NAVSEA
STANDARD ITEM

FY-28

ITEM NO:         009-116
DATE:        01 OCT 2024
CATEGORY:               II

1.  SCOPE:

1.1     Title:    Waste Heat Boiler Sodium Nitrate Wet Layup; accomplish

2.  REFERENCES:

2.1     S9086-GX-STM-020/CH-220, Boiler Water/Feedwater Test and Treatment

3.  REQUIREMENTS:

3.1     Accomplish sodium nitrite wet layup of each auxiliary/waste heat boiler.

3.2     Notify the SUPERVISOR one day prior to layup of each boiler.

3.3     The sodium nitrite layup solution must be prepared with sufficient solution to fill boiler and to provide a reservoir in a pier side tank or ship's feedwater tank.

3.3.1     For each 100-gallons of feed quality water (conductivity maximum of 15-micromho/cm) to be treated, dissolve one pound of sodium nitrite in accordance with Paragraphs 220-29.24.3 and 220-30.29.4 of 2.1.

3.3.1.1     Mixing is accomplished by dissolving the sodium nitrite in feed quality water (10 pounds will dissolve in 2-gallons of water), and then adding the dissolved chemicals to the feedwater in the tank. The tank is then circulated for 30-minutes to mix the solution.

3.3.2     A head tank is the easiest and preferred method of maintaining positive pressure.  If a head tank method is used, locate and pipe the head tank above the highest boiler vent.

3.3.3     Fill the boiler with the sodium nitrite layup solution and maintain pressure using a head tank or feed pump.

3.3.4     Provide an authorized source of heat to the fireside/gas-side areas to prevent corrosion in accordance with 2.1.

3.4     Layup is lost when the head tank level or pump discharge pressure is not maintained

and cannot be reestablished. Apply dry layup if layup is lost.

3.5    To prepare for boiler operation, dump the boiler, feed tanks and associated piping. Flush by refilling the boiler, feed tanks, and associated piping with feed-quality water. Do not light-off with sodium nitrite layup solution in the boiler, DFT (if applicable) or feed tank. Dispose of removed solution in accordance with local, state, and federal regulations.

3.5.1    Do not drain the solution to the bilge.

4.  NOTES:

4.1    None.