Terms and Variables: A Glossary

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Training of Trainers on Preparation of SFD
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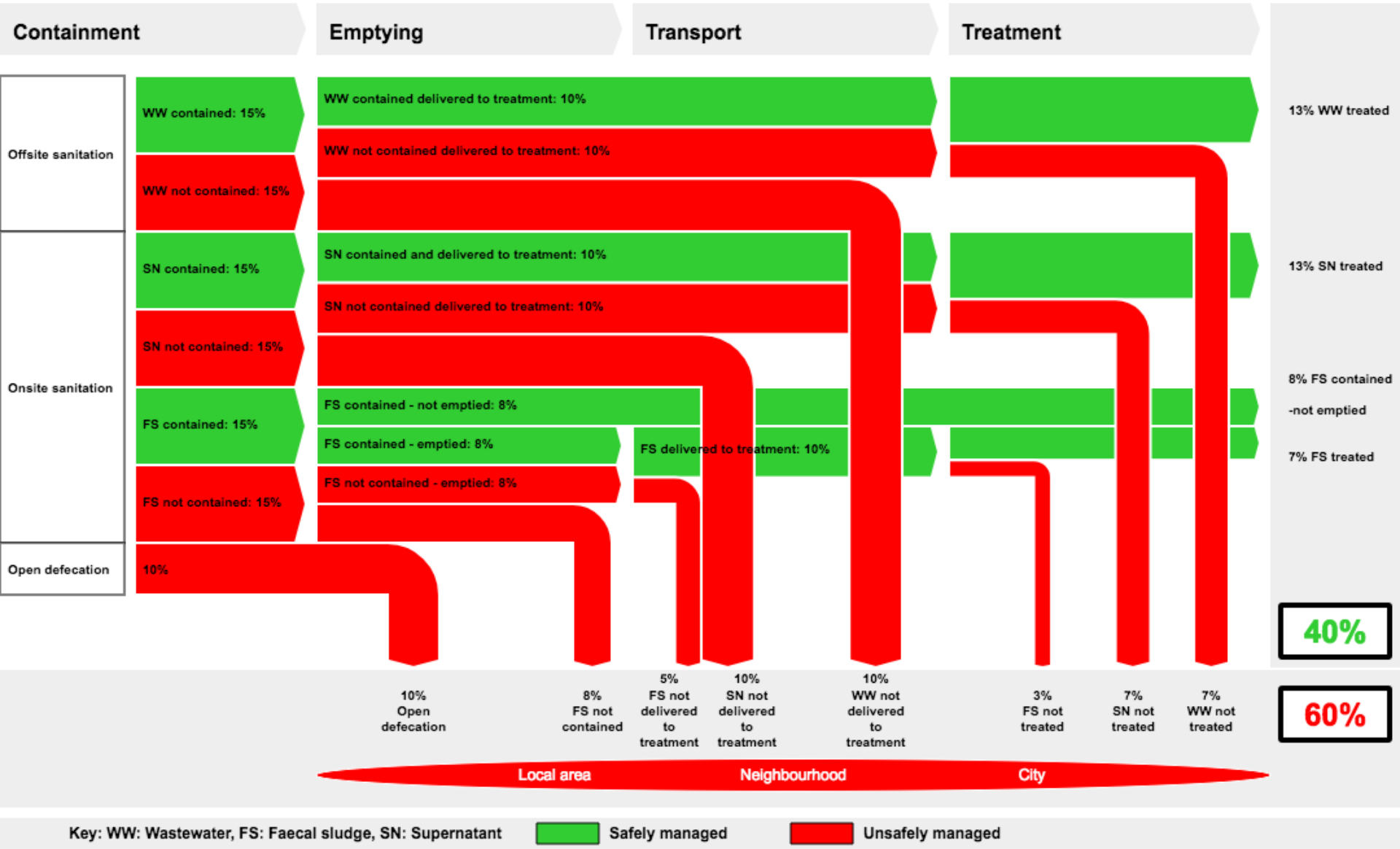
How To Use This Glossary

This Volume contains four parts:

- **Part 1: Master SFD Graphic**
  - This locates all the possible variables used in the SFD Graphic Generator and shows how they are connected.
- **Part 2: Definition of SFD Graphic Variables**
  - This describes and defines all the variables used in the SFD Graphic Generator.
- **Part 3: Definition of Terms**
  - This defines all the terms used in the SFD Graphic Generator, and provides examples of commonly used regional variations.
  - Terms in each definition starting with a Capital Letter are also defined within this document.
- **Part 4: Sanitation Containment System: SFD Schematics**
  - These schematic drawings show all of the possible sanitation containment systems defined on the selection grid within the SFD Graphic Generator.

