Sanitary Inspections for Sanitation

World Health Organization

WHO Sanitary Inspections for Sanitation Systems

I. GENERAL INFORMATION

A. Location

Provide the following information on the location of the toilet facility.

A1. Village/town
A2. District
A3. Province
A4. State
A5. GPS coordinates
A6. Additional location information
A7. Number of households served by this facility

B. Setting

The following factors describe the potential for risks or challenges to be present in the local area surrounding the toilet. Select the appropriate level for each setting factor based on the descriptions provided.

B1. Population density – Density of people living in the immediate area

- **Low** – Rural or low-density settlements where significant open space exists between houses
- **Medium** – suburban or peri-urban neighborhoods, small towns or village centers
- **High** – urban areas with multistory buildings and houses with minimal open land between them

B2. Difficulty accessing the toilet – How difficult is it for a service provider to access the toilet to remove sludge using a manual or motorized emptying method

- **Low** – the pit / septic tank is easy to reach by truck or gulper device; access is available through a removable cover
- **Medium** – the pit / septic tank can be reached but with some degree of difficulty due to the location or the design of the tank
- **High** – household is difficult to reach by truck due to high density or narrow streets; or, the pit / septic tank itself is difficult to access due to its location on the property or lack of a removable cover

B3. Reliance on groundwater used for drinking – the potential for local groundwater sources to be contaminated by inadequate sanitation and fecal sludge management practices

- **Low** – households in this area do not use groundwater for drinking
- **Medium** – groundwater is used in the area but the sources used for drinking and bathing are located far away and are well-protected
- **High** – households in this area use shallow groundwater (dug wells, tube wells, springs)

B4. Water scarcity – Insufficient water supply for sanitation purposes (such as flushing, cleaning, cleansing, hygiene, etc.) during all or part of the year

- O **Low** – Most households have sufficient water year-round for flushing or cleansing, or do not require water for sanitation purposes
- O **Medium** – Water is scarce during the dry season or due to frequent outages
- O **High** – Water is scarce most of the year and households do not have enough for flushing or cleansing

B5. Risk of flooding – Frequent and severe floods that could cause damage or washout (a breach or overflow due to flooding) to sanitation facilities

- O **Low** – Flooding does not typically occur in the area
- O **Medium** – Flooding that caused damage or washout to structures has occurred within the past 5 years
- O **High** – Flooding that caused damage or washout has occurred within the past year or usually occurs every year

B6. Soil hardness (rocky soil) – Hard or rocky soil that makes it difficult to dig

- O **Low** – Soil is sandy or loamy and pits are easy to dig using hand tools
- O **Medium** – Clay or rocky soil that makes it slow to dig by hand tools
- O **High** – Rocky soil or shallow bedrock layer makes it difficult or impossible to dig without using heavy machinery

B7. Soil impermeability – Inability for water to drain or seep into the soil

- O **Low** – Water drains rapidly into the soil (sand, gravel, fractured rock)
- O **Medium** – Water drains slowly into the soil (silty soil, mixed clay / sand / loam)
- O **High** – Water drains very slowly or not at all into the soil (mostly clay, rock formations)

B8. Land scarcity – Lack of sufficient land area available for onsite sanitation systems (including tank and soak away)

- O **Low** – Dwellings are located far apart and can accommodate a properly functioning septic system with soakaway / drain field or multiple pits for faecal sludge disposal
- O **Medium** – Dwellings are spaced far enough apart to accommodate septic tanks but many are too close together for proper soakaways / drain fields or pits for disposal of faecal sludge
- O **High** – Dwellings are located close together and without enough land area for a properly functioning septic system and there is very little space to dig additional pits to bury faecal sludge

II. SANITATION SAFETY INSPECTION

C1. Observe the type of sanitation facility

If 'Flush' or 'Pour flush', probe: Where does it flush to?

- O Flush to piped sewer system
- O Flush to septic tank
- O Flush to pit latrine
- O Flush to twin pits
- O Flush to open drain
- O Flush to don't know where
- O Pit latrine with slab
- O Pit latrine without slab / open pit
- O Twin pit latrine with slab
- O Ventilated improved pit latrine
- O Composting toilet
- O Container based sanitation
- O Hanging toilet / hanging latrine
- O No facility
- O Other (specify) _____
- O Observation not possible

If C1 is no facility or observation not possible, the inspection cannot be completed. End the survey here.

1. Privacy and security

Ingress of rainwater may cause the pit to fill up and overflow. Animals, rodents, insects, etc. entering the toilet and/or pit can damage the facility and carry excreta to the community. A door lockable from the inside and a working light will help provide privacy and security to the user.

1a. What is the condition of the toilet superstructure?

The toilet superstructure or enclosure refers to the walls, roof, and door of the toilet. Ingress of rainwater may cause the pit to fill up and overflow. Animals, rodents, insects etc. entering the toilet and/or pit can damage the facility and carry excreta to the community.

- O Absent or missing
- O Incomplete
- O Damaged
- O No problems observed

1b. Does the design of the toilet prevent other people from seeing what someone is doing when they use it?

- O Yes
- O No
- O Don't know

1c. Does the toilet provide security to the intended users?

A door that can be locked from the inside and a working light will help provide security.

- O Yes
- O No
- O Don't know

2. Toilet cleanliness

If the toilet is not kept clean, the users may be exposed to excreta when using the toilet and/or this may discourage toilet use.

2a. Is the toilet dirty with visible excreta on surfaces?

If the toilet is not kept clean, the users may be exposed to excreta when using the toilet and/or this may discourage toilet use.

O Yes O No O Don't know

3. Handwashing facilities

Handwashing facilities consist of the presence of water and soap. They may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water.

3a. Is there a handwashing facility inside or near the toilet?

A handwashing facility is a fixed or mobile device designed to contain, transport, or regulate the flow of water to facilitate handwashing. They may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. To be considered near the toilet, the handwashing facility should be located within 5 meters.

O Yes O No O Don't know

If 3a is Yes:

3b. Is water available at the handwashing facility?

Verify by turning on the tap or checking the basin, bucket, or water container for the presence of water.

O Yes O No O Don't know

If 3a is Yes:

3c. Is soap or detergent available at the handwashing facility?

Soap may include bar soap, liquid soap, powder detergent, or soapy water. Ash, soil, sand, or other traditional handwashing agents are less effective and do not count as soap.

O Yes O No O Don't know

4. Flies and insects

Flies can carry disease from the excreta in the pit/container/tank to the local community.

4a. Can flies and other insects easily enter and leave the pit/container/tank?

O Yes O No O Don't know

5. Damage

If the walls are not stable and/or the slab cracked, there may be a risk that the pit will collapse putting users and sanitation workers at risk (e.g. falling into pit).

If C1 is Pit latrine without slab / open pit, then mark this risk as present and skip the questions in this section.

If C1 is flush to pit latrine, flush to twin pits, pit latrine with slab, twin pit latrine with slab, ventilated improved pit latrine, or composting toilet:

5a. Is the cover of the pit or the slab cracked or damaged?

O Yes O No O Don't know

If C1 is flush to pit latrine, flush to twin pits, pit latrine with slab, twin pit latrine with slab, ventilated improved pit latrine, or composting toilet:

5b. Are the side walls of the pit damaged or collapsed?

If the walls are not stable, there may be a risk that the pit will collapse putting users and sanitation workers at risk (e.g. falling into pit or pit collapse during emptying).

O Yes O No O Don't know

If C1 is flush to piped sewer system, flush to septic tank, flush to open drain, flush to elsewhere, flush to don't know where:

5c. Is there visible damage to the septic tank /pit / outlet pipes, such as cracks, corrosion, deformation, or leakage?

