

# Preliminary Evaluation of the State Board of Stationary Engineers

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**Recommendations:      Require a Follow-up Report by October 1, 2012**

**Defer Decision on Whether to Waive from  
Full Evaluation Until Submission of the Required  
Report**

## **The Sunset Review Process**

This evaluation was undertaken under the auspices of the Maryland Program Evaluation Act (§ 8-401 *et seq.* of the State Government Article), which establishes a process better known as “sunset review” because most of the entities subject to review are also subject to termination. Since 1978, the Department of Legislative Services (DLS) has evaluated about 70 State entities according to a rotating statutory schedule as part of sunset review. The review process begins with a preliminary evaluation conducted on behalf of the Legislative Policy Committee (LPC). Based on the preliminary evaluation, LPC decides whether to waive an entity from further (or full) evaluation. If further evaluation is waived, legislation to reauthorize the entity typically is enacted. Otherwise, a full evaluation typically is undertaken the following year.

The State Board of Stationary Engineers was established as a statewide licensing board under Chapter 613 of 2005. The statewide board replaced the Board of Examining Engineers, which was established to regulate stationary engineers in Baltimore City, but also provided licenses to stationary engineers throughout the State, usually for insurance purposes.

DLS originally recommended the establishment of a statewide board, with several specific attributes, in its *Sunset Review: Evaluation of Boiler Safety in Maryland – Review of the Board of Boiler Rules and the Board of Examining Engineers* in October 2001. Due to concerns conveyed by the Department of Labor, Licensing, and Regulation (DLLR), the General Assembly declined to establish a new statewide board in 2002 and instead required the board and DLLR to report by October 1, 2003, on the proposed structure and implementation of a statewide stationary engineers licensing program. The authority governing the existing board, under the Public Local Laws of Baltimore City, was extended to July 1, 2005.

After the receipt of the *Report on the Proposed Structure and Implementation of a Statewide Stationary Engineering Licensing Program* in October 2003, the General Assembly considered but did not act upon a bill to establish a statewide licensing program in 2004. During the following session, the General Assembly extended the authority of the existing board by

three more months (to October 1, 2005), established a new statewide board effective October 1, 2005, provided for its termination on July 1, 2014, and required the new board to be evaluated as part of the Maryland Program Evaluation Act.

In conducting this preliminary evaluation, DLS staff interviewed board members and staff, licensees, and representatives of industry groups; reviewed State statutes and regulations pertaining to the State boiler industry; attended two board meetings; reviewed board meeting minutes; and visited the board's office. In addition, DLS staff analyzed data relating to the board's administration of licenses, complaints, and finances.

The State Board of Stationary Engineers reviewed a draft of this preliminary evaluation and provided the written comments attached at the end of this document as **Appendix 2**. Appropriate factual corrections and clarifications have been made throughout the document; therefore, references in board comments may not reflect the final version of the report.

## **Maryland's System of Boiler Regulation**

Maryland's system of boiler regulation is split between two divisions of DLLR: (1) the Division of Occupational and Professional Licensing, which houses the State Board of Stationary Engineers; and (2) the Division of Labor and Industry, which houses the Safety Inspection Boiler and Pressure Vessel Unit (BIU) and the Board of Boiler Rules. BIU oversees the inspection of boilers and pressure vessels and investigates any boiler and pressure vessel accidents. The Board of Boiler Rules recommends regulations for safe construction, installation, use, maintenance, repair, and inspection of boilers and pressure vessels. The State Board of Stationary Engineers has regulatory authority over all of the State's stationary engineers, who operate and maintain boilers and pressure vessels.

## **Evidence Points to a Need for More Stationary Engineers in Maryland**

According to the U.S. Department of Labor Bureau of Labor Statistics (BLS), most large buildings and facilities have large heating, ventilation, and air conditioning systems. Industrial plants frequently possess additional facilities to provide power, steam, or other services. Stationary engineers and boiler operators control and maintain these systems.

Stationary engineer and boiler operator jobs are concentrated in heavily populated areas where large industrial and commercial establishments are located. Employment opportunities for stationary engineers nationwide are expected to be less favorable than for other occupations. Due to the emergence of increasingly complex systems, the employment landscape is expected to prove more difficult for newer entrants to the occupational field, especially those who lack apprenticeship experience or other training.

