



Department of Veterans Affairs – Office of Construction & Facilities Management

CONSULTING SUPPORT SERVICE (003C5)

Technical Topics

Boiler Plant Deaerator Inspections

April 5, 2013

1. VHA Directive 2008-062, BOILER PLANT OPERATIONS, requires that the deaerator pressure vessels be periodically inspected internally by a Qualified Professional Inspector. Periodic external inspections are also required. This communication is to serve as a reminder of this inspection requirement.
2. The purpose of these inspections is to determine if there are cracks in the pressure vessel welds. Cracks have been found in at least three VA deaerators. Deaerator pressure vessels have been known to fail with catastrophic results because hot water, steam and pressure are involved.
3. The internal inspection of the pressure vessel will require the use of a non-destructive test method, such as wet fluorescent magnetic particle (WFMT), to determine if there are cracks in the welds. The test methods and procedures to be utilized are those which have been recommended by the National Board of Boiler and Pressure Vessel Inspectors.
4. Since 1988, the VA Master Specification for deaerators, Section 23 50 11, has included pressure vessel construction requirements which are predicted to reduce the chances of weld cracking.
5. For more information, contact the Consulting Support Service (003C5), Doug Ryan at 202-632-5519.