

Water Essentials Workbook

Six lessons | Onboard practice | Editable PDF fields

Training record

Participant / crew role

Vessel name or training code

Course / practical session date

Reviewer / instructor (if used)

How to use this workbook

1. Read each Water Essentials lesson and review the technical diagrams.
2. Complete the short, vessel-specific exercise for each lesson.
3. Do not record security-sensitive yacht details unless authorised.
4. Save your completed PDF locally; the course does not upload or retain these entries.

This workbook supports professional training. It is not a test certificate, statutory water-safety inspection or authorisation to operate equipment. Use vessel-approved procedures for all real operations.

The complete water journey

Identify sources, handover points, stored water and outlets

Map the actual water pathway

Water sources (shore / RO / other)

Storage tanks / transfer paths

Treatment processes and bypasses

Key taps and sample points

Three hazards and the corresponding controls

Reflection: Where could a perfectly functioning watermaker still fail to protect an outlet downstream? Compare your findings with the actual vessel P&ID and Water Safety Plan.

Essential water parameters

Record measurements with units, methods and limits

Field measurement practice

Conductivity	Value + unit <input type="text"/>	Meter ID / method <input type="text"/>
Estimated TDS	Value + unit <input type="text"/>	Meter ID / method <input type="text"/>
pH	Value + unit <input type="text"/>	Meter ID / method <input type="text"/>
Hardness	Value + unit <input type="text"/>	Meter ID / method <input type="text"/>

Sample location + collection time

Interpretation: baseline, trigger, or statutory limit?

No field reading above independently confirms potability. Observe the instrument method, temperature conditions and reference standard; review surprising measurements before making conclusions.

Microbiology, biofilm & stagnation

Identify low-use zones, possible exposure and controls

Low-use outlet and system review

Low-use guest / crew areas

Dead legs / stagnant branches / water age concerns

Existing temperature, circulation and hygiene controls

Person responsible / escalation route

Required review / test / corrective action

Microbiological sampling requires method-specific instructions from a qualified laboratory. Aerosol-generating outlets, including showers, may need additional attention under the vessel-specific plan.

Safe bunkering

Create a documented pre-transfer decision

Port / source / supplier

Receiving tank(s), operator and transfer time

Pre-transfer checks for discussion (not operational approval)

- ☐ Source documentation reviewed under yacht procedure
- ☐ Dedicated potable-water hose and connections checked
- ☐ Suitable backflow / cross-connection protection verified
- ☐ Receiving tank and valve routing confirmed
- ☐ Required transfer log and monitoring in place

Stop-transfer trigger / who authorises restart?

Use only authorised equipment and instructions on the actual vessel. A source certificate cannot verify the hygiene of an unsuitable transfer hose or downstream tank.

Monitoring & sampling

Build a traceable training record

Sample ID and exact sampling point

Requested parameter, unit and purpose

Collection date/time and sampler

Instrument / laboratory method / sample container

Preservation, transport and chain of custody

Reference / threshold, reviewer and action

For actual microbiological or specialist chemical analyses, follow the laboratory's current instructions for bottles, neutralisers, temperature, delivery time and test-specific handling.

Responding to abnormalities

Practise incident triage, investigation and closure

Observed symptom and first affected location

Extent: one outlet / branch / tank / system

Protection steps and person authorising them

Evidence and tests needed, including lab review

Verification / conditions for return to service

Fictional practice case: blue-green water follows repairs to one branch. Do not assume a cause based on colour alone or perform improvised system-wide chemical dosing.

Course reflection & review

Discuss learning objectives and plan next steps

Three most important lessons learned

One water-management improvement to propose onboard

Proposed owner and realistic next review date

Reference procedures / vessel Water Safety Plan revision

Participant / reviewer acknowledgement (typed)

Training completion on the website is a self-assessment, not an accredited certificate. Keep a separate controlled operational log for real incidents and formal water-quality records.