

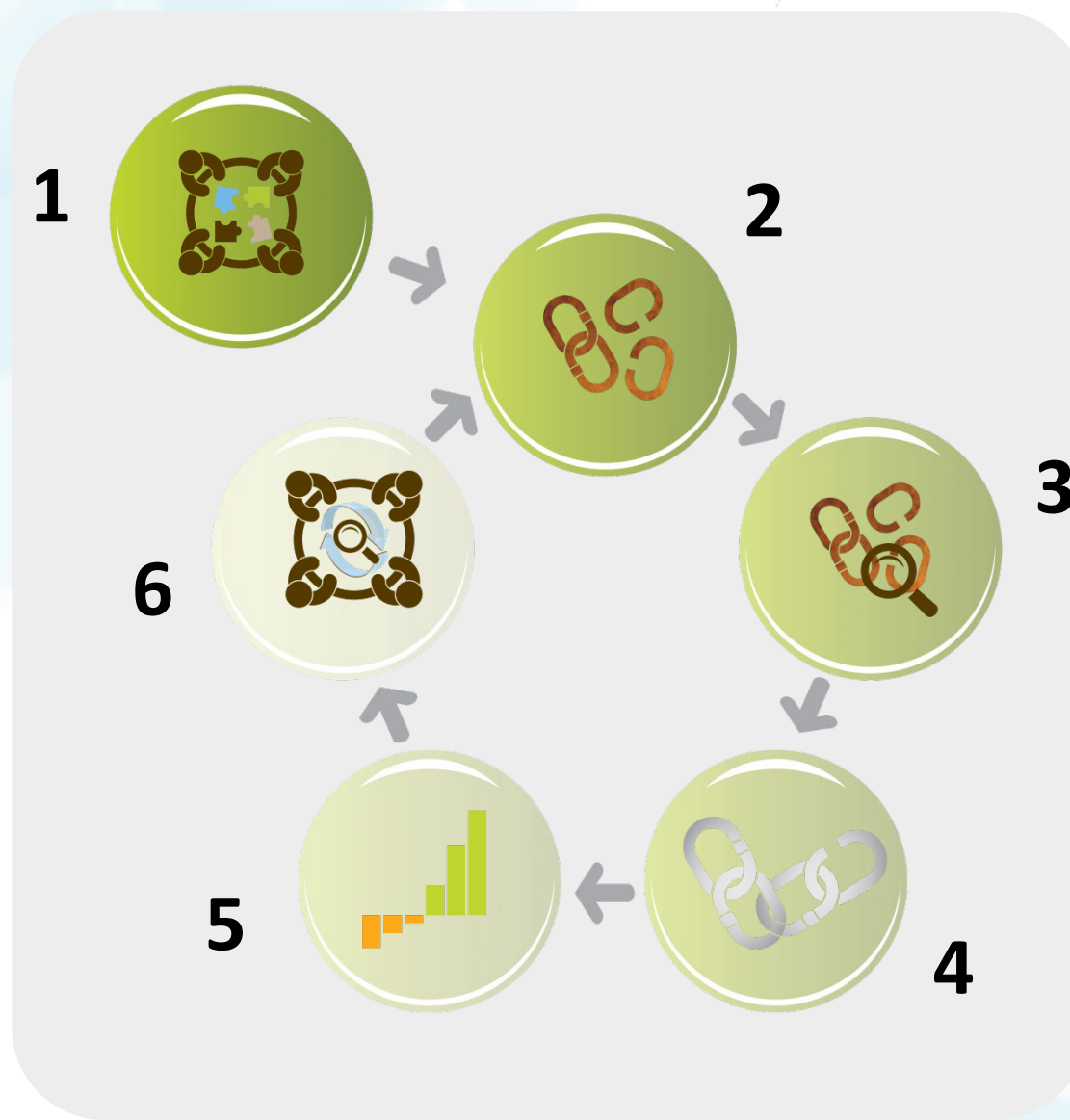
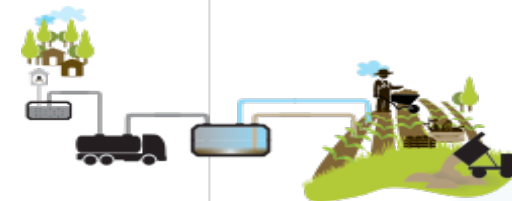
SANITATION SAFETY PLANNING