Master vn2,
Version: Draft
SFD Level: not set

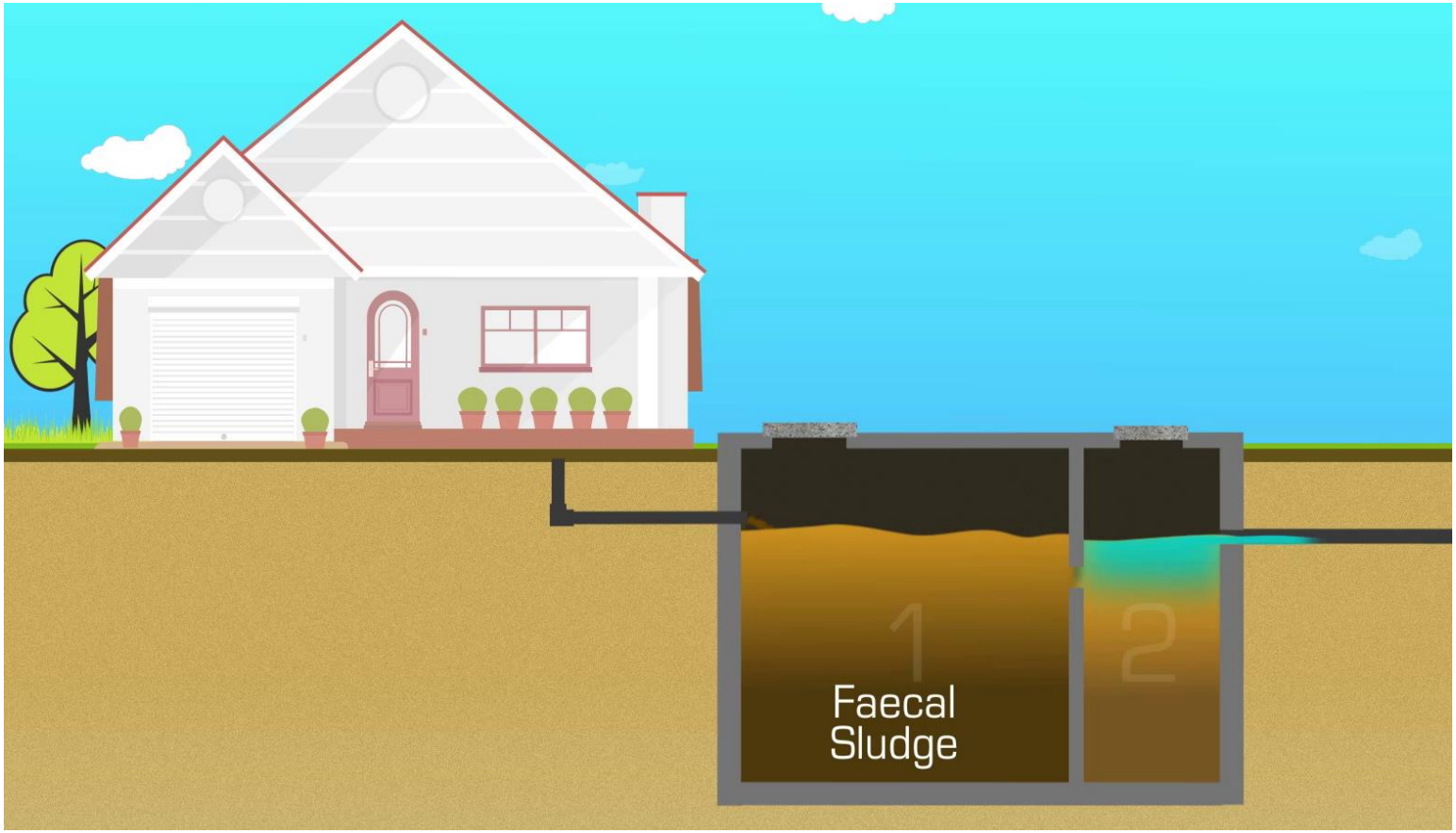
Date prepared: 14 Jun 2017
Prepared by: Name



