

# Offshore Potable Water. Back To Basics



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**Marine Safety Forum All Members Meeting Nov 2009**

# What's The Problem?



- Statutory requirement.
- Perception
- Bad water quality costs you money.
- Contamination can cause serious illness.

# What Do We Have To do?

## The Myths



- Make own water when possible
- Bunker water when possible
- Only use bottled water
- Dose chlorine
- Remove chlorine
- Nothing. All water is treated onshore
- Clean tanks annually...,every two years ...,every five years
- Test for Legionella
- Keep bacteria levels less than 10 ..,100 ..,300 .., 1000

# What Do We Have To Do Back To Basics



- Show that the water we are using is fit for purpose.

# How Do We Do This



- **C**ontrol measures,
- **V**erify the control measures are in place,
- **V**alidate control measures to show effectiveness

# Control Measures



- Temperature control
- Chemical UV disinfection control
- Filter
- Procedures

# Verify Control Measures



- Logging & Recording
- Measurement
- Audit

# Vvalidation Of Control



- Testing
- Historically offshore medic / chemist testing and beach testing
- Use of new onsite tests can help
- Improve validation

# Example 1

- Corrosion. Not good
- pH < 6.5 can cause corrosion
- **C**ontrol - pH > 7.0
- **V**erify - Test pH to ensure > 7.
- **V**alidate – Test iron levels
- Simple infield test controlled and managed in house at site.

# Example 2

- Pathogenic bacterial contamination. Not good
- Pathogenic bacteria prefer temperatures  $>25^{\circ}\text{C} < 45^{\circ}\text{C}$
- **C**ontrol - Water temperature should be less than  $20^{\circ}\text{C}$  or above  $50^{\circ}\text{C}$
- **V**erify - Test temperature to insure  $<20^{\circ}\text{C}$  or  $>50^{\circ}\text{C}$ .
- **V**alidate – Test for bacterial or bacterial indicators
- Simple infield test controlled and managed in house at site.

# In Summary



- Managing Water Correctly -:
- Is something we should all do
- Is not rocket science
- Can be controlled locally at site
- Will save you money
- Will save you time
- Will avoid unwanted non conformances (internal and external)
- Will make our sites safer

THANK YOU



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