Employment prospects for stationary engineers may be brighter in Maryland, however. Anecdotal reports from industry observers cite a need for more qualified stationary engineers to enter the field, especially in rural areas of the State. These reports are supported by official estimates; while approximately 450 locations in the State require stationary engineers, approximately 25% to 30% of the locations do not have one. Therefore, assuming full compliance with State law, there should be approximately 112 to 135 openings for stationary engineers statewide.

Anecdotal reports also suggest that there is a particular need for younger workers to enter the field. These reports are supported by Exhibit 4, which appears later in this report. In June 2011, 4,649 individuals held Grade 1 or 2 licenses, which require the highest levels of education and experience, only 1,465 individuals held Grade 3 or 4 licenses, and only 53 individuals held grade 5 licenses.

Given the shortage of new stationary engineers, as well as the increasing complexity of facility systems and the State's licensing requirements, many State industry observers recognize the importance of enhanced training and apprenticeship opportunities for stationary engineers. As a result, the board and the Division of Occupational and Professional Licensing have begun investigating ways to boost apprenticeship opportunities, enhance awareness of the industry among potential workers, and ease the costs of preparing for licensing examinations.

## **Establishment of the State Board of Stationary Engineers**

As discussed previously, the State Board of Stationary Engineers was established in 2005 to create "a licensing program to ensure that qualified individuals provide stationary engineer services to (1) protect the public; (2) provide for the safe operation of power plants, plants of machinery, and boilers; and (3) promote high professional standards." Under statute, "[p]rovide stationary engineer services" means to oversee the operation of a power plant, plant of machinery, or boiler, each generating pressure of more than 15 psi and operating at 30 or more horsepower," but "does not include overseeing the operation of a heating boiler."

### **Board Membership**

The board consists of eight members, including three stationary engineers, a representative from the boiler manufacture and design industry, a boiler owner, two consumer members, and the chief boiler inspector, or the chief's designee, who serves as an *ex officio*, nonvoting member of the board. Each engineer member must have at least 10 years practical experience in running steam engines, boilers, and appliances pertaining to stationary and portable engines and must hold a State license at all times when they serve. In addition, at least two members of the board must hold a Grade 1 stationary engineer license. The two consumer members may not hold a stationary engineer's license, or otherwise be subject to regulation by the board, and may not have had within one year before appointment a financial interest in or have received compensation from a person regulated by the board. Members are appointed to

three-year staggered terms. Members receive no salary but are reimbursed for travel expenses to and from the board's monthly meetings.

As currently appointed, the board consists of six members, with two vacancies. The current board members include two stationary engineer members, two consumer members, a boiler manufacturer, and a deputy boiler inspector recently established as the designee of the chief boiler inspector. The board is missing a stationary engineer and a boiler owner.

The board must hold at least two meetings per year, including at least two joint meetings with the Board of Boiler Rules. From May 2010 through August 2011, the board met on its own on 13 occasions. The board cancelled 2 meetings during that period due to the absence of a quorum, had three members attend 3 of the meetings, and had four members attend the other 10 meetings. The board also had a joint meeting with the Board of Boiler Rules in August 2011; this meeting was the first meeting between the two boards since the State Board of Stationary Engineers was established in 2005.

### **Statutory and Other Changes Affecting the Board Since the 2001 Full Evaluation of the Board of Examining Engineers**

Several substantive statutory changes affected board operations after its predecessor board – the Board of Examining Engineers – was evaluated in 2001. As described above, although the 2001 evaluation recommended the creation of a new statewide board, the General Assembly did not create the State Board of Stationary Engineers until the enactment of Chapter 613 of 2005.

Subsequently, Chapter 631 of 2006 allowed individuals who had provided stationary engineering services to qualify for a stationary engineer's license between June 1, 2006, and May 31, 2007, without passing an examination. In 2008, the General Assembly adopted Chapters 475 and 476, and established a licensing exemption for individuals who provide stationary engineering services at a resource recovery facility and are certified by the Maryland Department of the Environment. The General Assembly adopted another exemption that year in Chapters 432 and 433 by establishing that a licensed stationary engineer is not required to oversee the operation of a heating boiler.<sup>1</sup> The new laws also clarified that the Maryland Stationary Engineers Act and regulations adopted under the Act may not supersede the authority of the Board of Boiler Rules to implement boiler and pressure vessel safety standards.

**Exhibit 1** summarizes legislative changes affecting the board since the 2001 evaluation of the Board of Examining Engineers.