O Yes O No O Don't know

If C1 is Container-based sanitation:

5d. Are the toilet and cartridges poorly maintained with broken components, visible cracks or defects in the side walls?

If the walls are cracked, there may be a risk that the cartridge will leak exposing users, sanitation workers, and the local community to excreta.

O Yes O No O Don't know

6. Surface water and ground contamination

If effluent is flowing to an open drain, water body, or open ground, then the local community may be exposed to excreta.

Note: if C1 is flush / pour flush to open drain, or hanging toilet / hanging latrine, then mark this risk as present and skip the questions in this section.

6a. Is there any evidence of leakage or overflow to the surrounding area from the toilet or the containment?

Evidence may of leakage may include ponds of effluent, damp earth, or lush vegetation nearby.

○ Yes ○ No ○ Don't know

If C1 is one of: Flush / pour flush to septic tank, Flush / pour flush to pit latrine, Flush / pour flush to twin pits, or Other (specify):

6b. Does the tank or pit have an outlet pipe for liquid effluent?

Outlet is an external pipe through which liquid effluent from the containment is discharged.

○ Yes ○ No ○ Unable to observe

If 6b is Yes:

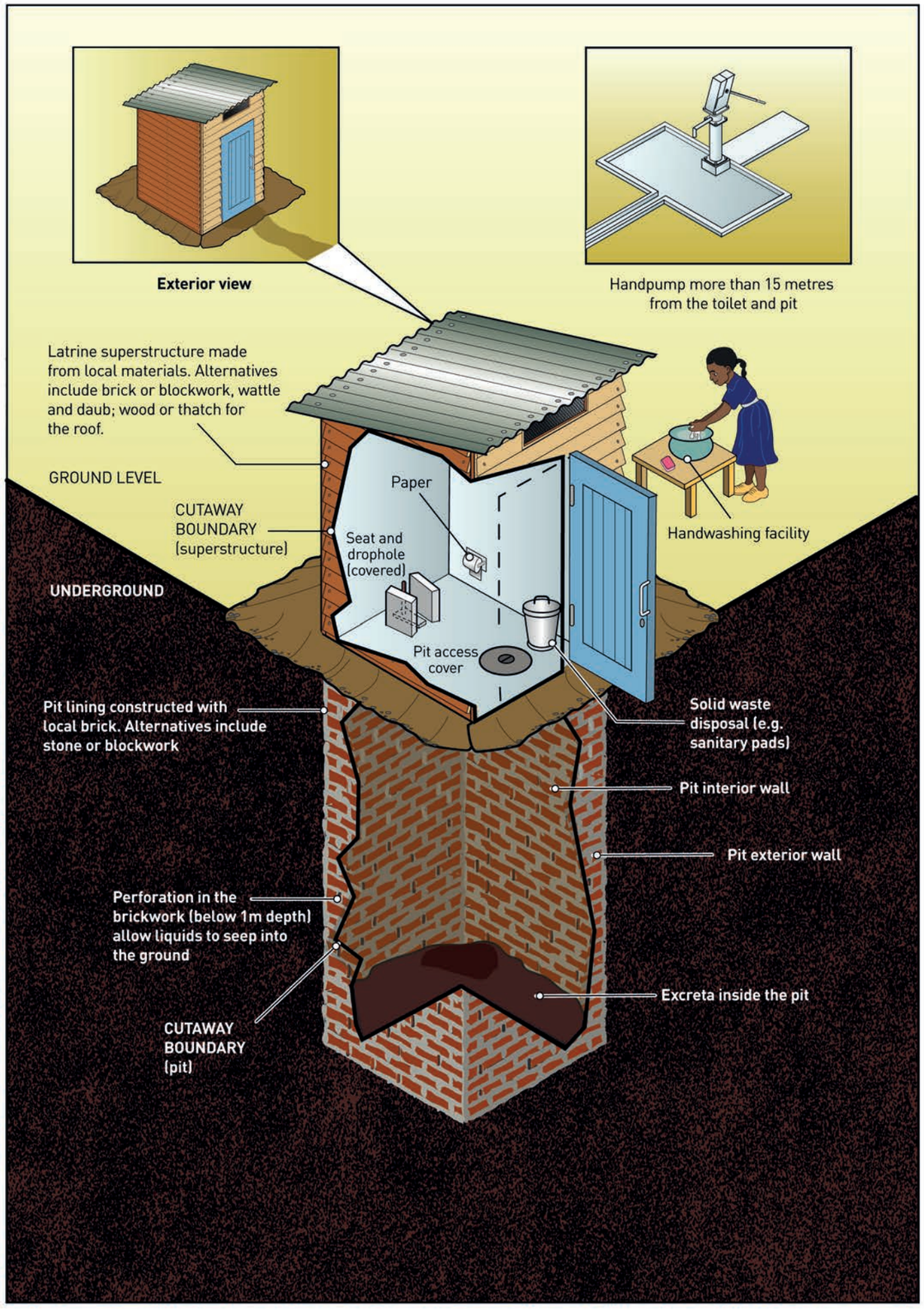
6c. Where does the outlet pipe discharge to?

- ○ Leach field or soak pit
- ○ Sewer or closed drain that leads to a wastewater treatment plant (WWTP)
- ○ Sewer or closed drain that leads to a water body (canal, river, pond, etc.)
- ○ Sewer or closed drain that leads to unknown place (don't know where)
- ○ Open drain
- ○ Water body or the ground surface
- ○ Land or gardens used to grow food crops
- ○ Other (specify): _____
- ○ Don't know