Step-by-step: Module 5 & 6



Presenter: Lena Breitenmoser (MSc)

SSP's 6 Modules

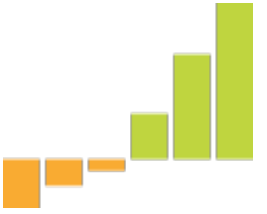




MODULE 5
MONITOR CONTROL
MEASURES AND VERIFY
PERFORMANCE



SSP Manual pages 69- 83

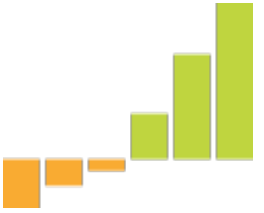


Why monitor and verify?

Sanitation systems are dynamic – things change in the short or long term

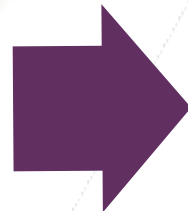
Any system can under-perform – leading to unacceptable public health risks and loss of confidence in the service or products

Need to provide assurance that the entire system is operating as intended



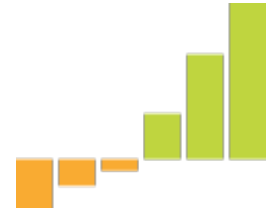
*Module 5 answers the question:
Is the system operating as
planned?*

