

## Water Systems Control & Protection While in Non-Operational Mode

### Introduction

During the operational lifetime of an offshore rig there may well be periods when it is commercially beneficial to temporarily lay up or stack an asset. There are two main types of stacking; warm stacking or cold stacking. This technical sheet deals with associated requirements for controlling and protecting an assets potable water system when moving to cold stack conditions.

The cold stacking of a rig involves shut down and storage in harbour, shipyard or designated offshore area. It will involve removal of all personal from the asset and a complete shutdown of all utilities including potable water services.

When preparing a potable water system for cold stacking all the relevant associated areas of the system must be taken into account. This includes supply lines, production process, storage areas, distribution lines and all other associated elements including treatment and control processes.

### Key Points

A potable water system shutdown procedure will be site specific although it should contain all of the following points.

- Fully purge and drain all wet parts of the system. This may require positive pressure within lines to ensure full draining. Dependant on design there will often be a benefit from incorporating a systematic approach to draining the lines.
- Ensure all dead legs and dead ends are drained locally.
- Disconnect all associated treatment plant and make safe any residual chemicals. (Special care should be taken over water makers and other treatment plant such as UVs, when manufacturer guidance should be followed.)
- Where possible carry out any remedial works on system while in shut down. This may include tank cleaning, pipework replacement or system upgrades.
- Remove all shower heads and either package and protect or install new heads on start up.
- Prior to reinstatement of start-up ensure that a full, complete and appropriate start-up potable water procedure is carried out.

### Reinstatement & Start-up

Through implementing a systematic approach to the shutdown of the potable water system and carrying out any corrective action while in shutdown, protecting the system while in cold stack is relatively straight forward. However, regardless of the extent and effectiveness of a cold stack shutdown procedure, it is critical that should the unit be being reinstated, as soon as this is confirmed, a correct startup procedure should be implemented. The start-up procedure should be site specific and confirmed at time of shutdown.

For any further information contact Offshore Water Management.



*Various Stacked Rigs.*

Offshore Water Management is an independent provider of all services and support associated with water management within the offshore industry. This includes the design, supply, installation, management and maintenance of all offshore potable water systems. Our customer base includes Offshore Operators Drilling Companies and all types of marine support companies associated within the offshore industry.

### SERVICES

- Professional Technical Support
- Water System Audits
- Certified Training (Tailored specifically to the Marine and Offshore Industries)
- Dosage and Control Equipment
- System pipework replacement and refurbishment
- Field Testing Kits
- Management Control Procedures and Protocol
- Record Keeping and Reporting Software Systems
- Legionella Risk Assessments
- Accredited Laboratory Chemical, Physical and Microbiological Testing
- Consultancy