GUIDELINES FOR CARE AND OPERATION
OF HOT WATER HEATING BOILERS

The owner is responsible for the proper care and safe operation of a Heating Plant in accordance with Section 4 of the Power Engineers Regulation (AR85/2003). The instructions below should be carried out by a responsible person who has the necessary skills and knowledge.

It is to be noted that the manufacturer’s instructions for the operation and maintenance of the pressure equipment shall be followed. In addition to the manufacturer’s instructions, the following guideline can be used. If there is a conflict between this guideline and the manufacturer’s instructions of the pressure equipment, the manufacturer’s instructions take precedence.

1. DAILY
   (a) Observe operating pressures, temperatures and general conditions. Determine the cause of any unusual noises or conditions and make necessary corrections.

   (b) Examine the safety relief valve and its drain for signs of leakage or malfunction. Repairs must be made as soon as possible at the first indication of any defects, leakage, or malfunction.

   (c) Keep the boiler room clean and free of combustible materials.

   (d) Ensure that there is adequate combustion air in the boiler room, and that any screens or filters are kept clean.

   (e) Maintain a boiler room log and record the various routines and tests that are performed. (Log repairs, as well as safety relief valve servicing and or replacement)

2. WEEKLY
   (a) Observe flame conditions and have adjustments made by a competent service provider if the flame is smoky or if the burner starts with a puff.

   (b) Observe the condition of circulating pump(s) for normal operation.

3. MONTHLY
   (a) Operate the safety relief valve manually by means of the try lever. (CAUTION: if vessel contains a Glycol-Water mixture, ensure that the discharge from the safety relief valve is captured, and not allowed to enter a sewer system).

   (b) Test flame detection devices as per manufactures instructions.

   (c) Test low-water fuel cut-off if piping arrangement permits this without draining considerable water from the system.

4. ANNUALLY
   Have the boiler, its controls and safety devices thoroughly examined and serviced by a competent service provider who has knowledge of the requirements of the applicable legislation and codes.

NOTE: For more detailed information, reference should be made to the most recent versions of:
ASME, Section VI, “Recommended Rules for Care and Operation of Heating Boilers”
ASME, CSD-1, “Controls and Safety Devices for Automatically Fired Boilers”,
CSA B51, “Boiler, Pressure Vessel, and Pressure Piping Code”.

The Alberta Regulations, Safety Codes Act, ABSA Alerts, and Information Bulletins are available online at www.absa.ca

AB-602 (2015-02- renumbered from AB-502 in 2011)
GUIDELINES FOR CARE AND OPERATION OF STEAM HEATING BOILERS

The owner is responsible for the proper care and safe operation of a heating plant in accordance with Section 4 of the Power Engineers Regulation (AR85/2003). The instructions below should be carried out by a responsible person who has the necessary skills and knowledge.

It is to be noted that the manufacturer’s instructions for the operation and maintenance of the pressure equipment shall be followed. In addition to the manufacturer’s instructions, the following guideline can be used. If there is a conflict between this guideline and the manufacturer’s instructions of the pressure equipment, the manufacturer’s instructions take precedence.

1. **DAILY**
   (a) Observe operating pressures, temperatures and general conditions. Determine the cause of any unusual noises or conditions and make necessary corrections.
   (b) Examine the safety relief valve and its drain for signs of leakage or malfunction. Repairs must be made as soon as possible at the first indication of defects, leakage, or malfunction.
   (c) Keep the boiler room clean and free of combustible materials.
   (d) Ensure that there is adequate combustion air in the boiler room, and that any screens or filters are kept clean.
   (e) Maintain a boiler room log and record the various routines and tests that are performed. (Log repairs, as well as safety relief valve servicing and or replacement)

2. **WEEKLY**
   (a) Test the low-water fuel cut-off.
   (b) Test the water column or gauge-glass, and ensure the shield around the gauge-glass is intact and secure.
   (c) Observe flame conditions and have adjustments made by a competent service provider if the flame is smoky or if the burner starts with a puff.
   (d) Blowdown the boiler if considerable make-up water is used, or sludge build-up is accumulating.

3. **MONTHLY**
   a) Operate the safety relief valve manually by means of the try lever.
   (b) Test flame detection devices as per the manufactures instructions.

4. **ANNUALLY**
   Have the boiler, its controls and safety devices thoroughly examined and serviced by a competent service provider who has knowledge of the requirements of the applicable legislation and codes.

NOTE: For more detailed information, reference should be made to the most recent versions of:
ASME, Section VI, “Recommended Rules for Care and Operation of Heating Boilers”
ASME, CSD-1, “Controls and Safety Devices for Automatically Fired Boilers”,
CSA B51, “Boiler, Pressure Vessel, and Pressure Piping Code”.

The Alberta Regulations, Safety Codes Act, ABSA Alerts, and Information Bulletins are available online at www.absa.ca