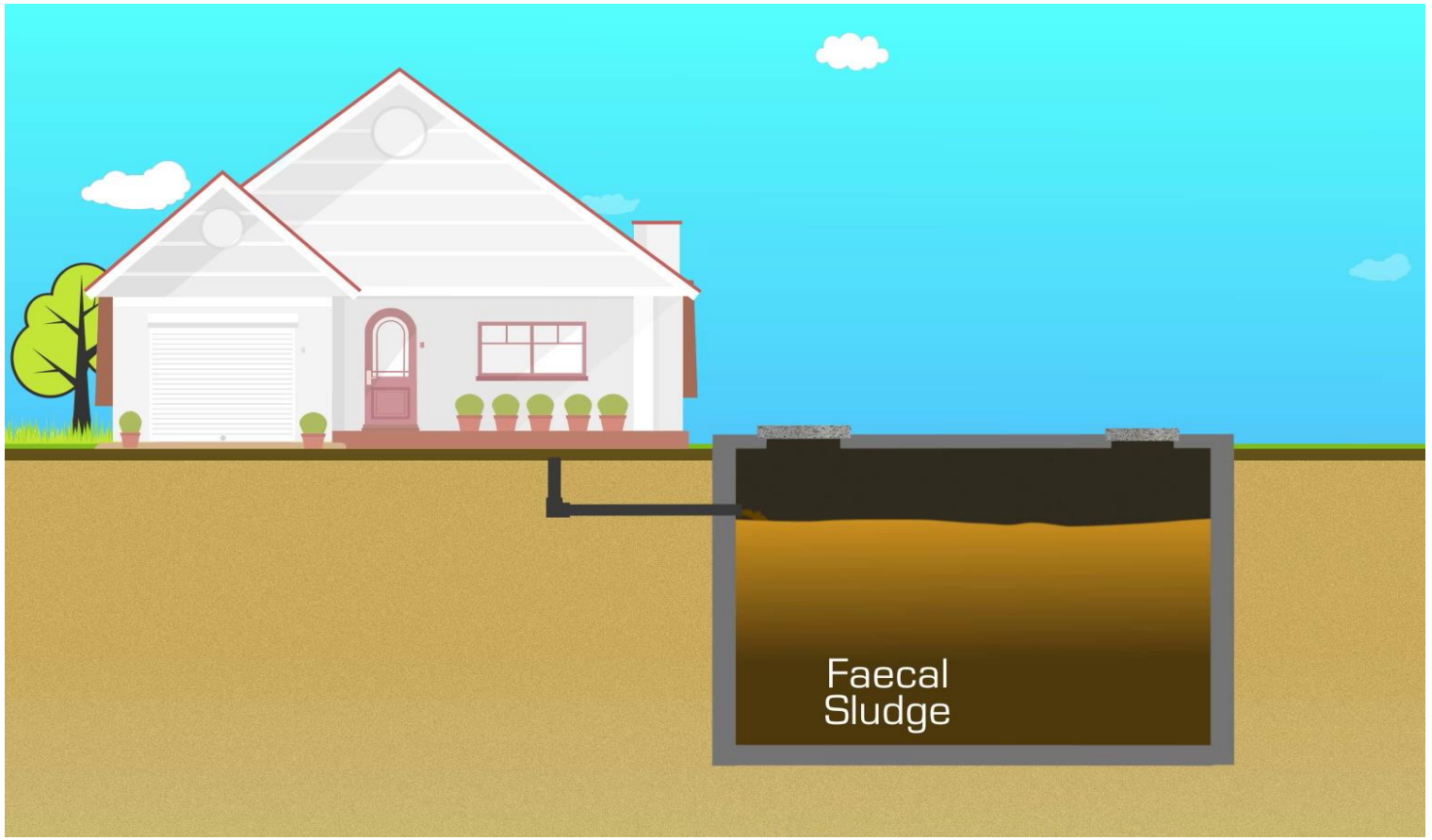
Key: WW: Wastewater, FS: Faecal sludge, SN: Supernatant Safely managed Unsafely managed

The SFD Promotion Initiative recommends preparation of a report on the city context, the analysis carried out and data sources used to produce this graphic.
Full details on how to create an SFD Report are available at: sfd.susana.org