Annexes

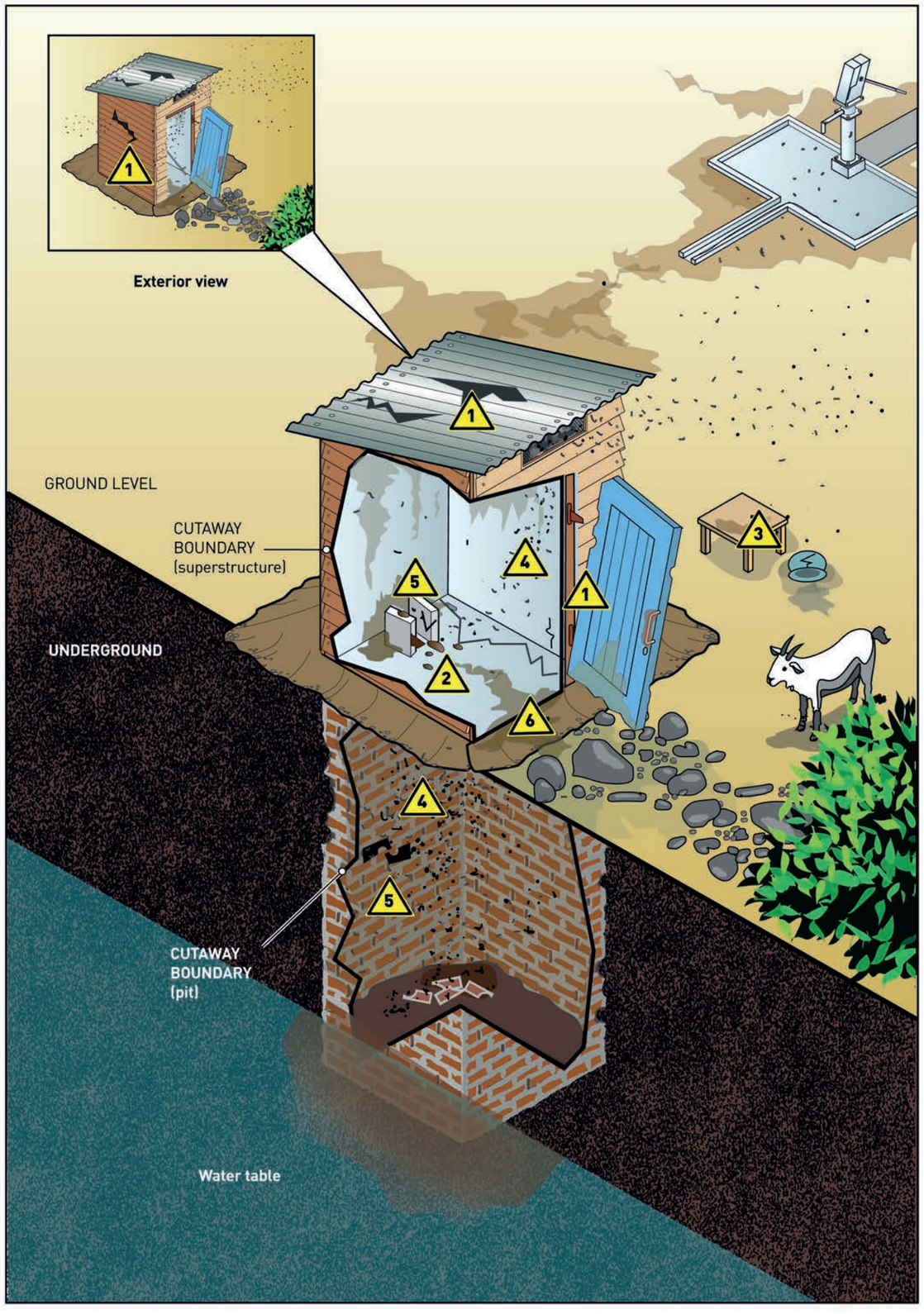
World Health Organization

Dry toilet with single pit



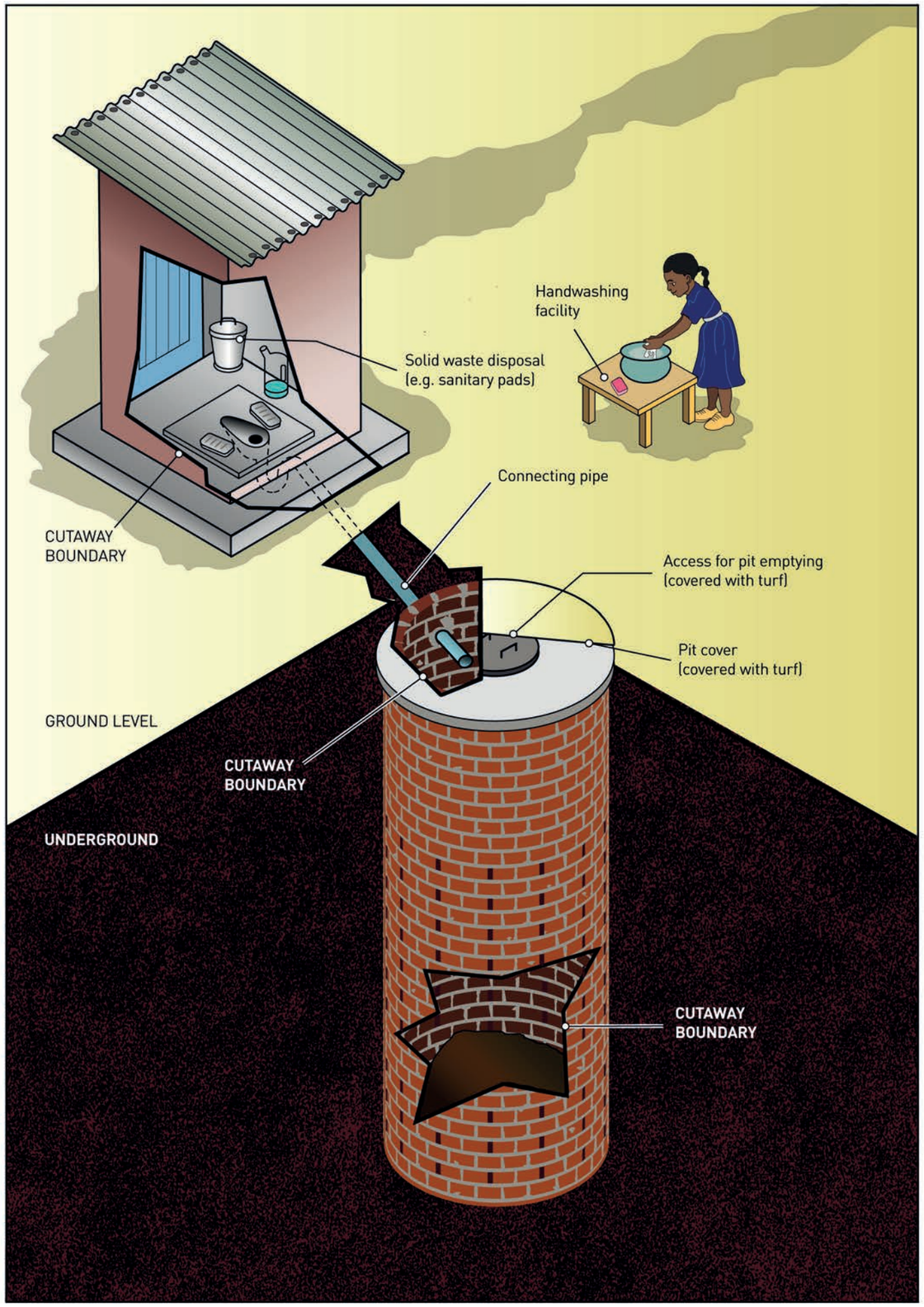
A.2

Dry toilet with single pit – with risk factors