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<sup>1</sup>The heating boiler exemption exists primarily because of cost concerns expressed by schools. Although a 1996 valve problem at Hazelwood Elementary-Middle School in Baltimore City resulted in legislation attention at the time, the board later determined that the exemption boilers could be operated safely without the attention of a stationary engineer. Some industry observers interviewed for this evaluation remain concerned about the exemption and the risks associated with having janitors operating boilers, and believe the exemption should be repealed.

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**Exhibit 1**
**Major Legislative Changes Since Evaluation of the Predecessor Board**

<u>Year</u>	<u>Chapter</u>	<u>Change</u>
2002	316	<p>Extends the termination date for the Board of Examining Engineers from July 1, 2003, to July 1, 2005.</p> <p>Requires the board and DLLR to report to the Senate Education, Health, and Environmental Affairs Committee and the House Economic Matters Committee, by October 1, 2003, on the proposed structure and implementation of a statewide stationary engineers licensing program.</p>
2005	613	<p>The Maryland Stationary Engineers Act replaces the Board of Examining Engineers that regulated examining engineers in Baltimore City with a statewide Board of Stationary Engineers effective October 1, 2005, and extends authority for the existing board to October 1, 2005.</p> <p>Provides for board membership and sets the terms of the new members; establishes responsibilities of and procedures for the new board; requires stationary engineers to be licensed under one of five classes of licensure; establishes requirements for licensure as an stationary engineer, including examination of applicants; authorizes the board to contract with a testing service for examinations; requires the board to issue licenses to qualified applicants and grandfathers existing licensees; establishes biennial license renewal requirements and requirements for reinstatement of licenses that have expired or been revoked; establishes fees for specified activities and authorizes the board to set other fees; authorizes the board to investigate complaints, issue subpoenas, and enforce any provision of the bill by injunction; provides licensees a right to a hearing before the board; authorizes the board to deny a license to any applicant, reprimand any licensee, or suspend or revoke a license in specified circumstances; authorizes the imposition of civil penalties for any violation of the bill as well as in addition to or instead of taking disciplinary action again a licensee; requires all penalties collected to be paid to the general fund; and establishes criminal penalties.</p>
2006	631	<p>Requires the State board, between June 1, 2006, and May 31, 2007, to waive any examination requirement under the Maryland Stationary Engineers Act and issue an appropriate grade of stationary engineer's license to an applicant who has lawfully provided stationary engineering services based on the applicant's record of service.</p> <p>Beginning June 1, 2007, continues to authorize an applicant to qualify based on a record of service, but only if the applicant takes an examination. Allows some work experience to be fulfilled by education.</p>

<u>Year</u>	<u>Chapter</u>	<u>Change</u>
2008	475/476	Establishes that an individual who provides stationary engineer services at a resource recovery facility does not require a license from the State Board of Stationary Engineers if otherwise certified by the Maryland Department of the Environment.
2008	432/433	Establishes that a licensed stationary engineer is not required to oversee the operation of a heating boiler.  Clarifies that the Maryland Stationary Engineers Act and regulations adopted under the Act may not supersede the authority of the Board of Boiler Rules to implement boiler and pressure vessel safety standards.
2009	731	Exempts stationary engineers licensed in Virginia and New Jersey from State examination requirements if they have relocated to the State due to a family member's reassignment under the Base Realignment and Closure (BRAC) process.

Source: Laws of Maryland

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## **The Board Oversees Robust Licensing Activity**

The primary purpose of the board is to license individuals who provide stationary engineering services. The board issues five grades of licenses; the grades dictate the size of the boiler that an engineer can oversee, as follows:

- Grade 1 licensees can oversee the operation of a boiler that can operate at 500 or more horsepower;
- Grade 2 licensees can oversee the operation of a boiler that can operate at 300 to 499 horsepower;
- Grade 3 licensees can oversee the operation of a boiler that can operate at 100 to 299 horsepower;
- Grade 4 licensees can oversee the operation of a boiler that can operate at 30 to 99 horsepower; and
- Grade 5 licensees can oversee the operation of a boiler than can operate at 30 to 99 horsepower and is located in a building not for public use.

To qualify for any stationary engineer's license, an applicant must pass an examination. The examination requirement for any license may be waived under certain conditions if the applicant holds an active license in good standing in another state and otherwise meets Maryland's licensing requirements. Waiver of examination conditions are less stringent for

Virginia and New Jersey stationary engineers who relocate to the State due to a family member's reassignment under BRAC.

