Understanding the SFD Graphic Generator

Interactive tool for estimating the proportion of the contents of any tank or pit which is faecal sludge

Go to introduction

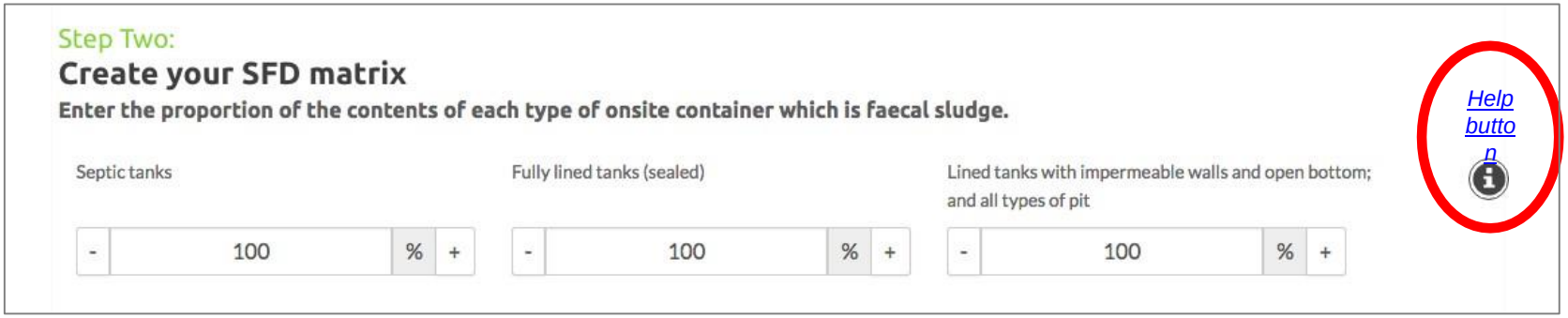
Introduction

- What is this tool for?
  - To help users of the SFD Graphic Generator (SFD GG)
- Which step does it help with?
  - Step two: estimating “the proportion of contents of each type of onsite container (tank or pit) which is faecal sludge”
- What does it contain?
  - Guidance on what values to use for each of the four onsite sanitation technologies shown on the SFD selection grid:
    - Septic tanks
    - Fully lined tanks (sealed)
    - Lined tanks with semi-permeable walls and an open bottom; and
    - All types of pits (i.e. with an open bottom and either semi-permeable or permeable walls)
- Click here to see the guidance provided in the SFD Graphic Generator.
- Click here to use an interactive tool that explains which values to use for each system.
- Click here for guidance on what value to use where onsite technologies are connected to different locations (e.g. most septic tanks discharge to soak pits but some discharge to open drains).

Guidance given in the SFD Graphic Generator (SFD GG)

In step two of the SFD GG, you can enter the proportions of each type of onsite container which is faecal sludge. The default value for each is set at 100%, as shown below.

Click the help button for guidance on when you should use these default values and when you should change them.



Return to introduction

What guidance is given in the help button ⓘ in step two of the SFD GG?

Estimating the proportion of contents of each type of onsite container (tank or pit) which is faecal sludge

This is the proportion of the contents of each type of onsite container which may be emptied periodically.

For example:

Use the default "100%" value where onsite containers are connected to soak pits, to water bodies or to open ground. This will model the contents as 100% faecal sludge and a proportion of this may be emptied periodically (you will enter this value in the SFD matrix). The remaining not emptied fraction is made up of one or more of the following: faecal sludge which remains in the container, supernatant (when discharging to water bodies or to open ground) and infiltrate. *You can see an example by clicking here.*

Click here to read about what proportions to enter where onsite containers are connected to sewer networks or connected to open drains.

Return to introduction

What guidance is given in the help button on the SFD GG where onsite containers are connected to sewers or to open drains?

Where onsite containers are connected to a sewer network or to open drains, using a value of "50%" means that half the contents are modelled as faecal sludge; a proportion of this may be emptied periodically (you will enter this value in the SFD matrix). The remaining fraction will comprise faecal sludge which remains in the container and, in the case of open-bottomed tanks, infiltrate. The other half of the contents is modelled as supernatant discharging into the sewer network or to open drains. You can see an example by clicking here.

Refer to the Definitions of terms and the Sanitation Containment Systems: Schematics in the Glossary for further details.

Return to introduction

What values to use in cities where onsite technologies discharge to different locations?

- For example, what values should be used on the SFD GG where 60% of the population use septic tanks connected to soak pits (where there is a low risk of groundwater pollution), but 10% of the population use septic tanks connected directly to open drains?
- You can either:
  1. Adjust the systems chosen on the SFD selection grid. Click here for an example; or
  2. Adjust the default percentage based on the proportion of the population using the two systems. Click here for an example.

Example of how to adjust systems on the SFD selection grid

The simplest way is to adjust the type of system used by the smaller proportion of the population to an unused but nevertheless similar system on the SFD selection grid. For instance, the 'fully lined tanks connected to open drains' are similar to 'septic tanks connected to open drains'.

Therefore, if you estimate that none of the population of your city uses 'fully lined tanks', then:

- Assign the smaller proportion of the population (the 10% given in example) using 'septic tanks connected to open drains' (T1A2C5) to 'fully lined tanks connected to open drains' (T1A3C6). Do this by selecting T1A3C6 in place of T1A2C5 on the selection grid, and assign 10% to this on the SFD matrix. (Always to remember to explain this substitution and the reason your report).
- Keep the larger proportion assigned to T1A2C5 on the selection grid (i.e. the 60% of the population using 'septic tanks connected to soak pits' (where there is a low risk of groundwater pollution)).
- As per the guidance note on the SFD GG:
  - Set the proportion of the contents of 'fully lined tanks (sealed)' which is faecal sludge to 50%.
  - Use the default 100% for the proportion of 'septic tank' contents which is faecal sludge.
- Click here to see the SFD selection grid and the data inputs on step two of the SFD GG, before and after making these changes.

Example of how to adjust the default percentage

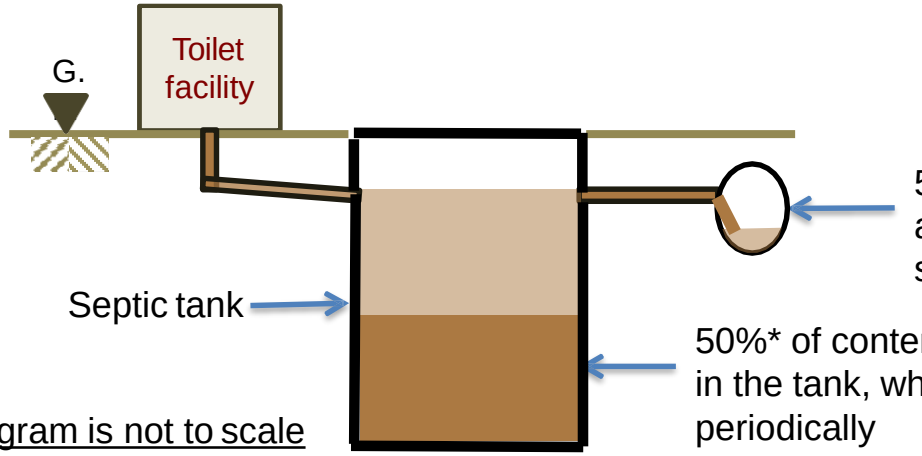
- In this example, 70% of the population use septic tanks; comprising 60% using septic tanks that are connected to soak pits and 10% using septic tanks that are connected to open drains.
- As per the guidance note on the SFD GG. The default values for the proportion of the contents which is faecal sludge are: 100% when septic tanks are connected to soak pits, and 50% when septic tanks are connected to open drains.
- You can pro rata the data to revise the default percentage and find an appropriate composite value, as follows:
  - Proportion of contents which are faecal sludge = 60/70 x 100% = 85%
- Set the proportion of 'septic tank' contents which is faecal sludge to 85%.
- Click here to see the SFD selection grid and the resulting SFD matrix before and after making this change.

To find out what proportion to enter in step two of the SFD GG for a particular system, click the corresponding yellow button on the SFD selection grid below:

List A: Where does the toilet discharge to? (i.e. what type of containment technology, if any?)	List B: What is the containment technology connected to? (i.e. where does the outlet or overflow discharge to, if anything?)									
	to centralised combined sewer	to centralised foul/separate sewer	to decentralised combined sewer	to decentralised foul/separate sewer	to soakpit	to open drain or storm sewer	to water body	to open ground	to 'don't know where'	no outlet or overflow
No onsite container. Toilet discharges directly to destination given in List B					Significant risk of GW pollution Low risk of GW pollution					Not Applicable
Septic tank					Significant risk of GW pollution Low risk of GW pollution					
Fully lined tank (sealed)					Significant risk of GW pollution Low risk of GW pollution					
Lined tank with impermeable walls and open bottom	Significant risk of GW pollution Low risk of GW pollution	Significant risk of GW pollution Low risk of GW pollution	Significant risk of GW pollution Low risk of GW pollution	Significant risk of GW pollution Low risk of GW pollution	Significant risk of GW pollution Low risk of GW pollution					Significant risk of GW pollution Low risk of GW pollution
Lined pit with semi-permeable walls and open bottom	Not Applicable									Significant risk of GW pollution Low risk of GW pollution
Unlined pit										Significant risk of GW pollution Low risk of GW pollution
Pit (all types), never emptied but abandoned when full and covered with soil										Significant risk of GW pollution Low risk of GW pollution
Pit (all types), never emptied, abandoned when full but NOT adequately covered with soil										
Toilet failed, damaged, collapsed or flooded										
Containment (septic tank or tank or pit latrine) failed, damaged, collapsed or flooded										
No toilet. Open defecation	Not Applicable									Not Applicable

Return to introduction

Septic tank connected to sewer (systems T1A2C1/C2/C3/C4)



