



## **BOILER LAYUP CHECKLISTS**

Putting your boiler into wet or dry standby is a procedure critical to its health and performance. Most facility teams will need the assistance of a water treatment professional to do it properly. However, the more you know, the more you can tell good work from poor work, recognize issues if they spring up, and make more informed decisions about your boiler in general. It's toward that end that we offer these basic procedural overviews for wet and dry standby.

**NOTE:** These checklists do NOT represent complete, step-by-step technical procedures. Their purpose is to provide a basic overview so you are not in the dark about the general sequence of activity and the reasons behind it.

## Wet Standby Overview for Steam Boilers\*

- **1.** Clean and inspect boiler, following proper procedure.
- 2. Fill boiler to normal level, adding proper amounts of sodium sulfite, caustic soda, and dispersant.
- **3.** When boiler cools to atmospheric pressure, add water until it comes out the vent. Make sure all connections are closed.

**NOTE:** It is extremely important to keep the boiler completely flooded at all times. The sight glass cannot be used as an indicator, because it does not reach all the way to the top of the boiler. Your HOH service engineer will make use of a small external tank to ensure the boiler is always flooded.

- 4. Start performing the same set of tests as in normal boiler operation, at minimim on a weekly basis. Make sure sulfite residual and alkalinity levels stay within range. Appropriate chemical should be added as needed.
- **5.** When it's time to bring the boiler back online, first perform bottom blowdowns until the water level is one-quarter the normal operational level. Then allow it to fill again to normal with fresh makeup water.
- 6. Once back online, test the boiler water frequently; make chemical feed adjustments as needed to bring all test parameters in-range. This may take several days, as conductivity increases slowly.

\* **NOTE:** The checklist above applies to **steam boilers** only. The process for **heating boilers** is different, uses different chemical treatments (molybdate, for instance), and tests for different parameters. Ask your HOH Water Quality Engineer for more information.

## Dry Standby Overview for Boilers

- 1. Shut down boiler and let cool completely. Dry it out as much as possible moisture is not treated water and will corrode the metal components of your boiler.
- 2. Clean boiler per standard procedure, removing all sludge and loose scale particles.
- 3. Inspect carefully to ensure all valves are tight and water or steam cannot enter the unit.
- **4.** Use fans to circulate warm air through the boiler, removing any remaining moisture. Alternatively, we may initiate a light fire in the boiler furnace.
- **5.** Add desiccant to boiler. There are a number of different desiccant products and solutions, each with its own procedure. Your HOH service engineer will help you determine the best option for your particular system.
- **6.** Tightly seal the boiler, including all man holes, hand holes, and other connections. Blank off any leaky valves.
- 7. After the first 2–3 weeks, verify that the desiccant is working properly. At this point, there should not be excessive moisture present, but if there is, the desiccant will need to be replaced per product recommendations.
- 8. Replace desiccant every 2–4 months, depending on the product used. If trays are used, make sure they are removed before bringing the boiler back online.

