SUNRISE REPORT
HEATING, VENTILATION, AIR CONDITIONING (HVAC) AND FIRE DAMPER TECHNICIANS

AUDIT OVERVIEW

The Legislative Auditor Recommends Certification of Heating, Ventilation, Air Conditioning and Fire Damper Technicians
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FINDING

The Legislative Auditor Recommends Certification of Heating, Ventilation, Air Conditioning (HVAC) and Fire Damper Technicians.

Finding Summary

In accordance with West Virginia Code §30-1A-1 et seq., a Sunrise application was submitted seeking licensure of Heating, Ventilation, Air Conditioning (HVAC) technicians and fire damper technicians. Currently, only contractors who provide these services are regulated by the State. The technicians who work for contractors are not regulated in terms of requiring formal training, and there are no national credentials available. Licensing HVAC contractors provides some measure of protection to the public. However, the Applicant contends that contractors may not be present at work sites to provide adequate supervision over the technicians; therefore, the Applicant is seeking licensure of HVAC technicians to enhance public protection. The Legislative Auditor did not find specific instances of harm directly tied to technicians in a search of lawsuits taken against licensed HVAC contractors. However, the Applicant provided documentation of three ongoing court cases alleging damages resulting from sub-standard HVAC work. The Applicant’s arguments of potential harm to the public are not tenuous or remote, and the harm to the public can be significant monetary losses, loss of property and possibly loss of life if contractors do not provide adequate supervision of technicians or if they use unskilled technicians. In addition, the Division of Labor, State Fire Marshal, State Fire Commission, and the Department of Military Affairs and Public Safety (DMAPS) all indicate that regulating HVAC technicians and fire damper technicians is necessary to enhance public protection. Given these circumstances, the Legislative Auditor recommends state certification with the State Fire Marshal certifying fire damper technicians, and the Division of Labor certifying HVAC technicians. The Legislative Auditor further recommends that a grandfather clause not be included in the statute as proposed.

Required Analysis

The Affiliated Construction Trades Foundations (Applicant) submitted a Sunrise application on May 31, 2013 in accordance with West Virginia Code §30-1A-1 et seq. seeking licensure of HVAC Technicians and Fire Damper Technicians. West Virginia Code §30-1A-3 requires the Legislative Auditor’s Office to evaluate Sunrise applications based on the following criteria:

- Whether the unregulated practice of the occupation or profession clearly harms or endangers the health, safety or welfare of the
public, and whether the potential for the harm is easily recognizable and not remote or dependent upon tenuous argument;

- Whether the practice of the profession or occupation requires specialized skill or training which is readily measurable or quantifiable so that examination or training requirements would reasonably assure initial and continuing professional or occupational competence;

- Whether the public can be adequately protected by other means in a more cost-effective manner; and

- Whether the professional or occupational group or organization should be regulated as proposed in the application.

**Background**

The Sunrise application proposes mandatory licensure of HVAC Technicians and Fire Damper Technicians under the purview of the West Virginia State Fire Marshal or the West Virginia Division of Labor. According to the Applicant, HVAC and fire damper technicians are responsible for manufacturing, fabricating, assembling, handling, erecting, installing, dismantling, conditioning, adjusting, altering, repairing, servicing, and testing/balancing of air handling and HVAC systems and installing, inspecting, servicing, and repairing fire damper systems. HVAC and fire damper technicians’ work settings include new construction projects, and renovations and maintenance of commercial properties and family dwellings. The Applicant indicates that there are around 1,549 HVAC technicians and 678 sheet metal workers in the state, as well as “numerous” building maintenance persons, many of whom would be required to be licensed under the proposed statute. The proposed fee schedule is shown below.