Examinations are limited to the subject matter applicable to the specific license. The board decides on the appropriate subject matter for the examination but may contract with an outside testing service to administer the examination. Currently, the board contracts with PSI Examination Services, which offers examinations at five locations in the State. Depending on the location, examinations are given on a daily or weekly basis.

Before taking an examination for any grade, an applicant must qualify based on the applicant's education, experience, or some combination of the two. The board may also allow an applicant to take a license examination if the board determines that the applicant's work experience is substantially equivalent to the work experience requirements of a licensee for the license level requested by the applicant. An applicant may receive no more than two years of work experience credit if the board determines that the work experience is acquired through study or training.

**Exhibit 2** describes, for each license grade, the qualifications that a candidate for licensure must meet before taking the licensing exam. As shown below, a candidate typically has multiple pathways to qualify for licensure.

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## **Exhibit 2**

### **Qualifications for Stationary Engineer Licenses**

#### **Qualifications**

#### **Grade 1**

Five years experience as an active Grade 2 stationary engineer under a Grade 1 stationary engineer, which may include one year of credit for six credit hours of classes or continuing education in boiler safety or operations, and one year of credit for holding a license as a master plumber; a master heating, ventilation, air conditioning, and refrigeration contractor; or a master restricted heating, ventilation and air conditioning contractor;

a four-year degree in mechanical engineering;

a professional engineer's license, including one year of experience as a professional engineer and one year of experience as a Grade 2 stationary engineer under a Grade 1 stationary engineer; or

a valid marine engineer's certificate or a chief petty officer's certificate from the U.S. Navy with documentation of steam boiler engineer training.

**Qualifications**

- Grade 2** Thirty-six months experience as a Grade 3 stationary engineer under a Grade 2 or 1 stationary engineer, which may include one year of credit for six credit hours of classes or continuing education in boiler safety or operations, and one year of credit for holding a license as a master plumber; a master heating, ventilation, air conditioning, and refrigeration contractor; or a master restricted heating, ventilation and air conditioning contractor;
- a four-year degree in mechanical engineering;
- a professional engineer's license, including six months of experience as a Grade 3, 4, or 5 stationary engineer; or
- a valid marine engineer's certificate or a chief petty officer's certificate from the U.S. Navy.
- Grade 3** Two years experience as a Grade 4 or 5 stationary engineer;
- one year of experience as a Grade 4 or 5 stationary engineer and six credit hours or continuing education units of classes in boiler operations or safety; or
- a valid marine engineer's certificate or a chief petty officer's certificate from the U.S. Navy.
- Grade 4** Six months experience as a Grade 5 stationary engineer; or
- three credit hours or continuing education units of classes in boiler operations or safety.
- Grade 5** A high school or graduate equivalence diploma.

Source: Maryland Annotated Code, Business Occupations and Professions Article

As **Exhibit 3** demonstrates, the application and renewal fees associated with each class of license range from a low of \$35 for Grade 4 and 5 licenses to a high of \$65 for Grade 1 licenses.

**Exhibit 3**  
**Schedule of Fees**

<b><u>Type of License</u></b>	<b><u>Issuance and Renewal Fee</u></b>	<b><u>Application and Examination Fee</u></b>
Grade 1	\$65	\$25 application fee plus \$65 examination fee
Grade 2 or 3	\$50	\$25 application fee plus \$65 examination fee
Grade 4 or 5	\$35	\$25 application fee plus \$65 examination fee

Source: Annotated Code of Maryland, State Board of Stationary Engineers

State licenses are issued for two years and may be renewed. An applicant for a stationary engineer's license or a licensee seeking to renew a stationary engineer's license may submit the application or renewal form online at DLLR's website.

As **Exhibit 4** shows, approximately 6,167 individuals had licenses in June 2011.

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**Exhibit 4**  
**Total Licenses**  
**State Board of Stationary Engineers**  
**Fiscal 2007-2011**

<u>Type of License</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
First Grade Engineer	3,250	3,717	3,680	3,564	3,470
Second Grade Engineer	1,198	1,284	1,270	1,217	1,179
Third Grade Engineer	630	1,003	1,021	958	997
Fourth Grade Engineer	52	376	431	396	468
Fifth Grade Engineer	2	7	17	32	53
<b>Total</b>	<b>5,132</b>	<b>6,387</b>	<b>6,419</b>	<b>6,167</b>	<b>6,167</b>

Note: License numbers reflect totals reported by DLLR's Division of Occupational and Professional Licensing in May or June of each year.