50%* of contents are modelled as supernatant discharging to sewer

50%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

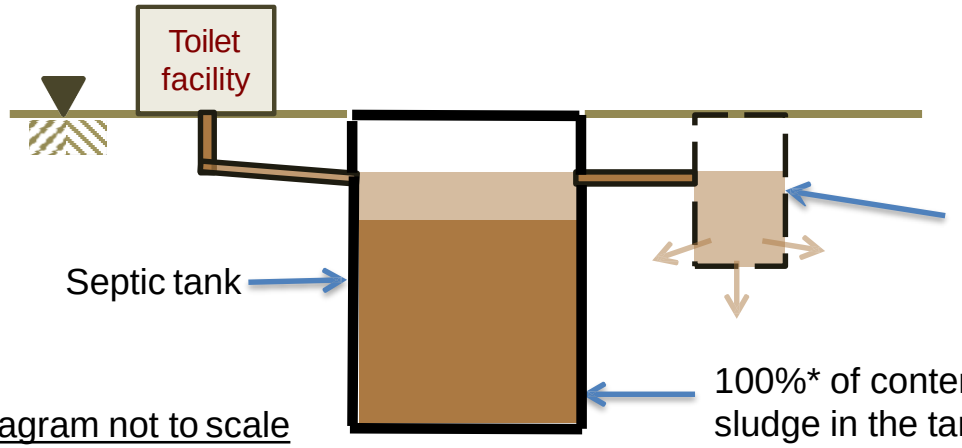
Note: diagram is not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **50%* (enter this value in step two of the SFD GG).**
2. The balance (50%*) is modelled as supernatant, which discharges to the sewer.
3. Because the supernatant is discharging to an impermeable (sealed) sewer, the faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) and the supernatant is modelled as 'SN contained' (S6).
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Septic tank connected to soak pit, where there is a low risk of groundwater pollution (system T1A2C5)



Supernatant from tank infiltrates into sub-soil via soak pit

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

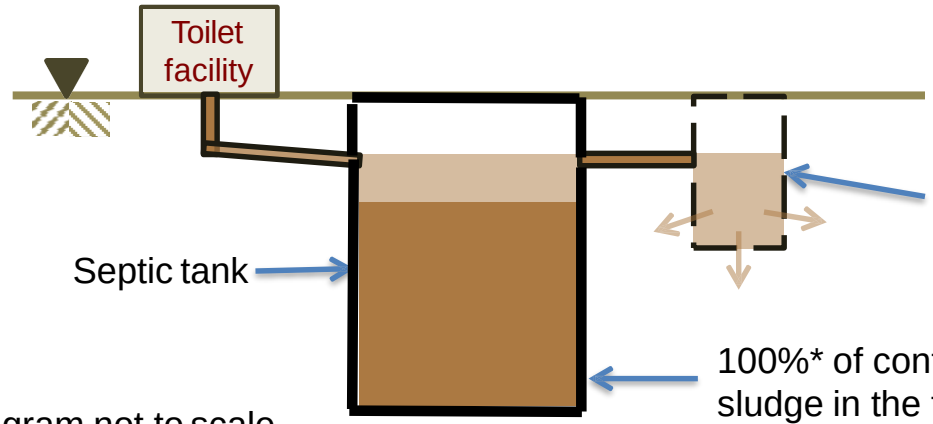
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) because the supernatant is discharging into a soak pit where there is low risk of groundwater pollution.
3. The supernatant within the tank is assumed to infiltrate into the sub-soil via a soak pit. The supernatant 'flow' is not shown on the SFD graphic.
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Septic tank connected to soak pit, where there is a significant risk of groundwater pollution (system T2A2C5)



Supernatant from tank infiltrates into sub-soil via soak pit

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

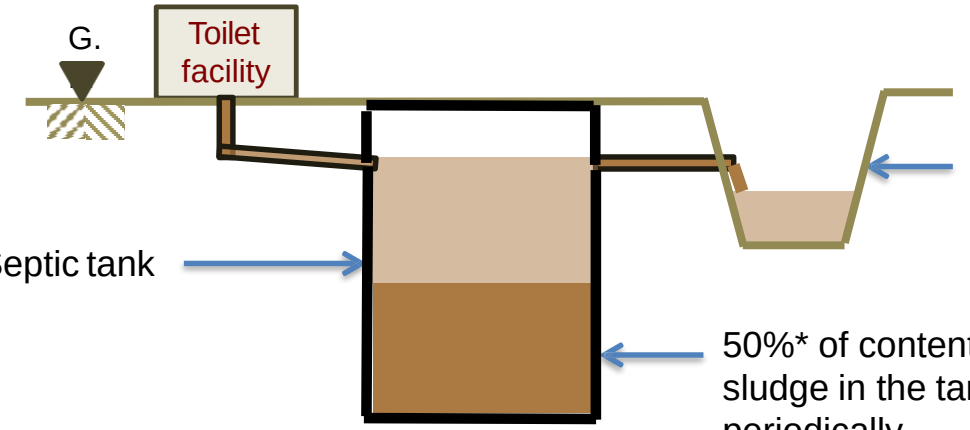
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS not contained' (F10) because the supernatant is discharging into a soak pit where there is significant risk of groundwater pollution.
3. The supernatant within the tank is assumed to infiltrate into the sub-soil via a soak pit. The supernatant 'flow' is not shown on the SFD graphic.
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Septic tank connected to open drain (system T1A2C6)



50%* of contents are modelled as supernatant discharging to open drain

50%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

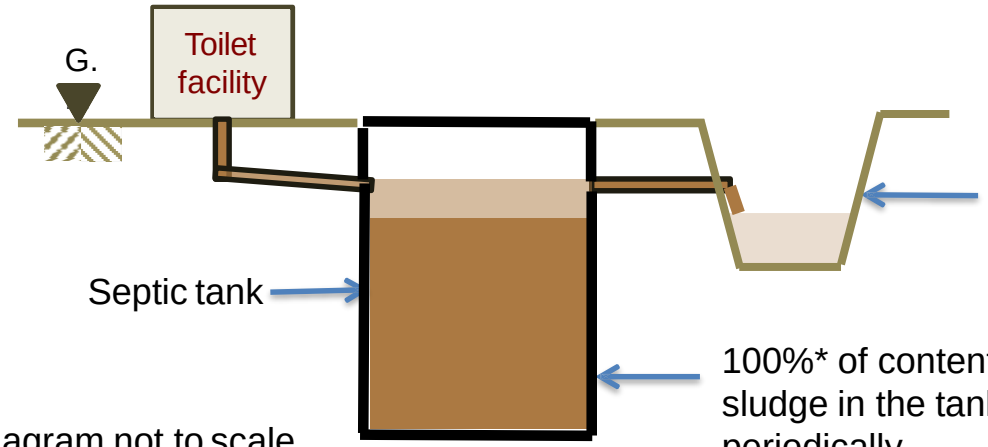
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **50%* (enter this value in step two of the SFD GG).**
2. The balance (50%*) is modelled as supernatant, which discharges to the open drain.
3. Because the supernatant discharges to an open drain, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10) and the supernatant is modelled as 'SN NOT contained' (S7).
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Septic tank connected to water body (system T1A2C7)



Supernatant from tank discharges into water body

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

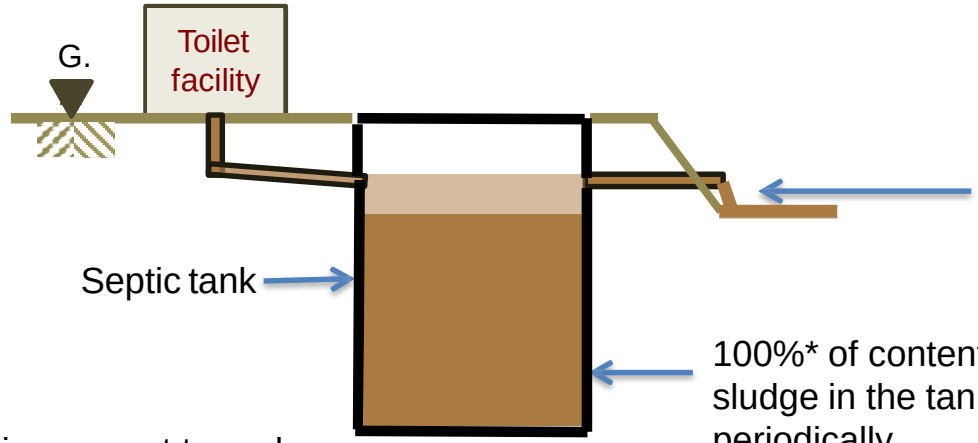
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging into a water body, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Septic tank connected to open ground (system T1A2C8)



Supernatant from tank discharges onto open ground

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

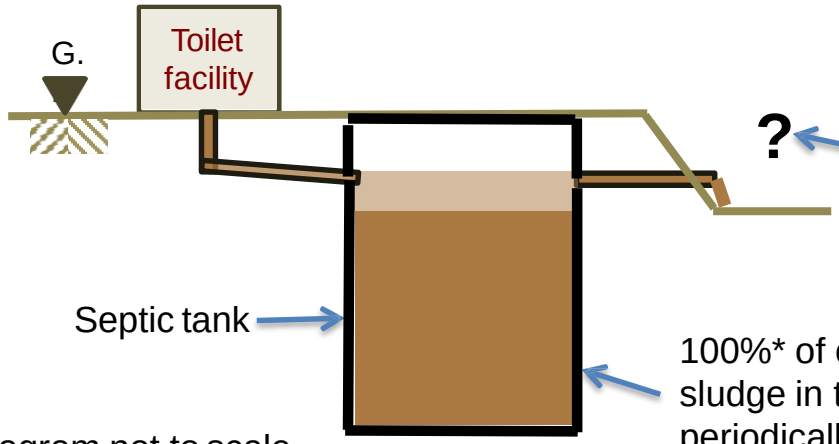
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging onto open ground, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Septic tank connected to 'don't know where' (system T1A2C9)



