



TERMS OF REFERENCE FOR A DIRECTED WRC PROJECT

KEY STRATEGIC AREA	KSA 11: Sanitation Research Fund for Africa
THRUST	Sustainable Municipal Wastewater and Sanitation
PROGRAMME	Wastewater sludge and faecal sludge management
TITLE	Raw Data Collation and Analysis of Sludge and Pit Latrine Characteristics from the Sanitation Research Fund for Africa (SRFA) Programme

Objectives: To collate raw data sets from the *Sanitation Research Fund for Africa (SRFA)* Programme.

General:

The Water Research Commission (WRC) together with the Bill and Melinda Gates Foundation (BMGF) has strategically invested in growing the technical capacity and knowledge base needed to support Faecal Sludge Management (FSM) in sub-Saharan Africa. In 2013, the Sanitation Research Fund for Africa (SRFA) Programme was launched through this joint strategic initiative to provide solutions in Faecal Sludge Management (FSM) based on good scientific evidence collected from sub-Saharan Africa. Through the SRFA Programme, 12 sub-Saharan African institutions and organisations were provided exclusive research contracts of up to US\$200,000 to:

- Scientifically elucidating the treatment processes occurring in VIP latrines and their variants and pit filling rates; or
- Develop emptying and faecal sludge beneficiation technologies.

With sub-projects relevant to the two streams described above at completion, there is a need to extract the information in raw data sets and collate this data into information that is valuable for design engineers and practitioners. The proposed project aims to provide a landscape of data of sludge characteristics (Moisture Content, Total Solids, Volatile Solids, COD, Total Nitrogen, etc.), and pit latrine types (how many surveyed) and their features and performance (pit aperture size, pit filling rates, superstructure size, etc.). The raw data should be collated and disseminated in a manner that ensures effective communication to a wider audience (informative graphics and visuals, etc.).

Specific Aims:

The main objective of the proposed project is to extract information from raw data sets generated from the SRFA Programme. The specific objectives to be achieved include:

1. Provide a landscape of sludge characteristics including the methodology used;
2. Provide specifications of latrines and performance in SRFA countries from literature data and that collected from SRFA grantees;
3. Final Report that will provide key information to design engineers and service providers.

Rationale:

The information generated from this project will be useful for design engineers and sanitation service providers.

Deliverables:

1. Excel spreadsheet on landscape of sludge characteristics.
2. Pit latrine specification per region. Information can be sourced from Final Reports and from literature.
3. Collation of data into Final Report.

Expected outputs

1. Spreadsheet with raw data for design engineers including methodology used
2. Pit latrine specifications
3. Final Report on Sludge Characteristics for SRFA Programme.

Lighthouse:

- Not specific to WRC Lighthouse

Impact Areas:

- Faecal Sludge Management, Policy and Decision-making

Knowledge Tree

- Inform Policy and Decision-making; Sustainable Development Solutions; Human Capital Development

Time Frame: 1-year

Total Funds Requested: R 300,000 inclusive of VAT (R300,000 available in year 1).