

**SUNSET EVALUATION UPDATE
ELECTRICIANS AND PLUMBERS**

Chapter 448E, Hawaii Revised Statutes

A Report to the Governor and the Legislature of the State of Hawaii

Submitted by

**Legislative Auditor of the State of Hawaii
Honolulu, Hawaii**

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FOREWORD

Under the "Sunset Law," licensing boards and commissions and regulated programs are terminated at specific times unless they are reestablished by the Legislature. Hawaii's Sunset Law, or the Hawaii Regulatory Licensing Reform Act of 1977, scheduled for termination 38 licensing programs over a six-year period. These programs are repealed unless they are specifically reestablished by the Legislature. In 1979, the Legislature assigned the Office of the Legislative Auditor responsibility for evaluating each program prior to its repeal.

This report evaluates the regulation of electricians and plumbers under Chapter 448E, Hawaii Revised Statutes. It presents our findings as to whether the program complies with the Sunset Law and whether there is a reasonable need to regulate electricians and plumbers to protect public health, safety, or welfare. It includes our recommendation on whether the program should be continued, modified, or repealed. Draft legislation intended to improve the regulatory program is incorporated in this report as Appendix B.

We acknowledge the cooperation and assistance extended to our staff by the Board of Electricians and Plumbers, the Department of Commerce and Consumer Affairs, and other officials contacted during the course of our examination. We also appreciate the assistance of the Legislative Reference Bureau which drafted the recommended legislation.

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Sunset Evaluation Update

ELECTRICIANS AND PLUMBERS

This report evaluates the regulation of electricians and plumbers under Chapter 448E, Hawaii Revised Statutes, to determine whether the health, safety, and welfare of the public is best served by reenactment, modification, or repeal of the statute. An evaluation of Chapter 448E, Hawaii Revised Statutes, was conducted previously by this office and our findings and recommendations were reported in January 1983 in the *Sunset Evaluation Report, Electricians and Plumbers, Chapter 448E, Hawaii Revised Statutes*. This update summarizes the information presented in the 1983 evaluation, reports on developments since then, and presents our current findings and recommendations.

Background on the Electrical Trade

Occupational characteristics. Electricity is the propelling force for most machinery and equipment utilized in an industrial and technological society. It is essential for heating, light, and power, for air conditioning, refrigeration, electronics, telecommunications, and other uses.

Electricians are the tradespeople who install electrical systems and equip facilities for the use of electric power. Electricians generally specialize in either the construction or maintenance of electrical systems, but some electricians do both. Electricians specializing in construction assemble, install and alter electrical systems in factories, homes, commercial buildings, and other facilities. They install wiring, attach fixtures, and connect the wiring to circuit breakers, transformers, or other components to make the systems operational and to safeguard the users from the potential dangers of electricity. There are also specialty electricians who assemble, install, or alter specialized equipment such as electronic systems, public address systems, community radio and television receiving systems, and recording systems.

Maintenance electricians keep electrical systems operational in both the private and public sectors. Their responsibilities vary with the setting. Maintenance electricians spend much of their time on preventive maintenance. They periodically inspect electrical systems and equipment and repair or replace defective, worn-out, or outmoded parts. They may also be called upon for advice concerning the potential hazards from continued use of worn-out equipment.

Of the approximately 556,000 electricians employed nationwide in 1986, about half were employed in the construction industry. Another nine percent were self-employed. The remainder worked as maintenance electricians in industry, government, and commerce.¹

Training of electricians. There are several routes to becoming an electrician. The traditional avenues have been on-the-job training and apprenticeship programs coordinated by management and labor.² More recently, community colleges have started offering associate degree programs with a major in electricity.³

Among these three options, the apprenticeship programs are likely to be the most comprehensive. In Hawaii, the program is administered by the Department of Labor and Industrial Relations (DLIR) in cooperation with the Joint Apprenticeship Committee. Aimed at providing training in both the theory and practice of the trade, the program's current standards call for 160 hours of classroom instruction and 8,000 hours of on-the-job training spaced over four years, with a predetermined number of work hours in each of the several aspects of the trade (residential installation, commercial installation, industrial installation, specialized work, and general work).⁴ Satisfactory completion of the program leads to journeyman status and qualifies an individual to do both construction and maintenance work. For the various construction trades nationwide, the proportion of tradespeople going through apprenticeship training is highest for electricians.⁵

On-the-job training outside of the apprenticeship program tends to be much less structured and thus may provide less varied experience. It also forces individuals to use their own initiative in acquiring related classroom instruction. Associate degree programs with a major in electricity provide trainees with a good foundation in the theory and principles of electricity, but they provide little in the way of hands-on experience.⁶

Regulation of the electrical trade. Nationally, the electrical trade is one of the most extensively regulated of the construction trades. A 1985 study by the Utah Legislative Auditor General could not identify any state that did not exercise some regulatory control over electricians at either the state or local level.⁷

Governmental regulation in this field is exerted in two ways, either singly or in combination. One way is to license the persons involved in electrical work (electrical contractors, electricians, and electrical inspectors). The other way is to adopt electrical codes which prescribe minimum standards for the performance of electrical work. There is considerable variation among the states in the employment of these two regulatory approaches. As of 1986, 45 states had some statewide mechanism for regulating the electrical trade.⁸

With regard to licensing, 22 states licensed electrical inspectors, 40 states licensed electrical contractors, and 24 states licensed journeyman electricians. With respect to electrical codes, 38 states had adopted, either with or without some modification, the National Electrical Code as developed by the National Fire Protection Association.⁹ Hawaii is among the minority of states which have not adopted the National Electrical Code at the state level. However, the code has been adopted at the county level.

Licensing, however, does occur at the state level in Hawaii. Electrical contractors are licensed as a category of specialty contractors by the Contractors License Board. Other electricians are licensed by the Board of Electricians and Plumbers. At present, this board issues licenses to four categories of electricians and three categories of supervising electricians. The seven categories and the number of persons licensed in each as of February 1988 are listed in Table 1.1.

Table 1.1

Categories of Electricians and Numbers of Licenses

Categories	Number of Licensees
Journeyman electrician	1092
Journeyman industrial electrician	53
Journeyman speciality electrician	79
Maintenance electrician	134
Supervising electrician	982
Supervisory industrial electrician	5
Supervisory speciality electrician	65

Source: Summary/Geographic Report, Professional and Vocational Licensing Division, Department of Commerce and Consumer Affairs, February 11, 1988.