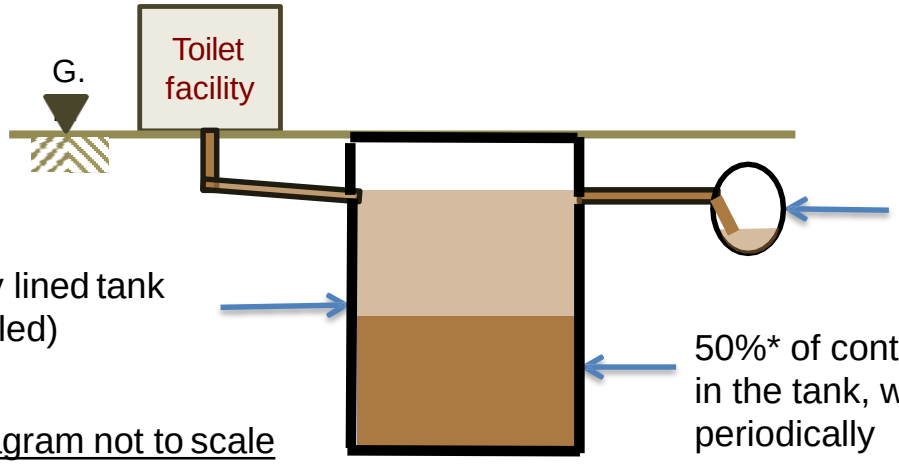
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging to an unknown location, the faecal sludge and supernatant are assumed to be NOT contained and modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Fully lined tank (sealed) connected to sewer (systems T1A3C1/C2/C3/C4)



50%* of contents are modelled as supernatant discharging to sewer

Fully lined tank (sealed)

50%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

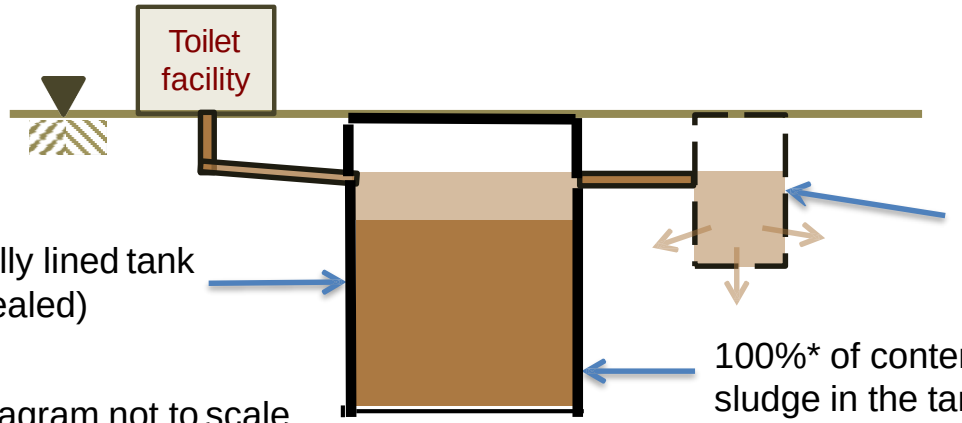
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **50%* (enter this value in step two of the SFD GG).**
2. The balance (50%*) is modelled as supernatant, which discharges to the sewer.
3. Because the supernatant is discharging to an impermeable (sealed) sewer, the faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) and the supernatant is modelled as 'SN contained' (S6).
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Fully lined tank (sealed) connected to soak pit, where there is a low risk of groundwater pollution (system T1A3C5)



Fully lined tank (sealed)

Supernatant from tank infiltrates into sub-soil via soak pit

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

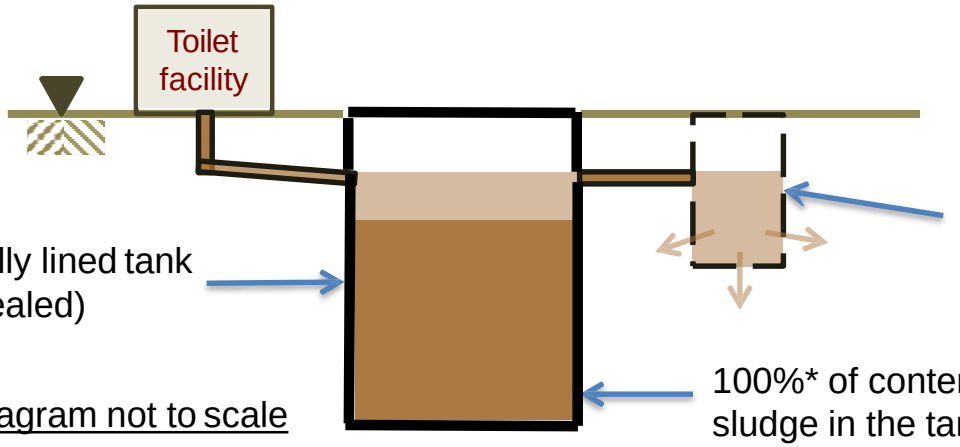
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) because the supernatant is discharging into a soak pit where there is low risk of groundwater pollution.
3. The supernatant within the tank is assumed to infiltrate into the sub-soil via a soak pit. The supernatant 'flow' is not shown on the SFD graphic.
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Fully lined tank (sealed) connected to soak pit, where there is a significant risk of groundwater pollution (system T2A3C5)



Supernatant from tank infiltrates into sub-soil via soak pit

Fully lined tank (sealed)

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

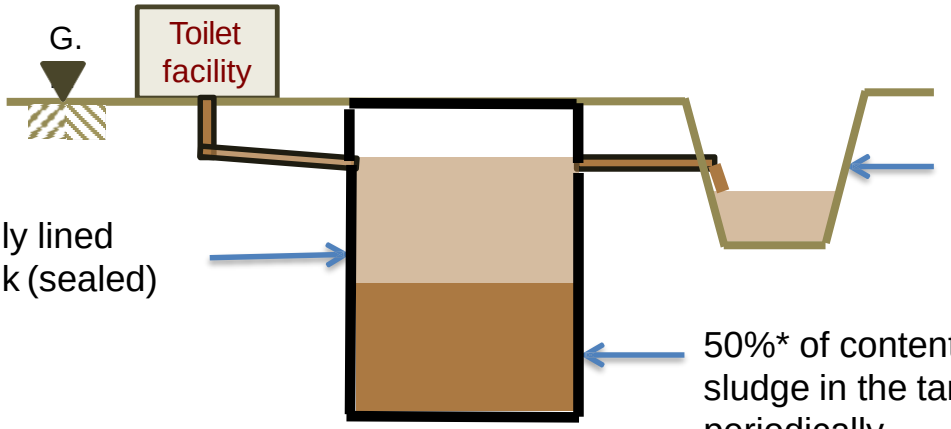
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS not contained' (F10) because the supernatant is discharging into a soak pit where there is significant risk of groundwater pollution.
3. The supernatant within the tank is assumed to infiltrate into the sub-soil via a soak pit. The supernatant 'flow' is not shown on the SFD graphic.
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Fully lined tank (sealed) connected to open drain (system T1A3C6)



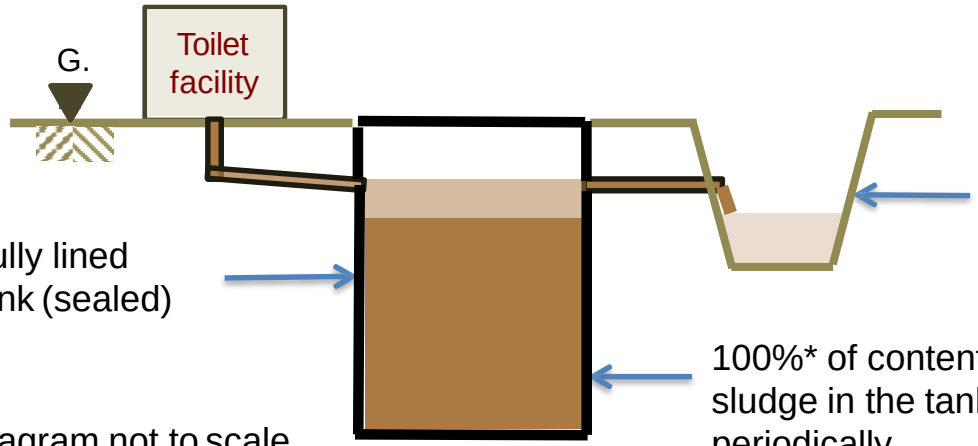
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **50%* (enter this value in step two of the SFD GG).**
2. The balance (50%*) is modelled as supernatant, which discharges to the open drain.
3. Because the supernatant discharges to an open drain, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10) and the supernatant is modelled as 'SN NOT contained' (S7).
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Fully lined tank (sealed) connected to water body (system T1A3C7)



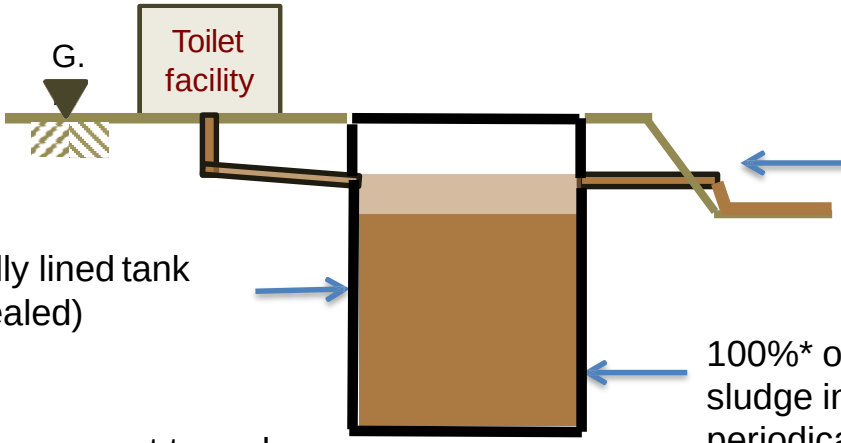
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging into a water body, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Fully lined tank (sealed) connected to open ground (system T1A3C8)



Supernatant from tank discharges onto open ground

Fully lined tank (sealed)

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

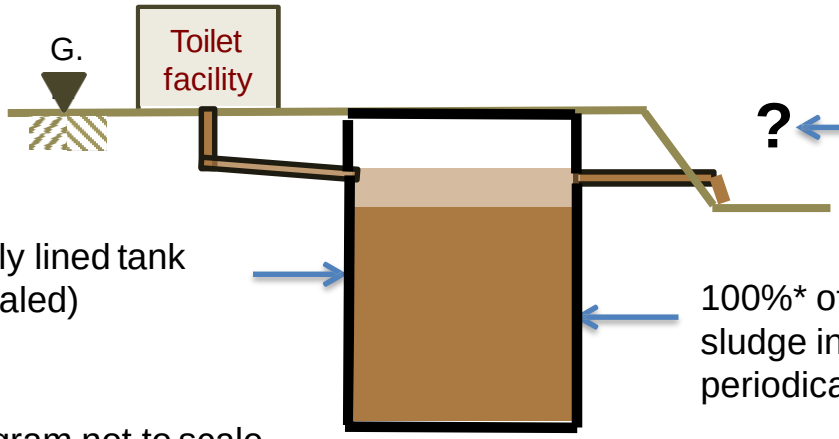
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging onto open ground, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Fully lined tank (sealed) to 'don't know where' (system T1A3C9)