<table>
<thead>
<tr>
<th>License Type</th>
<th>Annual License Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVAC/Fire Damper Technician in Training</td>
<td>$35</td>
</tr>
<tr>
<td>HVAC/Fire Damper Journeyperson</td>
<td>$50</td>
</tr>
<tr>
<td>Master HVAC/Fire Damper Technician</td>
<td>$75</td>
</tr>
</tbody>
</table>

*Source: HVAC/Fire Damper License Sunrise Review Application*

The Applicant argues that regulation is necessary because most counties and municipalities in the state have not adopted building codes to regulate HVAC/fire damper practices. State regulation would ensure that technicians have proven knowledge in relevant codes, standards,
and regulations set by organizations such as the National Fire Protection Association (NFPA). The Applicant further states that the current practice of regulating only contractors is insufficient because only one person per company is required to be licensed while the person who actually performs the work is not required to have any specific knowledge or license.

**Eleven States and Washington, D.C. Regulate Technicians at the State Level**

Currently, West Virginia requires that any contractor performing HVAC projects costing $2,500 or more register with the Division of Labor. Individuals employed by contractors are not required to be registered. Twenty-four states regulate the HVAC trade in the same way, requiring contractors to be licensed or certified, but not technicians. One of these states, Wisconsin, formerly certified HVAC technicians handling ozone-depleting refrigerants, but repealed this law in 2012, finding that federal regulations made refrigerant-specific state regulation unnecessary. Another state that regulates contractors only, Hawaii, previously found in a Sunrise analysis for the proposed regulation of air conditioning mechanics that licensing was unwarranted and that existing protections were sufficient. Additionally, a 2013 bill proposing regulation of HVAC technicians in Utah failed to pass. Nine states have no regulation of the trade and five states have regulation only at the county or municipal level. As shown in Table 2 below, 11 states and Washington, D.C. regulate technicians at the state level.
Table 2
State Regulation of HVAC/Fire Damper Technicians

<table>
<thead>
<tr>
<th>State</th>
<th>Type of Regulation</th>
<th>Special Requirements</th>
<th>Initial Regulation Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>Mandatory licensure</td>
<td>Technicians(^1) must be affiliated with a licensed contractor.</td>
<td>$210</td>
</tr>
<tr>
<td>Delaware</td>
<td>Licensure</td>
<td>Technicians working under the supervision of a licensed contractor are not required to be licensed.</td>
<td>$93</td>
</tr>
<tr>
<td>Idaho</td>
<td>Mandatory licensure</td>
<td>Technicians must work under the supervision of a licensed contractor.</td>
<td>$50</td>
</tr>
<tr>
<td>Iowa</td>
<td>Mandatory licensure</td>
<td>Journeyman technicians must work under the supervision of a licensed contractor. Masters do not have to work under supervision.</td>
<td>$50 - $375</td>
</tr>
<tr>
<td>Kentucky</td>
<td>Mandatory licensure</td>
<td>Technicians must work under the supervision of a licensed contractor.</td>
<td>$50 - $225</td>
</tr>
<tr>
<td>Maryland</td>
<td>Mandatory licensure</td>
<td>Technicians must work under the supervision of a licensed contractor.</td>
<td>$40 - $75</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Mandatory licensure</td>
<td>N/A</td>
<td>$75 - $150</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Mandatory licensure</td>
<td>N/A</td>
<td>$48</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>Mandatory licensure</td>
<td>N/A</td>
<td>$36</td>
</tr>
<tr>
<td>Texas</td>
<td>Optional certification</td>
<td>N/A</td>
<td>$35</td>
</tr>
<tr>
<td>Virginia</td>
<td>Mandatory certification</td>
<td>N/A</td>
<td>$130</td>
</tr>
<tr>
<td>Washington, D.C</td>
<td>Mandatory Licensure</td>
<td>N/A</td>
<td>$10 - $15</td>
</tr>
</tbody>
</table>

\(^1\)Terms used to refer to HVAC/Fire Damper workers vary by state. “Technician” is used here for uniformity.

Source: Information from state licensing websites and statutes as of August 2013.

