



Pollution Research Group  
University of KwaZulu-Natal, Durban  
South Africa

Support to Sanitation Practitioners  
Engineering Testing: Questionnaire on requirements

First edition: December 2017

## Engineering Testing Questionnaire

This questionnaire is designed to obtain basic information from researchers wishing to test sanitation systems in Durban such that the required support from the PRG can be determined.

Organisation	
Date of planned arrival	
Estimated duration of testing phase (i.e. how long will you be based in Durban)	
Number of people on site (from your side)	
Prototype name	
Prototype description	
Prototype value	
Footprint	
Will the prototype be shipped as built, or will it need assembly and parts in SA?	
Energy requirements	
Water requirements	
Sewer requirements	
Other waste disposal requirements (e.g. ash, vapour, trash)	
Min. and Max. number of users per day	
Continuous / intermittent operation?	
Where would you like your prototype tested (UKZN, households, Newlands Mashu, Community ablution blocks)?	
Is a caretaker required?	
What supervision is required and for how many hours per day (e.g. 24 hr; day time only etc.)	
What other technical support is required in terms of manpower (operator, students etc.)	

Security requirements (fencing, guard etc.)	
Site preparation requirements (e.g. Size of platform or levelled site required Plinth, cranes, fencing etc.)	
local mechanical /electronic/other parts requirements	
Other operational needs (pumps etc.)	
Technical servicing requirements?	
List any specific health and safety requirements (CO <sub>2</sub> / CO sensors, smoke detectors, fire extinguishers, etc.)	
Please list any particular procedures in case of failure or emergency shut-down	
Is cell phone reception required?	
What is your exit strategy (i.e. moving / removing the plant, ownership etc?)	
List laboratory analyses required.  Please separate into LIQUID and SOLID sample testing requirements.  You may use the laboratory analysis request sheet as a guideline	
List monitoring data required (in addition to any user data or laboratory analyses)  Please separate into LIQUID and SOLID sample testing requirements.	
List sampling points and frequency of sampling	
Please list any specific requirements for sampling, transportation and storage of samples (e.g. mixing before sampling, storage on ice etc.)	
Are there any specific standard methods you would require for the sampling and analysis of samples? If yes, please explain.	

What support do you envisage requiring from the PRG?	
Is user data required? Please list and explain how this is to be undertaken (e.g. questionnaires)  Will this be collected by yourselves, or do you need PRG to do these surveys etc.?	
Do you have ethical clearance for this study? If so, please attached certificate and date of expiration.	

If testing at UKZN labs:

<b>Space Allocation</b>	
Dimensions and weight of instrument	
Additional space on all sides for service access and air circulation	
Can the PRG double doors accommodate the instrument	
Do you require additional moving mechanisms e.g. rigging equip, pallet jacks, rollers	
Do you require additional manpower for instrument installation	
<b>Environmental Conditions</b>	
What environmental operating conditions do you require i.e. temp and humidity	
Do you require gasses, compressed air, plumbing(taps, drainage), extraction	
What is the expected noise decibel level (85 and above requires operator ear protection)	
<b>Power Requirements</b>	
Power requirements, number and location of electrical outlets, total voltage required.	
<b>OTHER SPECIFICATIONS</b>	

Please add in any other relevant information that has not been addressed above