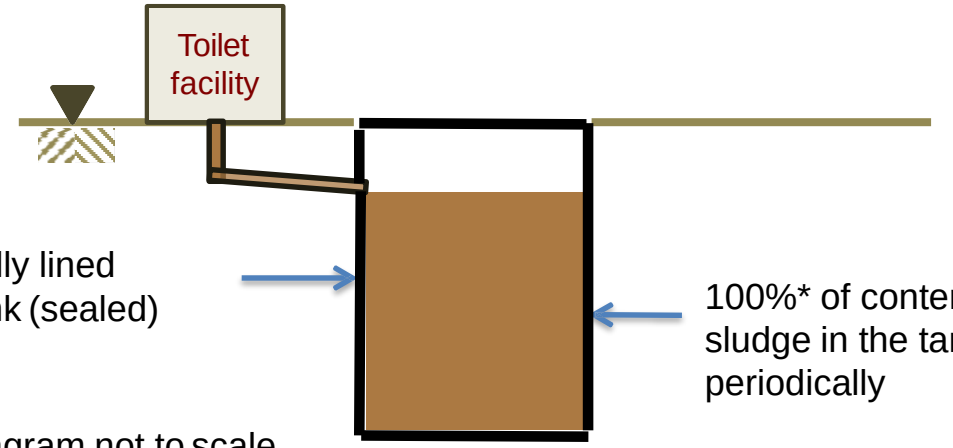
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging to an unknown location, the faecal sludge and supernatant are assumed to be NOT contained and modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Fully lined tank (sealed) with no outlet or overflow (system T1A3C10)



Fully lined tank (sealed)

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

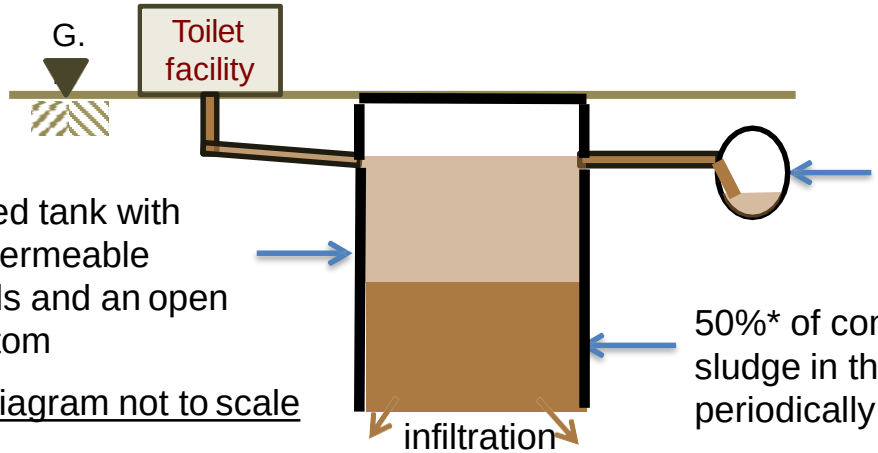
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) because the faecal sludge (and any supernatant) is fully contained within the tank.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and open bottom, connected to a sewer, where there is a low risk of groundwater pollution (systems T1A4C1/C2/C3/C4)



50%* of contents are modelled as supernatant discharging to (sealed) sewer

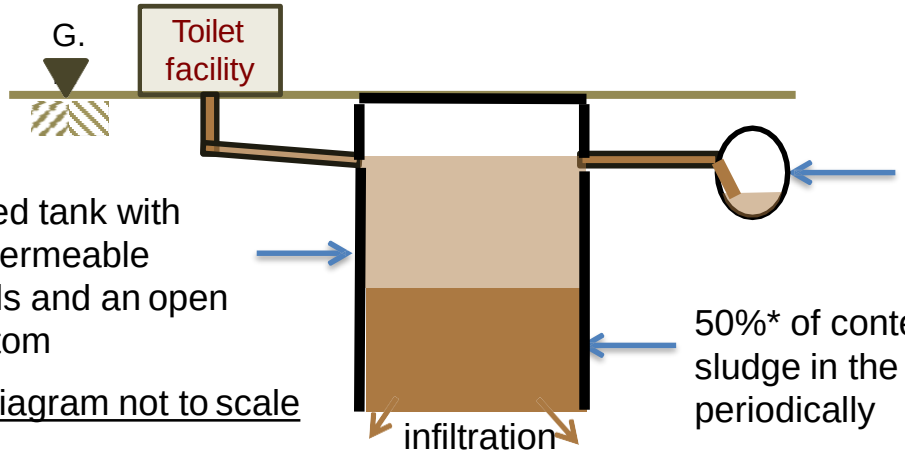
50%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **50%* (enter this value in step two of the SFD GG).**
2. The balance (50%*) is modelled as supernatant, which discharges to the sewer.
3. Because there is a low risk of groundwater pollution and the supernatant discharges to a sewer, the faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) and the supernatant as 'SN contained' (S6).
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and open bottom, connected to a sewer, where there is a significant risk of groundwater pollution (systems T2A4C1/C2/C3/C4)



Lined tank with impermeable walls and an open bottom

50%* of contents are modelled as supernatant discharging to sewer

50%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

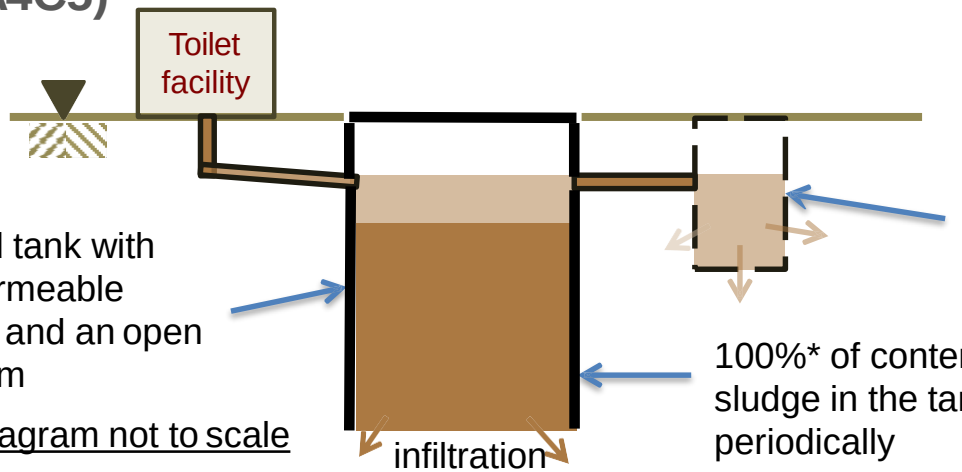
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **50%* (enter this value in step two of the SFD GG).**
2. The balance (50%*) is modelled as supernatant, which discharges to the sewer.
3. Because the tank has an open bottom and there is a significant risk of groundwater pollution, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained'(F10) and the supernatant as 'SN NOT contained' (S7).
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and an open bottom connected to a soak pit, where there is a low risk of groundwater pollution (system T1A4C5)



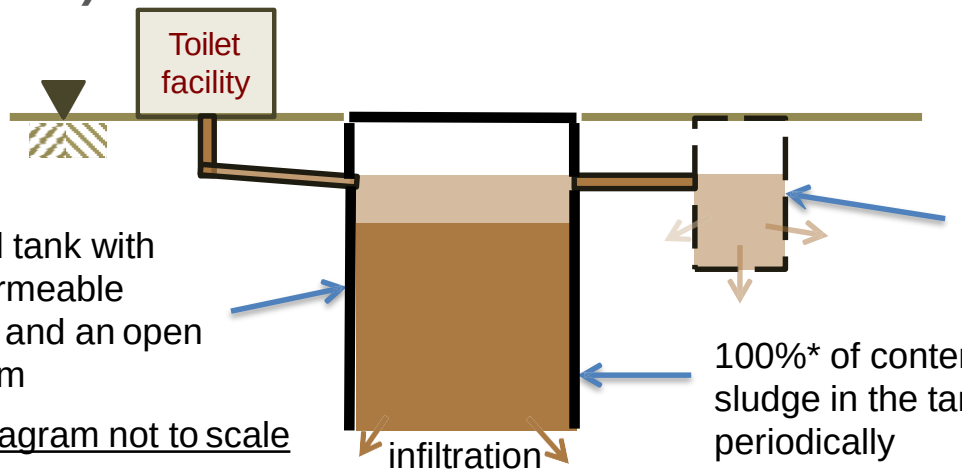
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because there is a low risk of groundwater pollution, the faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) and the supernatant is modelled as 'SN contained'(S6).
3. The faecal sludge and any supernatant within the tank is assumed to infiltrate into the sub-soil via the open bottom and/or soak pit. The infiltration 'flow' is not shown on the SFD graphic.
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and an open bottom connected to a soak pit, where there is a significant risk of groundwater pollution (system T2A4C5)