Background on the Plumbing Trade

Characteristics. Plumbers and pipefitters deal with pipe systems. Plumbers install, alter, extend or maintain pipe systems, fixtures, and appurtenances which convey potable water; dispose of liquid waste, sewage, and storm drainage; and transport fuel within or adjacent to residential, commercial, or industrial buildings. Plumbers also install appliances and venting systems and extend the storm waste, sewage, and potable water supply systems of premises to points of public disposal.

In 1986, there were 402,000 persons employed nationally as plumbers and pipefitters. Most were retained by mechanical and plumbing contractors. Others were retained by government, industry, and commercial enterprises. About 14 percent were self-employed.¹⁰

Training of plumbers. As with the electrical trade, alternative routes are available for individuals wanting to enter the plumbing trade. However, employers endorse apprentice training as the preferred entry into the trade.

In Hawaii, apprentices are required to complete 10,000 hours of varied on-the-job work over a five-year period.¹¹ Trainees are also required to complete successfully 80 hours of instruction per semester during the training period for a total of 800 hours of related academic instruction. Subjects covered include pipe measurement and materials, mathematics, properties of water, hydraulics and pneumatics, basic welding, isometric drawing, plan reading, sewer and gas installations, and the plumbing code.¹²

Regulation of the plumbing trade. Plumbing, like the electrical trade, is extensively regulated by government. All states regulate plumbing in some manner.¹³ Licensing and adoption of a code of minimum standards of work performance are the two means of regulation, but there are many variations in how these two approaches are used and how responsibilities are divided between state and local governments. As of 1983, 30 states regulated the trade by licensing plumbers at the State level.¹⁴

In Hawaii, the regulation of plumbing closely parallels the regulation of the electrical trade. Thus, it is the counties that have enacted the Uniform Plumbing Code developed by the International Association of Plumbing and Mechanical Officials. Plumbing contractors are licensed as specialty contractors by the State Contractors License Board. Plumbers are licensed by the Board of Electricians and Plumbers. This board recognizes two categories of plumbers: journeyman plumbers and master plumbers. As of February 1988, the numbers of persons licensed under these two categories were 708 and 428 respectively.¹⁵

Regulation in Hawaii

Legislative history of regulation. Regulations relating to electricians and plumbers have their origin in territorial days. In 1905, the Legislature delegated to the counties the responsibility for sanitation. In 1909, the Legislature amended the statute to provide more specificity and to expand the scope of authority. The legislation authorized the counties to develop and enforce ordinances relating to police matters and sanitation including the inspection of buildings, plumbing, and sewers. In response, each county, adopted its own ordinance regulating electricians and plumbers. Thus, the impetus for regulation arose from a concern for safety and sanitation within the respective counties.

Then in 1969, an electrical contracting company filed suit against the Hawaii County Board of Electrical Examiners. The contractor alleged that the board had restricted outside competition and that the counties had no inherent right to regulate these occupations without specific authority from the State. The courts ruled in favor of the contractor and the county was ordered to suspend licensing. In 1971, the Legislature enacted Act 183 which established the Board of Electricians and Plumbers. The same act expanded the authority of the board to include motion picture operators because of the fire hazard posed by highly flammable film.

The statute has been amended several times. In 1972, maintenance electrician was added as a category of licensing. In 1974, the definition of master plumber was broadened to clarify the degree of supervision and responsibility for licensees in this category. In 1976, apprentices in the regulated trades, working under the supervision of licensed tradesmen, were exempted from licensing. In 1979, homeowners doing repairs were exempted if the repairs did not involve valves, pipes, or fixtures requiring backflow devices. In 1982, the journeyman industrial electrician and supervisory industrial electrician were added as licensing categories.

Licensing requirements. Applicants for licensing are required to submit written applications to the board. Applicants must also submit information on experience in the trade accompanied by notarized verification by the previous employer of the dates and hours of employment, description of duties and position title, and the employer's name, address, and telephone number. Additional information relating to experience is required when applying for a supervisory electrician's or master plumber's license. Information on prior licenses acquired by the applicant and photocopies of out-of-state licenses are also required for the supervisory electrician or master plumber licensing categories.

The minimum prerequisites for examination in the various categories are shown in Table 1.2.

Findings and Recommendations in the 1983 Sunset Evaluation Report

Our 1983 evaluation resulted in the following findings:

- "1. Incompetent work by electricians and plumbers can result in danger to public safety and health, such as fire, in the case of electrical work, and contaminated water supplies, in the case of plumbing. However, there is no danger in the work of motion picture operators.
- "2. County agencies, through code requirements and enforcement, and the Department of Labor and Industrial Relations (DLIR), through its apprenticeship programs with the unions and employers, and the Department of Health (DOH) are the principal agencies providing public protection against the danger of incompetent electrical work and plumbing. Regulation by the Board of Electricians and Plumbers provides little additional protection to the public.

“3. The examinations for electricians and plumbers have not been validated, and especially in the case of the examinations for journeyman electricians and supervising electricians, they are characterized by high failure rates, which may unduly be restricting or delaying entry or advancement in the trade.”

Table 1.2

Minimum Requirements for Examination
for the Various Categories of Licensing

	Minimum Age	Years of Experience in Trade	Registration With the Board at next Lower License Level	Apprentice Trainee Requirement
Journeyman electrician	18	4		8000 hours
Journeyman specialty electrician	18	4		
Journeyman industrial electrician	18	4		8000 hours
Maintenance electrician	18			1 year of experience as maintenance electrician
				2 years of schooling in electrical trade
Journeyman plumber	18	5		10,000 hours
Supervisory electrician			2 years*	
Supervisory specialty electrician			2 years*	
Supervisory industrial electrician			2 years*	
Master plumber			2 years*	

*Equivalent experience accepted.

Need for regulation. In our previous review of the three occupations then regulated under Chapter 448E, HRS, we found that they presented different kinds and different levels of danger to public health and safety. With respect to electrical work, the most common dangers are short circuits, shocks, and fires. While not all electricity related losses, deaths, and injuries can be attributed to faulty or incompetent electrical work, the dangers posed by electricity would be exacerbated if installation, repair, and maintenance were performed by incompetent persons.

The main danger attributed to improper plumbing is the potential contamination of potable water systems through improper cross-connections. On a nationwide basis over the years, serious illnesses and deaths have resulted from such contamination.

At one time, faulty handling of volatile motion picture film posed a fire danger. However, with the replacement of the highly inflammable nitrate-based film with less flammable acetate or polyester-based films, this danger has been substantially alleviated.