The states of Connecticut, Idaho, Kentucky, and Maryland require licensed technicians to work under the supervision of licensed contractors. Delaware only requires that technicians not affiliated with a licensed contractor be licensed, while technicians working under the supervision of a contractor are exempt from licensure.
There Is a Potential for Harm Resulting From Improperly Conducted HVAC and Fire Damper Work

The Applicant’s main argument for establishing regulation of HVAC/fire damper technicians is safety. According to the application, improper installation of HVAC or fire damper systems can lead to injury, death, or destruction of property and since individuals performing this work are not required to be licensed, they are therefore not subject to knowledge or skills requirements. The Applicant argues that because there is no state-wide HVAC/fire damper code requirement and most of the counties and municipalities in the state have not adopted building codes, there is no mechanism to ensure accepted codes and standards such as those established by the Sheet Metal Air Conditioning National Association (SMACNA) and the NFPA are being followed. The proposed regulation would require that technicians demonstrate knowledge of these. Although it is not included in the proposed legislation, the Applicant indicates that a grandfather period is “contemplated” that would allow those with experience in the field to be granted licensure without testing. It is the opinion of the Legislative Auditor that a grandfather clause defeats the purpose of regulation by allowing unqualified individuals to become licensed. If the Legislature chooses to regulate these technicians, it is not recommended that a grandfather clause be included.

When contacted for their opinions concerning the proposed regulation, the State Fire Marshal, DMAPS, the State Fire Commission Chair, and the Division of Labor agreed that regulation of these technicians is necessary to protect the safety and welfare of the public. The State Fire Marshal’s Office stated the following:

In particular, the installation and maintenance of “fire dampers” are a critical component of any building engineered to minimize the spread of smoke and or flame through the mechanical spaces and ductwork. In order for any particular “fire wall” or “smoke wall” to be effective, all penetrations through the particular wall MUST be protected in accordance with applicable NFPA and ANSI standards. I strongly agree in that the licensure of the fire damper technicians would benefit not only the general public in the form of regulation and oversight, but the trades professionals as well in the form of accreditation and stature gained from governmental regulation and standards.

DMAPS and the State Fire Commission Chair agreed with this statement. In addition, the Commissioner of the Division of Labor indicated the following:

We believe that anytime critical equipment is installed that the level of competency, work experience and/or training
of the HVAC/Fire Damper Technicians is absolutely necessary to protect the health, safety and/or welfare of the public.

Both the State Fire Marshal and the Division of Labor indicate that it is anticipated the proposed fee schedule would cover the additional administrative cost of regulating the profession. The State Fire Marshal further states that a split regulation, with fire damper technicians falling under the purview of the State Fire Marshal and HVAC technicians falling under the purview of the Division of Labor, may be the most effective way of establishing regulation. Correspondence from the State Fire Marshal and the Division of Labor are included in Appendices B and C.

Regulation of Technicians Is Important for Citizen Safety

Although the Legislative Auditor agrees that HVAC and fire damper installation is a specialized field that requires a high level of skill and has the potential to endanger lives and property if conducted incorrectly, no evidence could be found that the lack of regulation of technicians has caused specific examples of loss of property or harm to the public. The examples of harm provided in the application all pertain to work performed by contracting companies and do not indicate whether the actual work was conducted by a licensed contractor or unlicensed technicians. Because fire damper failure statistics are not collected by the NFPA, neither the Applicant nor the State Fire Marshal were able to provide any instance in the state where the failure of fire dampers due to improper installation led to loss or damage. The Division of Labor’s Licensing Section, which serves as the enforcement arm for the Contractor Licensing Board, indicated that fewer than six complaints per year are received against HVAC contractors and those that are received typically involve things like contract disagreements rather than faulty installation. Further, the Legislative Auditor contacted the West Virginia Insurance Commission to determine whether licensure of HVAC and fire damper technicians would affect insurance premiums paid by property owners and/or contractors by decreasing rates for those hiring licensed or certified technicians. The Commission stated that the anticipated effect would be minimal and no insurance filings concerning state regulated technicians have been seen.

