

# Operational Monitoring Plan Development

A guide to strengthening operational monitoring practices  
in small- to medium-sized water supplies



**World Health  
Organization**

Regional Office for South-East Asia



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small- to medium-sized water supplies*

Operational monitoring plan development: a guide to strengthening operational monitoring practices in small-to medium-sized water supplies.

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## Acronyms and Abbreviations

<	less than
>	greater than
HWTS	household water treatment and safe storage
m <sup>3</sup> /day	cubic meters per day
mg/L	milligram per litre
min.mg/L	minutes per milligram per litre
NTU	nephelometric turbidity unit
OMP	Operational Monitoring Plan
SEARO	South-East Asia Regional Office
SOP	standard operating procedure
WHO	World Health Organization
WSP	Water Safety Plan

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## Introduction

Water safety plans (WSPs) are widely regarded as the most effective means to manage drinking-water safety. This preventative, holistic approach is increasingly being adopted throughout the world as best practice for drinking-water quality risk assessment and management. Operational monitoring is a core component of the WSP framework to ensure that the control measures in place to manage drinking-water quality risks are working effectively. Strengthening operational monitoring capabilities through supportinag programmes is important for the development of local capacity for sustainable WSP implementation.

### What is the aim of this guide?

This guide aims to provide stepwise instructions on how to develop operational monitoring plans (OMPs) for small- to medium-sized organized water supplies in lower resource settings. It is intended to act as a supporting programme for staff development and training under the WSP framework<sup>1</sup>. The guide is intended to support the development of a basic OMP from first principles for organized water supply systems with conventional water treatment capabilities. The guide supports an operational monitoring development training programme, with the corresponding training presentation available to download from the World Health Organization's (WHO's) South-East Asia Regional Office (SEARO) website<sup>2</sup>.

### For whom is the guide intended?

This guide is intended for individuals responsible for WSP development and implementation within small- to medium-sized organized water supply systems. The material contained within this guide is also relevant for operational-level personnel (including those with responsibility for performing operational monitoring activities), water suppliers, as well as representatives from public health, local government, non-governmental organizations and any other individuals supporting water safety planning activities.

### How is the guide structured?

The guide is presented in two parts:

**Part 1. Principles of Operational Monitoring:** Describes the key principles of operational monitoring, alongside the types of operational monitoring that may be performed and the information required within an OMP.

**Part 2. Operational Monitoring Plan Development:** Describes the stepwise development of an OMP for a water supply system, including the source, water treatment, intermediate storage, distribution and household. For illustration purposes, practical guidance is provided using a specimen water supply system considered to be representative of a conventional small- to medium-sized supply in a lower resource setting. This template may be used to develop system-specific OMPs for individual water supply systems.

Information contained within this guide provides an overview of key information to assist with the development of OMPs; for further information, please refer to the *Water Safety Plan Manual*<sup>1</sup>.

1 Bartram et al. (2009). Water safety plan manual: Step-by-step risk management for drinking-water suppliers. Geneva, Switzerland.

2 [http://www.searo.who.int/entity/water\\_sanitation/documents/WSP\\_Training\\_Modules/en/](http://www.searo.who.int/entity/water_sanitation/documents/WSP_Training_Modules/en/).



# Part 1. Principles of Operational Monitoring

Describes key operational monitoring principles to assist with the development of an effective operational monitoring plan



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