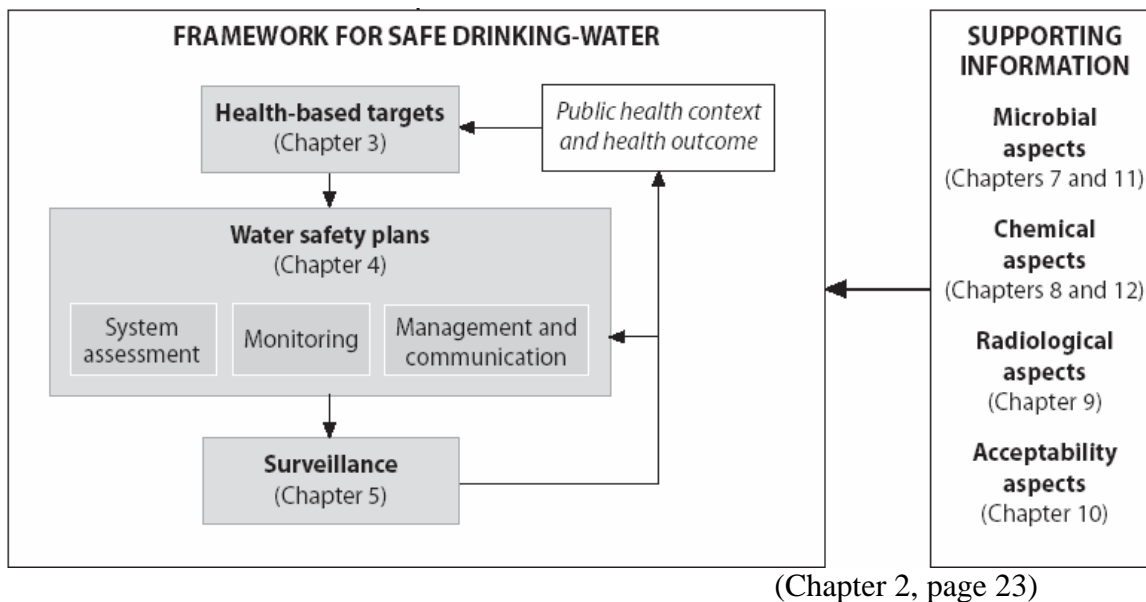


ANNEX 3

Key Excerpts from WHO Guidelines for Drinking Water Quality- 3rd Edition
and from Sobsey “Managing Water in the Home” Section 7- Monitoring and Evaluation
relevant for the Implementation Working Group



Chapter 3 – Health Based Targets

Chapter 3 presents 4 types of health-based targets:

1. Health outcome
2. Water quality
3. Performance
4. Specified technology

Table 3.2 Nature, application and assessment of health-based targets

Type of target	Nature of target	Typical applications	Assessment
Health outcome			
• epidemiology based	Reduction in detected disease incidence or prevalence	Microbial or chemical hazards with high measurable disease burden largely water-associated	Public health surveillance and analytical epidemiology
• risk assessment based	Tolerable level of risk from contaminants in drinking-water, absolute or as a fraction of the total burden by all exposures	Microbial or chemical hazards in situations where disease burden is low or cannot be measured directly	Quantitative risk assessment
Water quality			
	Guideline values applied to water quality	Chemical constituents found in source waters	Periodic measurement of key chemical constituents to assess compliance with relevant guideline values (see section 8.5)
	Guideline values applied in testing procedures for materials and chemicals	Chemical additives and by-products	Testing procedures applied to the materials and chemicals to assess their contribution to drinking-water exposure taking account of variations over time (see section 8.5)
Performance			
	Generic performance target for removal of groups of microbes	Microbial contaminants	Compliance assessment through system assessment (see section 4.1) and operational monitoring (see section 4.2)
	Customized performance targets for removal of groups of microbes	Microbial contaminants	Individually reviewed by public health authority; assessment would then proceed as above
	Guideline values applied to water quality	Threshold chemicals with effects on health that vary widely (e.g., nitrate and cyanobacterial toxins)	Compliance assessment through system assessment (see section 4.1) and operational monitoring (see section 4.2)
Specified technology			
	National authorities specify specific processes to adequately address constituents with health effects (e.g., generic WSPs for an unprotected catchment)	Constituents with health effect in small municipalities and community supplies	Compliance assessment through system assessment (see section 4.1) and operational monitoring (see section 4.2)

Note: Each target type is based on those above it in this table, and assumptions with default values are introduced in moving down between target types. These assumptions simplify the application of the target and reduce potential inconsistencies.

The IWG's Action Plan, Activity 3 is to: "Develop agreed common guidance for evaluation, including both impact evaluation for health, water quality, and behavior/use as well as program implementation evaluation." This activity indicates 3 "targets":

1. Health;
2. Water quality;
3. Behavior/use.

Behavior/use is missing from the GDWQ list, but is a potentially valuable target in implementation evaluation. Specified technology targets are missing from the IWG list.

According to the GDWQ:

3.2.1 Specified technology targets

Specified technology targets are most frequently applied to small community supplies and to devices used at household level. They may take the form of recommendations concerning technologies applicable in certain circumstances and/or licensing programmes to restrict access to certain technologies or provide guidance for their application. (GDWQ, Ch.3. p. 41)