Source: Department of Labor, Licensing, and Regulation; Division of Occupational and Professional Licensing

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As shown in Exhibit 4, there are far fewer Grade 3, 4, and 5 stationary engineers than Grade 1 and 2 stationary engineers. Part of that discrepancy is attributable to the fact that, under Chapter 631 of 2006, many individuals who had provided stationary engineering services before State licensing was established were able to qualify on their record of service, without taking an examination, between June 1, 2006, and May 31, 2007. This also accounts for the sudden increase in licenses from fiscal 2007 to 2008. Since the beginning of fiscal 2008, the ratio of more experienced stationary engineers to less experienced engineers declined slightly each year.

The annual decline in the number of Grade 1 and 2 engineers, however, also reveals that experienced stationary engineers are exiting the profession more quickly than less experienced engineers are qualifying to perform more complex tasks. With 112 to 135 openings for stationary engineers statewide, the industry needs to not only recruit more young workers to enter the profession, but also ensure that the young workers can readily gain the skills and experience to replace retiring engineers.

The board and the Division of Occupational and Professional Licensing are exploring ways to address the need for more stationary engineers and better training. The board has begun investigating ways to boost apprenticeship opportunities, as there have been no active registered

apprenticeship training programs in the State for more than 10 years.<sup>2</sup> The board also recently finished publishing a list of frequently asked questions on its website and continues to discuss other ways to enhance awareness and understanding of the industry. Finally, the Division of Occupational and Professional Licensing has also expressed concerns about the costs of preparing for licensing examinations. According to anecdotal evidence, stationary engineering course providers do not use the materials upon which PSI bases its exams. As a result, individuals who study for exams need to purchase a large number of books and study materials, and the total cost for preparing and sitting for an exam can become significant. Consolidating and aligning the materials needed for each grade exam may mitigate a barrier to entry for some individuals.

## **Complaints and Penalties: Under Construction**

Other than licensing, the primary function of the board should be to investigate violations of the stationary engineer licensing code, but procedures for enforcing the code are still being developed.

### **Penalties**

The board may deny a license to an applicant, revoke or suspend a license, issue a reprimand, and impose a civil penalty of up to \$5,000 for any violation of the stationary engineers licensing statute or regulations.

Certain violations of the stationary engineer licensing provisions constitute criminal violations, and the board can recommend these cases for criminal prosecution. A person who practices without a license, uses or attempts to use the license of another individual, impersonates another individual who holds a license, or allows another individual to provide stationary engineering services without an appropriate license is guilty of a misdemeanor and on conviction is subject to a fine of up to \$1,000, imprisonment for up to six months, or both. On a second or subsequent violation, a person is subject to a fine of up to \$5,000, imprisonment for up to two years, or both.

Due to a very low volume of complaints since the board's inception, the board has not issued any penalties.

### **Complaints**

Until recently, the State has not played a proactive enforcement role. Although the board has long been aware of a significant number of systems that lacked the services of a stationary

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<sup>2</sup>Local 99 of the International Union of Operating Engineers, which is located in the District of Columbia but provides representation for most unionized stationary engineers in Maryland, offers a four-year apprenticeship training program that is recognized and registered in the District of Columbia.

engineer, the State has not dedicated the resources to send investigators to enforce the stationary engineer licensing statute. Since fiscal 2007, the board has received three or fewer complaints in each fiscal year.

Recently, however, as a result of collaboration among the State Board of Stationary Engineers, the Board of Boiler Rules, and BIU, BIU has begun checking whether systems that require the services of a stationary engineer are in compliance with the stationary engineer licensing law. If a system is not in compliance, BIU sends a complaint to the State Board of Stationary Engineers. Because most boiler inspections are now performed by third-party contractors, however, and because there is no current system for requiring third-party inspectors to enforce the stationary engineer licensing law, many violators may continue to evade detection. BIU, the Board of Boiler Rules, and the State Board of Stationary Engineers are currently investigating how to have third-party inspections ensure compliance with the stationary engineer licensing law as well.<sup>3</sup> With approximately 112 to 135 systems in need of stationary engineering services throughout the State, however, the Division of Occupational and Professional Licensing anticipates a significant rise in complaints as BIU, and eventually third-party inspectors, continue to cite locations that do not comply with the law.