Public protection by other state and county agencies. We found in our previous review that the Board of Electricians and Plumbers is one of several state and county agencies having responsibilities in this area. Preparatory training to ensure competency rests primarily with the Department of Labor and Industrial Relations through the apprenticeship programs which it administers in cooperation with the Joint Apprenticeship Committees.

The counties adopt the codes setting forth the minimum standards of workmanship in the two trades and provide for the enforcement of these standards. All four counties had adopted the uniform electrical and plumbing codes and had established review and inspection procedures to ensure compliance.

In addition, the Contractors License Board requires all electrical and plumbing work, except for work specifically exempted by statute, to be provided only by contractors with licenses in the two respective specialty fields. Such specialty contractors have to meet experience and other requirements set by the board and are also liable for the work of their employees. Hence, they have a vested interest in employing qualified personnel.

As part of its statewide responsibility to protect drinking water, the Department of Health has adopted rules governing cross-connection and backflow controls, including the type of devices to be installed, how and when the devices are to be installed, and the periodic testing and inspection of such devices. The four county water agencies also have established procedures for protecting the quality of potable water systems. Besides reviewing plans to insure that potential cross-connections are covered by backflow devices, they conduct their own on-site visits or arrange to have county building inspectors do so.

Upon examining this range of activities, we found that the licensing activities of the Board of Electricians and Plumbers, especially its examinations, added little protection to that provided to the public by the other agencies.

Questionable examinations and high failure rates. When we looked at the testing process used by the Board of Electricians and Plumbers for granting licenses, we found that the tests were highly questionable, that they were characterized by high failure rates, and that they might unduly restrict or delay entry or advancement in the two trades.

Recommendations. In light of the foregoing findings, we recommended that Chapter 448E, HRS, be allowed to expire as scheduled. However, if the Legislature decided to retain the chapter, we recommended that it be amended to eliminate the licensing of motion picture operators and that the Board of Electricians and Plumbers take appropriate steps to develop valid and reliable examinations for determining qualifications in these trades.

Subsequent Developments

Act 56, SLH 1983, extended the repeal date of Chapter 448E, HRS, to December 31, 1989. However, the Legislature deleted the licensing of motion picture operators from the chapter. Legislative committees also expressed concern about the high examination failure rate.¹⁶

Act 38, SLH 1983, amended Chapter 448E, HRS, to include prerequisites for licensing of maintenance electricians. Applicants for the maintenance electrician examination are now required to have one year of experience in performing electrical maintenance work or two years of schooling in electrical courses in an institution of higher education.

Act 141, SLH 1986, defined the causes for which the board may suspend, deny, or revoke a license, impose fines, or deny the renewal of a license. The act also authorized the Board of Electricians and Plumbers to contract with professional testing agencies to develop, administer, grade, and validate examinations.

Current Findings and Recommendations

We find the following:

1. Faulty workmanship by electricians and plumbers poses threats to public health and safety--fire, shock, and electrocution in the case of electrical work and contamination of water supplies in the case of plumbing. Hence, there is justification for governmental intervention and regulation in the fields of electricity and plumbing.

2. With the number of state and county agencies involved in protecting the public in the electrical and plumbing fields, it is important that they be coordinated so as to avoid both inadequate protection and wasteful duplication. At present, however, the following problems exist:

a. Relatively few persons are entering these fields through apprenticeship programs although these programs may offer the best assurance of competency. As a result, testing and licensing of electricians and plumbers become more essential.

b. There is relatively little coordination among the various affected agencies. This enables some persons to perform incompetent work repeatedly without risk of losing their licenses. In addition, insufficient attention is being given to the problem of inadequate knowledge on the part of many plumbers concerning the maintenance, repair, and replacement of backflow devices.

3. The examination process for determining the qualifications of electricians and plumbers has been improved by contracting with professional testing services to develop and implement appropriate examinations. However, because the new tests have only recently been inaugurated, the Board of Electricians and Plumbers needs to monitor and evaluate their application to make sure they are adequately fulfilling their intended purpose.

4. The Board of Electricians and Plumbers has not amended its rules since 1981 although several substantive statutory changes have been made to Chapter 448E, HRS, in the period since then. Recently, however, the board has initiated action to amend its rules.

The need for regulation. As brought out in our 1983 sunset report, threats to public safety and health can come from improper workmanship on the part of both electricians and plumbers. This has not changed. In the electrical area, the most common dangers are fire and electrical shock. Many fires, both nationally and locally, are electrical in origin and result in substantial property losses and even death. Although all such incidents of fire and shock cannot be attributed to faulty workmanship, there is no doubt that incompetent installation, repair, and maintenance of electrical systems will increase these dangers.

With respect to plumbing, the major danger is the contamination of potable water systems resulting from improper cross-connections. Such contamination can cause illness and death. There are also potential problems of explosion and fire resulting from the improper installation of water heaters and gas pipes.

Instances of poor workmanship in these two trades continue to occur in Hawaii. At the county level, where compliance with electrical and plumbing code requirements is handled, inspections are made while work is in progress. When infractions are detected, the standard procedure is to issue an oral reprimand directing that the violation be corrected. If the situation

is not remedied, then a citation is issued. To obtain a picture of the operation and impact of this enforcement activity, we looked at the pertinent records of the Building Department of the City and County of Honolulu for calendar year 1987.

The files of the electrical section contained 93 citations while those of the plumbing section contained 80 citations. According to inspection personnel, these represent only a small portion of cases--probably less than 15 percent. Fifty-two of the citations for electrical violations and 44 of the citations for plumbing violations involved improper workmanship. The remaining citations were for failing to obtain the required building permits or for not properly identifying the contractors doing the work.

Examples of electrical code violations for which citations were issued include: use of noninsulated wiring; unaccessible junction box which makes it difficult to cut the flow of electricity when short circuits occur; unbonded receptacle outlets which expose a user to shock; and ungrounded electrical systems. Examples of plumbing code violations for which citations were issued include: waste water pipes unconnected to drainage systems; lack of traps to protect against noxious odors; insufficient vent pipes to eliminate noxious odors; and lack of backwater valves to prevent backflow of sewage into homes located in flood water zones.

Considering the thousands of inspections made each year, these numbers may appear relatively low. However, where public health and safety are involved, it is important to keep violations at an absolute minimum.

Moreover, it should be recognized that county inspection and enforcement activities are focused on projects where building permits are required. There are other maintenance, repair, and replacement projects which for one reason or another are not inspected. Some of these may involve faulty workmanship that will not come to light until an accident or problem is reported and investigated.