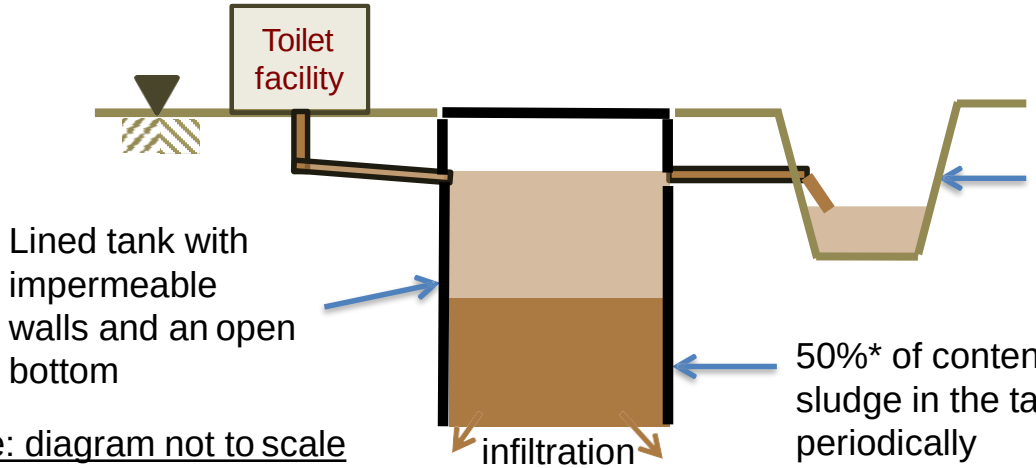
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the tank has an open bottom and there is a significant risk of groundwater pollution, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained'(F10) and the supernatant as 'SN NOT contained' (S7).
3. The faecal sludge and any supernatant within the tank is assumed to infiltrate into the sub-soil via the open bottom and/or soak pit. The infiltration 'flow' is not shown on the SFD graphic.
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and an open bottom connected to open drain (system T1A4C6)

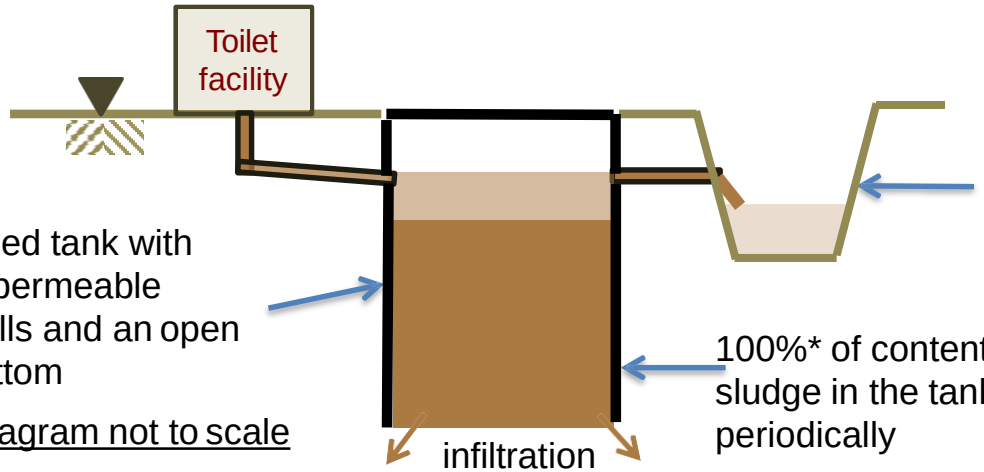


Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **50%* (enter this value in step two of the SFD GG).**
2. The balance (50%*) is modelled as supernatant, which discharges to the open drain.
3. Because the supernatant discharges to an open drain, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10) and the supernatant is modelled as 'SN NOT contained' (S7).
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and an open bottom connected to water body (system T1A4C7)



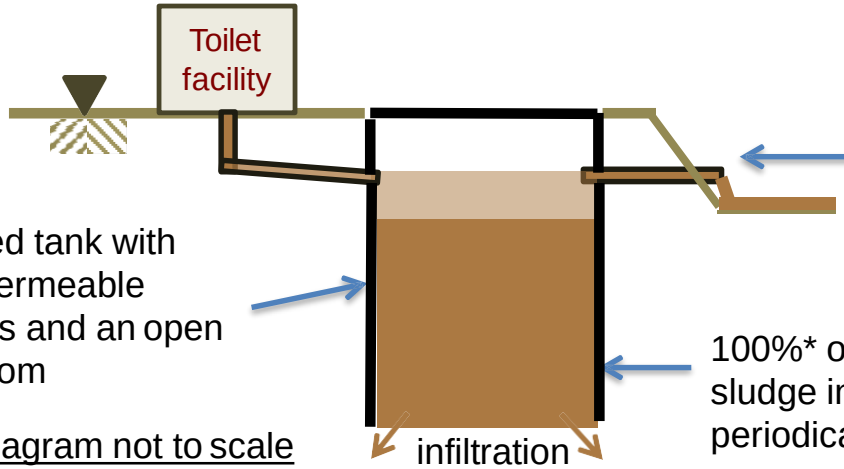
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging into a water body, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and an open bottom connected to open ground (system T1A4C8)



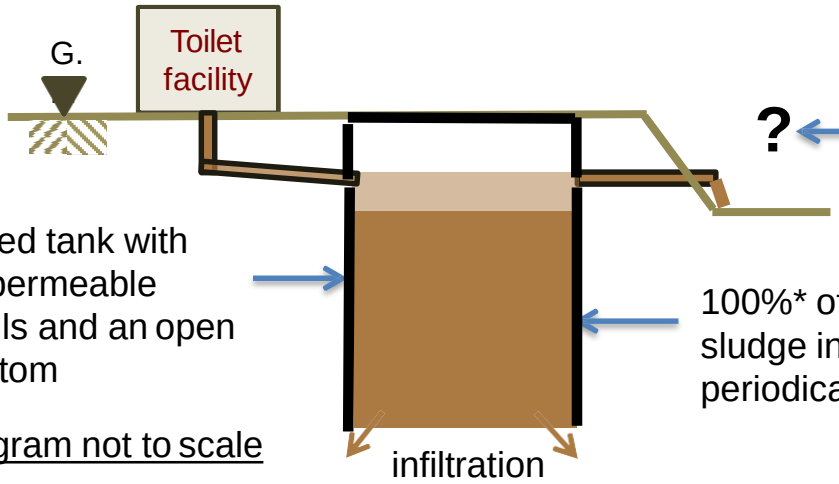
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging onto open ground, the faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and an open bottom to 'don't know where' (system T1A4C9)



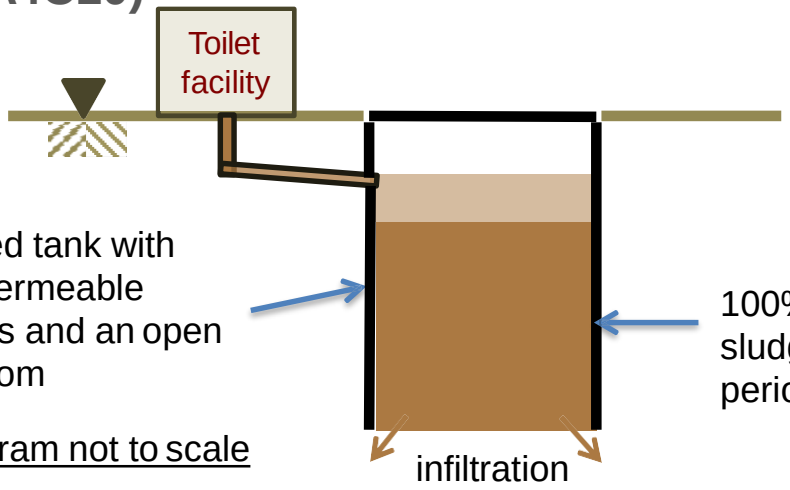
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. Because the supernatant is discharging to an unknown location, the faecal sludge and supernatant are assumed to be NOT contained and modelled on the SFD graphic as 'FS NOT contained' (F10). The supernatant 'flow' is not shown on the SFD graphic.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and an open bottom with no outlet or overflow, where there is a low risk of groundwater pollution (system T1A4C10)



Lined tank with impermeable walls and an open bottom

Note: diagram not to scale

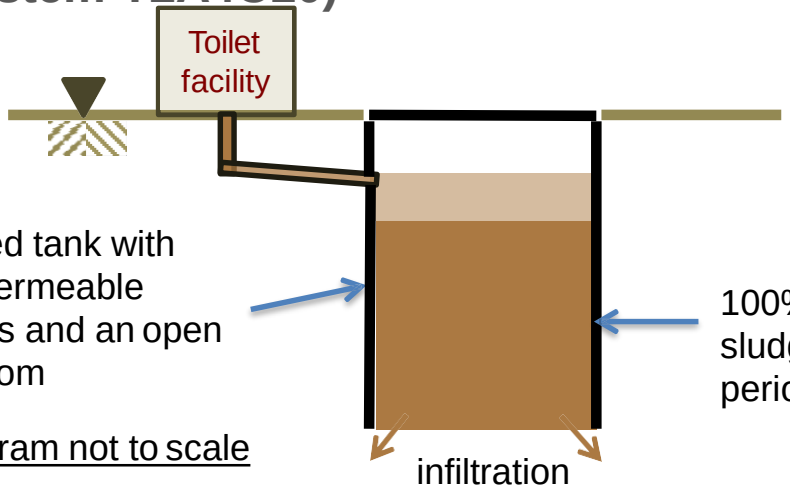
100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F2) because there is a low risk of groundwater pollution.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined tank with impermeable walls and an open bottom with no outlet or overflow, where there is a significant risk of groundwater pollution (system T2A4C10)



Lined tank with impermeable walls and an open bottom

Note: diagram not to scale

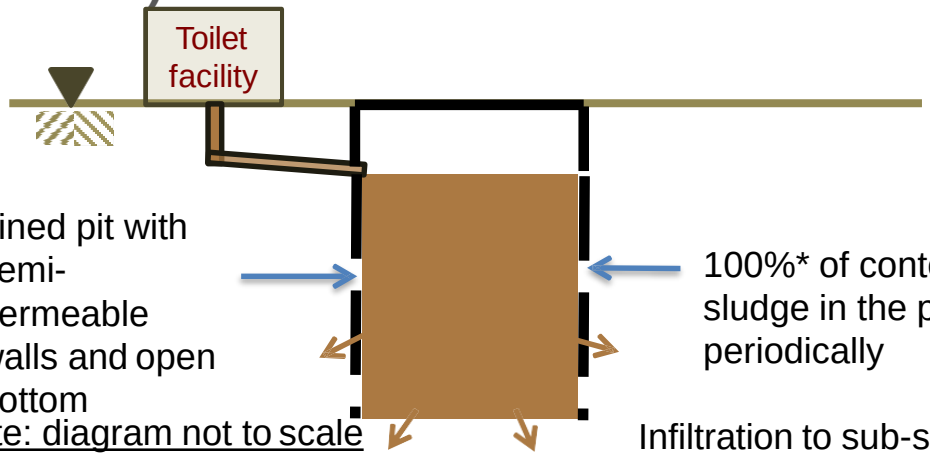
100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10) because there is a significant risk of groundwater pollution.
3. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined pit with semi-permeable walls and open bottom, with no outlet or overflow, where there is a low risk of groundwater pollution (system T1A5C10)