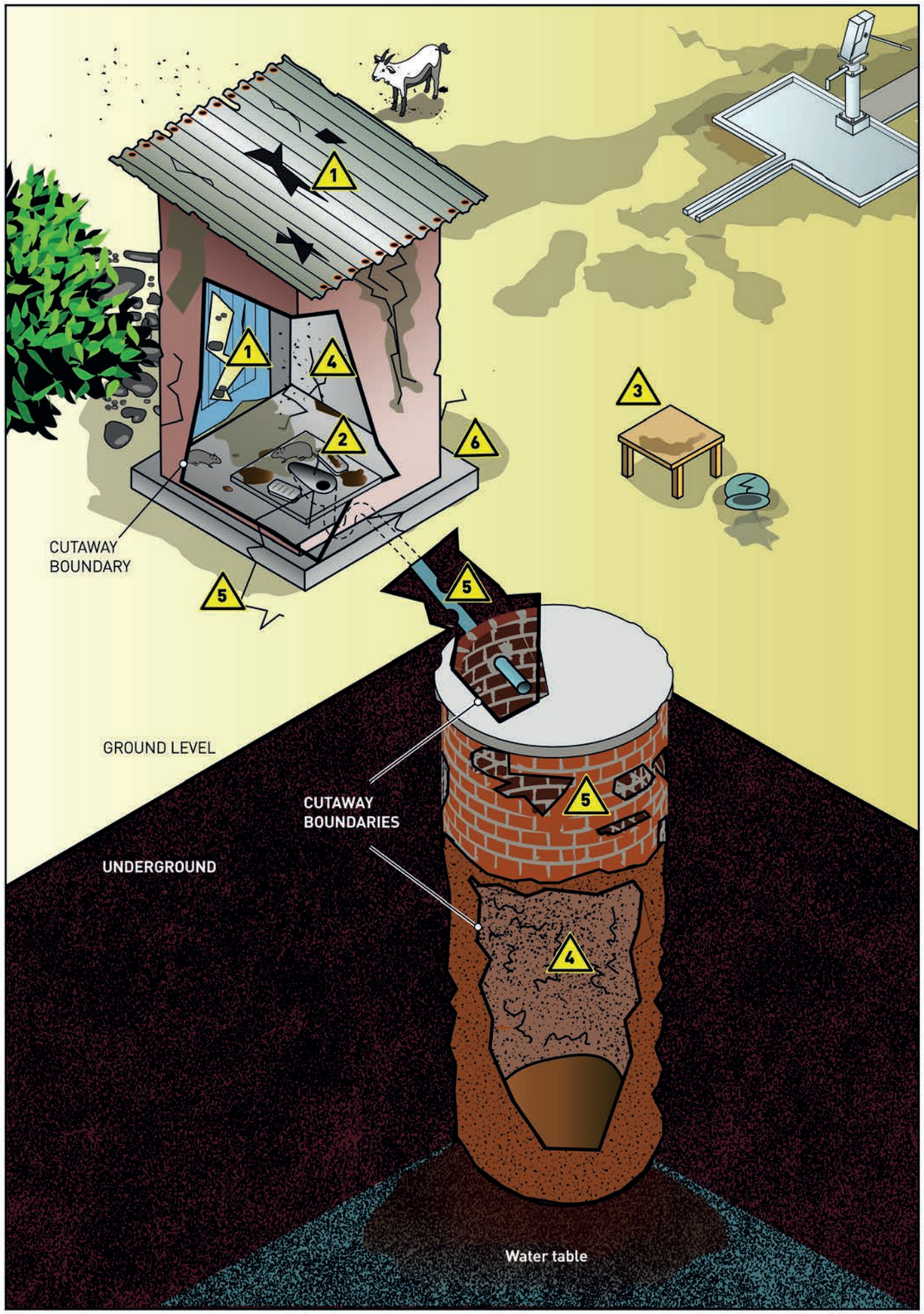
A.3

Pour-flush toilet with a single pit



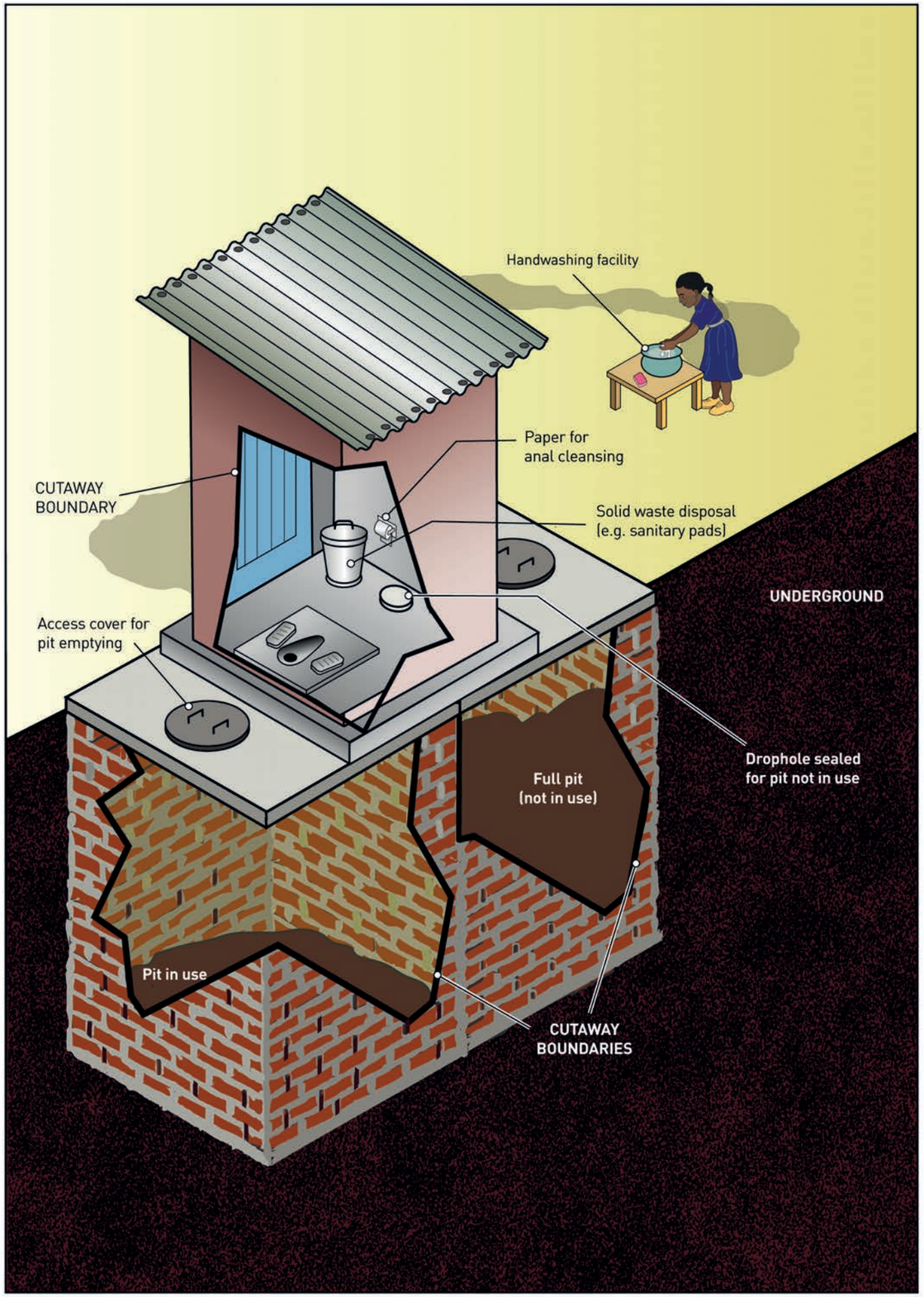
A.4

Pour-flush toilet with a single pit – with risk factors