When the board receives a complaint, the administrative aide sends acknowledgment letters to the complainant and the respondent. If possible, staff attempts to work out a mutually agreeable solution informally.

If a complaint is not resolved, staff presents the complaint to the board's complaint committee and provides the committee with a recommendation on how to proceed. The committee consists of two members of the board and meets after each full board meeting. If further investigation of a complaint is required, a Division of Occupational and Professional Licensing investigator conducts an investigation. Ultimately, the committee may recommend that the board pursue further action or close a complaint based on actions already taken. If the board accepts a close-out recommendation, the administrative aide sends a letter to the complainant with a copy to the respondent. An assistant Attorney General and senior official from the division also attend all board meetings to assist in the analysis of complaints and the rendering of board decisions.

## **Budget and Personnel**

The board operates with direct assistance from four DLLR staff persons, none of whom works exclusively for the board. One deputy commissioner provides policy direction and management for all boards and commissions within the division. He has oversight over operational support services such as personnel services, information technology, budget and procurement, and legislative affairs. Until three years ago, an executive director responsible for a total of four boards and commissions oversaw and assisted with board operations. The executive director had access to division investigators to collect information about complaints.

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<sup>3</sup>The chief boiler inspector's designee on the State Board of Stationary Engineers has helped serve as a bridge between the Board of Boiler Rules, BIU, and the State Board of Stationary Engineers. The designee and others are engaged in efforts to improve data sharing and recordation so that all regulatory entities have an improved sense of where boiler safety improvements are needed.

However, the executive director position became vacant in February 2009 and remained vacant until it was eliminated as part of cost containment measures.

DLLR subsequently created the Office of Home and Mechanical Services within the Division of Occupational and Professional Licensing, with an assistant commissioner who directly oversees board operations while also providing oversight for certain other occupational and professional licensing boards. An assistant Attorney General provides legal counsel for the State Board of Stationary Engineers as well as four other boards and commissions within the division. The board also has a part-time administrative secretary to support its day-to-day functions, although the secretary is not budgeted to the board. The board had an administrative aide budgeted to it through fiscal 2009 but lost it due to general fund cost containment; the board now shares the administrative aide who is assigned to the State Board of Master Electricians. The board also had a full-time clerical aide to assist with applications and deposits in fiscal 2008. After the individual resigned in early fiscal 2009, the division lost that contractual position to cost containment.

The Division of Occupational and Professional Licensing hired a full-time investigator to support its general funded boards in 2009; for an extended period prior to the hiring, the division had been forced to rely on the assistance of other DLLR investigators to investigate complaints when they were available. The division advises that, since losing the executive director position due to cost containment, support for board operations has been strained.

The Division of Labor and Industry's BIU employs nearly all of the State's experts in boiler safety. Although a deputy boiler inspector acting as the designee of the chief boiler inspector provides a high level of support to the board in the role of the board's *ex officio* member, the Division of Occupational and Professional Licensing does not employ its own expert in boiler safety.

### **Revenues Exceed the Cost of Regulation**

The General Assembly has a policy that regulatory bodies should not charge licensees significantly more than necessary to maintain operations and cover the costs associated with regulation.

**Exhibit 5** shows much higher levels of revenue than expenditures from fiscal 2007 through projected fiscal 2012. Revenue surged in fiscal 2007 due to the receipt of one-time application fees from individuals who, between June 1, 2006, and May 31, 2007, were able to become licensed based on experience alone. Since the review and approval of the large number of applications resulted in the majority of approved applicants paying for their licenses in the first half of fiscal 2008, revenue increased even more in fiscal 2008. Revenues are expected to remain consistently higher in even-numbered fiscal years as those licensees continue to renew their two-year licenses in even-numbered years.

Even in odd-numbered years after fiscal 2008, however, revenues still have outpaced expenditures. As mentioned above, the division and the board have until recently not taken an

aggressive approach to enforcing the licensing law. The board's lack of expenditures relative to revenues may reflect minimal spending on enforcement. If the board and the division expand their recent efforts to enforce the licensing law more aggressively by hiring more staff, board expenditures could approximate board revenues more closely.