There is no national regulatory organization for HVAC and fire damper technicians. The current state system of regulating HVAC contractors provides a degree of accountability for work completed and protection of consumers; however, this regulation may not be sufficient. The Legislative Auditor requested a search of court cases involving HVAC work from 2005 to the present from Legislative Services. This search revealed only two cases that were ruled on by judges; however, the allegations were not pertinent to this analysis. The Legislative Auditor also found that the Contractor’s Licensing Board did not have complaints
filed against contractors for alleged substandard HVAC work. However, the Applicant provided three examples of ongoing cases in the circuit courts of Kanawha, Berkley, and Putnam Counties. Since these cases are ongoing, they would not have been identified by the Legislative Auditor’s search. The Applicant’s cases all allege faulty or substandard work with thousands of dollars in damages. Although there are few instances of complaints against licensed HVAC contractors in the courts or to the HVAC Contractor Licensing Board, the complaints that have been made illustrate the potential for harm to the public if contractors utilize undertrained technicians or poorly supervise the work of technicians. The potential for harm is not tenuous or remote, and it can be significant in terms of monetary and property losses, as well as possible loss of life.

The Fire Marshal agrees with this assessment and further states:

Most of the general public never sees or understands the intricate workings of a modern building that is designed and built to codes. Engineers, fire inspectors, building inspectors, architects and contractors experience and work in this environment on a daily basis and understand the importance of the fire safety features and structures built into modern buildings . . . .

Although the Legislative Auditor concludes that regulation of technicians would enhance public protection, it is recommended that this regulation take the form of certification rather than licensure, with the State Fire Marshal certifying fire damper technicians and the Division of Labor certifying HVAC technicians. There are three levels of regulation: licensure, certification, and registration.

- Licensure – Under licensure, it would be illegal for anyone to perform HVAC work without a license and only persons who possess certain qualifications would be granted licensure. Although the exact impact cannot be determined, licensure could create a supply problem in the field. It is likely that most experienced technicians would be able to pass a licensure exam, but some may be unwilling or unable to do so.

- Certification - Under certification, specific occupational titles are limited to individuals who have met certain standards and only persons certified by the state may use the protected title, although anyone may engage in the occupation. A supply issue could also result from establishing certification requirements.

- Registration - Under registration, anyone may engage in the profession, but the person would be required to show proof of having certain credentials and the person’s name would be placed on a registry along with other pertinent information. Registration would not be relevant to this Sunrise application since there is no national or state credential for technicians.
Opening the practice of HVAC and fire damper work to certification would enable technicians to provide proof of their training and competency to potential employers and help contractors or business and homeowners hiring technicians for jobs less than the $2,500 contractor threshold\(^1\) ensure that they are receiving services from an individual who is adequately trained. It is the opinion of the Legislative Auditor that registration would not provide any enhancement of protection in this case and that requiring licensure would be too stringent given that some protection already exists in the form of contractor licensing.

Contractors are by law accountable for work performed in their names, although the Applicant indicates that contractor licensing is not sufficient, stating that

\[
\text{the contractor license holder is seldom on the project and rarely performs or even inspects the installation.}
\]

**Conclusion**

HVAC and fire damper work is a specialized field requiring a certain degree of knowledge and proficiency. Although the current law requires state licensing of all contractors performing HVAC work on projects exceeding $2,500, the Legislative Auditor finds that this regulation may be insufficient. The Legislative Auditor finds that HVAC and fire damper technicians should be regulated by the State, and that this regulation be certification rather than licensure, with the State Fire Marshal certifying fire damper technicians and the Division of Labor certifying HVAC technicians. The State Fire Marshal and other regulatory officials agree that regulation of technicians is “vital” to public safety. Additionally, the Legislative Auditor recommends a grandfather clause not be included in the statute, as this defeats the purpose of establishing the regulation.