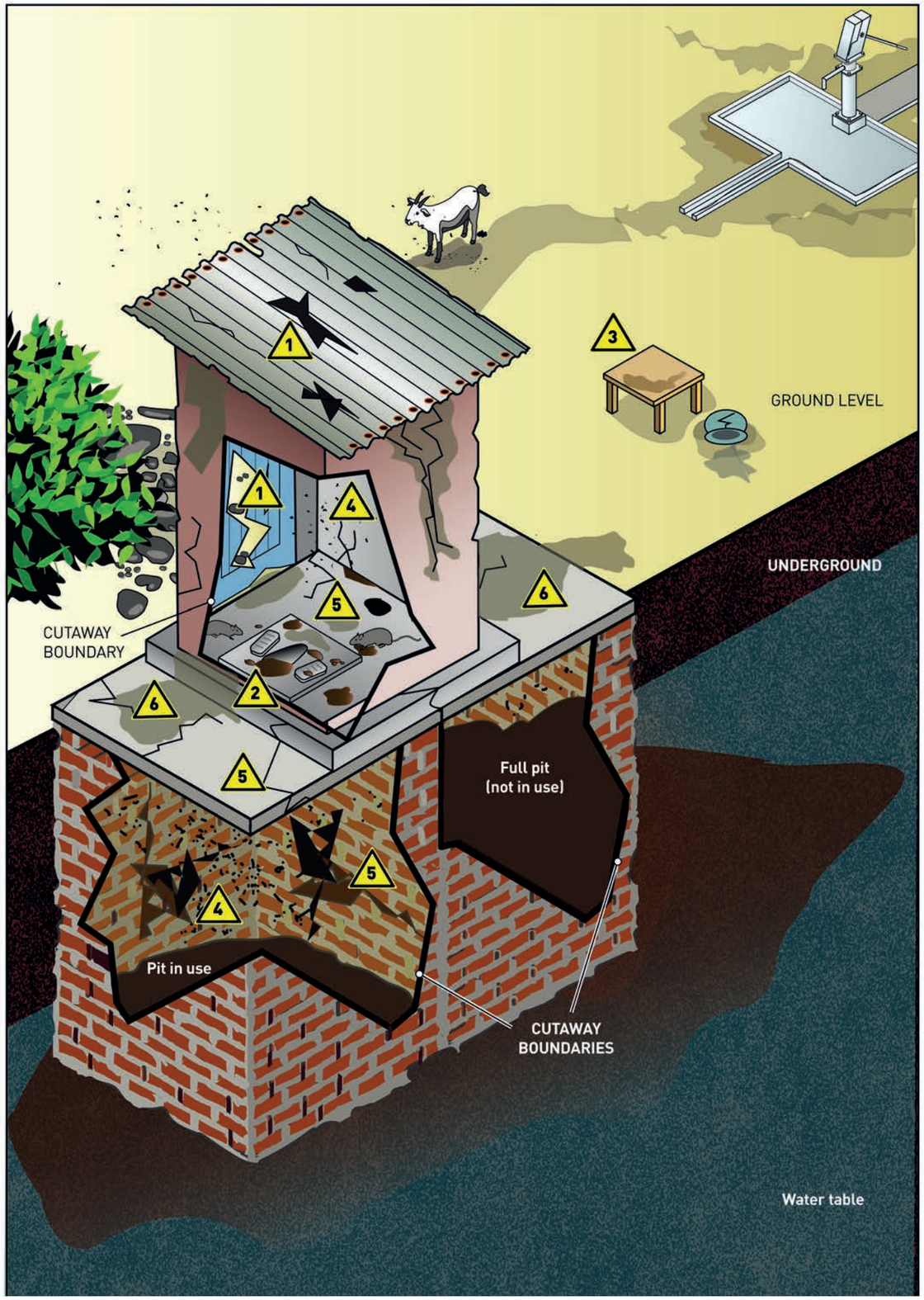
A.5

Dry toilet with a double pit



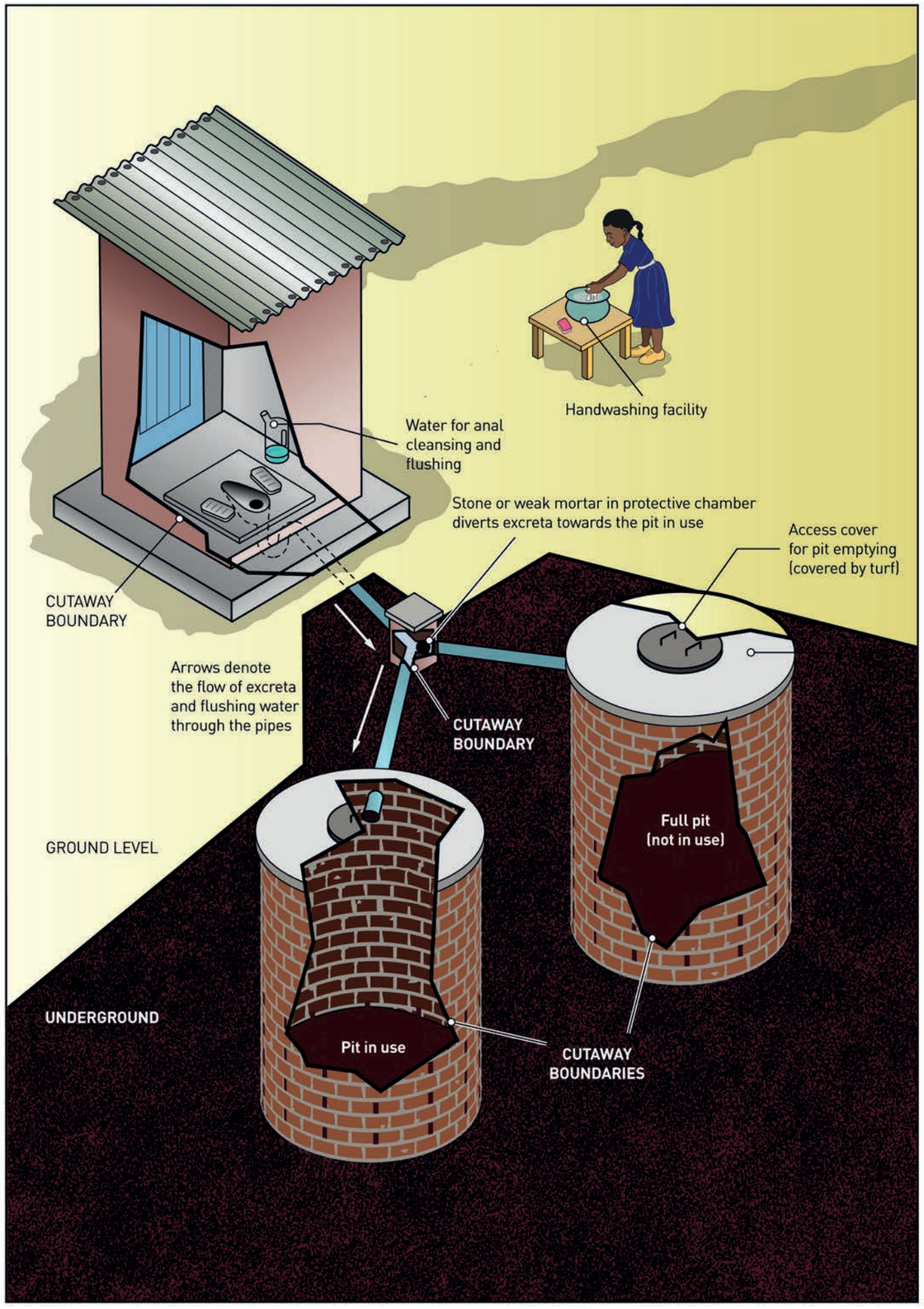
A.6

Dry toilet with a double pit – with risk factors



