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Annex to "Checklist Installation Conditions"

Information and questions regarding water analysis

In order to provide a reliable quotation and technical layout for the specific project, Trunz Water Systems requires a water analysis together with additional information regarding the conditions in the water source.

Depending on the raw water source (f.e. sea or river), the countrys' water regulations and requirements by the customer, the measured parameters may be different for every site/project. The local water laboratory will provide indications to this. Alternatively, please ask the local water authority who is familiar with the specific water problems and water contamination in the region.

We herewith provide a short list of parameters and questions which are important related to the selection of the appropriate Trunz Water Systems product:

Typically measured parameters

The laboratory will measure the concentration (mg/l, ppm) in the water sample and provide information to the local drinking water limits:

- Total Coliform bacteria
- E.coli
- TDS (Total dissolved solids, salt & minerals)
- pH
- Colour
- Odour
- Turbidity (NTU)
- Conductivity (salinity)
- Temperature
- Calcium
- Magnesium
- Iron
- Fluoride
- Nitrate
- Arsen
- Others depending on local occurence

For more information to specific water contamination, WHO drinking water limits and treatment opportunities, please contact our team (<u>water@trunz.ch</u>).

Additional questions:

What are the short and long term health issues related to consumption of contaminated water?

Are there seasonal effects on the water contamination (such as floods, etc.)?

Any industry waste that effects water quality?

What is the average water temperature? Are there considerable fluctuations in the water temperature?



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Importan information

The following steps are necessary/crucial in order to have a reliable water sample which is suitable for testing/analysis :

- In case, the unit was not operational for a longer time, the activated carbon filter as well as the 5 micron filter (for desalination and/or brackish units) need to be replaced.
- In a first step, <u>remove</u> activated carbon filter and <u>install a new</u> 5 micron filter.
- Then start a backflush of the membrane to empty the product water tank. Then start forwardflushing cycle (Purge Mode; automatic stop after 20 minutes). After that start the unit in run-mode to refill the product water tank. Carry out the cleaning of the membrane with SC2 followed by a cleaning with SC3. Please check the <u>operation manual</u> for details and step-by-step information (this step is necessary even when the unit was operational as usual/without interruption)
- Install <u>again</u> a new 5 micron filter (desalination and/or brackish units)
- Start the unit and produce water for 20 30 minutes and install a new activated carbon filter
- Make sure, that the position on the unit where you take the water sample is properly/totally disinfected !
- Use only bottles from the water laboratory for the water sample testing. If you use any kind of bottle, there's a risk of contamination within the bottle. If no bottle is available from laboratory, clean the bottle with chlorination first.