# RECOMMENDED READING GUIDE

### **FOR**

## REFRIGERATION PLANT EXAMINATION CANDIDATES

Prepared by:

Department of Environment and Labour Power Engineers Section Public Safety Division The publications listed below are intended to supplement the course material for students studying for Second and First Class Refrigeration Plant Certificate of Competency Examinations. The Code books listed are quite expensive, and they may change annually. Therefore, it is suggested that candidates use the codes located at their company library or at public libraries to obtain the necessary information.

It is strongly recommended that Candidates complete an appropriate formal course of study offered by a recognized Technical Institute before undertaking to write any of the "Refrigeration Plant Certificate of Competency Examinations".

#### **CODE BOOKS**

The following Code book is used for both the Second Class level and the First Class level. The candidates must be aware that although there will be questions on all levels of examinations from the following code, the difficulty and depth of questions will increase significantly as the candidate advances in levels. We wish to repeat at this point, these Code books are quite expensive and some are revised on an annual basis. Therefore we recommend to students that they use Codes books from their company library or from public libraries to assist with their studies.

Applicable Jurisdictional Codes & Regulations	<b>Contact your Provincial Jurisdiction</b>	
	1 <sup>st</sup> .	2 <sup>nd</sup> .
Canadian Regulations (C. S. A.) B-52, Mechanical Refrigeration Code, (latest Edition) ISSN # 0317-5669	X	X
A.S.M.E. Code Section VIII Pressure Vessels	X	X
Steam Boiler & Pressure Vessels Act and Regulations	X	X
SAIT Refrigeration Plant Operator Series	X	X
Ontario Refrigeration Facility Association - Refrigeration (Chapters 1 to 4)	X	X

One of the most comprehensive and complete sets of books for Refrigeration candidates to study from, is the Southern Alberta Institute of Technology's (SAIT) Refrigeration Plant Operator Series. It is recommended that Candidates start to compile this series from the beginning of their career in Refrigeration. This series does not cover all topics in the syllabi, however it is very useful.

First and Second Class Levels	Paper A	Paper B
Boilers and Pressure Vessels Act/Stationary Engineers Act		X
Introduction to CSA and ASME Codes		X
Introduction to Thermodynamics	X	
Thermodynamics of Refrigeration	X	
Introduction to Basic Mechanics	X	
Welding Methods	X	
Welding Terms and Inspection	X	
Types of Pumps	X	
Pump Operation and Maintenance	X	
Piping Materials and Connections	X	
Introduction to Valves	X	
Lubricating Principles	X	
Air Compression	X	
Fire Safety	X	
Building Safety	X	
Introduction to Electricity	X	
Refrigerants		X
Environmental Impact of Chlorinated Hydrocarbons		X
Compression Refrigeration Systems		X
Absorption Refrigeration Systems		X
Refrigeration Compressors		X
Heat Exchangers for Refrigeration Systems		X
Cooling Towers		X

First and Second Class Levels	Paper A	Paper B
Refrigeration Metering Devices and Capacity Controls		X
Refrigeration Accessories		X
Refrigeration Cycle Controls		X
Compression Refrigeration Systems Pre-Startup Procedures		X
Compression Refrigeration System Operation		X
Absorption Refrigeration System Operation		X
Psychometric Properties of Air		X
Application of the Psychometric Chart and Comfort Conditions		X
Fans for Air Distribution Systems		X
Ventilation and Air Filters		X
Air condition Duct Systems		X
Humidification		X
Coil Types		X
Coil Operation		X
Air Condition Systems I		X
Air Conditioning Systems II		X
Air Conditioning Heat Recovery Systems		X
Air Condition Systems Controls		X

#### Books may be purchased at the following locations:

- 1. Distribution and order processing for government publications will be provided by the Nova Scotia and Municipal Relations Department at the following:
  - A. Visit the government website at www.gov.ns.ca, and click on the Government Publications link, or e-mail publications@gov.ns.ca
  - B. Call (902) 424-7580 or toll free (in NS) 1-800-526-6575
  - C. Fax (902) 424-5599
  - D. Write Government Publications, PO Box 637, Halifax, NS B3J 2T3
- 2. Nova Scotia Community College Phone: (902) 491-4730 Institute of Technology Campus Bookstore 5685 Leeds Street Halifax, Nova Scotia B3J 3C4
- 3. Southern Alberta Institute of Technology (SAIT) Phone: (800) 661-1268 1301 16<sup>th</sup> Avenue NW Calgary, Alberta T2M 0L4
- 4. Canadian Standards Association (CSA) Phone: (800) 463-6727 178 Rexdale Boulevard Fax: (416) 747-4149 Etobicoke, Ontario M9W 1R3
- 5. Power Engineering Books Ltd. Phone: (800) 667-3155
  7 Perron Street Fax: (780) 460-2530
  St. Albert, Alberta T8N 1E3
- 6. Ontario Recreation Facility Association (ORFA) Phone: (416) 426-7062
  1185 Eglinton Avenue E. Fax: (416) 426-7385
  North York, Ontario
  M3C 3C6