The low levels of expenditures in fiscal 2011 and 2012 are also partly attributable to the fact that the board's budget no longer reflects any direct personnel costs. As discussed above, the board's part-time secretary is budgeted to the State Board of Master Electricians.

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**Exhibit 5**  
**Fiscal History of State Board of Stationary Engineers**  
**Fiscal 2007-2012**

	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>Projected FY 2012**</u>
<b>Total Revenues</b>	<b>\$248,113</b>	<b>\$288,719</b>	<b>\$185,100</b>	<b>\$225,509</b>	<b>\$179,695</b>	<b>\$220,000</b>
<b>Total Costs</b>	<b>\$139,410</b>	<b>\$173,983</b>	<b>\$141,801</b>	<b>\$129,776</b>	<b>\$92,798</b>	<b>\$66,546</b>
Direct Costs	109,088	149,026	120,202	111,485	78,114	45,546
O&P Allocation*	30,322	--	--	--	--	--
Legal Costs		11,016	9,429	7,392	8,341	9,000
DLLR Indirect	--	13,941	12,170	10,899	6,343	12,000
<b>Annual Surplus/(Gap)</b>	<b>\$108,703</b>	<b>\$114,736</b>	<b>\$43,299</b>	<b>\$95,733</b>	<b>\$86,897</b>	<b>\$153,454</b>
Biennial Surplus (Gap)		223,439		139,032		240,351

O&P: Occupational and Professional Licensing

\* DLLR no longer makes this allocation for general funded boards as of fiscal 2009.

\*\* DLLR's direct appropriation for the board in fiscal 2012 is low because the shared board secretary is budgeted with the electrical board and will be adjusted for later in the fiscal year. Legal and indirect costs are an approximation; DLLR only reported that the costs will fall within the range of numbers for fiscal 2008 through 2010.

Source: Department of Labor, Licensing, and Regulation; Division of Occupational and Professional Licensing

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## **Recommendations**

The State Board of Stationary Engineers and all associated regulations and provisions will terminate as of July 1, 2014, unless reauthorized. The board serves an important role in facilitating the licensing of competent contractors in an increasingly specialized industry, thereby protecting the citizens of Maryland from the unsafe operation of boilers, pressure vessels, and other systems.

As demonstrated above, while the board has become a more effective regulatory entity in recent years, DLS concludes that it requires additional time to demonstrate whether the changes it has begun to make will bring the board more in line with its statutory obligations. The board has not had the ability to proactively address noncompliance with the licensing requirement and has not been routinely coordinating regulation of boiler safety with the Board of Boiler Rules and BIU. More recently, the board has been exploring approaches to enhance enforcement of the licensing statute and has initiated meetings with the Board of Boiler Rules. It has also begun exploring the feasibility of initiatives, such as an apprenticeship program, to address the severe shortage of new stationary engineers.

**In sum, it is too early to determine whether these efforts will bear fruit, prompting DLS to defer its recommendation for one year.** In doing so, DLS recognizes that addressing the issues identified in this report may be complicated because the separation of the two boards remains an obstacle to the coordinated regulation of boiler safety in the State and because both boards have vacant seats and frequent attendance problems.<sup>4</sup> The State Board of Stationary Engineers is also unique in that a different division within DLLR houses the vast majority of State staff expertise on the subject of boiler safety. Although the board benefits from having eager and active members, it is unclear whether the current regulatory structure, if fully embraced, affords it sufficient resources to carry out its mission effectively.

**In the intervening year, DLS recommends that the State Board of Stationary Engineers, in conjunction with the Board of Boiler Rules and the Department of Labor, Licensing, and Regulation, make full use of the existing statutory framework for regulation of boilers and pressure vessels by:**

- **enhancing efforts to fill vacant seats on both boards;**
- **meeting regularly with a quorum necessary to conduct official business;**
- **holding joint meetings between the two boards, including joint meetings to consider ways to boost board membership and improve the State's regulatory structure;**
- **enhancing its enforcement of the stationary engineer licensing statute with more active and effective enforcement strategies; and**

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<sup>4</sup>The board had three vacancies until October of 2011, when a representative of the boiler manufacture and design industry who also serves on the Board of Boiler Rules was appointed. The Board of Boiler Rules has three vacancies and meets infrequently. Two of the vacant boiler rules seats also involve boiler expertise.

