



SUGGESTED STUDY OUTLINE
1ST CLASS STATIONARY ENGINEER

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

Stationary Engineers at this level **MUST** know everything expected of 2nd and 3rd Class Stationary Engineer and have at least one (1) additional year of practical experience. The examination for 1st Class Engineers involves more than the ability to memorize formulas. Exam candidates must demonstrate the ability to apply basic facts of familiarity to solve practical and general problems encountered during the daily operation of a Steam Generation Facility. The exams are prepared with this expectation in mind.

EXAM SUGGESTED STUDY OUTLINE:

- 1) Working Pressure & Bursting Pressure
- 2) Centrifugal Pumps
- 3) Steam Tables
- 4) Heat Added Boiler
- 5) Factor of Evaporation: Equivalent and Actual Evaporation
- 6) Developed Boiler Horsepower and Rated Boiler Horsepower
- 7) Boiler Efficiency
- 8) Furnace Volume Heat Release
- 9) Fuel Cost Evaluation for Coal, Oil and Natural Gas
- 10) Environmental Regulations (allowable sulfur in fuel)

