

Site tour outline template

The following information is provided as a general starting point for planning a school or community site tour of your water treatment facility. You will need to adapt your language and terminology to suit your audience.

Key messages

Identify the key messages that you want students or community members to understand about water and wastewater treatment. For instance:

Water

- Drinking water comes from a variety of sources.
- Drinking water is treated to Australian Drinking Water Guideline Standards.
- The main aims are to get rid of the dirt and bacteria. We do this by filtering and disinfecting.
- A lot of effort goes into treating water so it's important we use it wisely.

Wastewater

- Wastewater is 99 per cent water.
- Things end up in the sewerage system that should not be there.
- Wastewater is treated by millions of bugs.
- Recycled water is treated wastewater that can be used for a variety of purposes.
- Biosolids can be used as fertiliser.

Introduction

Welcome to the xxx treatment plant.

This plant services the xxx area and provides water/wastewater treatment to approximately xxx people.

Approximately xxx litres per day of water is produced here (or approximately xxx litres of wastewater is treated here).

Safety induction

This plant is a working site and has hazardous chemicals and machinery. Please stay with the group at all times and don't wander off. Please don't climb or run. Please don't touch anything unless asked. If a siren sounds, please follow staff's instructions. The emergency evacuation area is xxx.

Afterwards, please wash your hands (wastewater treatment plant).



Overview of treatment plant/process

Provide a general overview of the treatment process including the way water is filtered, the chemicals added and their purpose. Use simple and brief explanations for younger students. For example: Dirt is removed by sand filters. Chlorine is added to disinfect the water. Fluoride is added for dental health.

Senior secondary and tertiary students will require a much more detailed explanation. It is handy to have a schematic of the process (either on the wall or as a handout).

Stop 1.

Water treatment: removing the dirt (explain how the dirt, taste and odour is removed)

Wastewater treatment: removing the rubbish (discuss things that should go down the drain and things that shouldn't)

Stop 2.

Water treatment: dosing with chlorine and fluoride (how many parts per million?)

Wastewater treatment: keeping the bugs happy

Stop 3.

Water treatment: sludge (what is left over and what happens to it?)

Wastewater treatment: biosolids (what can they be used for?)

Stop 4.

Water treatment: drinking water (the end product. How much is used per day in your area?)

Wastewater treatment: recycled water (how is it treated before it goes back into the environment or before it is repurposed?)

Question time

Give students, teachers or community members five minutes or so to ask questions.

Summary

Ask a student (or several students) to give an overview of the process. This will indicate if they understand the process and whether something needs to be explained again or in more detail.

For community members, repeat the overview of the treatment process.