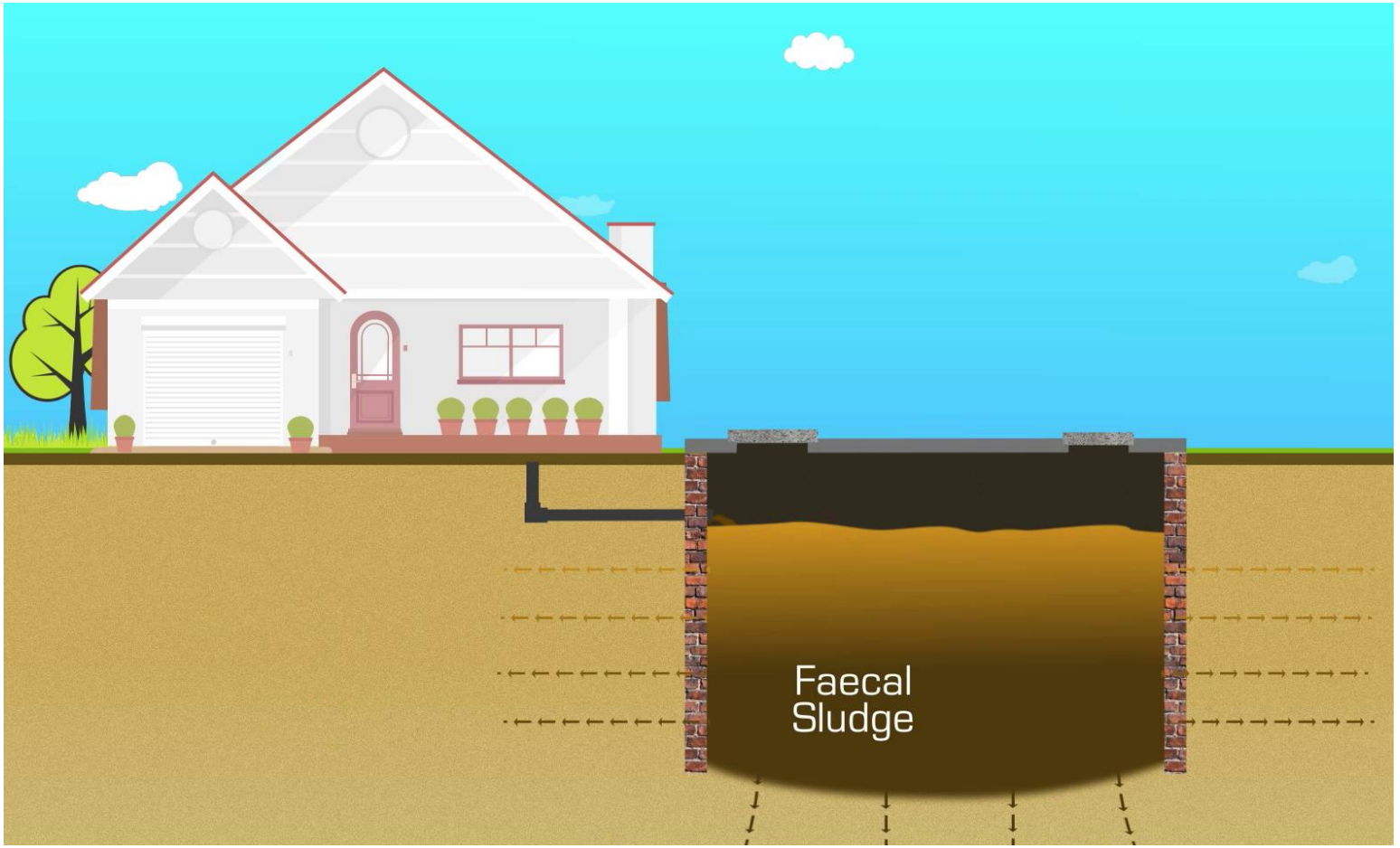
Identify the structure A



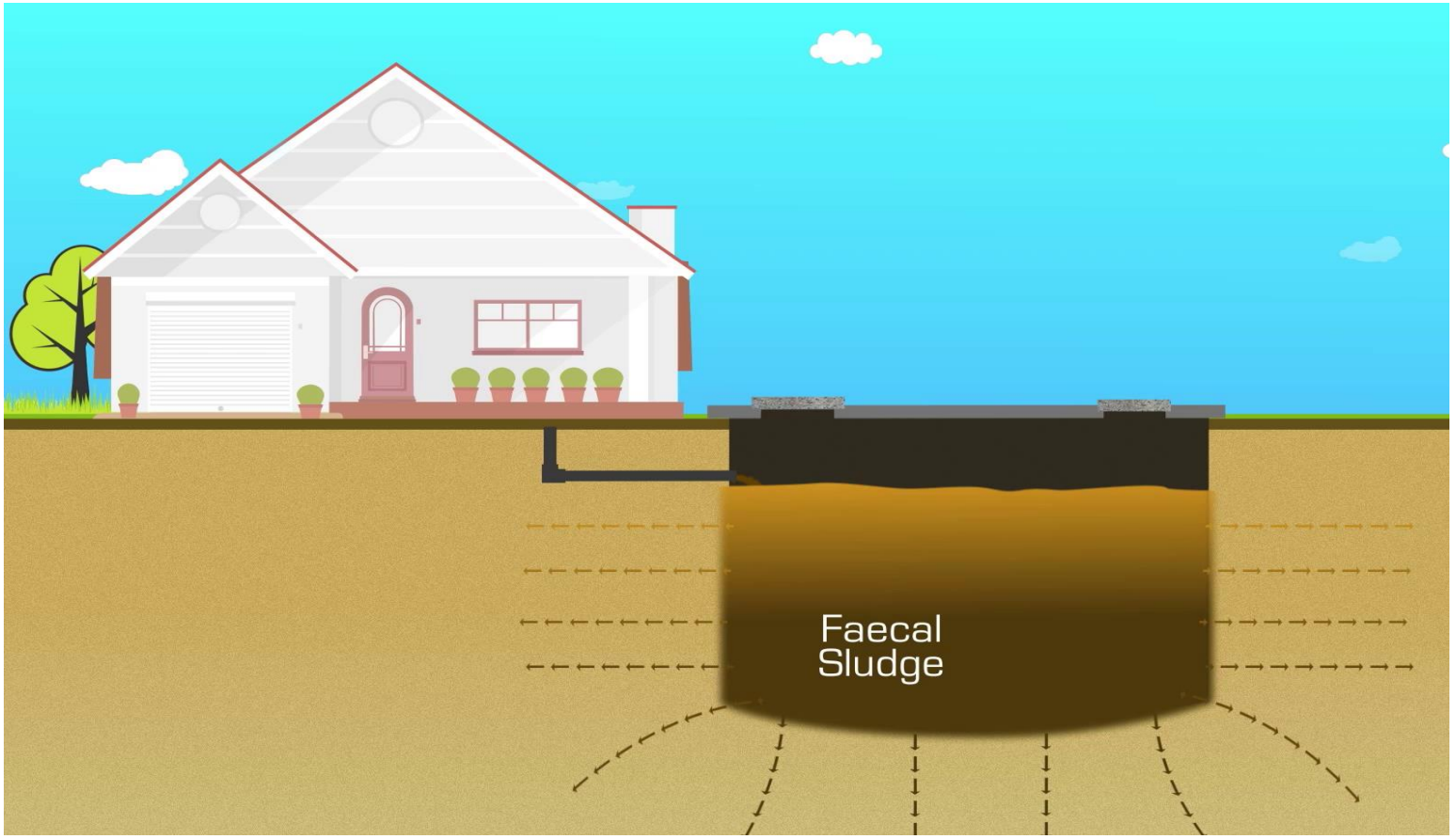
Identify the structure B



Identify the structure C



Identify the structure D



Terms and Variables

Purpose

- It helps the user to understand the variables and terms used in the manual (graphic generator, master SFD, methodology etc.) in much better way.

- The purpose of glossary is to bring everyone around the globe on same page, because septic tank as it is comprehended in India might not be same for Africa.

Part 2: Definition of SFD Graphic Variables

Variable No: W2- Wastewater contained centralised (offsite)

Variable group	Reference *(Refer to system selection grid)*	Description *(Refer to system selection grid)*	Definition
L1	**T1A1C1**	User interface discharges directly to a centralised combined sewer	This is a fully functioning user interface discharging directly to a correctly designed, properly constructed, fully functioning centralised combined sewer. The excreta is raw, untreated and hazardous, but since it is captured in the sewer, all the excreta in this system will contribute to variable W2.
