

SSP Training of Sanitation Task Force in Northern Uganda

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Abdullah Ali Halage (SSP consultant)



Outline

- Objectives of the training
- What is SSP?
- Purpose of SSP
- Steps for preparing SSP
- The Steering Committee
- Process flow diagram
- Risk assessment
- Key Control measures

Objectives of the training

- Participants should be able to describe the key concepts of SSP.
- Participants should be able to conduct risk assessment
- Participants should be able to design sanitation safety plans
- Participants should be able to apply key concepts of SSP during inspection.

What is SSP?

- It is a multiple-barrier approach combining treatment and non-treatment barriers to reduce risks to various exposure groups.
- A risk based management tool for sanitation systems (WHO, 2015)
- It provides a structure to bring together actors from different sectors to identify health risks in the sanitation system and agree on improvements and regular monitoring

What is SSP II

- It focuses on safe use of Wastewater, Excreta and Grey water
- What to do to improve the system or programme and when to do it selected according to the risks

Purpose of the SSP

- To systematically identify and manage health risk along the sanitation chain
- SSP guides investment based on actual risks, to promote health benefits and minimize adverse health impacts
- To provide assurance to authorities and the public on the safety of sanitation related products and services.

Steps for preparing SSP

- Step1: Preparing for sanitation safety planning (Priority area, steering committee, specific objectives etc.)
- Step2 : Describe the sanitation system
- Step3 : Identify hazardous events; assess existing control measures and exposure risks

Steps cont'd

- Step4: Develop and implement an incremental improvement plan
- Step5 :Monitor control measures and verify performance
- Step6: Develop supporting programmes and review plans

Specific Objectives of the SSP (KCCA)

- ▶ To ensure safe and sanitary collection, transport and disposal of household fecal sludge in all Divisions
- ▶ To promote and apply safe use of sanitation facilities (Technical and behaviour component)
- ▶ To protect the health of informal and formal municipal sanitation workers involved in collection and transport of faecal sludge
- ▶ To protect the local community members from getting exposed to hazardous events related to improper collection and transport of household human waste
- ▶ To assist in prioritizing occupational Health and Safety related investments in all Divisions

Developing SSP for a simple pit latrine.

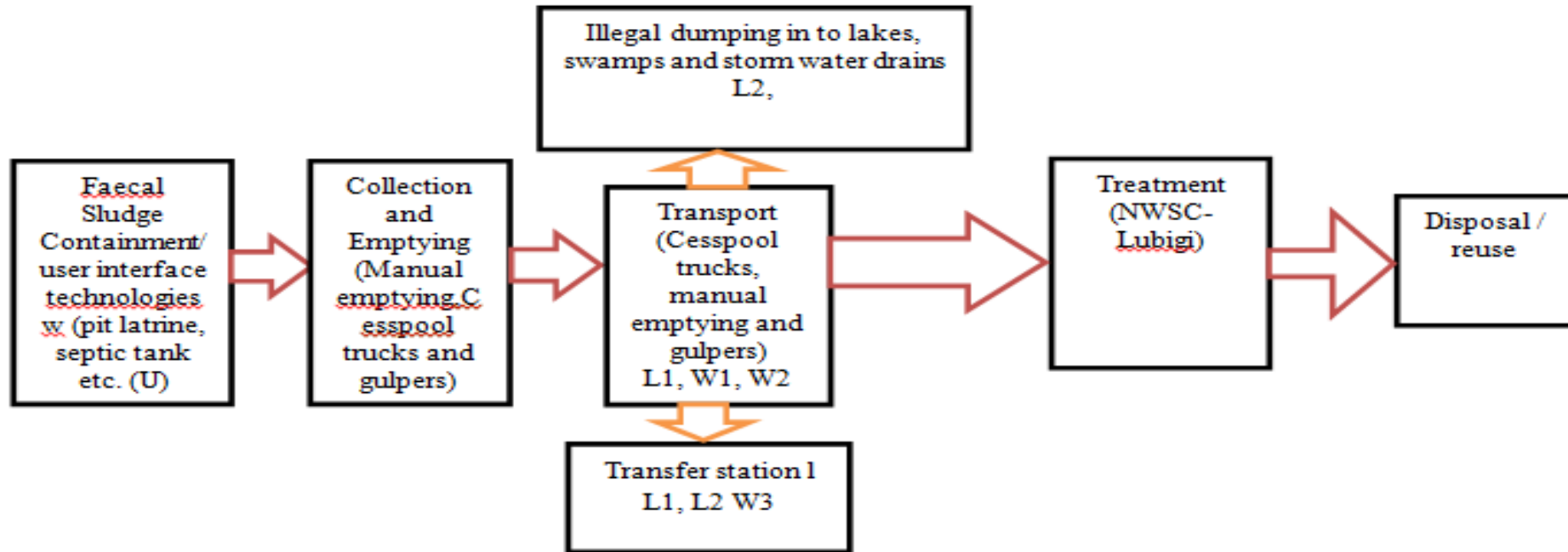
- System mapping / identification
- Exposure groups at each step
- Hazards and risk ranking
- Controls
- monitoring

