
Introduction to

The Water Safety Plan Compendium

Better protection and management of drinking water sources is possible, if weaknesses and strengths are identified. For this and the identification of possible water source risks, the knowledge about water quality, pollutants, their sources and the ways of contamination is essential. A water safety plan (WSP) can be one way to obtain and maintain proficient drinking water quality and to minimise water related diseases.

The management of a safe drinking water supply system, whether it is on a small or large scale, concerns many stakeholders. However, large-scale water supply systems require a lot of specific expertise in particular.

On a village level, citizens in cooperation with the concerned stakeholders can play an important role in supporting better protection and management of the local drinking water supply system. In general, only a few citizens will have the knowledge on sustainable and safe management of the local drinking water supply system. Therefore, educational materials, based on the WSP approach of the World Health Organisation, were created for local leaders, teachers and NGOs whom develop Water Safety Plans for small-scale water supply systems. This includes the involvement of schools, the youth, citizens and other stakeholders.

1. Aim of the presented materials

The aim of the presented materials is to enable leaders, teachers and NGOs to involve pupils, citizens and other stakeholders, in developing a WSP for small water supply systems; e.g. dug wells, boreholes, springs and small-scale piped centralised water supply systems.

The users of this WSP compendium should be enabled to make their classes or groups interactive; to plan practical work, tests and experiments; to involve all stakeholders in discussions and to develop in cooperation with all stakeholders an action plan which should lead to safe drinking water in the community. Finally, the developed plans intended to improve the water safety should be implemented. The activities should be transparent to all, and the results shared and discussed with all stakeholders.

2. The target groups for a WSP project

- Schools, local citizens and parents
- Youth groups and pupils in the age of 10 – 16 years
- Local authorities
- Institution/authorities responsible for the local water supply
- Water and health experts
- NGOs

3. Content of the ring binder “Local Action for Safe Water”

“Educational Materials for developing Water Safety Plans with youth in rural villages and schools”

The content of the compendium presented in a ring binder, can be divided in three parts:

1. In the first two modules, general background information is described for the implementation of Water Safety Plans for small-scale water supply systems; e.g. the aim, the approach and the development progression. Whereas the first module focuses mainly on WSP for non-piped water supply systems, the second module focuses on small scale piped distribution systems.
2. After the background information modules, module’s 3 - 14 include theoretical lessons on for example general water issues, possible drinking water sources and treatment systems, water protection and water quality, water related regulations and financing of drinking water supply, exercises and practical activities to the users.

Each module starts with a one-page introduction and overview of the suggested issues to be taught or carried out. The follow-up text offers a more detailed knowledge or explanation on the related issue. In

order to gain some background and knowledge on a drinking water supply system, the sequence of the modules is arranged in a logical follow-up of water issues. Exercises, questions and a box with suggested activities for the development of a WSP for the local drinking water supply system are presented at the end of a module. Text sources and further reading finalise each module.

3. The ring binder's third part, module 15 - 19, contains suggestions for practical activities, guidance for doing water test. Forms for processing the collected drinking water monitoring results and information are provided. The final modules contain risk assessment forms and questionnaires for citizens, water and health authorities, intended to gather information about the local water supply system and for surveying the perception and experiences of the local citizens and other stakeholders. The questionnaires and risk assessment forms can be adapted to local needs and conditions.

In addition this part supports the users to report and make the findings visible for themselves and to the broader public.

4. The toolbox

There are core activities for developing a WSP in which tools are needed, such as assessment of water quality by analysing for example the nitrate concentration or the pH or colour. Therefore, it will be convenient to have a (tool) box for each class or group to gather the tools needed and related to the WSP lessons. The toolbox consists of practical tools, which can be combined according to the needs and circumstances. Educational and/or practical tools can be stored in the box.

The content of the toolbox can be:

- Clear drinking glass of 2 dl or 3 dl
- Nitrate quick test strips – with a range from 0-500 mg/l
- pH –indicator strips
- Colour strip for measuring colour of the water
- Puzzle poster of “bad” and “good wells”, other pictures or drawings e.g. “The water cycle”
- Precipitation measure beaker
- Thermometer
- Towel or tissues

5. Timeframe

For developing a WSP, a time frame of one school year, working one to two hours per week, could be suitable. This includes the teaching of the educational materials. However, the water supply system is operating continually, therefore it has to be monitored and recovered frequently. A continuation of the WSP activities, in particular implementing the identified needed improvements, is required.

Development the first year WSP activities could result in a continuation of sharing information while ensuring cooperation with all stakeholders, thus creating the establishment of a local water committee, which leads to planning and implementing improvements, and being followed by a new round of assessing the water supply system.

Remarks

The content of the given WSP compendium are not fixed and can be adjusted and developed according to the local situation and possibilities for implementation. For example, the age and the engagement of the pupils, the possibilities of the teachers, the input and cooperation of the citizens, the local and/or regional authorities and other stakeholders will all have an influence to the progress and the results of the WSP.