We checked with the three government agencies who protect water systems and find that poor workmanship can cause problems with serious consequences. For example, a recent investigation revealed that a school's water supply was contaminated with chromium compounds as a result of a plumbing repair in which the backflow device on a waterline connecting the air conditioning system to the potable water system had been circumvented rather than repaired or replaced. A similar incident occurred when guests at a hotel reported a bad odor emanating from faucets. Fortunately, no serious illnesses or deaths resulted.

In summary, faulty workmanship can and does occur in the electrical and plumbing fields with enough frequency to justify governmental intervention and regulation so as to protect public health and safety.

Multiple agency involvement in protecting the public interest. As pointed out in our previous sunset review of Chapter 448E, HRS, there are numerous state and county agencies involved in protecting the public interest in the electrical and plumbing fields. Multiple agency involvement does not necessarily guarantee fully effective and efficient protection. Without adequate coordination, there is always the danger that gaps and duplications will occur. Hence, it is important to see how well the various programs work together when assessing whether a particular one may be needed.

In our earlier review, we concluded that the activities of the Board of Electricians and Plumbers added little protection beyond what was being provided by the other agencies. For this reason primarily, we recommended that Chapter 448E, HRS, not be reenacted. During the current review, however, we have found weaknesses in the overall framework of governmental activity relating to the electrical and plumbing trades that throw this recommendation into a somewhat different perspective.

For one thing, apprenticeship programs may offer the best means of assuring competency on the part of electricians and plumbers, but they lose much of their efficacy if they are not widely utilized, as has been the case in Hawaii in recent years. For another, there is inadequate coordination among the various affected agencies with the result that gaps are occurring in the protective coverage being provided in the electrical and plumbing fields. These reasons now persuade us that the licensing of electricians and plumbers should be continued.

Diminished importance of apprenticeship programs. In prior years, apprenticeship programs were the main avenue of entry into the electrical and plumbing trades. More recently, however, the situation has changed so that these programs now account for a relatively small proportion of new entrants.

The apprenticeship program for electricians was suspended in 1979 due to an excess of journeyman electricians and was not reactivated until 1984.¹⁷ Even with its reactivation, it is expected to supply less than half of the journeyworkers projected to be needed through 1994. The impact of this sequence of events on apprenticeship as a source of licensed journeyman electricians in Hawaii is depicted in Table 1.3.

As can be seen in Table 1.3, only 5 among the 88 persons, or less than 6 percent, who were granted journeyman electrician licenses in the four year period from 1984 through 1987 were products of the apprenticeship program. During this same period, 288 persons applied for licenses, including those who applied more than once because they failed to qualify the first time they applied. Moreover, only 12 persons have completed the electrical apprenticeship program since 1984.

Table 1.3

Apprenticeship Program as a Source
of Licensed Journeymen Electricians
January 1984-December 1987

No. Completing Program	Applicants for Licensing (Duplicated Count)	No. of Successful Applicants	New Licensees with Apprenticeship Training
12*	288**	88**	5***

* Data from Apprenticeship Division, Department of Labor and Industrial Relations.

** Data from Examination Branch, Professional and Vocational Licensing Division, Department of Commerce and Consumer affairs.

*** Information derived from Report No. RGCJO72R, Professional and Vocational Division, Department of Commerce and Consumer Affairs, April 6, 1988, and data from Apprenticeship Division, Department of Labor and Industrial Relations.

Between 1979 and 1984, a period of economic slowdown, there was a dramatic drop in the employment of electricians in Hawaii. Membership in the electricians' union decreased from 1,600 to 1,227, and the number of journeyworkers dropped from 1,000 to 730. Since then, employment in the field seems to have stabilized. Nevertheless, the need for new electricians will apparently greatly exceed the supply coming out of the apprenticeship program.

Based on a union-commissioned study, 360 new journeyworkers will be needed by 1994 just to replace workers lost through normal attrition. However, according to affected union officials, the current four-year apprenticeship program (where class enrollment is limited to 40 persons and an attrition rate of 25 percent is anticipated) will probably produce only about 180 new electricians in the given time period. If the program is extended to five years, as is currently being considered by some union officials, then the gap between demand and supply will be even greater. In any event, it does not appear that the apprenticeship program can be relied upon, at least in the next several years, to assure the competency of those entering the electrical trade in Hawaii.

A similar though less dramatic situation prevails in the plumbing trade. Table 1.4 includes data comparable to the data for electricians in Table 1.3. Only 29 of the 69 persons, or less than

half, who were granted plumbing licenses from 1984 through 1987 were products of the apprenticeship program. Moreover, only 45 persons have completed plumbing apprenticeship training since 1984.

Table 1.4

Apprenticeship Program as a Source
of Licensed Journeyman Plumbers
January 1984-May 1988

No. Completing Program	Applicants for Licensing (Duplicated Count)	No. of Successful Applicants	New Licensees with Apprenticeship Training
45*	273**	69**	29***

* Data from Apprenticeship Division, DLIR.

** Data from Examination Branch, Professional and Vocational Licensing Division, DCCA.

*** Information derived by using data from Report No. RGCJ072R, Professional and Vocational Division, DCCA, 4/6/88, and data from Apprenticeship Division, DLIR.

Therefore, as in the case of the electrical trade, it does not seem that Hawaii can depend upon the apprenticeship program to assure competence among those who seek to become plumbers. This decrease in the importance of the apprenticeship programs increases the need to strengthen other ways of assuring competence, such as the licensing of the affected trades.

Adding further to the need to place heavier reliance upon licensing is an apparent trend toward the employment of more non-union workers in these two trades. In order to qualify for union membership and be certified by the unions as journeyman electricians or plumbers, workers have to meet experience and testing standards established by the affected unions. Union officials have estimated that in years past some 95 percent of electrical contractors and 85 percent of plumbing contractors hired only union-affiliated tradespersons. However, at present, less than 60 percent of the electrical and plumbing contractors listed in the telephone directory are affiliated with unions in terms of union contracts.

This is not to say that the employees of non-union contractors are necessarily less competent than those of the union contractors, but it does mean that there are more tradespersons now than there used to be who have not had to meet standardized requirements like those imposed by the unions.

Loophole in contracting licensing law. With electrical and plumbing contractors subject to licensing and regulation by the Contractors License Board under Chapter 444, HRS, it might be assumed that the public is adequately protected and that additional regulation under Chapter 448E, HRS, is unnecessary. In many fields, particularly those where economic loss is the primary threat to the public, it is probably sufficient to regulate only employers and not employees. However, where direct threats to public health and safety are involved, it is prudent to provide additional safeguards.

