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| **Sanitation Safety Planning**  **3-day Training**  Step-by-step risk management for safely managed sanitation systems  **Table group Worksheets**  **-Module 3, Module 4 and Module 5-** |

**Name of the group:**

**Date:**

**Place:**

**MODULE 3: IDENTIFY HAZARDOUS EVENTS, AND ASSESS EXISTING CONTROL MEASURES AND EXPOSURE RISKS**

In the following table, you and your team will conduct a health risk assessment of the sanitation system you have described in Module 2.

**STEP 3.1: Identify hazards and hazardous events**

When **applying step 3.1**, only complete the columns **Component** and **Hazard identification**. Make sure you describe the hazardous event telling the story of how the hazards cause harm, including the exposure route (ingestion after contact with excreta, ingestion of contaminated water, consumption of contaminated produce, dermal contact, vector-borne, inhalation). Revise the Newtown worked case study, the example 3.2 and guidance note 3.4 for examples).

**STEP 3.2: Identify hazards and hazardous events**

When **applying step 3.2**, only complete the columns related to Existing Controls.

**STEP 3.3: Assess and prioritize the exposure risk**

When **applying step 3.3**, complete the columns related to the risk assessment. Use tools 3.5 and 3.6 of your SSP manual (page 58) for definitions and scores of likelihood, severity and risks. Decide two most likely climate change scenarios and decide with your team if the risk will increase, decrease, or will remain the same. Make sure you write in the comments box, the reasons that justify your choice.

| **Component** | **Hazard Identification** | | | | **Existing Control(s)** | | | **Risk Assessment** | | | | | | **Comments**  **justifying risk assessment, under current conditions or climate change scenarios, or effectiveness of the control** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Under current conditions** | | | | **Under the most likely climate change scenarios:**  + means increased risk  - means decreased risk  = means the same risk | |
| L=Likelihood; S=Severity; R=Risk | | | |
| **Sanitation step** | **Hazardous event** | **Hazard** | **Exposure Groups** | **Number of persons at risk** | **Description of existing control** | | **Validation of control** | **L** | **S** | **Score** | **R** | Scenario 1: | Scenario 2: |
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**MODULE 4: DEVELOP AND IMPLEMENT AN INCREMENTAL IMPROVEMENT PLAN**

**STEP 4.1: Consider options to control identified risks**

For each hazardous event prioritized, analyze the possible control measures using the following table:

| **Step of the sanitation service chain:**  **Description of the hazardous event:**  **Exposure group:**  **Improvement options** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Option of new or modified control measures for this hazardous event** | **What is the likely effectiveness of this control measure option?**  (High, medium, low) | **What is the level of resources required?**  (Including financial, human resources, political support: high, medium, low) | **To what extent will this control measure be effective under the most likely climate change scenarios?**  (Effective, ineffective, detrimental) | **Comments/**  **discussion** | **Priority for improvement plan**  (Immediate, short term, medium term, long term) |
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| **Step of the sanitation service chain:**  **Description of the hazardous event:**  **Exposure group:**  **Improvement options** | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Option of new or modified control measures for this hazardous event** | **What is the likely effectiveness of this control measure option?**  (High, medium, low) | **What is the level of resources required?**  (Including financial, human resources, political support: high, medium, low) | **To what extent will this control measure be effective under the most likely climate change scenarios?**  (Effective, ineffective, detrimental) | **Comments/**  **discussion** | **Priority for improvement plan**  (Immediate, short term, medium term, long term) |
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| **Step of the sanitation service chain:**  **Description of the hazardous event:**  **Exposure group:**  **Improvement options** | | | | | |
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| **Option of new or modified control measures for this hazardous event** | **What is the likely effectiveness of this control measure option?**  (High, medium, low) | **What is the level of resources required?**  (Including financial, human resources, political support: high, medium, low) | **To what extent will this control measure be effective under the most likely climate change scenarios?**  (Effective, ineffective, detrimental) | **Comments/**  **discussion** | **Priority for improvement plan**  (Immediate, short term, medium term, long term) |
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**STEP 4.2: Develop an incremental improvement plan**

Use the following Gantt Chart to plan the implementation of your improvement measures.

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| **Improvement measure** | **Cost** | **Source of funds** | **Lead organization** | **Year 1** | | | | | | | | | | | | **Year 2** | | | | **Year 3** | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 |
| *Improvement measures to control prioritized hazardous event 1* | | | | | | | | | | | | | | | | | | | | | | | |
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| *Improvement measures to control prioritized hazardous event 2* | | | | | | | | | | | | | | | | | | | | | | | |
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| *Improvement measures to control prioritized hazardous event 3* | | | | | | | | | | | | | | | | | | | | | | | |
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**MODULE 5: Monitor control measures and verify performance**

**STEP 5.1: Define and implement operational monitoring**

For each prioritized hazardous event and their improvement measures, choose 1 improvement measure that should have an operational monitoring plan.

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| **Prioritized hazardous event** | **Sanitation step** | **Choose one control measure that will have a detailed operational monitoring plan** |
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Using the following tables, prepare the operational monitoring plan for the chosen control measures:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Operational monitoring plan** | | | | |
| **Operational monitoring plan for:** | |  | | |
| **Operational limits** | **Operational monitoring of the control measure: Control measure:** | | **Corrective action when the operational limit is exceeded** | |
|  | **What is monitored?** |  | **What action is to be taken?** |  |
| **How is it monitored?** |  |
| **Where is it monitored?** |  | **Who takes the action?** |  |
| **Who monitors it?** |  | **When is it taken?** |  |
| **When is it monitored?** |  | **Who needs to be informed of the action?** |  |

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| **Operational monitoring plan** | | | | |
| **Operational monitoring plan for:** | |  | | |
| **Operational limits** | **Operational monitoring of the control measure: Control measure:** | | **Corrective action when the operational limit is exceeded** | |
|  | **What is monitored?** |  | **What action is to be taken?** |  |
| **How is it monitored?** |  |
| **Where is it monitored?** |  | **Who takes the action?** |  |
| **Who monitors it?** |  | **When is it taken?** |  |
| **When is it monitored?** |  | **Who needs to be informed of the action?** |  |

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| **Operational monitoring plan** | | | | |
| **Operational monitoring plan for:** | |  | | |
| **Operational limits** | **Operational monitoring of the control measure: Control measure:** | | **Corrective action when the operational limit is exceeded** | |
|  | **What is monitored?** |  | **What action is to be taken?** |  |
| **How is it monitored?** |  |
| **Where is it monitored?** |  | **Who takes the action?** |  |
| **Who monitors it?** |  | **When is it taken?** |  |
| **When is it monitored?** |  | **Who needs to be informed of the action?** |  |

**STEP 5.2: Verify system performance**

For each prioritized hazardous event and their improvement, identify the verification plan.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **What is the control measure?** | **What is the objective of implementing this control measure?** | **How would you measure it?** | **Verification** | | | | |
| **What indicator will you use?** | **What is the maximum value you will accept?** | **When are you going to measure it?** | **Who will measure it?** | **How will it be measured?** |
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