L1	**T1A1C2**	User interface discharges directly to a centralised foul/separate sewer	This is a fully functioning user interface discharging directly to a correctly designed, properly constructed, fully functioning centralised foul/separate sewer. The excreta is raw, untreated and hazardous, but since it is captured in the sewer, all the excreta in this system will contribute to variable W2.

Part 3: Definition of Terms

KEY TERMS

Term	Definition	Comments and Regional Examples	References
Contained	*Sanitation technology* and/or *system* which ensures safe level of protection from *excreta* i.e. pathogen transmission to the user or general public is limited.		Re-worded from WHO, 2001 "Water Quality: Guidelines, Standards and Health: *Excreta-related infections and the role of sanitation*', pg107
Containment system	First part of the *sanitation service chain*, also referred to as 'containment' on the *excreta* flow diagram. For *offsite sanitation* it includes a) the *user interface* and b) what the *user interface* is connected to (typically a pipe to the *sewer* network) For *onsite sanitation*, it includes a) the *user interface*, b) the *onsite sanitation technology* that the *user interface* discharges to and c) the second stage technology (if anything) that the *onsite sanitation technology* is then connected to (e.g. *soak pit* or *sewer*)	-	
Containment technology	A single sanitation infrastructure immediately downstream of the *user interface* into which *excreta* is discharged.		