The need for such extra protection is recognized in the contracting licensing law itself. Section 444-9.5, HRS, provides that at least half of all electricians and plumbers working on any construction project covered by Chapter 444, HRS, shall be licensed as required under Chapter 448E, HRS. Only the Contractors License Board can waive this requirement, and then only for a county where there are not enough licensed craftspersons to meet the requirement. The effect of this provision is to require contractors to hire mostly electricians and plumbers who are licensed.

However, there is a loophole in Chapter 444, HRS, which allows some construction activity (which could include electrical and plumbing work) to be performed beyond the purview of the chapter. Section 444-2(7), HRS, exempts from coverage, those property owners or lessees who build or improve buildings or structures on their own property for their own use. Although these structures may have been intended for private use, they are often sold to others. The exemption loophole means that the contracting licensing law alone cannot be relied upon to safeguard against inept electrical and plumbing work.

The counties have recognized this deficiency in Chapter 444, HRS. Thus, even when they grant building permits under the owner-builder exemption, they still require that any electrical or plumbing work be performed by persons who are properly licensed in these fields. For example, Honolulu's electrical code under Section 18-5.5 makes it unlawful to do any work under a permit which would violate Chapter 448E, HRS, governing the licensing of electricians and plumbers, as well as Chapter 444, HRS, governing the licensing of contractors. The application forms for building permits further require that all project phases involving electrical and plumbing work be specifically identified and that the name and license number of the party selected to do the work also be indicated.

Electrical and plumbing specialty contractors and county inspection officials feel that continued licensing and regulation of electricians and plumbers are desirable and in the public interest. Contractors informed us that they do not have the time, resources, and authority available to government to screen and verify the qualifications of every person claiming to be an electrician or plumber. Moreover, by recruiting workers who are properly licensed, they can avoid various problems related to complying with anti-discrimination requirements and minimize potential liabilities from faulty workmanship. County inspection officials summed up the situation by saying that the time and effort required to work with unlicensed personnel ends up making their agents “consultants instead of inspectors.”

Inadequate interagency coordination. The Board of Electricians and Plumbers exercises fairly effective control over entry into the electrical and plumbing trades through its testing and licensing powers, thereby providing protection against incompetency. However, once tradesperson have become licensed, the board is less able to protect against incompetent and fraudulent workmanship. This is because other agencies are involved in the monitoring and investigation of trade performance and there is little or no coordination of effort among them.

The county electrical and plumbing inspectors are the governmental authorities who are most involved in monitoring the performance of specialty contractors and tradespersons. In the City and County of Honolulu alone they conduct thousands of inspections each year. Even so, their scope of authority and concern is relatively narrow. Their main purpose is to assure compliance with code requirements when actual work is performed. Their main weapon is the power to issue citations for workmanship which does not meet standards. However, the weapon is weak with respect to repeat offenders. Instead of being able to prevent them from continuing to perform substandard work, each job they do must be inspected after the fact and correction ordered if found necessary. At present, no mechanism exists whereby continuing noncompliance can be brought to the attention of other affected agencies, including the Board of Electricians and Plumbers.

RICO is concerned with fraudulent and incompetent performance on the part of regulated specialty contractors and tradespersons, but it usually conducts investigations only when specific complaints are filed. Its main mission is to settle the cases brought to its attention. While some offending licensees may be referred to the affected regulatory boards for disciplinary action, many cases may be settled without being reported to those boards. RICO's procedures are not designed to detect and halt repeat offenders, but rather are aimed at remedying particular problems after they occur.

Much the same can be said for the county water agencies and the State Department of Health with respect to their activities relating to the protection of water supplies. They, too, function mainly in a reactive manner in response to particular problems and complaints. No regular channels have been established for the interchange of information and concerns between them and other affected agencies, such as the Board of Electricians and Plumbers. Thus, even when they identify what appears to be a generalized problem requiring preventive attention, they are constrained in their scope of action.

For example, several officials have come to the conclusion that lack of knowledge about the maintenance, inspection, repair, and replacement of backflow preventers on the part of plumbers and plumbing contractors is contributing to the problem of water contamination in Hawaii. As indicated previously, several potentially serious cases of this sort have come to the attention of these officials. To deal with this problem, they have sponsored several workshops aimed at providing necessary training. However, most of those attending these workshops have been governmental employees. Participation by the private sector has been low. No effort has been made to enlist the support of the Board of Electricians and Plumbers or the Contractors License Board in dealing with this problem, such as by tightening up training, testing, and relicensing requirements relative to backflow preventers.

A multi-faceted approach by the several affected governmental agencies would offer the best way of protecting the public in the electrical and plumbing areas. Both county inspection authorities and specialty contractors say that their jobs would be much more difficult if they alone had to determine the qualifications of every electrician and plumber in Hawaii instead of being able to rely on the board to make the initial determinations. However, such a multi-faceted approach cannot be fully effective unless it functions as a comprehensive, interactive, and mutually supporting network of programs and activities. As indicated above, this is not occurring at present. It is reflected especially with regard to the failure of the affected officials to ensure that all plumbers become knowledgeable and experienced in the proper installation, inspection, repair, and replacement of backflow devices.

With so many agencies and jurisdictions involved, it is difficult to say who should take the initiative in establishing an adequate network. However, inasmuch as the Board of Electricians and Plumbers, the Contractors License Board, and RICO all fall under the jurisdiction of the Department of Commerce and Consumer Affairs, perhaps that department is in the best position to draw all affected parties together to achieve closer interagency coordination.

Improved examinations. In our previous sunset review, we pointed out serious weaknesses in the examinations for electricians and plumbers. Besides the lack of validation, we noted the

very high failure rates, especially by candidates for journeyman and supervising electrician licenses, which may have been unduly restricting entry or advancement in the trade. Under Act 141, SLH 1986, the Board of Electricians and Plumbers was authorized to contract with professional testing services to develop, administer, grade, and validate examinations for the electrical and plumbing trades. With this authorization, the board has taken steps to improve its examination function.

American Community Services, Incorporated (ACSI) was retained to develop, administer, grade, and validate examinations for seven categories of electricians. ACSI is a Florida-based national testing and assessment organization which provides comprehensive service to state and national agencies in a wide variety of professional and occupational fields. The contractor used its staff of experienced electricians as well as consultants to develop content-valid examinations for the several licensing categories. These were then submitted to the Board of Electricians and Plumbers for review and approval. The tests were adjusted to accommodate the special needs of the local setting. For example, the examination for journeymen was constructed to assess the candidate's knowledge of electrical theory and principles as well as the code and local statutory requirements. The tests were initially administered in March 1986. After every examination, the contractor does an item analysis of questions.