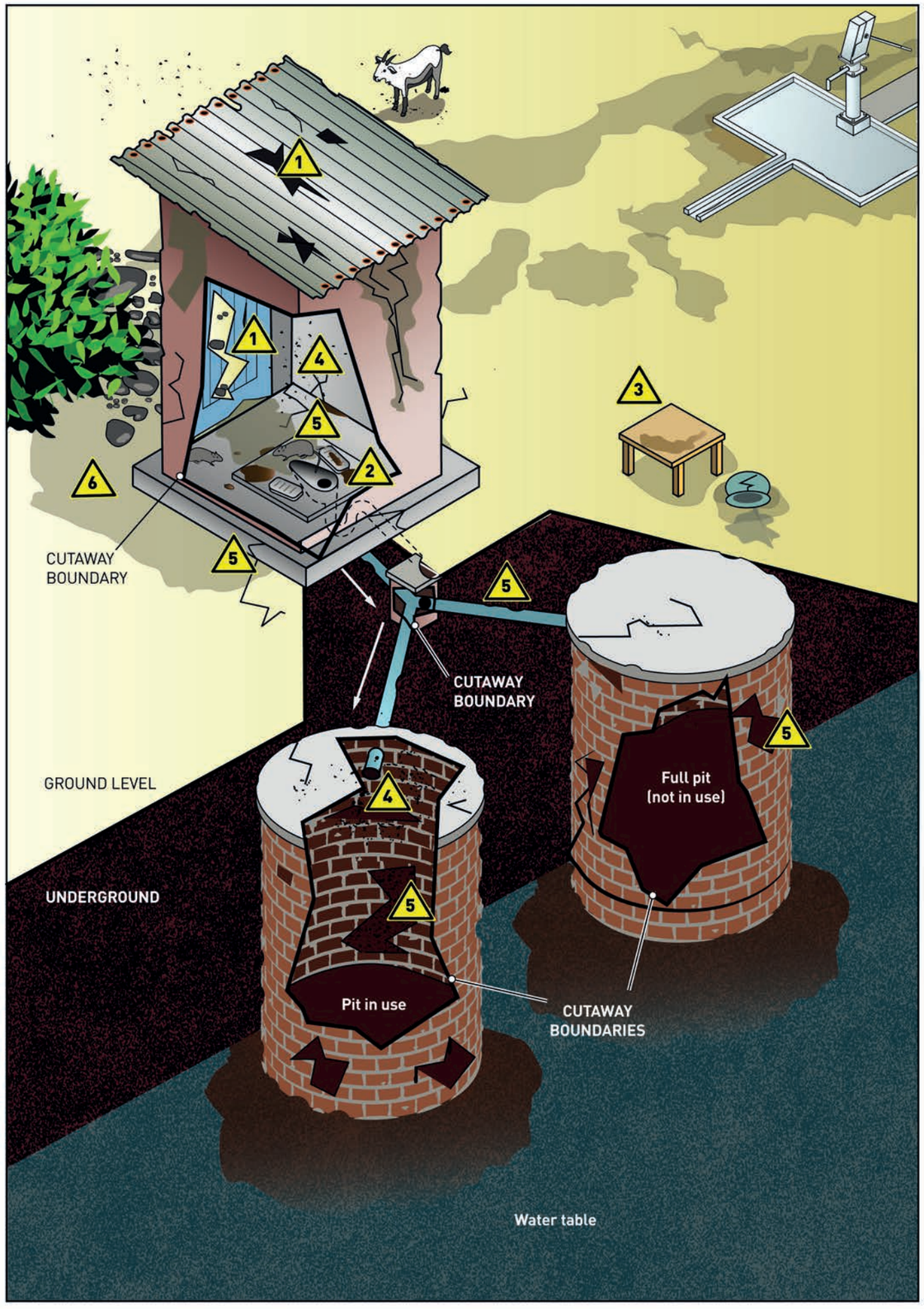
A.7

Flush toilet with twin pits



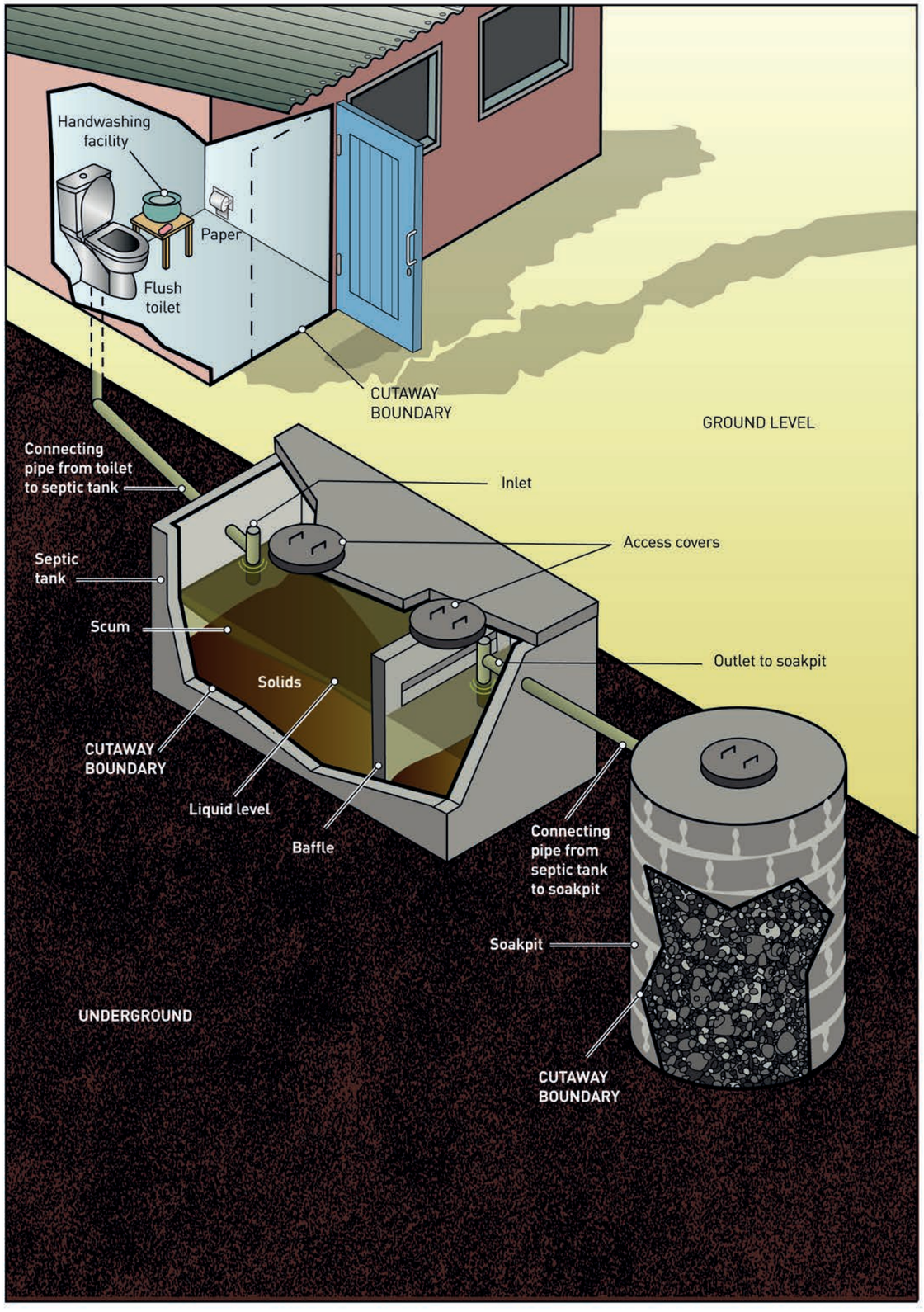
A.8

Flush toilet with twin pits – with risk factors