**Recommendations**

1. **The Legislative Auditor recommends that the Legislature consider regulating HVAC and fire damper technicians by certification, with the Division of Labor certifying HVAC technicians and the State Fire Marshal certifying fire damper technicians.**

2. **If the Legislature chooses to regulate these technicians, it is not recommended that a grandfather clause be included.**

\(^1\)West Virginia Code requires contractors performing HVAC projects costing $2,500 or more to register with the Division of Labor.
Appendix A
Transmittal Letter

WEST VIRGINIA LEGISLATURE
Performance Evaluation and Research Division

Building 1, Room W-314
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0610
(304) 347-4890
(304) 347-4939 FAX

John Sylvia
Director

November 15, 2013

Steve White, Director
Affiliated Construction Trades Foundation
600 Leon Sullivan Way
Charleston, WV 25301

Dear Director White:

This is to confirm that we have transmitted a draft copy of the Sunrise Review for HVAC/fire damper technicians. This report is scheduled to be presented during the Tuesday, November 19, 2013 interim meeting of the Joint Committee on Government Operations, and the Joint Committee on Government Organization in the House Chamber at 7:00 PM. It is expected that someone be present at the meeting to orally respond to the report and answer any questions the committees may have.

We need your written response by the close of business on November 18, 2013, in order for it to be included in the final report. We request that you not disclose the report to anyone not involved with your application. Thank you for your cooperation.

Sincerely,

John Sylvia

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Joint Committee on Government and Finance
Appendix B
Correspondence From the State Fire Marshal

State of West Virginia
Department of Military Affairs and Public Safety

Earl Ray Tomblin, Governor

STATE FIRE MARSHAL’S OFFICE
1207 Quarrier St, 2nd Floor
Charleston, WV 25301
Phone: (304) 558-2191
Fax: (304) 556-2053

September 17, 2013

Denny Rhodes
West Virginia Legislature
Performance, Evaluation and Research Division
Building 1, Room W-314
1900 Kanawha Blvd., East
Charleston, WV 25305-0610

Dear Mr. Rhodes,

I have reviewed the Sunrise Application for the regulation of Heating, Ventilation, Air Conditioning (HVAC)/Fire Damper Technicians. In response, I offer the following statements:

1. In my opinion, the proposed regulation/statute changes are indeed necessary to protect the safety and welfare of the public. In particular, the installation and maintenance of “fire dampers” are a critical component of any building engineered to minimize the spread of smoke and or flame through the mechanical spaces and ductwork. In order for any particular “fire wall” or “smoke wall” to be effective, all penetrations through the particular wall MUST be protected in accordance with applicable NFPA and ANSI standards. I strongly agree in that the licensure of the fire damper technicians would benefit not only the general public in the form of regulation and oversight, but the trades professionals as well in the form of accreditation and stature gained from governmental regulation and standards.

2. In lieu of deciding which agency this program should fall under, I propose a similar arrangement similar to what was accomplished in the drafting of the Supervision of Plumbers and Fire Protection Workers a few years ago. It was then decided that by splitting the single group into two distinctive groups, regulated by the Division of Labor (Plumbers) and the State Fire Marshal (Sprinkler Fitters), that both agencies could better administer their own programs where they had expertise. In retrospect, I must admit that this decision, as far as this office is concerned, was and continues to be a wise and prudent one. I think that this proposal is very similar in nature whereas this office maintains the expertise in fire protection (Fire/Smoke Dampers) and is the lead state agency on all matters fire protection related. The general oversight of all other HVAC technicians could be left to the Division of Labor as they are the state agency with general contractor expertise.

3. Overall projected costs associated with the start-up of a new licensing program, if the program was split as proposed, would be minimal at best. There does exist the possibility of adding one additional data entry clerical position and associated computer equipment and filing, however, I feel the a true and accurate projection would be premature without knowing potential number of licensees that would fall under both categories. In giving a conservative estimate, I would have to offer a number in the range of $50,000.00 for one (1) additional FTE and associate costs. Secondly, I agree with the proposed range of license fees as it falls within the established fees schedules of other trades professionals already regulated.
4. I understand it is not the intent or function of PERD to make suggestions on splitting the proposed program, only to recommend whether or not it would benefit the public safety and welfare. Regardless, I would like to offer a more detailed proposal to split the program between this office and the Division of Labor. First, a statutory mechanism already exists to include the Fire/Smoke Damper Technicians into the Fire Marshal's Office. Chapter 29, Article 3D could be expanded to include this group of "Fire Protection Workers", thereby creating the means to revise the existing Legislative Rule to include this group (103CSR3). I am not certain, but I believe the Division of Labor has existing statutes and rules that could be modified, but if not, could be added to include the general HVAC technicians under their supervision.