**Module 5
Output**

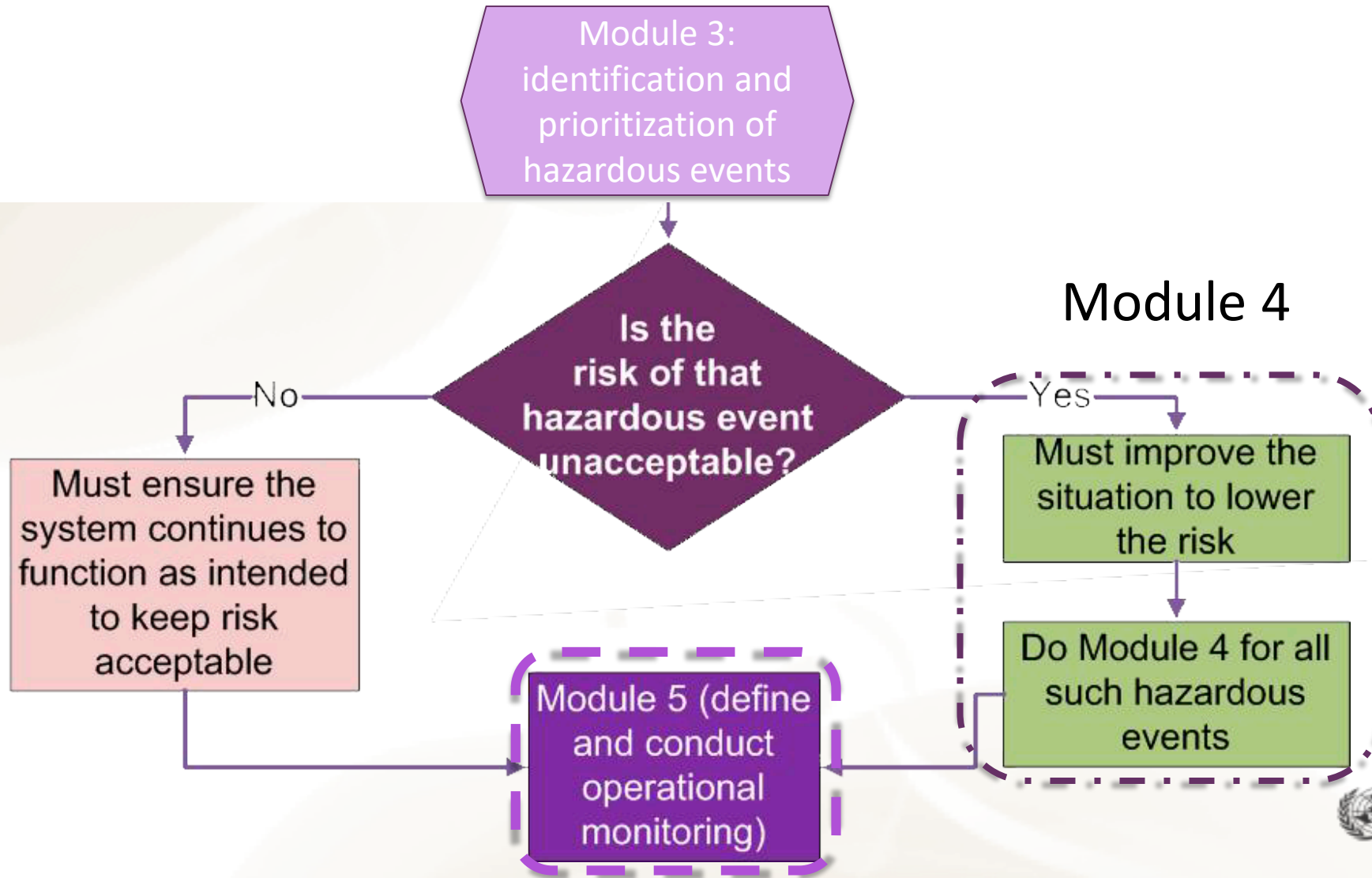


**Regular checks that the
system is operating as
intended, and action to
correct problems.**

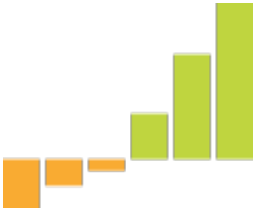
Module 5 generates specific evidence to show
that existing operations are OK.
If not, improvements are needed.



Modules 3, 4 and 5 flow



Module 5: Overview

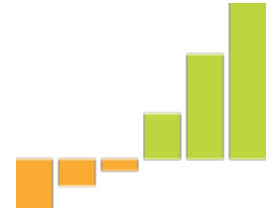


5.1 Define and implement operational monitoring
5.2 Verify system performance
5.3 Audit the system

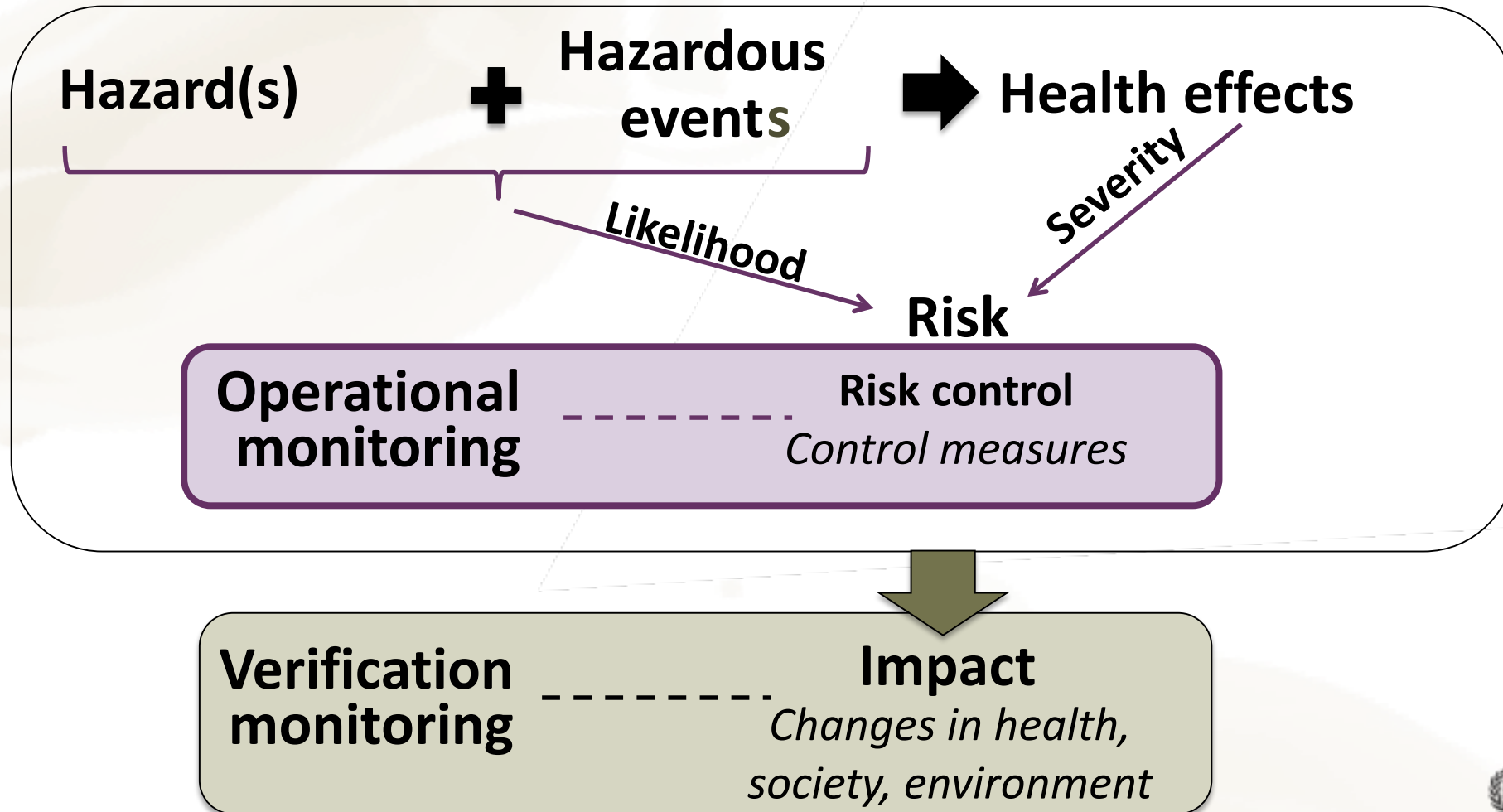
- An operational monitoring plan
- A verification monitoring plan
- Independent assessment