Table 1.5 compares the performance of applicants for licensing under the old and new tests.

As can be seen in Table 1.5, candidates for five categories have performed better under the new examination. In two categories, the journeyman speciality electricians and the supervisory speciality electricians, a lower percentage passed in 1987 than in 1985. However, considering the small numbers involved, such variations are not significant unless tracked over an extended period of time.

Pacific Testing Service, a local firm, was retained by the Board of Electricians and Plumbers to develop tests to assess candidates for the journeyman and master plumbers licenses. The contractor consulted exam agencies, board members, textbooks, unions, and others to develop a blueprint for the examination. Plumbing professionals were asked to comment on the blueprint for content validity. Pacific Testing Service attempted to pre-test the examination on apprentices who had successfully completed the plumbing training program. However, due to a lack of interested candidates, this pre-testing was abandoned. Instead, experienced plumbers were recruited to validate the passing scores. The test was first administered in July 1988. Therefore, it is too early to assess its success. However, considerable care and effort were exerted to develop the examination.

Table 1.5

Comparison of 1985 and 1987 Test Results for Electricians

Categories	1985 Examinations*			1987 Examinations**		
	No. Passing	No. Failing	% Passing	No. Passing	No. Failing	% Passing
Journeyman Electrician	15	66	19%	24	27	47%
Journeyman Speciality Electrician	3	1	75%	3	6	33%
Supervisory Speciality Electrician	3	0	100%	1	2	33%
Supervising Electrician	10	65	13%	33	44	43%
Supervisory Industrial Electrician	1	2	33%	2	1	67%
Journeyman Industrial Electrician	7	58	11%	21	49	30%
Maintenance Electrician	17	34	33%	11	12	48%

* Source: Examination Branch, Professional and Vocational Licensing Division, DCCA.

** National Assessment Institute (an ACSI company), Bulletin of Examination Information for the Electrical Licensing Examinations.

Rules of the Board. Chapter 448E, HRS, has been amended on several occasions since 1981. These amendments made substantive changes to the regulations relating to electricians and plumbers. However, the rules of the Board of Electricians and Plumbers have not been revised to incorporate the statutory changes that have occurred since 1981. A change of executive secretaries and the preoccupation of the new secretary with more urgent duties has contributed to the delay.

The Board of Electricians and Plumbers initiated efforts to revise the rules in 1988. The rules have been submitted to the attorney general for review, comment, and approval. The timetable for completion of rule revision is December 1988. Every effort should be made to make sure that the rules are brought up to date as expeditiously as possible.

Recommendations

We recommend the following:

- 1. Chapter 448E, HRS, be reenacted.*
- 2. Close the present owner-builder exemption loophole in the contracting licensing law by amending Section 444-2(7), Hawaii Revised Statutes, so as to require electrical and plumbing work done under such exemptions to be performed only by persons or firms properly licensed to do electrical and plumbing work under Chapter 444 or Chapter 448E, Hawaii Revised Statutes.*
- 3. The Department of Commerce and Consumer Affairs take the initiative to bring together the various governmental agencies concerned with promoting competency and protecting the public interest in the electrical and plumbing trades for the purpose of achieving better interagency coordination and providing as effective a regulatory network as possible. In this regard, particular attention should be given to ensuring competency among plumbers and plumbing contractors relative to the installation, inspection, maintenance, repair, and replacement of backflow preventers.*
- 4. The Board of Electricians and Plumbers evaluate the performance of the examination for journeyman plumbers to determine its effectiveness and applicability. The Board of Electricians and Plumbers continue to assess the examinations for electricians.*
- 5. The Board of Electricians and Plumbers expedite the rules revision to reflect statutory changes.*

NOTES

1. U.S., Department of Labor, *Occupational Outlook Handbook*, 1988-89 ed., April 1988, p. 334.
2. *Ibid.*
3. Honolulu Community College, *Electrical Installation and Maintenance Technology (EIMT) Program Checklist*, 1988-89.
4. Hawaii, Department of Labor and Industrial Relations, *Wireperson Apprenticeship Standards of Joint Apprenticeship Committee for the Electrical Trade of Hawaii*, August 1979, pp. 10-12.
5. U.S., Department of Labor, *Occupational Outlook Handbook*, 1988-89 ed., April 1988, p. 334.
6. Phone interview with Harry Kawamura, Instructor of EMT Program at Honolulu Community College, April 13, 1988.
7. Utah, Office of Legislative Auditor General, *A Performance Audit of the Division of Contractors*, Report No. 85-8, September 1985, p. 14.
8. National Electrical Contractors Association, Inc., *Summary of Major Provisions of Electrical Code, Licensing, and Enforcement Statutes of the 50 States and the District of Columbia*, 1986.
9. *Ibid.*
10. U.S., Department of Labor, *Occupational Outlook Handbook*, p. 340.
11. Hawaii, Department of Labor and Industrial Relations, *Apprenticeship Standards Joint Apprenticeship and Training Committee for the Plumbing and Pipefitting (Refrigeration-Airconditioning) Industry*, June 1981, p. 6.
12. Joint Plumbing Apprentice and Journeyman Training, Inc., *Plumbing Training Course and Materials for UA Joint Training Committee*.
13. Utah, Office of Legislative Auditor General, *A Performance Audit of the Division of Contractors*, Report No. 85-8, 1985, pp. 14-15.
14. The Council of State Governments, *The Book of the States 1982-1983*, Vol. 14, p. 553.
15. Hawaii, Department of Commerce and Consumer Protection, *Summary/Geographic Report*, Report No. RGC1066P, February 11, 1988, p. 10.

16. House Standing Committee Report 89 on House Bill 657, Twelfth Legislature, 1983, State of Hawaii.
17. Samcon, Inc., *Training for PECA-IBEW Training Fund*, May 1984, p. 8. This union-commissioned report provides considerable background information on the electricians apprenticeship program.

APPENDICES

APPENDIX A

COMMENTS ON AGENCY RESPONSES

A preliminary draft of this Sunset Evaluation Report was transmitted on December 16, 1988, to the Board of Electricians and Plumbers and the Department of Commerce and Consumer Affairs for their review and comments. A copy of the transmittal letter to the board is included as Attachment 1 of this Appendix. A similar letter was sent to the department. The responses of the board and department are included as Attachments 2 and 3.

The Board of Electricians and Plumbers has expressed general agreement with the observations and evaluations contained in this report.

