

# STATE BOARD OF REFRIGERATION EXAMINERS

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January 2, 2015

## VIA EMAIL AND HAND-DELIVERY

Mr. John Turcotte, Director  
Program Evaluation Division  
North Carolina General Assembly  
300 North Salisbury Street, Suite 100  
Raleigh, NC 27603

Re: Response by the North Carolina Board of Refrigeration Examiners to PED Report on Occupational Licensing Agencies

Dear Mr. Turcotte:

Thank you for the opportunity to review and respond to the recent report by the Program Evaluation Division ("PED") on Occupational Licensing Agencies ("OLA").

In this letter, the Board is responding to PED's recommendation that the proposed Occupational Licensing Commission ("OLC") develop a plan to review the Board for possible elimination. For the reasons set forth below, we respectfully request both PED and the Commission to reconsider this recommendation.

### I. Background

The State Board of Refrigeration Examiners was created during the 1955 session of the General Assembly requiring a refrigeration license for work done in cities and towns with a population of 10,000 or more. Governor Luther Hodges appointed the original members of the Board; they were sworn in on January 6, 1956.

In 1977, the Governmental Evaluation Commission was formed by the legislature and this Commission recommended that the refrigeration licensing law be state-wide. As of July 1, 1979, all refrigeration contractors in the state were required to be licensed.

Now, the Board has over 1,800 licensees including "all persons, firms or corporations engaged in the installation, maintenance, servicing and repairing of refrigerating machinery, equipment, devices and components relating thereto" but does not include: the installation of self-contained commercial refrigeration units or domestic household self-contained refrigeration appliances equipped with an Original Equipment Manufacturer (OEM) molded plug; or any person, firm or corporation engaged in the business of selling, repairing and installing any comfort cooling devices or systems.

Throughout its existence, the Board has worked closely with the UNC School of Public Health and the engineering programs of the UNC system. Indeed, persons from those programs have designated seats on the Board.

In October of 1994, the Board created the SBRE Scholarship Program to benefit students who are enrolled in or plan to enroll in either an Associate in Applied Science Degree Program of Study in HVACR or an Associate in Applied Science Degree Program in Commercial Refrigeration Technology in the State Community College System. In the past ten years, 35 scholarships have been awarded totaling \$30,800.

## **II. Growing Trend in Other States.**

Twenty years ago, North Carolina was one of only two states that required the licensing of contractors doing refrigeration work. Today, over twenty states require this occupation to be licensed. Clearly, many states have seen the need for this unique area of regulation.

## **III. Importance of Board in Protecting Against Public Harm**

In keeping with its mandate to protect the public health and safety of North Carolinians, the Board sets forth criteria ensuring that refrigeration contractors meet specific qualifications when installing, maintaining, repairing and servicing of refrigeration equipment. These criteria are reviewed on a yearly basis to ensure they are up-to-date with current refrigeration contracting practices and fall within the parameters set by the NC Mechanical Code.

There is some degree of confusion about the scope of activities of the Board, which is in part due to the Board's name. The Board does not regulate comfort cooling or domestic equipment equipped with the original plug; rather, they regulate the installation, servicing, etc. of equipment designed for the cooling of product.

Refrigerants used to cool product can be more dangerous than those used for comfort cooling. For instance, the use of ammonia and some Freon such as R11, R404 and R507—all of which can be extremely hazardous to health and safety—has become more prevalent for product cooling in recent years. Ammonia is considered a high health hazard because it is corrosive to the skin, eyes, and lungs. Exposure to 300 parts per million (ppm) is immediately dangerous to life and health. Ammonia is also flammable at concentrations of approximately 15% to 28% by volume in air. When mixed with lubricating oils, its flammable concentration range is increased. It can explode if released in an enclosed space with a source of ignition present, or if a vessel containing anhydrous ammonia is exposed to fire.

