SUGGESTED STUDY OUTLINE FOR 3RD CLASS STATIONARY ENGINEER EXAM

Neighborhood and Business Development
City Hall Room 121B, 30 Church Street
Rochester, New York 14614-1290

1. Applicant's own plant procedure for loss of water.
2. Applicant's own plant equipment.
3. How, why and when to blow down a boiler.
4. How to blow down a water column and gauge glass.
5. The difference between a water tube and a fire tube boiler; steel and cast iron boilers and steam and hot water boilers.
6. How fresh water is supplied to a steam boiler and hot water boiler.
7. How the system works outside the boiler, including the transfer of steam or hot water through the boiler system and its return to the boiler.
8. The objectives of water treatment.
9. Safety appliances including safety valves, low water cutoffs, flame monitoring systems, etc.
10. The complete gas train including the manual shutoff, regulator, gas pilot control.
11. Cause of firebox explosions as well as vessel explosions.
12. Define: Boiler; Steam-saturated and superheated, BTU, Boiler Horsepower and Draft.

Acceptable Experience:

1. Employment experience operating employer's boiler as part of a fulltime position.
2. United States Navy or Merchants Marine boiler tender or operator of related boiler equipment experience.
3. Federal or State experience as described in #1 or #2 above.
4. Board approved paid or unpaid employer sponsored program for Stationary Engineers.
5. Employment experience as a School District Custodian with boiler operation duties.
6. Employment experience operating a boiler with a higher level licensed Stationary Engineer Custodian.

All experience verification must be documented in writing as an affidavit under penalty of the law and included with application at time of testing.

The Custodian License will allow a person to operate a boiler and related equipment to gain acceptable experience for the 3rd Class Stationary Engineer's exam under the direct or indirect supervision of a Licensed Stationary Engineer whose license covers the scope of the plant.