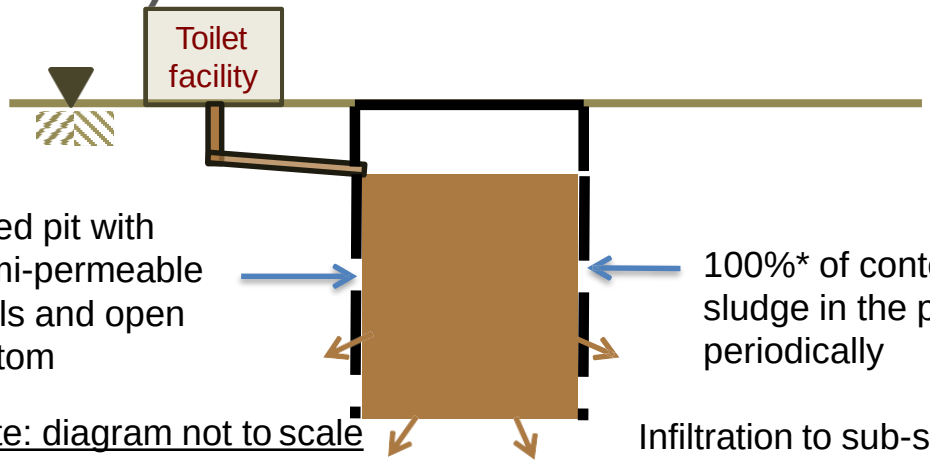
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) because there is a low risk of groundwater pollution.
3. The faecal sludge and supernatant (if any) within the pit is assumed to infiltrate into the sub-soil via the semi-permeable walls and open bottom. The infiltration 'flow' is not shown on the SFD graphic.
4. A proportion of these pits may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Lined pit with semi-permeable walls and open bottom, with no outlet or overflow, where there is a significant risk of groundwater pollution (system T2A5C10)

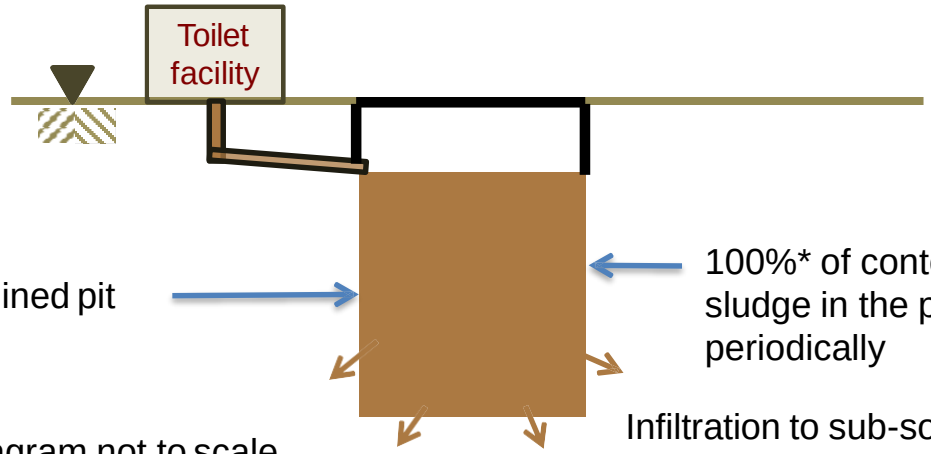


Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10) because there is a significant risk of groundwater pollution.
3. The faecal sludge and supernatant (if any) within the pit is assumed to infiltrate into the sub-soil via the semi-permeable walls and open bottom. The infiltration 'flow' is not shown on the SFD graphic.
4. A proportion of these pits may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Unlined pit, with no outlet or overflow, where there is a low risk of groundwater pollution (system T1A6C10)



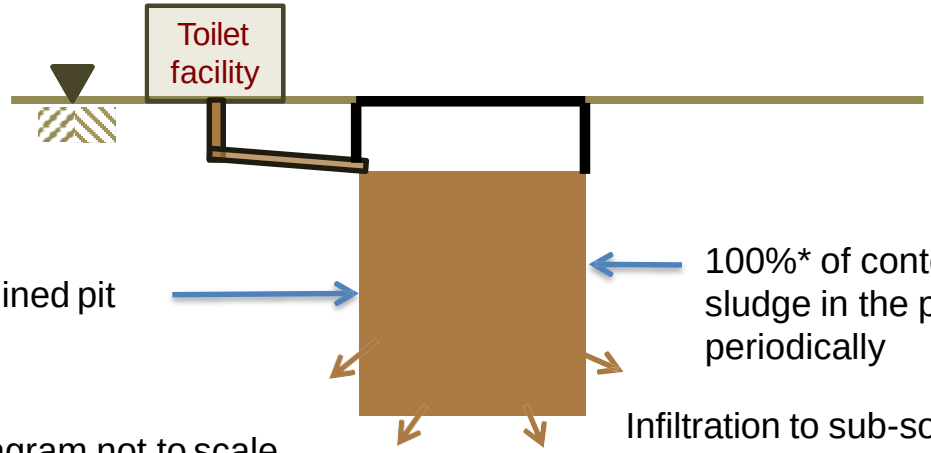
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) because there is a low risk of groundwater pollution.
3. The faecal sludge and supernatant (if any) within the pit is assumed to infiltrate into the sub-soil via the unlined walls and open bottom. The infiltration 'flow' is not shown on the SFD graphic.
4. A proportion of these pits may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Unlined pit, with no outlet or overflow, where there is a significant risk of groundwater pollution (system T2A6C10)



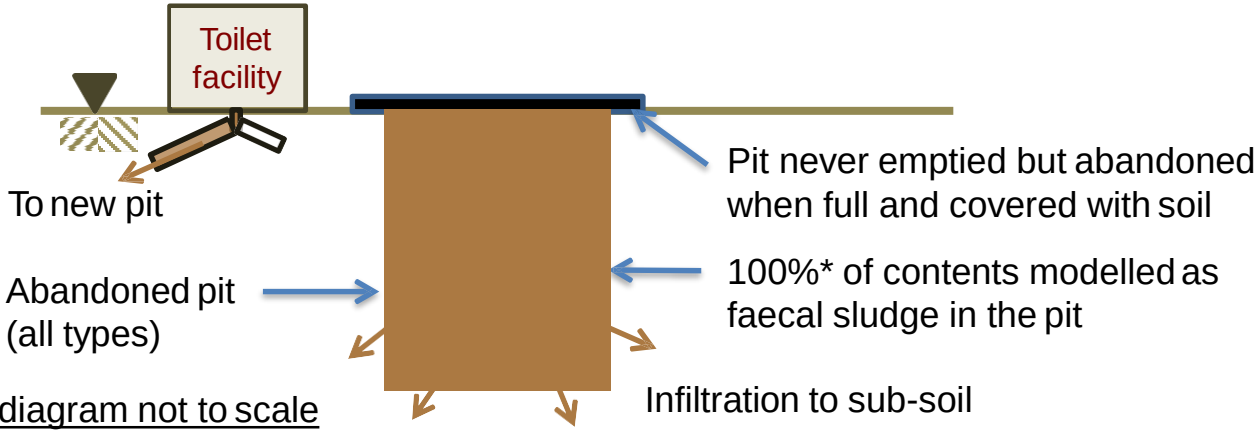
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10) because there is a significant risk of groundwater pollution.
3. The faecal sludge and supernatant (if any) within the pit is assumed to infiltrate into the sub-soil via the unlined walls and open bottom. The infiltration 'flow' is not shown on the SFD graphic.
4. A proportion of these pits may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Pit (all types) never emptied but abandoned when full and covered with soil, with no outlet or overflow, where there is a low risk of groundwater pollution (system T1B7C10)



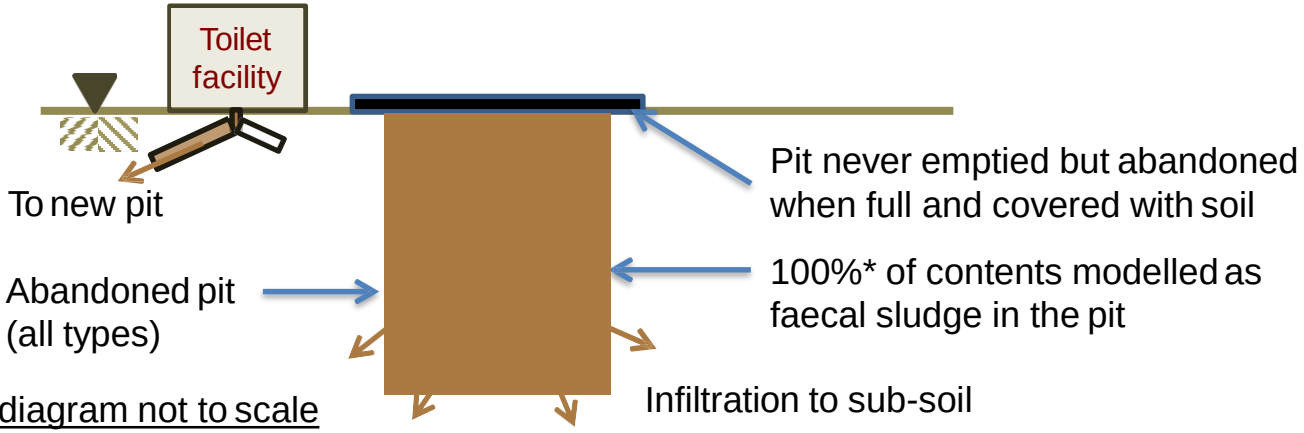
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) because there is a low risk of groundwater pollution.
3. The faecal sludge and supernatant (if any) within the pit is assumed to infiltrate into the sub-soil via the pit walls and open bottom. The infiltration 'flow' is not shown on the SFD graphic.