5. Finally, as I am operating as the "Acting" State Fire Marshal, I feel it would be inappropriate for me to fully commit this agency to any additional licensure program without the direct input from both the State Fire Commission and the Cabinet Secretary of DMAPS. Hopefully, this situation will be resolved in the near future.

If I can be of further assistance, please do not hesitate to contact me.

Respectfully,

Anthony W. Carrico  
Acting State Fire Marshal
Appendix C
Correspondence From the Division of Labor

WEST VIRGINIA DIVISION OF LABOR
749-B Building 6, Capitol Complex • Charleston, West Virginia 25305
Phone (304) 558-7890 • Fax (304) 558-2273
www.wvlabor.org

EARL RAY TOMLIN
Governor

DAVID W. MULLINS
Commissioner

October 10, 2013

Denny Rhodes
West Virginia Legislature
Building 1, Room W-314
Charleston, WV 25305-0610

Dear Mr. Rhodes:

The Division of Labor is in receipt of your questions regarding the Sunrise Application for the proposed regulation of Heating, Ventilation, Air Conditioning, (HVAC), Fire Damper Technicians.

Your questions are as follows:

1. In our opinion, is the proposed regulation of HVAC/Fire Damper Technicians necessary to protect the health, safety or welfare of the public?
   a. We believe that anytime critical equipment is installed that the level of competency, work experience and/or training of the HVAC/Fire Damper Technicians is absolutely necessary to protect the health, safety and/or welfare of the public.

2. What is our opinion on establishing regulation of HVAC/Fire Damper Technicians under the purview of your agency?
   a. Although our office has limited knowledge on the Fire Protection Codes and Rules, we do have a number of people around the state that have access to locations where HVAC systems are installed and can check for compliance.

3. What would be the estimated administrative costs to our agency if it was responsible for regulation of HVAC/Fire Damper Technicians? Would the applicant’s anticipated annual fees of $35 for Technicians in Training, $50 for Journeypersons and $75 for Master Technicians cover these costs?
   a. At this time, the estimated administrative cost for our agency to regulate the HVAC/Fire Damper Technicians would be approximately $100,000.00 covering
three (3) full-time employees. It is our hope that the applicant’s fees would absorb most of the cost to our agency.

4. Provide any other information that we feel would be beneficial to your review.
   a. To include in the Proposed Regulation an Annual Renewal fee; late fees and grandfathering set by statute.

We will make every effort to have more precise information prior to the October Legislative Interims.

Sincerely,

David W. Mullins
Commissioner
November 15, 2013

Tina Baker, Research Analyst
West Virginia Legislative Auditor’s Office
Building I Room: W 314
1900 Kanawha Boulevard East
Charleston WV 25305-0610

Dear Ms. Baker:

I am writing in response to the Legislative Auditor Recommendation report regarding our Sunrise application for the licensure of HVAC and Fire Damper technicians which I received this morning.

While we have not had time to carefully read the entire report I can say that we agree with the majority of statements made.

We appreciate the hard work of your office to review our application and conduct your own assessment.

We have some questions regarding the difference between certification and licensure, the application of a grandfather clause, and splitting the oversight between two agencies. However, we feel these issues can be discussed further with both industry representatives and the legislature to hopefully find consensus.

While we wish to reserve the right to make additional comments upon further review I think overall we would like to see the process move forward.

Again, we appreciate the time and professionalism your office devoted to this task.

Sincerely,

Steve White

cc: Randy Gombos, Steve Ellis, Bobby Ina