- **exploring initiatives designed to increase the number of new entrants into the stationary engineer trade.**

**By October 1, 2012, the three entities should report to DLS on the following developments between the date of this report and the delivery of the required report to DLS:**

- **the frequency with which the State Board of Stationary Engineers and the Board of Boiler Rules have been able to meet independently with a quorum necessary to conduct official business;**
- **the frequency with which the two boards have met to coordinate enforcement of boiler safety;**
- **the extent to which the anticipated increase in the volume of complaints handled by the State Board of Stationary Engineers has been realized and whether the complaint volume has resulted in increased expenditures for the board; and**
- **final fiscal 2012 revenues and expenditures for the State Board of Stationary Engineers; fiscal 2012 licensing totals by grade; and projected revenues, expenditures, and licensing numbers for fiscal 2013.**

**Given the information provided in the report, DLLR may wish to articulate a position on the effectiveness of maintaining the current system of having two boards regulate the boiler industry or whether the two boards should be consolidated.**

**Based on this report, DLS will recommend to LPC in 2012 whether to waive the board from full evaluation and, if waived, recommend a new termination date for the board. If the report is not submitted, DLS will automatically conduct a full evaluation of the board during the 2013 interim. If a full evaluation is required, the evaluation should:**

- **investigate the practicality of the current system of having two boards regulate the boiler industry: one to address occupational issues and one to address equipment problems;**
- **evaluate the board's efforts to improve its coordination with the Board of Boiler Rules;**
- **consider how to enable a more appropriate balance between the board's revenues and the board's expenditures;**
- **examine methods of ensuring that the board has enough members to successfully discharge its responsibilities; and**

- **consider ways of attracting more new stationary engineers to the industry, including the establishment of an apprenticeship program.**



# **Appendix 1. Members of the State Board of Stationary Engineers**

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## **Industry Representatives<sup>5</sup>**

Kevin McLeod, Stationary Engineer

Gregory Restivo, Stationary Engineer

Keith Smith, Deputy Boiler Inspector, Designee of Chief Boiler Inspector

Brian Wodka, Boiler Manufacture and Design Industry

## **Consumer Members**

Harold Norris, Chair

Lorretta Johnson

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<sup>5</sup>There are also seats for another stationary engineer and a boiler owner; both are currently vacant.



**Appendix 2. Written Comments of the  
State Board of Stationary Engineers**

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December 2, 2011

Michael Rubenstein  
Principal Policy Analyst  
Office of Policy Analysis  
Department of Legislative Services  
90 State Circle  
Annapolis, Maryland 21401-1991

Dear Mr. Rubenstein,

The Department of Labor, Licensing and Regulation (DLLR) and the Board of Stationary Engineers (Board) have received the draft of the preliminary evaluation of the Board conducted by the Department of Legislative Services pursuant to the Maryland Program Evaluation Act. We appreciate the time and attention that was spent reviewing the Board's operations.

The evaluation defers a decision as to whether the Board will receive a full evaluation pending the receipt of a report from DLLR and the Board addressing several questions outlined in the preliminary evaluation. While the progress that the Board has made since its creation is acknowledged, the evaluation concludes that it would be premature to make a definitive recommendation at this time. We view the listed expectations and items for report by October 1, 2012 to be reasonable and appropriate given the Board's statutory mandate. DLLR and the two Boards cited will work in concert to address these issues and report accordingly.

We noted no factual corrections necessary in the draft. We would like to express our appreciation for the thoroughness and professionalism of DLS staff in the conduct of the evaluation. We look forward to working with the General Assembly and legislative staff in addressing issues that were raised in the preliminary evaluation as well as future issues which may arise. If your office should require additional information, please do not hesitate to contact me (410-230-6226) or Assistant Commissioner Steve Smitson (410-230-6269).

Sincerely,

Harry Loleas  
Deputy Commissioner

cc: Alexander M. Sanchez, Secretary  
Stanley J. Botts, Commissioner  
Steven Smitson, Assistant Commissioner  
Chairman and Members, Board of Stationary Engineers  
Jill Porter, Legislative Director  
Karl S. Aro

TTY USERS, CALL VIA THE MARYLAND RELAY SERVICE

INTERNET: [WWW.DLLR.STATE.MD.US](http://WWW.DLLR.STATE.MD.US) • E-MAIL: [OP@DLLR.STATE.MD.US](mailto:OP@DLLR.STATE.MD.US)