HAZARDOUS CONDITIONS IN CARGO PUMP ROOMS

The U.S. Coast Guard Office of Safety and Environmental Health was recently notified of a potential hazardous condition regarding the venting of Vacuum Assist Stripping System (VASS) collection tanks into pump rooms aboard crude carriers. On more than one occasion, a Certified Marine Chemist has encountered what appears to be a common practice of venting VASS collection tanks directly into the pump room rather than venting to the main deck or a slop tank. In the reported instances, the Classification Societies associated with the involved vessels were aware of the configuration and allowed the venting of the tanks through the use of simple goose neck piping with no flame screens or vents fitted with pressure vacuum valves. While the risks associated with hydrocarbon emissions released through the vents are minimized when the collection tanks have been cleaned and are empty, there have been reported findings of unsafe limits of flammable vapors when the tanks were stripped with residues remaining in them.

It should be noted that one of the following tank venting arrangements may be found:

a) tanks with open venting into the pump rooms,
b) tanks with pressure/vacuum (P/V) valves that vents into the pump rooms,
c) tanks that vent into slop tanks,
d) tanks that vent to the main deck from an open goose neck vent, or
e) tanks that vent to the main deck with a P/V valve fitted.

MIIs and PSCOs should consult with the marine chemist and ship’s crew to confirm the venting arrangement for the VASS collection tanks prior to examining the cargo pump room. Entry into the pump room should only be made by Coast Guard personnel when a marine chemist certificate has been issued detailing the conditions for which safe entry can be made.

Officers in Charge Marine Inspection (OCMIs) are urged to encourage vessel owners and operators to consider the adoption of safer venting configurations (to the main deck or a slop tank) for the VASS collection tanks in an effort to reduce the risk of a potentially dangerous situation for personnel and atmospheric conditions.

Questions concerning this notice may be directed to Office of Vessel Activities, Domestic Compliance Division (CG-5431) at CG-5431@uscg.mil or (202) 372-1224 or Foreign & Offshore Compliance Division (CG-5432) at CG-543@uscg.mil or (202) 372-1235.