Pit (all types) never emptied but abandoned when full and covered with soil, with no outlet or overflow, where there is a significant risk of groundwater pollution (system T2B7C10)



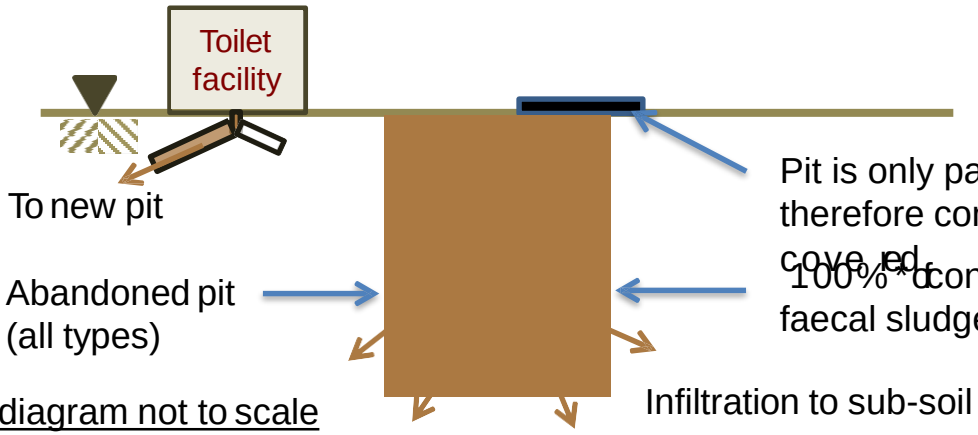
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10) because there is a significant risk of groundwater pollution.
3. The faecal sludge and supernatant (if any) within the pit is assumed to infiltrate into the sub-soil via the pit walls and open bottom. The infiltration 'flow' is not shown on the SFD graphic.

Pit (all types) never emptied but abandoned when full but NOT adequately covered with soil, with no outlet or overflow (system T1B8C10)



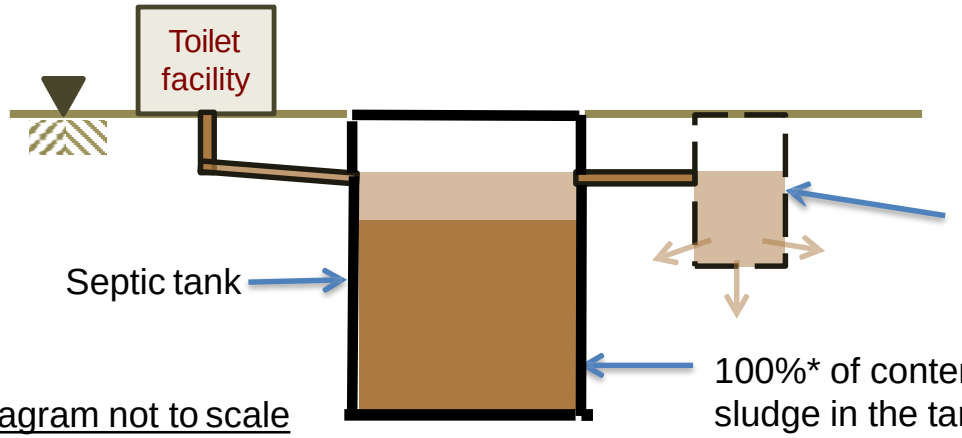
Note: diagram not to scale

Choose another system

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS NOT contained' (F10) because the abandoned pit and contents are NOT adequately covered with soil.
3. The faecal sludge and supernatant (if any) within the pit is assumed to infiltrate into the sub-soil via the pit walls and open bottom. The infiltration 'flow' is not shown on the SFD graphic.

Septic tank connected to soak pit, where there is a low risk of groundwater pollution (system T1A2C5)



Supernatant from tank infiltrates into sub-soil via soak pit

100%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

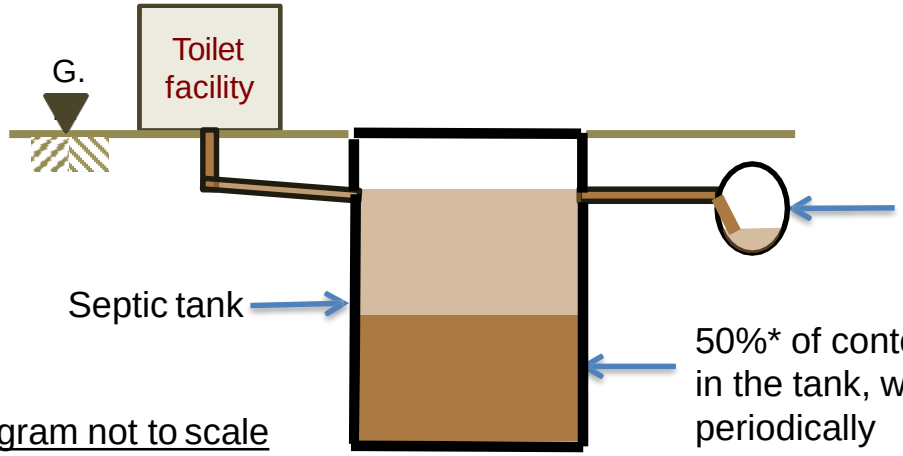
Note: diagram not to scale

Back to guidance

Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **100%* (enter this value in step two of the SFD GG).**
2. The faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) because the supernatant is discharging into a soak pit where there is low risk of groundwater pollution.
3. The supernatant within the tank is assumed to infiltrate into the sub-soil via a soak pit. The supernatant 'flow' is not shown on the SFD graphic.
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

Septic tank connected to sewer (systems T1A2C1/C2/C3/C4)



50%* of contents are modelled as supernatant discharging to sewer

50%* of contents modelled as faecal sludge in the tank, which may be emptied periodically

Note: diagram not to scale

Back to guidance

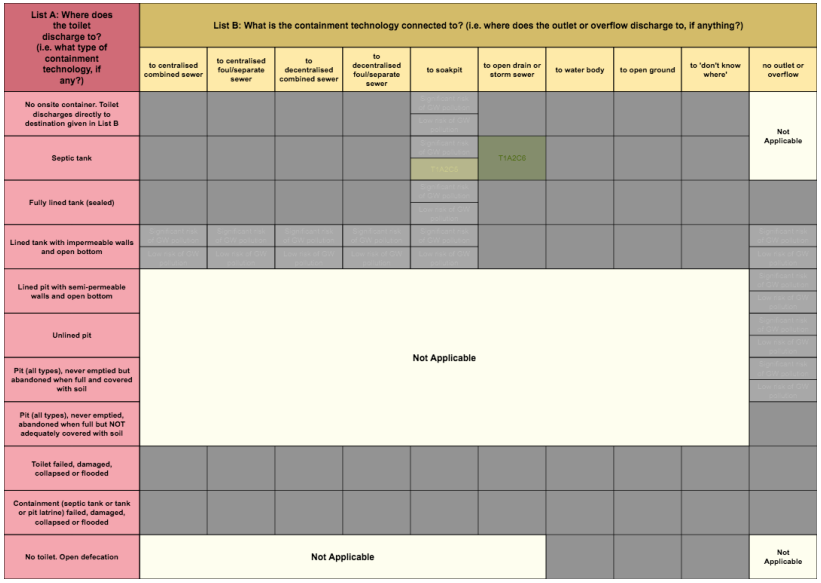
Assumptions where there is no other data*:

1. Proportion of the contents which is faecal sludge = **50%* (enter this value in step two of the SFD GG).**
2. The balance (50%*) is modelled as supernatant, which discharges to the sewer.
3. Because the supernatant is discharging to an impermeable (sealed) sewer, the faecal sludge is modelled on the SFD graphic as 'FS contained' (F2) and the supernatant is modelled as 'SN contained' (S6).
4. A proportion of these tanks may be emptied periodically (enter the proportion of tanks from which faecal sludge is emptied on the SFD matrix under F3).

SFD Promotion Initiative

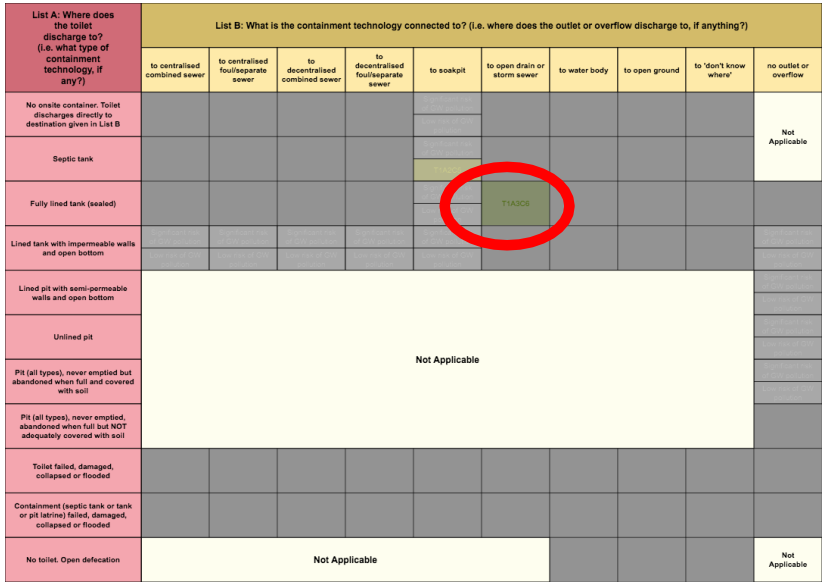
Example of adjustments required to SFD selection grid

Before adjustment



List A: Where does the toilet discharge to? (i.e. what type of containment technology, if any?)	List B: What is the containment technology connected to? (i.e. where does the outlet or overflow discharge to, if anything?)									
	to centralised combined sewer	to centralised foul/separate sewer	to decentralised combined sewer	to decentralised foul/separate sewer	to soakpit	to open drain or storm sewer	to water body	to open ground	to 'don't know where'	no outlet or overflow
No onsite container. Toilet discharges directly to destination given in List B										Not Applicable
Septic tank						T1A2C8				
Fully lined tank (sealed)										
Lined tank with impermeable walls and open bottom										
Lined pit with semi-permeable walls and open bottom	Not Applicable									
Unlined pit										
Pit (all types), never emptied but abandoned when full and covered with soil										
Pit (all types), never emptied, abandoned when full but NOT adequately covered with soil										
Toilet failed, damaged, collapsed or flooded										
Containment (septic tank or tank or pit latrine) failed, damaged, collapsed or flooded										
No toilet. Open defecation	Not Applicable									Not Applicable