Exposure to even small doses of ammonia causes a burning sensation and severe irritation to the respiratory tract and eyes. In higher concentrations, exposure can lead to internal injuries and even death. Moreover, Freon is a tasteless, mostly odorless gas, which, when deeply inhaled, may cut off vital oxygen to lungs and cells.

On a larger scale, overuse of refrigerants such as HFCs and HCFCs is widely recognized to cause irreversible damage to the Ozone layer. The degradation of the ozone layer leads to higher levels of ultraviolet radiation reaching Earth's surface. This, in turn, can lead to a greater incidence of skin cancer, cataracts, and impaired immune systems, and is known to have adverse environmental impacts.

The Board is one of the original agencies approved by the Environmental Protection Agency ("EPA") to provide the EPA Section 608 Certification Test and has certified thousands of applicants every year since 1994. The Board partnered with the Community College System to offer the EPA training and testing through both curriculum and continuing education classes. Under Section 608 of the Clean Air Act, EPA established the following regulations (40 CFR Part 82, Subpart F):

- Restrict the sale of refrigerant to certified technicians.
- Set certification requirements for refrigerant recycling and recovery equipment, technicians, and refrigerant reclaimers.
- Require service practices that maximize recovery and recycling of ozone-depleting substances (both chlorofluorocarbons [CFCs] and hydrochlorofluorocarbons [HCFCs] and their blends) during the servicing and disposal of air-conditioning and refrigeration equipment.
- Establish safe disposal requirements to ensure removal of refrigerants from goods that enter the waste stream with the charge intact (e.g., motor vehicle air conditioners, home refrigerators, and room air conditioners).

Despite the public health consequences stemming from the unregulated dispersal of toxic agents, the PED assigned the Board a Public Harm score of zero. Clearly, such scoring is inconsistent with the significant protection that the Board provides from environmental contamination.

### **III. Complaints**

Consistent with its statutory charge to protect the public health and safety, the Board receives and handles two types of complaints received from the public: those involving licensees and those filed against unlicensed persons. The Board has made the process as straightforward for the public as possible; access to a Complaint form, which does not have to be notarized, is prominently displayed and easily obtainable on the Board website and may be filed electronically,

Over the past ten years, approximately 175 complaints have been filed with the Board; a majority of the complaints were filed against unlicensed persons performing work included within the scope of the statutory definition of refrigeration contracting. Often, this work is deficient and does not meet building code standards, since the contractor has not taken and passed the required examination, thus demonstrating professional competency in performing work undertaken. The Board typically resolves these cases with a Demand to Cease and Desist, signed by the unlicensed person. If the subject of the

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complaint fails to answer or sign the Demand, the Board has weighed the risk to the public and has sought and obtained injunctions for unauthorized practice in the court. It is in this area that the Board provides its best public protection because unlicensed activities can lead to dispersal of toxic agents.

Complaints against licensees for performing inadequate work, or other instances of unprofessional conduct, are not as frequent as those against unlicensed persons. The Board's Review Committee investigates all of these cases and makes a determination on the merits and recommends to the Board either a dismissal or, if the allegations are credible, first attempts a resolution through a Consent Order, imposing a variety of disciplinary actions. Most often, the licensee will agree to a Consent Order; the Board has not had to initiate a hearing process often, which lengthens the time to resolve the matter.

Whether the complaint involves an unlicensed person or a licensee, the complainant is informed of the Board decision and, in most cases, provided a copy of the closing document

#### IV. Conclusion

In conclusion, we respectfully disagree with PED's recommendation that the N.C. State Board of Refrigeration Examiners be considered for elimination. As set forth above, the Board provides an important protection to public health and safety by ensuring that only trained and competent licensees handle the toxic chemicals involved in the refrigeration process. Moreover, the Board is well-equipped to handle public complaints regarding licensees and non-licensees, as demonstrated by its successful resolution of over 175 complaints over the past ten years.

Sincerely,



Jerry M. King  
Chairman