Part 4: Sanitation Containment System
SFD Schematics

- These schematic drawings show all of the possible sanitation containment systems defined on the selection grid
- For ease of reference, and to indicate which systems populate the same variables, the systems have been grouped together and numbered L1 to L20 and S1 to S5
- Variable group L1 to L20 are for use when pollution of groundwater is a Low Risk
- Variable group S1 to S5 are for use when pollution of groundwater is a Significant Risk

System Selection Grid

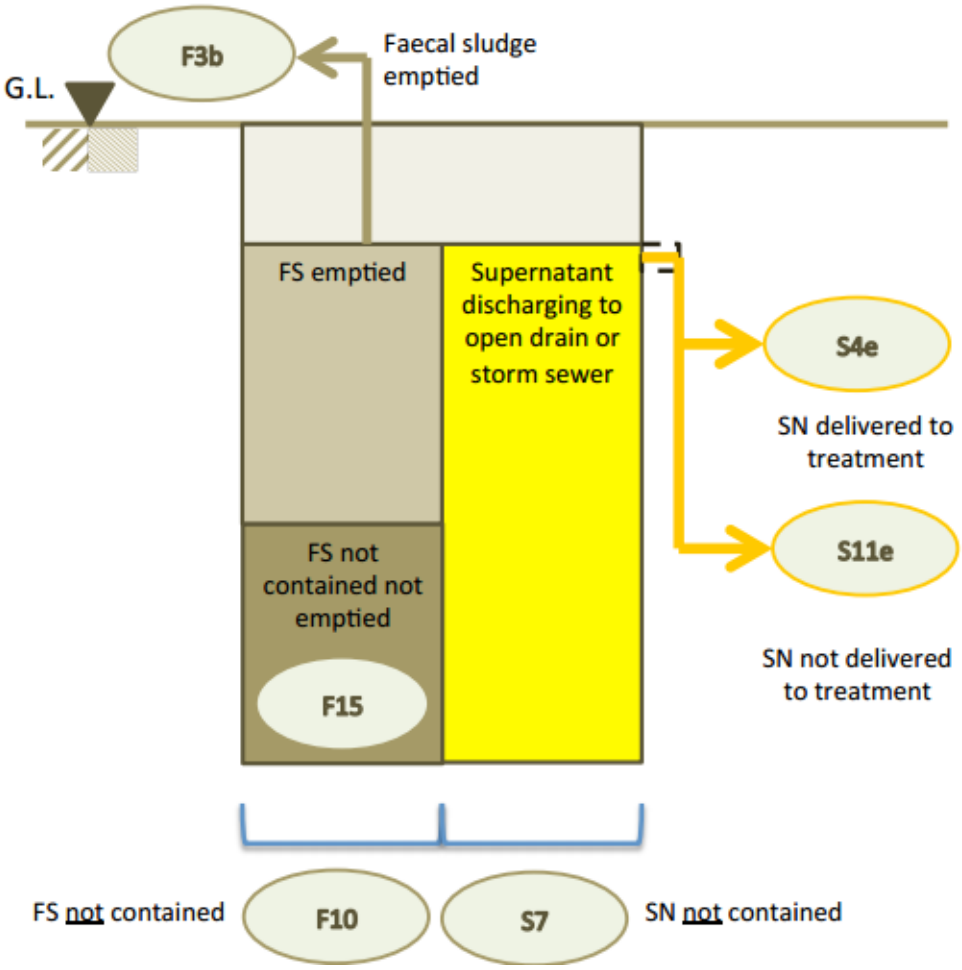
Identify each system in use in your city by selecting one technology from List A and what it is connected to from List B. Each system is identified by both a Variable Group (e.g. L7) and an individual Label (e.g. T1A2C5).

