Appendix 10-H
Tank Cleaning Standards

Revision History

Revision Number	Date	Section	Changes
1	December 2022	1 Wet Bulk Tanks	Additional comments added to emphasise use of safest possible cleaning method and consideration of contamination
		1.1 Pump out Standard	Reference to checking discharge suction added
		1.2 Oil Based Mud Standard	Good practice reference added Comments added to cover use of compressed air for clearing lines and consideration of future product.
		1.3 Maintenance Clean Standard	New section added
		1.4 Water Based Mud Standard	Comment added re cleaning as high as practicable without use of scaffolding
		1.5 Brine Standard	Wording update regarding use of scaffold and detergent. Comment added re lines flushing for completion brines
		1.6 Off-Hire Standard	New section added
		2 Dry Bulk Tanks	Comment added regarding removal of build-up of loose product from tank tops
		3	New section added to cover standards related to use of vessel fixed self-cleaning systems

Contents

1 Wet Bulk Tanks

The vessel charterer should, where possible, ensure that tank cleaning operations are carried out in the safest method possible. Consideration should be given for the planned product and risk of contamination. Where possible, the use of scaffolding should be reduced.

Tank inspections should confirm that the tanks have been cleaned to the following standards as required:

1.1 Pump out Standard

Pump out residues from tank and wipe tank floor using rubber mops or equivalent. No requirement for washing. Check vessel discharge suction to prove clear.

1.2 Oil Based Mud Standard

Tank bottoms and internal structure are clear of mud solids and residues. Good practice 1m up from tank bottom including agitators. Cargo lines are flushed through with compressed air / clean water and lines drained depending on future product. Pump suctions are checked and clean. Tank must be empty and clear of all water / mud mixtures.

1.3 Maintenance Clean Standard

Tank bottoms, gauge ports, agitators, ladders, access, and internal structures are clean. Good practice 1m up from tank bottom and agitators. Cargo lines are flushed through with clean water, purged clear with air and drained.

1.4 Water Based Mud Standard

Cargo lines (including tank recirculation lines) and pumps are flushed through with clean water and lines drained. Tank bottoms and internal structure are clean of all evidence of previous cargo as high as practicable from the tank floor without the use of scaffolding. The tank may require cleaning with detergent to achieve the highest standard of cleanliness possible. All traces of water and detergent removed from tank.

1.5 Brine Standard

Cargo lines (including tank recirculation lines) and pumps are flushed through with clean water and lines purged with air or drained. Tank bottoms and internal structure (stringers, frames, etc.) are clear of mud solids, semi-solids, and all evidence of previous cargo. The tank may require scaffolding and cleaning with detergent to achieve the standard required for the next product. All residual water and detergent removed from tank. For completions brines further cleaning and line flushing may be required.

1.6 Off-Hire Standard

Cargo lines (including tank recirculation lines) and pumps are flushed through with clean water and lines purged with air / drained. Tank bottoms and internal structure (stringers, frames, etc.) are clear of mud solids, semi-solids, and all evidence of previous cargo. The tank may require cleaning with detergent to achieve the highest standard of cleanliness possible. All traces of water and detergent removed from tank. For off hire vessel tanks should be returned to the standard inspected at the on hire with consideration for reasonable wear and tear.

2 Dry Bulk Tanks

Tanks to be brushed down and residues removed by vacuum or equivalent. Lines and manifolds should be opened and proven. Slides should be checked for dryness and condition and 'elephant foot' suction checked to ensure clear. Where safe any new build-up of loose product should be removed from tank tops.

3 Vessel Self Cleaning Standards

The vessel charterer should, where possible, ensure that self-tank cleaning operations are carried out in the safest method possible. Consideration should be given for the planned product and risk of contamination.

Vessel self-cleaning can be considered as this reduces tank entry and working at height for personnel. The efficiency of a self-cleaning system onboard a PSV is very much dependant on how the system is operated.

The self-tank cleaning time cycle can be adjusted depending on the previous product and on the standard required. As all self-cleaning systems perform differently, the standard required should be discussed with the vessel crew to ascertain if this is achievable.

As a guide when using a vessel self-clean system consideration should be given to:

- Previous product in the tank(s)
- Acceptable standard for product to be loaded
- Minimum acceptable residues regarding compatibility
- Length of washing cycle
- Temperature of water
- Soap / detergent to be used

Tank inspections should confirm that the tanks have been cleaned to the standards required. If the standard required has not been achieved, tank cleaners should be called to complete the operation and achieve the required standard.

The following pictures show a typical standard achieved from use of vessel self-clean system and would be considered as mud standard.