The Department of Commerce and Consumer Affairs has indicated that it is more than willing to initiate interagency coordination with other affected agencies to promote the interchange of information and concerns and to coordinate enforcement and training activities where appropriate.



ATTACHMENT 1

THE OFFICE OF THE AUDITOR
STATE OF HAWAII
465 S. KING STREET, RM. 500
HONOLULU, HAWAII 96813

CLINTON T. TANIMURA
AUDITOR

December 16, 1988

COPY

Mr. Warren La France, Chairperson
Board of Electricians and Plumbers
Department of Commerce and Consumer Affairs
State of Hawaii
1010 Richards Street
Honolulu, Hawaii 96813

Dear Mr. La France :

Enclosed are 8 preliminary copies, numbered 4 through 11, of our *Sunset Evaluation Update, Electricians and Plumbers, Chapter 448E, Hawaii Revised Statutes*. These copies are for review by you, other members of the board, and your executive secretary. This preliminary report has also been transmitted to Robert Alm, Director of the Department of Commerce and Consumer Affairs.

The report contains our recommendations relating to the regulation of electricians and plumbers. If you have any comments on our recommendations, we would appreciate receiving them by January 17, 1989. Any comments we receive will be included as part of the final report which will be submitted to the Legislature.

Since the report is not in final form and changes may possibly be made to it, we request that you limit access to the report to those officials whom you wish to call upon for assistance in your response. Please do not reproduce the report. Should you require additional copies, please contact our office. Public release of the report will be made solely by our office and only after the report is published in its final form.

We appreciate the assistance and cooperation extended to us.

Sincerely,



Clinton T. Tanimura
Legislative Auditor

Enclosures

ATTACHMENT 2

JOHN WAIHEE
GOVERNOR



ROBERT A. ALM
DIRECTOR

NOE NOE TOM
LICENSING ADMINISTRATOR

BOARD OF ELECTRICIANS AND PLUMBERS

STATE OF HAWAII
PROFESSIONAL & VOCATIONAL LICENSING DIVISION
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
P. O. BOX 3469
HONOLULU, HAWAII 96801

January 17, 1989

RECEIVED
JAN 17 3 45 PM '89
OFF. OF THE AUDITOR
STATE OF HAWAII

Mr. Clinton T. Tanimura
Legislative Auditor
Office of the Legislative Auditor
Kekuanaoa Bldg., Suite 500
465 South King Street
Honolulu, Hawaii 96813

Dear Mr. Tanimura:

Thank you for the opportunity to comment on your "Sunset Evaluation Update, Electricians and Plumbers."

The board is in general agreement with the observations and evaluations you have made concerning the board and Chapter 448E, HRS.

We find the report comprehensive and complete, and wish to commend your staff for the thoroughness of the report.

Very truly yours,


WARREN LA FRANCE
Chairman


HERBERT ENDO
Vice Chairman

ATTACHMENT 3

JOHN WAIHEE
GOVERNOR



ROBERT A. ALM
DIRECTOR
COMMISSIONER OF SECURITIES

SUSAN DOYLE
DEPUTY DIRECTOR

STATE OF HAWAII
OFFICE OF THE DIRECTOR
DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS
1010 RICHARDS STREET
P. O. BOX 541
HONOLULU, HAWAII 96809

January 13, 1989

RECEIVED

JAN 17 8 17 AM '89

OFFICE OF THE AUDITOR
STATE OF HAWAII

Mr. Newton Sue, Acting Auditor
Office of the Legislative Auditor
State of Hawaii
465 S. King Street, Room 500
Honolulu, Hawaii 96813

Dear Mr. Sue:

Subject: Sunset Evaluation Update - Electricians and Plumbers

The Department of Commerce and Consumer Affairs has reviewed the comments and recommendations made with regard to initiating interagency coordination with other affected agencies to promote the interchange of information and concerns. The Department would be more than willing to chair such an activity to open and establish lines of communication for the sharing of information and the coordination of enforcement and training activities where appropriate.

Very truly yours,

ROBERT A. ALM
Director

APPENDIX B

DIGEST

A BILL FOR AN ACT RELATING TO ELECTRICIANS AND PLUMBERS

Extends board of electricians and plumbers until 12/31/95. Requires owners or lessees who build or improve their property to have electrical and plumbing work done by a licensed contractor and to indicate the names and license numbers of those contractors on county register.

A BILL FOR AN ACT

RELATING TO ELECTRICIANS AND PLUMBERS.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. Section 26H-4, Hawaii Revised Statutes, is
2 amended to read as follows:

3 "§26H-4 Repeal dates. (a) The following chapters are
4 hereby repealed effective December 31, 1989:

5 (1) Chapter 444 (Contractors License Board)

6 [(2) Chapter 448E (Board of Electricians and Plumbers)

7 (3)] (2) Chapter 464 (Board of Registration of Professional
8 Engineers, Architects, Surveyors and Landscape
9 Architects)

10 [(4)] (3) Chapter 466 (Board of Public Accountancy)

11 [(5)] (4) Chapter 467 (Real Estate Commission)

12 [(6)] (5) Chapter 439 (Board of Cosmetology)

13 [(7)] (6) Chapter 454 (Mortgage Brokers and Solicitors)

14 [(8)] (7) Chapter 454D (Mortgage and Collection Servicing
15 Agents)

16 (b) The following chapter and sections are hereby repealed

H.B. NO.

1 effective December 31, 1990:

2 (1) Chapter 466J (Board of Radiologic Technology)

3 (2) Sections 321-13 to 321-15 (midwives, laboratory
4 directors, laboratory technologists, laboratory
5 supervisors, laboratory technicians, tattoo artists,
6 electrologists, and sanitarians)

7 (c) The following chapters are hereby repealed effective
8 December 31, 1991:

9 (1) Chapter 447 (Dental Hygienists)

10 (2) Chapter 453 (Board of Medical Examiners)

11 (3) Chapter 457 (Board of Nursing)

12 (4) Chapter 458 (Board of Dispensing Opticians)

13 (5) Chapter 460J (Pest Control Board)

14 (6) Chapter 462A (Pilotage)

15 (7) Chapter 438 (Board of Barbers)

16 (8) Chapter 468K (Travel Agencies)

17 (d) The following chapters are hereby repealed effective
18 December 31, 1992:

19 (1) Chapter 448H (Elevator Mechanics Licensing Board)

20 (2) Chapter 451A (Board of Hearing Aid Dealers and Fitters)

H.B. NO.

