## Example/tool 3.5: Deciding which method of risk assessment is most appropriate

The risk assessment process can involve a quantitative or semi-quantitative approach, comprising estimation of likelihood/frequency and severity/consequence (see Example/tool 3.6, 3.7 and 3.8), or a simplified qualitative approach based on expert judgment of the WSP team (see Example/tool 3.9 and 3.10). A small water supply system may only require a team decision, whereas a more complex system may benefit from a semi-quantitative risk prioritization approach. In any case, it is beneficial to record the basis of the decision to act as a reminder to the team and/or auditor or reviewer as to why the decision was taken.

## Example/tool 3.6: Semi-quantitative risk matrix approach (from Deere et al., 2001)

	Severity or consequence					
		Insignificant or no impact - Rating: I	Minor compliance impact - Rating: 2	Moderate aesthetic impact - Rating: 3	Major regulatory impact - Rating: 4	Catastrophic public health impact - Rating: 5
Likelihood or frequency	Almost certain / Once a day - Rating: 5	5	10	15	20	25
	Likely / Once a week - Rating: 4	4	8		16	20
	Moderate / Once a month - Rating: 3	3	6	9	12	15
	Unlikely / Once a year - Rating: 2	2	4	6	8	10
	Rare / Once every 5 years - Rating: I	I	2	3	4	5
Risk score		<6	6-9		0-15	>15
Risk rating		Low	Medium		High	Very high

All risks should be documented in the WSP and be subject to regular review even when the likelihood is rare and the risk rating is low. This avoids risks being forgotten or overlooked and provides the water utility with a record of due diligence should incidents occur.