



REPORT ON UNDERTAKING POLYPROPYLENE RANDOM COPOLYMER (PPR) PIPE INTERIOR CLEANING.

1. INTRODUCTION

On 26th September 2025, a team from Green Fusion Technologies Ltd visited Abuya Palace to conduct a thorough assessment of the building's cold water piping system. The inspection was initiated in response to ongoing issues reported by the facility management, including low water pressure and suspected pipe clogging within the PPR (Polypropylene Random Copolymer) pipe network.

The purpose of this initial assessment was to identify the root causes of these issues ahead of undertaking a comprehensive interior cleaning of the PPR piping system. The findings from this visit would guide the cleaning strategy, ensure proper remediation, and restore optimal performance to the cold-water supply network.

2. OBJECTIVE

- The main objective of the PPR pipe cleaning was:
- To remove any internal dirt, debris, or foreign materials from the pipe network.
- To ensure the cleanliness of the system before pressure testing, for final commissioning.

3. PIPING SYSTEM DETAILS

Description

- Pipe Material PPR (Polypropylene Random Copolymer)
- Diameter Range [20mm -63mm]
- Total Length [TBD]
- Installation Method [Horizontal and vertical.

4. CLEANING PROCEDURE

4.1 Initial Inspection

- ✓ Visual inspection of the entire PPR piping network.
- ✓ Identification of accessible points: valves, end caps, and tees for flushing.
- ✓ Isolation of sections as required.

4.2 Chemical Disinfection.

- ✓ Rapid ph. minus adjuster applied in all the pipe works and ensure it reaches all corners of the building i.e. both guest rooms, public toilets and kitchen.

4.3. Flushing with Clean Water for areas with partial blockages.

- ✓ High-pressure clean water was introduced into the piping system.
- ✓ Flow was maintained to ensure removal of loose debris.
- ✓ Water was flushed until clear discharge was observed.

4.4 Final Inspect

- ✓ Visual confirmation of clean, debris-free discharge.

5. CONCLUSION

The interior cleaning of the PPR piping system has been successfully completed. The system is now clean, debris-free, and ready for subsequent pressure testing or commissioning.

6. RECOMMENDATIONS

- ❖ Prioritize installation of booster set pumps to pressurise cold water system, hence achieving a constant pressure regardless the number of tap open within the rooms, in addition to periodic flushing of the pipes.
- ❖ Installation of Revers osmosis system to remove the salinity of the water which forms scale along the pipes.

7. PHOTO EVIDENCE



1ST PHASE OF 22 ROOMS



2ND PHASE OF ABOUT 19 ROOMS



3PHASE OF ABOUT 28 ROOMS



4TH PAHASE OF 21 ROOMS



PUBLIC TOILETS GENTS



PUBLIC TOILET LADIES

TECHNICIAN
CAMPANY
EMAIL ADDRESS:
CONSULTANT ENG. /DAVIS AND SHIRTLIFF

DATE:

KENNEDY ODHIAMBO OTIENO
GREENFUSION TECHNOLOGIES LTD
GREENFUSION.2050@GMAIL.COM
GEORGE GAMBERA (DAVIS AND
SHIRTLIFF)
01/10/2025