After adjustment



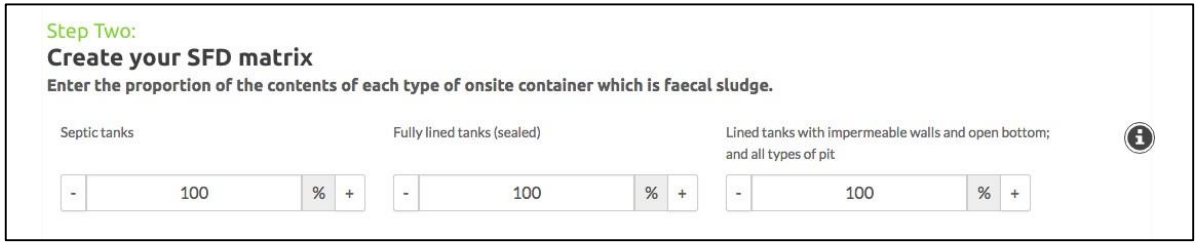
List A: Where does the toilet discharge to? (i.e. what type of containment technology, if any?)	List B: What is the containment technology connected to? (i.e. where does the outlet or overflow discharge to, if anything?)									
	to centralised combined sewer	to centralised foul/separate sewer	to decentralised combined sewer	to decentralised foul/separate sewer	to soakpit	to open drain or storm sewer	to water body	to open ground	to 'don't know where'	no outlet or overflow
No onsite container. Toilet discharges directly to destination given in List B										Not Applicable
Septic tank										
Fully lined tank (sealed)						T1A3C6				
Lined tank with impermeable walls and open bottom										
Lined pit with semi-permeable walls and open bottom	Not Applicable									
Unlined pit										
Pit (all types), never emptied but abandoned when full and covered with soil										
Pit (all types), never emptied, abandoned when full but NOT adequately covered with soil										
Toilet failed, damaged, collapsed or flooded										
Containment (septic tank or tank or pit latrine) failed, damaged, collapsed or flooded										
No toilet. Open defecation	Not Applicable									Not Applicable

[Click here to see example of adjustments required to step two of the SFD GG]

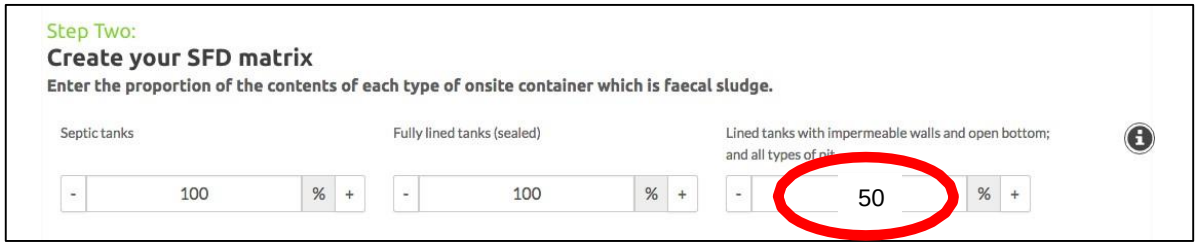
[Return to introduction]

Example of adjustments required to step two of the SFD GG

Before adjustment



After adjustment



Click here to see example of the resulting SFD matrix after making adjustments

Return to introduction

Example of resulting SFD matrix after making adjustments

Before adjustment

City name 15/10/2018, State/province name, Country name, 15 Oct 2018. SFD Level: not set
Population: 100000
Proportion of tanks: septic tanks: 100%, fully lined tanks: 100%, lined, open bottom tanks: 100%

System label	Pop	F3	F4	F5	S4e	S5e
System description	Proportion of population using this type of system	Proportion of this type of system from which faecal sludge is emptied	Proportion of faecal sludge emptied, which is delivered to treatment plants	Proportion of faecal sludge delivered to treatment plants, which is treated	Proportion of supernatant in open drain or storm sewer system, which is delivered to treatment plants	Proportion of supernatant in open drain or storm sewer system that is delivered to treatment plants, which is treated
T1A2C5 Septic tank connected to soak pit	60.0	0.0	0.0	0.0		
T1A2C6 Septic tank connected to open drain or storm sewer	10.0	0.0	0.0	0.0	0.0	0.0

After adjustment

City name 15/10/2018, State/province name, Co[illegible]me, 15 Oct 2018. SFD Level: not set
Population: 100000
Proportion of tanks: septic tanks: 100[illegible], fully lined tanks: 50%, [illegible]ned, open bottom tanks: 100%

System label	Pop	F3	F4	F5	S4e	S5e
System description	Proportion of population using this type of system	Proportion of this type of system from which faecal sludge is emptied	Proportion of faecal sludge emptied, which is delivered to treatment plants	Proportion of faecal sludge delivered to treatment plants, which is treated	Proportion of supernatant in open drain or storm sewer system, which is delivered to treatment plants	Proportion of supernatant in open drain or storm sewer system that is delivered to treatment plants, which is treated
T1A2C5 Septic tank connected to soak pit	60.0	0.0	0.0	0.0		
T1A3C6 Fully lined tank (sealed) connected to an open drain or storm sewer	10.0	0.0	0.0	0.0	0.0	0.0

Return to introduction

Example of SFD selection grid

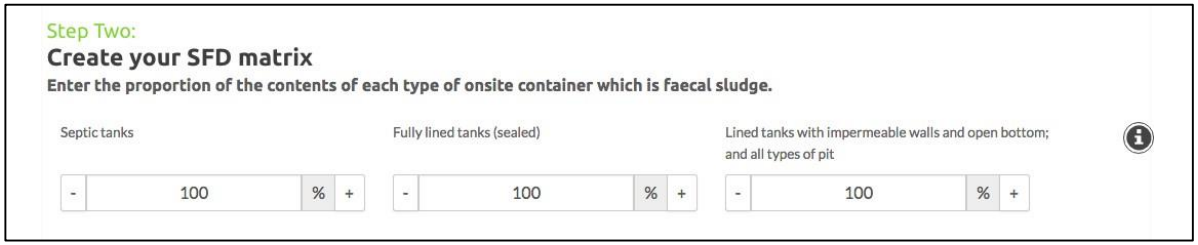
List A: Where does the toilet discharge to? (i.e. what type of containment technology, if any?)	List B: What is the containment technology connected to? (i.e. where does the outlet or overflow discharge to, if anything?)									
	to centralised combined sewer	to centralised foul/separate sewer	to decentralised combined sewer	to decentralised foul/separate sewer	to soakpit	to open drain or storm sewer	to water body	to open ground	to 'don't know where'	no outlet or overflow
No onsite container. Toilet discharges directly to destination given in List B										Not Applicable
Septic tank						T1A2C6				
Fully lined tank (sealed)										
Lined tank with impermeable walls and open bottom										
Lined pit with semi-permeable walls and open bottom	Not Applicable									
Unlined pit										
Pit (all types), never emptied but abandoned when full and covered with soil										
Pit (all types), never emptied, abandoned when full but NOT adequately covered with soil										
Toilet failed, damaged, collapsed or flooded										
Containment (septic tank or tank or pit latrine) failed, damaged, collapsed or flooded										
No toilet. Open defecation	Not Applicable									Not Applicable

Click here to see example of adjustments required to step two of the SFD GG

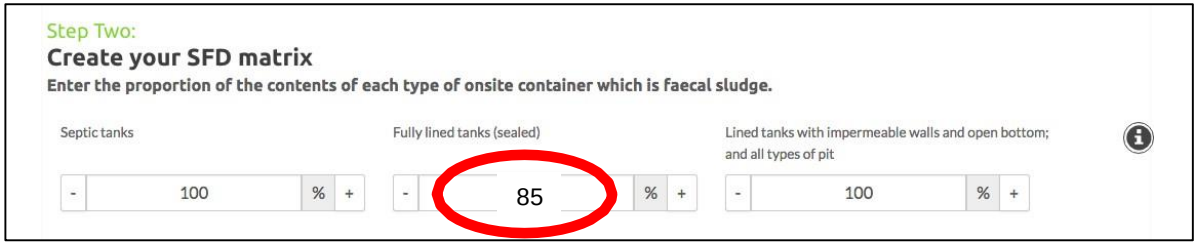
Return to introduction

Example of adjustments required to step two of the SFD GG

Before adjustment



After adjustment



Click here to see example of the resulting SFD matrix after making adjustment

Return to introduction

Example of resulting SFD matrix after making adjustments

Before adjustment

City name 15/10/2018, State/province name, Country name, 15 Oct 2018. SFD Level: not set
Population: 100000
Proportion of tanks: septic tanks: 100%, fully lined tanks: 100%, lined, open bottom tanks: 100%

System label	Pop	F3	F4	F5	S4e	S5e
System description	Proportion of population using this type of system	Proportion of this type of system from which faecal sludge is emptied	Proportion of faecal sludge emptied, which is delivered to treatment plants	Proportion of faecal sludge delivered to treatment plants, which is treated	Proportion of supernatant in open drain or storm sewer system, which is delivered to treatment plants	Proportion of supernatant in open drain or storm sewer system that is delivered to treatment plants, which is treated
T1A2C5 Septic tank connected to soak pit	60.0	0.0	0.0	0.0		
T1A2C6 Septic tank connected to open drain or storm sewer	10.0	0.0	0.0	0.0	0.0	0.0

After adjustment

City name 15/10/2018, State/province name, Country name, 15 Oct 2018. SFD Level: not set
Population: 100000
Proportion of tanks: septic tanks: 85%, fully lined tanks: 100%, lined, open bottom tanks: 100%

System label	Pop	F3	F4	F5	S4e	S5e
System description	Proportion of population using this type of system	Proportion of this type of system from which faecal sludge is emptied	Proportion of faecal sludge emptied, which is delivered to treatment plants	Proportion of faecal sludge delivered to treatment plants, which is treated	Proportion of supernatant in open drain or storm sewer system, which is delivered to treatment plants	Proportion of supernatant in open drain or storm sewer system that is delivered to treatment plants, which is treated
T1A2C5 Septic tank connected to soak pit	60.0	0.0	0.0	0.0		
T1A2C6 Septic tank connected to open drain or storm sewer	10.0	0.0	0.0	0.0	0.0	0.0

Return to introduction