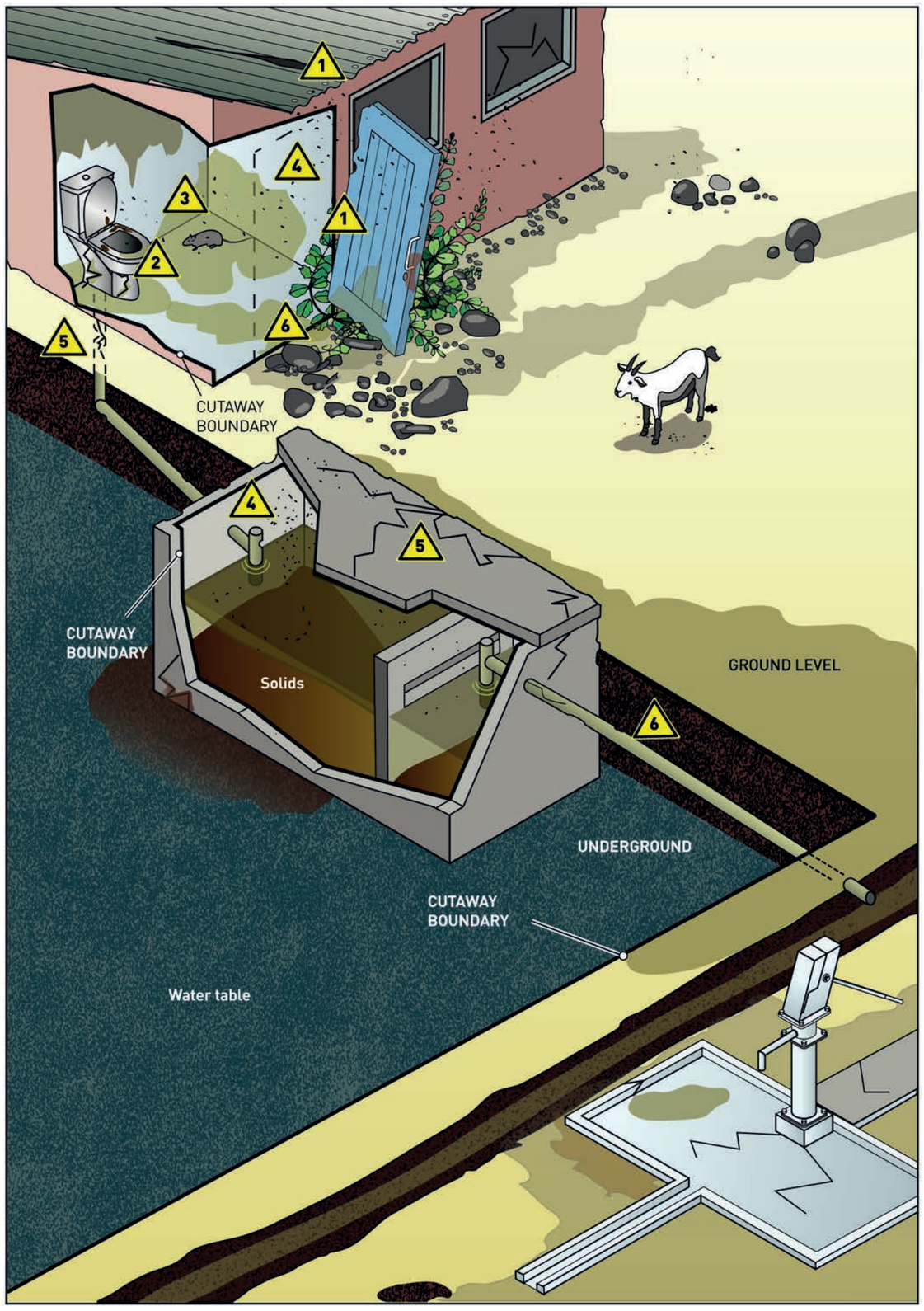
A.9

Flush toilet to a septic tank and soakpit



A.10

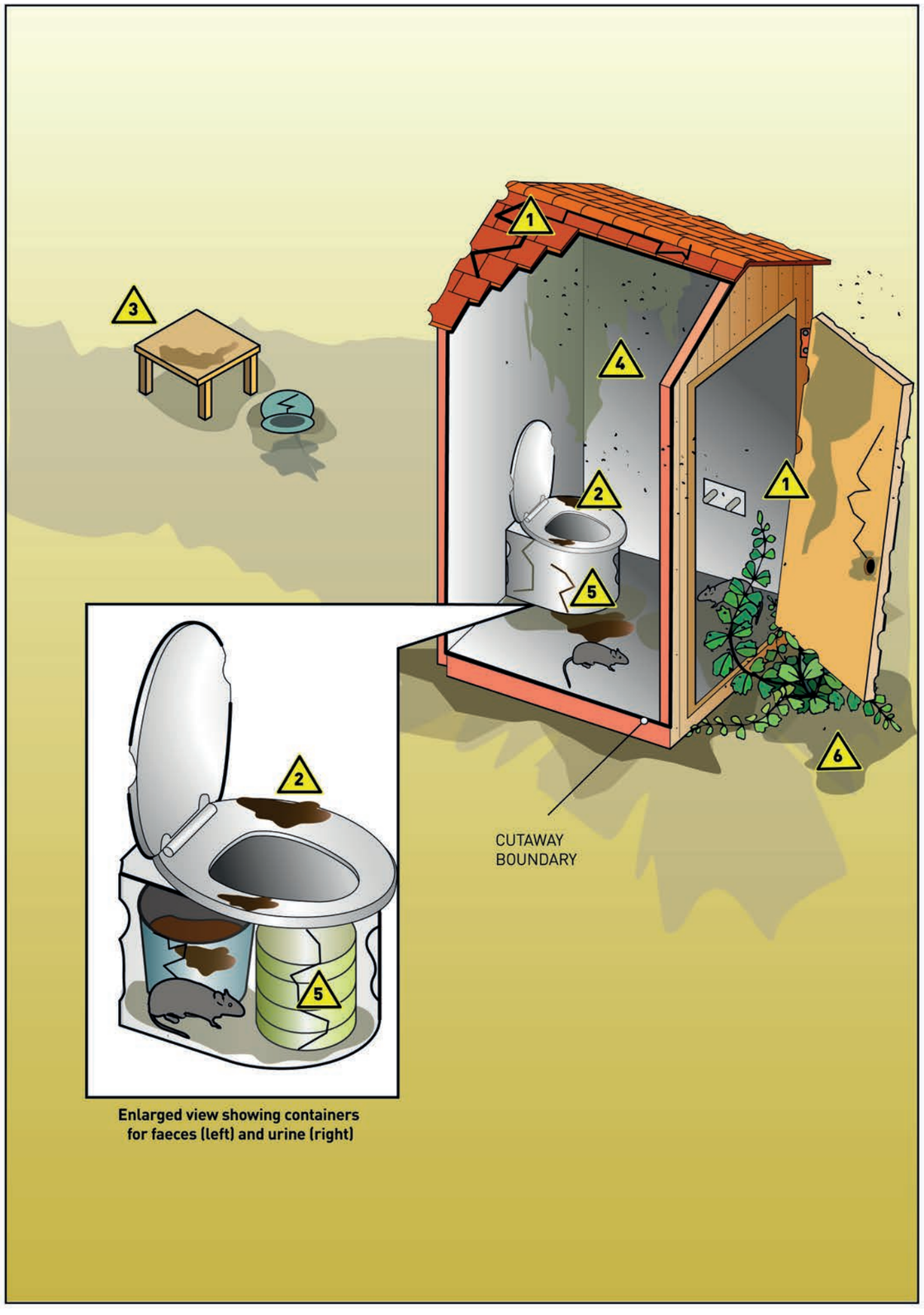
Flush toilet to a septic tank and soakpit – with risk factors