Committee Members Identifying hazards and possible control measures



Process flow diagram for faecal sludge management

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⊕ Table 2: Exposure Groups

W1	Workers involved in collection of <u>Faecal</u> sludge using Cesspool trucks
W2	Workers involved in collection of <u>Faecal</u> Sludge using gulpers
W3	Workers involved in maintenance of the transfer stations
M	Residents or people involved in manual emptying
L1	Local community Living adjacent to the latrines being emptied
L2	Neighboring community
U	Users of the facilities

Identified Hazards

- **Physical hazards** (Mal-odours; Slips, trips and falls; sharp objects)
- **Biological hazards**(Direct and indirect oral, nasal and dermal exposure to pathogens e.g. bacteria, viruses, etc.)
- **Chemical hazards** (Direct and indirect oral, nasal and dermal exposure to chemicals e.g. methane, ammonia, etc.)
- **Psychosocial / Other hazards**(Alcohol consumption during emptying

Risk Ranking Matrix used

RISK= Likelihood x Severity		Severity				
		Insignificant	Minor impact	Moderate impact	Significant impact	Catastrophic impact
Very high risk=>32		1	2	4	8	16
High risk =13-32						
Medium risk =7-12						
Low risk=< 6						
Probability	Very unlikely 1	1	2	4	8	16
	Unlikely 2	2	4	8	16	32
	Possible 3	3	6	12	24	48
	Probable 4	4	8	16	32	64
	Almost certain 5	5	10	20	40	80

Source: SSP manual, WHO, 2015

Risk Assessment

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Storage facility	Hazardous event	Ranking
Pit-latrine	Ingestion of excreta or sludge due to improper hand washing	H
	Stepping on faeces with bare foot	H
	Contact with flies , mosquitoes	H
	Falling in to the pit	H
	Exposure to sharps and solid waste	VH
	Surface and ground water contamination	H

Risk Assessment 2

Step	Hazardous event	R
Motorized and human powered emptying and transport activities	Exposure to sludge or raw sewage during emptying due to improper hand washing	H
	Exposure to spillage of Faecal sludge	M
	Exposure to bad odours causes un ease	M
	Exposure to sharp objects	H
	Exposure to toxic gases	H
	Falling into the pit during emptying	H
	Working under the influence of Alcohol	H
	Cross contamination during emptying	H
	Exposure of the household , children and community members to solid waste from the emptied pit	VH
	Exposure of unauthorized persons at the emptying site	M
	Contamination of the neighbourhood during emptying and transport	M
	Illegal dumping or disposal of sludge or sewage in to lakes, rivers, drains and the environment leading to contamination of water sources and the environment	H

Risk Assessment 3

Step	Hazardous event	R
Transfer station	Heavy load	M
	Exposure to bad odours, flies causes un ease	M
	Direct exposure to sewage	H
	Spillage during dumping sludge	H
	Exposure of unauthorized persons (children and community members)	H

Key control measures identified (workers)

- Provision of appropriate Personal Protective Equipment (PPE)
- Sensitization of workers on hygiene and work place safety
- Provision of key hygiene facilities (Soap dispenser, Hand washing facility), appropriate equipment and supplies like detergents and soap.

Community members, users and children

- Sensitization of community members, users, children on hygiene, proper use, maintenance and construction of appropriate sanitary facilities
- Programmes in schools highlighting maintenance and safety of sanitary facilities
- Enforcing restricted entry during emptying.
- Developing standards for excreta containment facilities

Group Exercise

- ▶ Conduct risk assessment and ranking of the hazardous events involved during emptying of toilet/ latrine facilities in your sub-county.

References

- ▶ WHO (2006). “Guidelines for the Safe Use of Wastewater, Excreta and Grey water in Agriculture and Aquaculture”. Volume II.
- ▶ WHO (2015). Sanitation Safety Planning
- ▶ GIZ/ KCCA 2016: Sanitation Safety Planning for Kamwokya Parish, Central Division, Kampala Capital City Authority.

Thanks for your attention