List A: Where does the toilet discharge to? (i.e. what type of containment technology, if any?)	List B: What is the containment 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.	T1A1C1 L1	T1A1C2	T1A1C3 L2	T1A1C4	T2A1C5 S1 L3 T1A1C5	L4 T1A1C6	T1A1C7 L5	T1A1C8	T1A1C9	Not applicable
Septic tank	T1A2C1	T1A2C2 L6	T1A2C3	T1A2C4	T2A2C5 S2 L7 T1A2C5	L8 T1A2C6	T1A2C7 L9	T1A2C8	T1A2C9	
Fully lined tank (sealed)	T1A3C1	T1A3C2	T1A3C3	T1A3C4	T2A3C5 S2 L7 T1A3C5	T1A3C6	T1A3C7	T1A3C8	T1A3C9	L10 T1A3C10
Lined tank with impermeable walls and open bottom	T2A4C1	T2A4C2 S3	T2A4C3	T2A4C4	T2A4C5 S2	T1A4C6	T1A4C7	T1A4C8	T1A4C9	T2A4C10 S4
	T1A4C1	T1A4C2 L6	T1A4C3	T1A4C4	L7 T1A4C5					L11 T1A4C10
Lined pit with semi-permeable walls and open bottom	Not applicable									T2A5C10 S4 L11 T1A5C10
Unlined pit										T2A6C10 S4 L11 T1A6C10
Pit (all types), never emptied but abandoned when full and covered with soil										T2B7C10 S5 L12 T1B7C10
Pit (all types), never emptied, abandoned when full but NOT adequately covered with soil										L13 T1B8C10
User interface failed, damaged, collapsed or flooded	T1B9 C1 TO C10	T1B9 C1 TO C10	T1B9 C1 TO C10	T1B9 C1 TO C10	T1B9 C1 TO C10	L14 B9 C1 TO C10	T1B9 C1 TO C10	T1B9 C1 TO C10	T1B9 C1 TO C10	T1B9 C1 TO C10
Containment (septic tank or tank or pit latrine) failed, damaged, collapsed or flooded	T1B10 C1 TO C4	T1B10 C1 TO C4 L15	B10 C1 TO C4	T1B10 C1 TO C4	L16 T1B10C5	L17 T1B10C6	T1B10 C7 TO C9	L18 T1B10 C7 TO C9	T1B10 C7 TO C9	L19 T1B10C10
No toilet. Open defecation	Not applicable						T1B11 C7 TO C9	L20 T1B11 C7 TO C9	T1B11 C7 TO C9	Not applicable

KEY:

- indicates low risk of groundwater pollution
- indicates significant risk of groundwater pollution
- indicates excreta is not contained, which could result in a significant risk of pollution
- Not applicable — indicates where the combination of technologies is not possible

Groundwater Pollution: Low Risk
General description: Tanks to open drain or storm sewer



Variable group: L8
Apply to systems:
T1A2C6
T1A3C6
T1A4C6

Assumptions (where there is no other data):

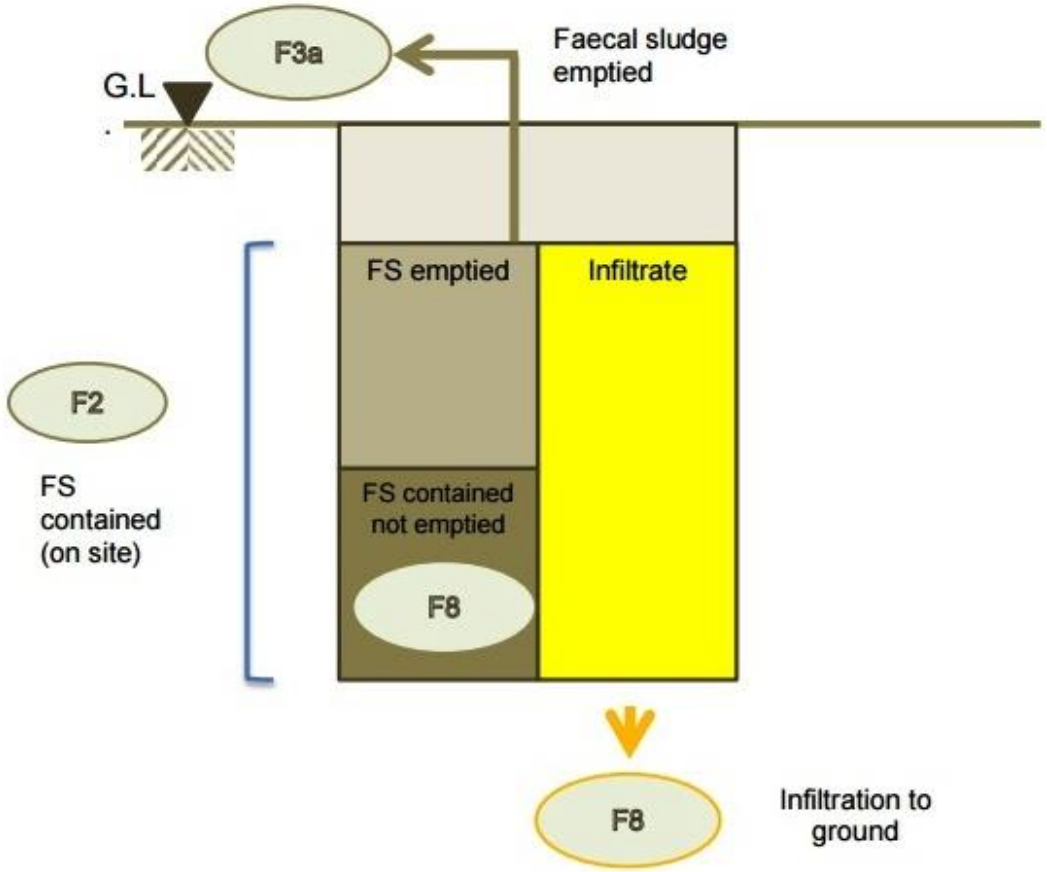
50% of tank content is supernatant of which 50% goes to treatment (S4e).