Modules

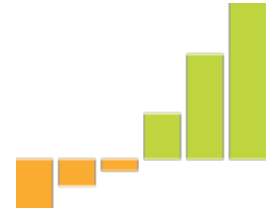
Outputs



Hazard, hazardous event, effect, risk, ...!?



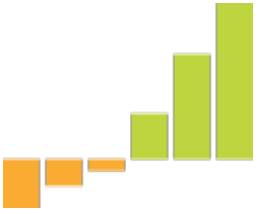
Module 5.1: Define and implement operational monitoring



- To give simple and rapid feedback on system performance
- To show how effectively the control is operating
- To make corrections quickly if required



SSP manual page 71
Guidance Note 5.1 (p 73), Tools
5.1 & 5.2 (pp 79-80) and
Examples 5.1 (p 81)



Operational Monitoring....

Is **routine monitoring** of parameters that can be measured rapidly.

Uses tests that can be performed **quickly** or through **visual** inspection.

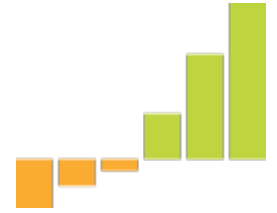
Informs management decisions to prevent hazardous conditions before they happen.

Needs to be **made operational** by collating the plans into field-friendly monitoring tables or log books.



General: SSP manual
Guidance Note 5.1 p 73, Tools 5.1 & 5.2
(pp 79-80) and Examples 51 (p 81)

Potential recording format



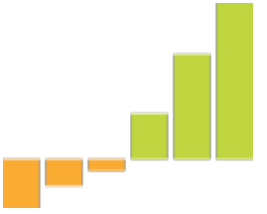
Operational monitoring plan for:			
Operational limits (see note below)	Operational monitoring of the control measure:		Corrective action (when the operational limit is exceeded)
	What is monitored		What action is to be taken
	How it is monitored		
	Where it is monitored		Who takes the action
	Who monitors it		When it is taken
	When it is monitored		Who needs to be informed of the action

Note: If the monitoring is outside this limit(s), the control measure is deemed to be not functioning as intended



Recording format – see
SSP manual Tool 5.2 p 80

Module 5.2: Verify system performance

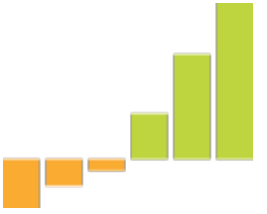


To periodically verify whether the system meets the intended performance outcomes, such as quality of effluents or products

Verification may be undertaken by the operator or surveillance agency and will be more intensive in situations with greater resources and/or strict **regulatory requirements** (→ indicators? Who monitors?)



