasibility study is expected to be completed in the quarter four of this financial year 2020/2021.