50% of remaining is FS emptied (F3b); and 50% is FS not contained not emptied (F15)

L11

Groundwater Pollution: Low Risk
General description: Lined tank with impermeable walls and open bottom with no outlet; lined pit with semi-permeable walls and open bottom with no outlet or overflow; and unlined pit with no outlet or overflow.

Apply to systems:
1A4C10
1A5C10
1A6C10



Assumptions (where there is no other data):

50% of tank or pit contents is infiltrate (F8)

50% of remaining is FS emptied (F3a); and 50% is FS contained not emptied (F8)

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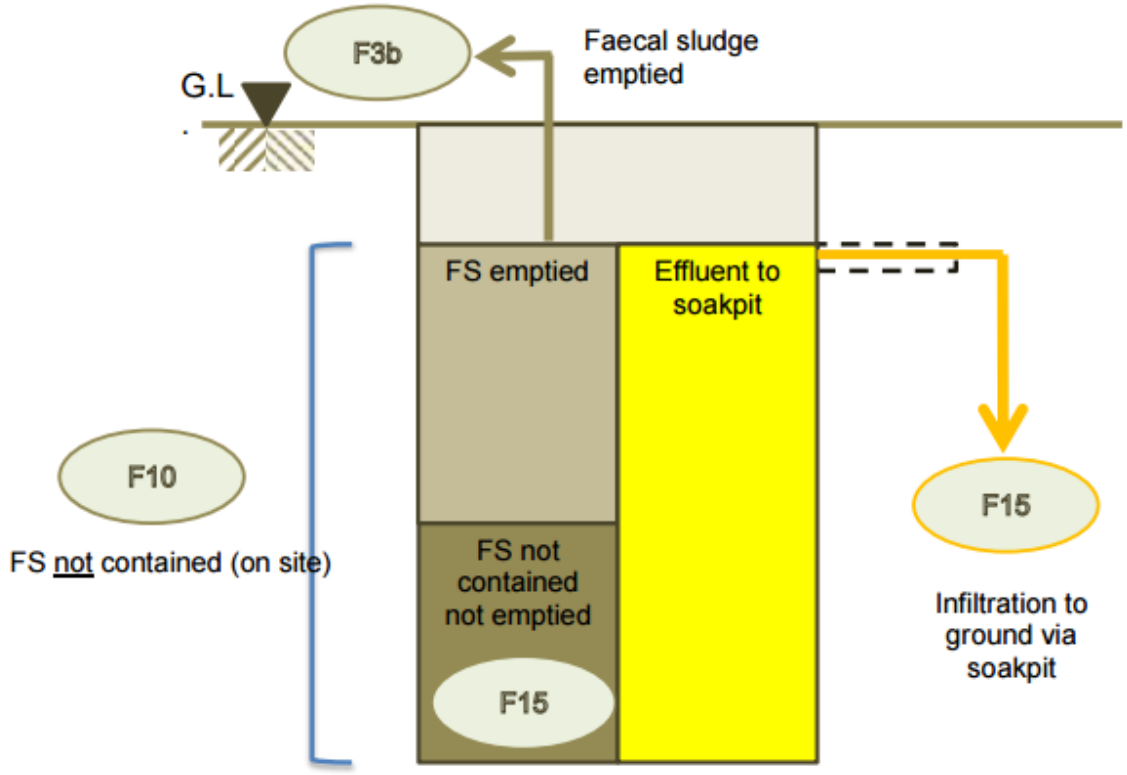
S2

Groundwater Pollution: Significant Risk
General description: Tanks connected to soakpit



Apply to systems:
2A2C5
2A3C5
2A4C5

Assumptions (where there is no other data):
50% of tank content is effluent (F15)

50% of remaining is FS not contained emptied (F3b); and 50% is FS not contained not emptied (F15)

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Thank you!

Please visit
www.sfd.susana.org

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SFD Promotion Initiative

sustainable sanitation alliance

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of Federal Ministry for Economic Cooperation and Development

UNIVERSITY OF LEEDS

WORLD BANK GROUP Water

wsp water and sanitation program

WEDC

Loughborough University

CSE

eawag aquatic research

Sandec Sanitation, Water and Solid Waste for Development

BILL & MELINDA GATES foundation