- 1 (3) Chapter 457B (Board of Examiners of Nursing Home
2 Administrators)
- 3 (4) Chapter 460 (Board of Osteopathic Examiners)
- 4 (5) Chapter 461 (Board of Pharmacy)
- 5 (6) Chapter 461J (Board of Physical Therapy)
- 6 (7) Chapter 463E (Podiatry)
- 7 (e) The following chapters are hereby repealed effective
8 December 31, 1993:
- 9 (1) Chapter 437 (Motor Vehicle Industry Licensing Board)
- 10 (2) Chapter 437B (Motor Vehicle Repair Industry Board)
- 11 (3) Chapter 440 (Boxing Commission)
- 12 (4) Chapter 446 (Debt Adjusters)
- 13 (5) Chapter 436E (Board of Acupuncture)
- 14 (f) The following sections are hereby repealed effective
15 December 31, 1993:
- 16 (1) Sections 445-21 to 38 (Auctions)
- 17 (2) Sections 445-131 to 136 (Pawnbrokers)
- 18 (3) Sections 445-171 to 172 (Secondhand Dealers)
- 19 (4) Sections 445-231 to 235 (Scrap Dealers)
- 20 (g) The following chapters are hereby repealed effective

H.B. NO.

1 December 31, 1994:

- 2 (1) Chapter 441 (Cemetery and Funeral Trusts)
- 3 (2) Chapter 443B (Collection Agencies)
- 4 (3) Chapter 452 (Board of Massage)
- 5 (4) Chapter 455 (Board of Examiners in Naturopathy)
- 6 (5) Chapter 459 (Board of Examiners in Optometry)
- 7 (6) Chapter 442 (Board of Chiropractic Examiners)
- 8 (7) Chapter 373 (Commercial Employment Agencies)
- 9 (8) Chapter 448 (Board of Dental Examiners)
- 10 (9) Chapter 465 (Board of Psychology)
- 11 (10) Chapter 468E (Speech Pathology and Audiology)
- 12 (h) The following chapter is hereby repealed effective

13 December 31, 1995:

- 14 (1) Chapter 448E (Board of Electricians and Plumbers)

15 [(h)] (i) The following chapters are hereby repealed
16 effective December 31, 1997:

- 17 (1) Chapter 463 (Board of Private Detectives and Guards)
- 18 (2) Chapter 471 (Board of Veterinary Examiners)."

19 SECTION 2. Section 444-2, Hawaii Revised Statutes, is
20 amended to read as follows:

H.B. NO.

- 1 "§444-2 Exemptions. This chapter shall not apply to:
- 2 (1) An officer or employee of the United States, the State,
- 3 or any political subdivision while in the performance
- 4 of their governmental duties;
- 5 (2) Any person acting as a receiver, trustee in bankruptcy,
- 6 personal representative, or any other person acting
- 7 under any order or authorization of any court;
- 8 (3) A person who sells or installs any finished products,
- 9 materials, or articles of merchandise which are not
- 10 actually fabricated into and do not become a permanent
- 11 fixed part of the structure, or to the construction,
- 12 alteration, improvement, or repair of personal
- 13 property;
- 14 (4) Any project or operation for which the aggregate
- 15 contract price for labor, materials, and all other
- 16 items is less than \$100. This exemption shall not
- 17 apply in any case wherein the undertaking is only a
- 18 part of a larger or major project or operation, whether
- 19 undertaken by the same or a different contractor or in
- 20 which a division of the project or operation is made in

H.B. NO.

1 contracts of amounts less than \$100 for the purpose of
2 evading this chapter or otherwise;

3 (5) A registered architect or professional engineer acting
4 solely in the person's professional capacity;

5 (6) Any person who engages in the activities [herein]
6 regulated in this chapter as an employee with wages as
7 the person's sole compensation;

8 (7) Owners or lessees of property who build or improve
9 residential, farm, industrial, or commercial buildings
10 or structures on property for their own use, or for use
11 by their grandparents, parents, siblings, or children
12 and do not offer the buildings or structures for sale
13 or lease[.]; provided that this exemption shall not
14 apply to electrical and plumbing work, which must be
15 performed only by persons or entities licensed under
16 this chapter or chapter 448E. In all actions brought
17 under this paragraph, proof of the sale or lease, or
18 offering for sale or lease, of the structure within one
19 year after completion is prima facie evidence that the
20 construction or improvement of the structure was

H.B. NO.

1 undertaken for the purpose of sale or lease; provided
2 that this shall not apply to residential properties
3 sold or leased to employees of the owner or lessee;
4 provided further that in order to qualify for this
5 exemption the owner or lessee must register for the
6 exemptions as provided in section 444-9.1; or
7 (8) Any copartnership or joint venture if all members
8 thereof hold licenses issued under this chapter."

9 SECTION 3. Section 444-9.1, Hawaii Revised Statutes, is
10 amended to read as follows:

11 "§444-9.1 Issuance of building permits; owner-builder
12 registration. Each county or other local subdivision of the
13 State which requires the issuance of a permit as a condition
14 precedent to the construction, alteration, improvement,
15 demolition, or repair of any building or structure shall also
16 require that each applicant for such a permit file as a condition
17 to the issuance of a permit a statement that the applicant is
18 licensed under this chapter, giving the number of the license and
19 stating that it is in full force and effect, or, if the applicant
20 is exempt from this chapter, the basis for the claimed exemption;

H.B. NO.

1 provided that if the applicant claims an exemption under section
2 444-2(7), the applicant shall also be required to certify that
3 the building or structure is for the applicant's personal use and
4 not for use or occupancy by the general public. Each county or
5 local subdivision of the State shall maintain an owner-builder
6 registration list which shall contain the following information:
7 (1) the name of any owner or lessee who claims an exemption from
8 this chapter as provided in section 444-2(7); (2) the address of
9 the property where exempt building or improvement activity is to
10 occur; (3) a description of the type of building or improvement
11 activity to occur; [and] (4) the approximate dates of
12 construction activity[.]; and (5) whether any electrical or
13 plumbing work is to be performed and if so, the name and license
14 number of the person or entity who will do the work. The absence
15 of such registration is prima facie evidence that the exemption
16 in section 444-2(7) does not apply.

17 The county shall verify the license against a list of
18 licensed contractors provided by the state contractors licensing
19 board, which list shall be updated at least quarterly. The
20 county shall also verify that the applicant is in fact the

H.B. NO.

1 contractor so licensed or the contractor's duly authorized
2 agent."

3 SECTION 4. Statutory material to be repealed is bracketed.
4 New statutory material is underscored.

5 SECTION 5. This Act shall take effect upon its approval.

6

7

INTRODUCED BY: _____