SSP manual (p 72)
Guidance Note 5.2 (p 74) and
Examples 5.2 & 5.3 (pp 82 – 83)



Some typical verification data



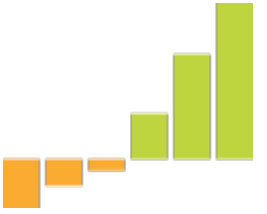
- **Microbial testing** of crops, fish products, and waters at exposure points and system boundaries e.g. *E.coli* and Helminth eggs



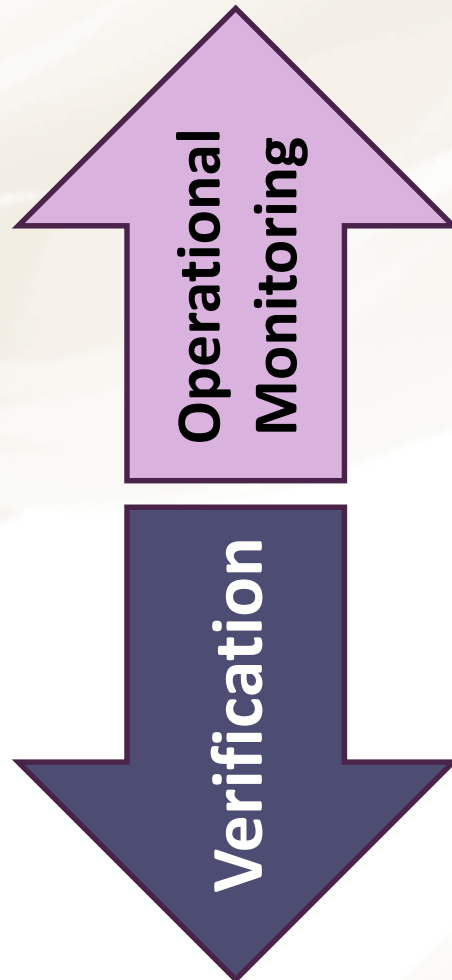
- **Health monitoring** for key exposure groups



- **Satisfaction and perception surveys** of the various exposures groups and stakeholders



Operational *versus* verification monitoring



Operational Monitoring

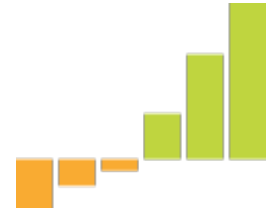
- Frequent
- Many monitoring points throughout the system
- Simple observations and tests
- Used to manage risks before they occur

Verification

- Periodic
- Few points, but focused on the system-end points
- More complicated tests (e.g. *E.coli*, helminth eggs)
- Used to prove the system works



Technical support for monitoring

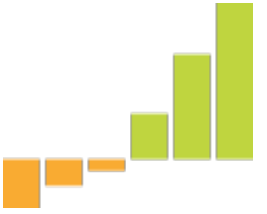


SSP Manual Guidance Notes 5.2 to 5.4 (pages 74-76) provide a lot more detail.

WHO 2006 Guidelines

Multiple sections

Module 5.3: Audit the system



To provide additional independent evidence of the system performance and quality of the SSP

Audits can be part of surveillance carried out by independent agencies.

For example, certification requirements for wastewater irrigated produce.



SSP manual page 72
Guidance Note 5.6 (p 78) and
Examples 5.2 & 5.3



End of Module 5



MODULE 6
DEVELOP SUPPORTING
PROGRAMMES AND
REVIEW PLANS



SSP Manual pages 85- 90



Module 6 answers the question: *How can we adapt to changes?*

By developing:

- people's skills and knowledge, and
- organizational ability and capacity

Mod 6

Up to date SSP that can meet its commitments



Module 6: Overview

Modules

6.1 Identify and implement supporting programmes and management procedures

6.2 Periodically review and update the SSP outputs

Outputs

- Supporting programmes and management procedures
- Up to date SSP outputs responding to internal and external changes



Module 6.1: Identify and implement supporting programmes, and management procedures



To ensure SSP operation is supported with:

- Clear management procedures
- Programmes of research and training for staff
- Communication to key stakeholders, especially in large or complex systems



SSP manual page 87,
Examples 6.1 & 6.2,
Guidance Note 6.1



Module 6.2: Periodically review and update the SSP outputs



To ensure that SSP is always relevant and responds to the current or anticipated operating conditions

- Improvements/changes in the sanitation system
- Changes in operating conditions
- New evidence on health risks



SSP manual page 90,
Example 6.3



End of Module 6

The 2 key SSP outputs are:



1. Prioritized, incremental improvement plan
2. Operational monitoring plan for regular monitoring and periodic verification