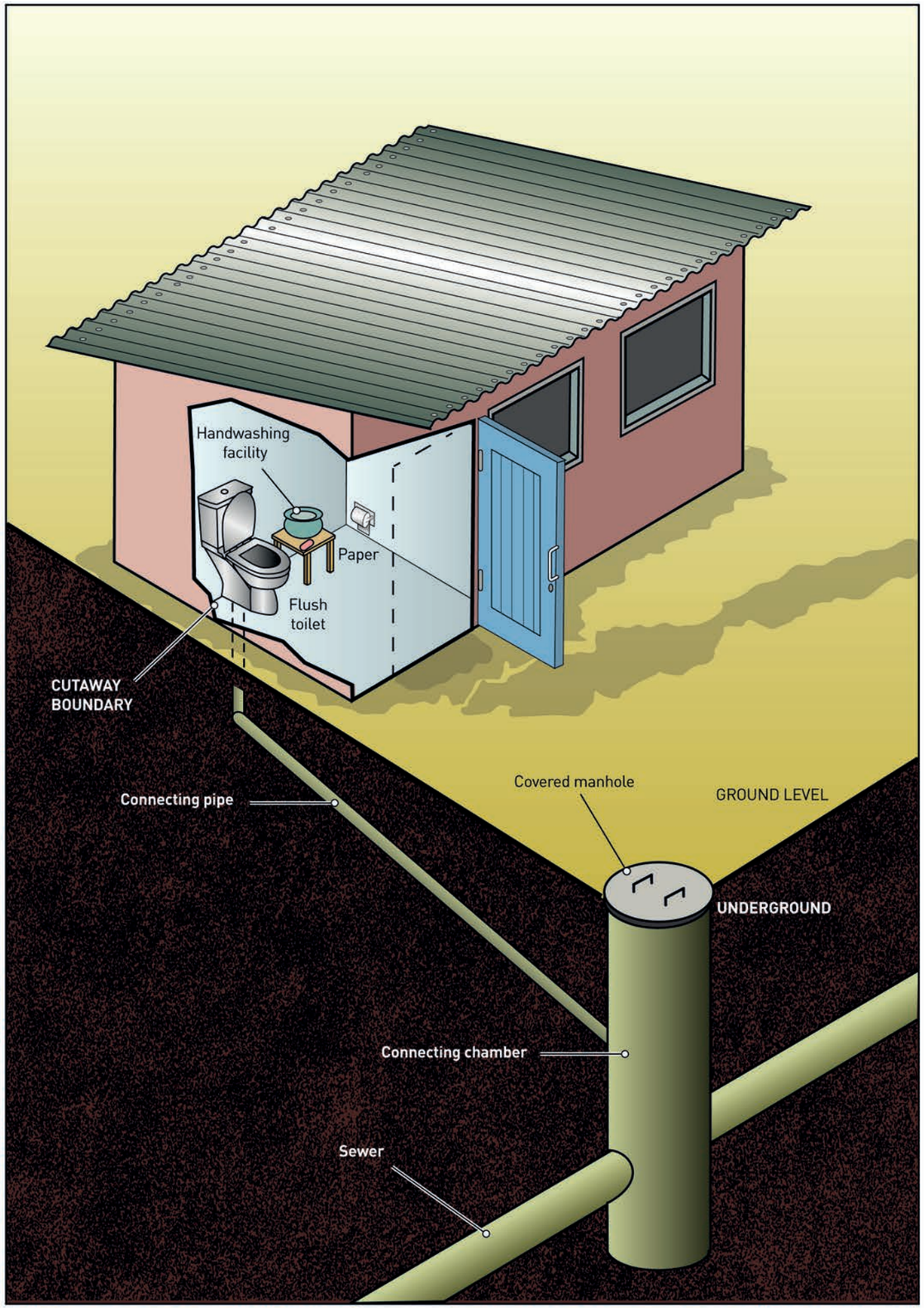
A.11

Urine diversion dry toilet with cartridges or storage tanks

Urine diversion dry toilet with cartridges or storage tanks – with risk factors

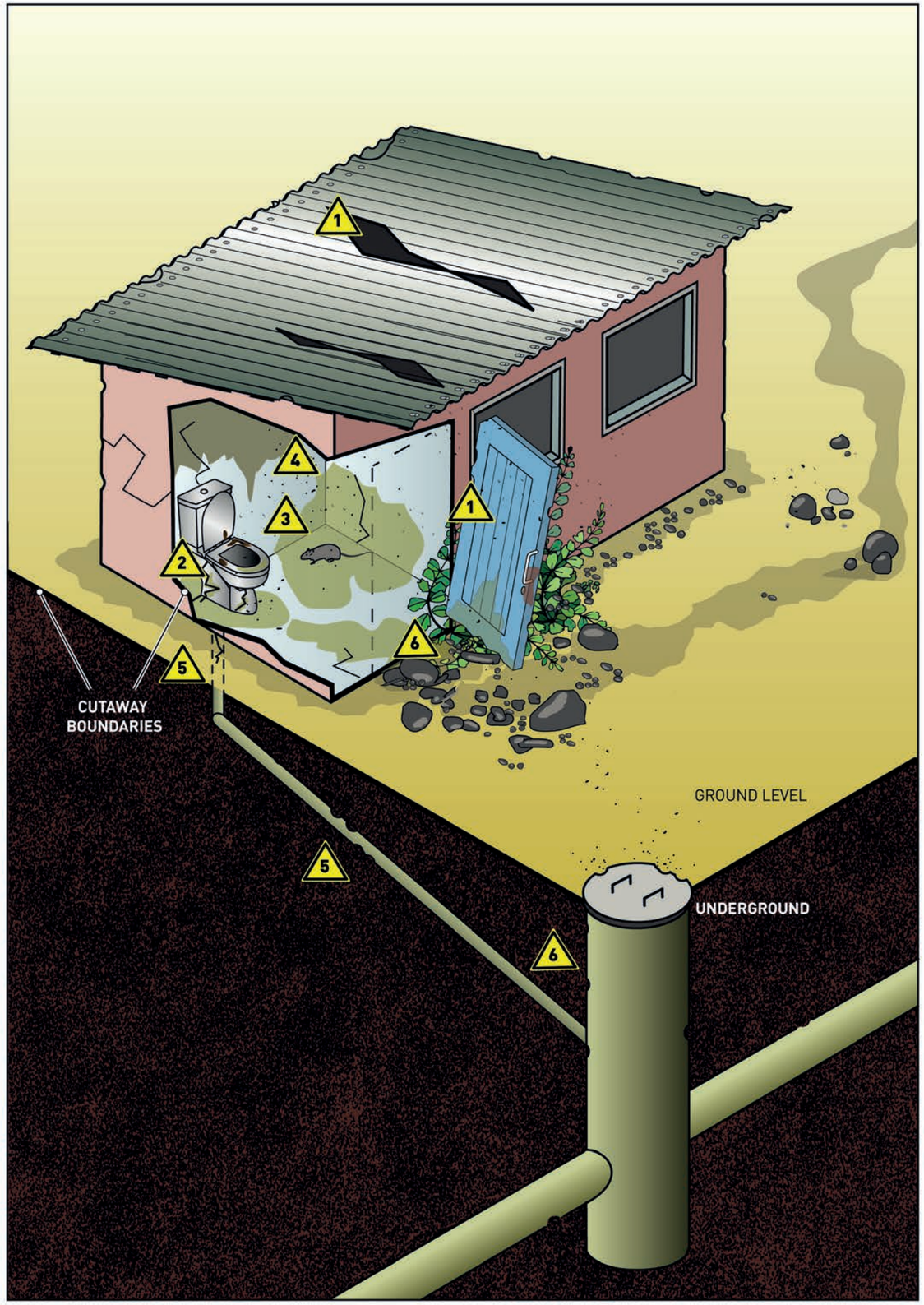


Flush toilet to sewerage system



A.14

Flush toilet to sewerage system – with risk factors



A.15

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Illustrated by Rod Shaw, WEDC, Loughborough University