



STUDY OUTLINE FOR R-2 REFRIGERATION OPERATOR LICENSE

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

Applicants at this level must know everything expected of R-3 and R-4 Refrigeration Operators and have at least three (3) years of practical experience. The exam for R-2 Refrigeration Operators involves more than the ability to memorize formulas. Applicants must demonstrate their ability to apply basic facts of familiarity to solutions of practical problems, and be prepared to solve problems with specific formulas and general problems encountered during the daily operation of an Ammonia Refrigeration Facility. The exams are prepared with this expectation in mind.

- 1) Working Pressure & Bursting Pressure
- 2) Centrifugal Pumps
- 3) Refrigerant Tables & Charts of Ammonia
- 4) Reciprocating Ammonia Compressor Calculations
- 5) Tonnage Calculations
- 6) Cool-down Calculations for food committed to Cold Storage
- 7) Cold Box Heat Gain Calculations
- 8) Heat Rejected by Refrigerant to Condenser
- 9) Heat absorbed by Refrigerant in Evaporator
- 10) Refrigeration Effects

