



Memorandum

Staten Island Ferry

Reference: SPM 5.1 Document Control

To: Captains & Chief Marine Engineers	<input checked="" type="checkbox"/> SMS Alert # 23.03 <input type="checkbox"/> Memo
From: Barry Torrey, DFO	SMS / DOT Reference: <i>OPM 5.6 & OPM 5.7</i>
Date: 01-Feb-23	
Subject: Vessel Fuel Systems	<input type="checkbox"/> Signature required upon receipt

The investigation into the fire aboard the F/B Sandy Ground being conducted by the United States Coast Guard (USCG) and the National Transportation Safety Board (NTSB) is ongoing and it is anticipated that a final report(s) will not be published for some time.

An over-pressurization of the fuel oil system resulted in the failure of the main engine spin-on fuel filters and subsequent engine room fire. At this point investigators believe that both fuel oil return valves were manually closed, which caused the over-pressurization event as the excess fuel oil from the engines had no place to go. As part of the corrective action for this event:

- At least **one (1) fuel oil return valve** leading back to the fuel oil service tank(s) **must always be maintained in the fully OPEN position**, regardless of vessel Class. A positive displacement fuel oil pump can never be allowed to pump against a dead head. A dead head is caused when a pump operates with no flow through the pump due to a closed discharge valve or blockage in the line.

Additionally, to mitigate future risk, we are currently reviewing SMS procedures for possible revision as well as identifying additional engineering controls to prevent recurrence. Recent discussions with fleet engineers have additionally identified **best practices** that are already in place.

The following best practices have been identified and should continue to be considered when maintaining the desired level in the vessel fuel oil service tanks.

- Crewmembers should never OPEN or CLOSE a valve without understanding how the action could affect the system. If in doubt, immediately seek out the CME / supervisor and ask for assistance.
- Chief Marine Engineers should consider assigning one (1) Below Deck Team Member to maintain, monitor, and adjust fuel service tank levels during their watch.
- Proper and continual communication by all Below Deck Team members is essential in maintaining proper machinery plant operation.