

# **An Analysis of The Licensing Rates of Contractors in Massachusetts Under The USEPA RRP Regulation**

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The US Environmental Protection Agency (USEPA) issued a new regulation on April 22, 2008 that required contractors that conduct renovation activities in houses constructed prior to 1978 become certified as Lead Safe Renovation Contractors by April 22, 2010. Extensive outreach was conducted by the USEPA to contractors, local regulators, and homeowners to convey the requirements. To determine the success of this outreach in Massachusetts, the list of certified Lead Safe Renovation Contractors was compared to the total number of residential contractors in Massachusetts. The total number of contractors in Massachusetts was estimated using the US Census Bureau tables. The percentage of certified contractors was determined on the effective date of the requirement, April 22, 2010 and one year later on April 22, 2011. On both dates, the percentage of contractors complying with the regulation is less than 20%. The compliance percentage is different for contractors that have employees and contractors that do not. However, there was an 8.5% increase from 2010 to 2011 in the total number of contractors that obtained the certification. After April 22, 2010, enforcement of the monetary penalties for non-compliance began, which may have led to the increase in contractors obtaining certification.

**Key Words:** USEPA, Lead Safe Renovation, Massachusetts

## **Introduction**

On April 22, 2008, the USEPA issued 40 CFR Part 745, Lead; Renovation, Repair, and Painting Program (RRP) (USEPA, 2008) after an extensive rule-making process. The RRP regulation applies to all renovation projects conducted in residential dwellings constructed prior to 1978, when the use of lead based paint was banned by the US Consumer Product Safety Committee (CPSC, 1977). Any project conducted by a contractor that disturbs greater than six feet of painted surfaces on the interior or twenty feet of painted surfaces on the exterior (USEPA, 2008) is subject to the requirements of the regulation. Renovation work conducted by an individual homeowner is not subject to the requirements of the regulation (USEPA, 2008).

Previous lead paint regulations, such as those issued in Massachusetts and by the US Office of Housing and Urban Development (HUD) (HUD, 2011), applied only to residences where children under the age of six resided. The focus of these regulations was protecting small children from the hazards of lead paint poisoning by removing the hazard. The RRP focuses on the hazard that the lead paint dust generated by renovation activities poses to the general public (USEPA, 2008).

Technical studies conducted by the Department of Housing and Urban Development (HUD), the Centers for Disease Control (CDC), and other governmental organizations indicated that the hazards posed by lead based paint are not just an issue in residences with children under the age of six. There are hazards posed by renovation in homes with lead based paint that affect everyone. The USEPA conducted technical studies that showed elevated lead dust levels as a result of renovation activities (NSCEP, 2000). Studies have indicated that training the workers in the use of lead

safe work practices and requiring these practices be utilized on renovation projects can reduce this risk (Buzzetti, Greene, & Dottie, 2011).

## **Outreach**

When the RRP rule was issued on April 22, 2008, the requirements of the regulation were phased in over a period of two years. The date by which contractors were required to register was April 22, 2010 (USEPA, 2008). The USEPA website contains extensive information regarding the regulation, with separate pages aimed at homeowners, contractors, and small contractors (USEPA, 2011). There are brochures that can be downloaded and reproduced with information on the regulation. These brochures were mailed to building inspectors in cities and towns in Massachusetts for them to distribute. USEPA officials attended meetings of interested trade groups such as the lead paint inspectors association and construction industry groups to discuss the requirements of the regulation. Public service announcements were run in local media to increase awareness of the regulation. The USEPA conducted web-based seminars for all interested parties. The USEPA did not release cost data on their outreach efforts. USEPA approved training providers conducted marketing campaigns to increase attendance at their classes.

In Massachusetts, the USEPA delegated authority to the Massachusetts Division of Occupational Safety (MA DOS) on July 9, 2010 under the Massachusetts regulation Deleading and Lead-Safe Renovation Regulation, 454 CMR 22.00 (MADOS, 2011). This regulation contains all of the requirements of the USEPA regulation. There is some confusion regarding the terms “Certified Lead Safe Renovation Contractor” and “Licensed Lead Safe Renovation Contractor.” The USEPA regulation uses the term certified and the MA DOS regulation uses the term licensed. Since the USEPA has delegated enforcement authority of this regulation to Massachusetts, the term “Licensed Lead Safe Renovation Contractor” will be used.

## **Research Design and Methodology**

To determine whether the USEPA outreach programs were successful in reaching contractors in Massachusetts that were required to obtain a license, the total number of contractors engaging in residential construction work (excluding new construction, since the regulation would not apply to those contractors) had to be determined and the total number of contractors that had obtained a license on April 22, 2010 had to be determined.

To determine the number of contractors that engage in residential construction work, the US Census database tables were consulted. The analysis of current building permits to determine the number of contractors was considered, but rejected for two main reasons. In Massachusetts, building permits are issued by the 334 individual cities and towns with no centralized tracking system. Building permits do not list all subcontractors who will work on the project and may not be obtained at all for such projects as painting.

Since the RRP applies to contractors based on the type of work, not the size of the business (USEPA, 2011), two types of tables were consulted. The first table is the 2009 County Business Patterns for Massachusetts (US Census Bureau, 2009), which lists the number of construction businesses that have employees. To be certified on April 22, 2010, a company would have applied for certification 2-3 months in advance, so using 2009 numbers is reasonable. A review of the statistics from 1998 to 2009 indicates that this number has fluctuated from a low in 1998 to a high in 2006, but the degree of fluctuation has not been significant (US Census Bureau, 2009). This information is further categorized by types of construction. Since the RRP applies to residential construction built prior to 1978, the total number of contractors engaged in residential construction in 2009 was taken from the table. The categories of New

single-family general contractors, New multifamily housing construction (except operative builders), and New housing operative builders were then subtracted from the total, as new construction is not covered by the RRP.

Given that many construction businesses, especially in the residential construction market do not have employees, a second list from the US Census Bureau was consulted to determine the number of these contractors. The 2008 Non Employer Statistics for Massachusetts (US Census Bureau, 2008) lists the number of Residential Building Construction firms that do not have employees. The data from 2002- 2008 shows little fluctuation in yearly totals (US Census Bureau, 2008). This list does not contain a breakdown of new construction and remodeling, so the total list of Residential Building Construction firms was used for this study.

The 2008 and 2009 reports were the most current numbers available from the US Census Bureau, so they will be used for the estimate of the total number of residential construction firms in Massachusetts.

To determine the number of contractors that had obtained a license on April 22, 2010, the list of contractors that are currently licensed was obtained from the MADOS website (MADOS, 2011). This license list includes the name, address, and telephone number of each contractor, the license number, the date the license expires, and whether the contractor has employees. These licenses are good for a five year period.

The MADOS did not conduct independent verification of all of the information on the license applications, including whether the contractors actually had employees, so this information is self-reported.

Since the USEPA issued the regulation in 2008 and the license term is five years, initial licenses have not expired for any contractor. Subtracting five years from the expiration date determined the date that the license was issued. Although Massachusetts did not begin enforcement of the regulation until July 9, 2010, certifications issued by the USEPA to Massachusetts firms were recognized from the date that they were originally issued by the USEPA. The total number of licensed firms was then divided into those that had employees and those that did not.

Once the determination of the number of contractors that were licensed on April 22, 2010 was made, a second analysis of the list was made to determine the number of contractors that were licensed on April 22, 2011. The total number was also divided into those that had employees and those that did not.

Once the data from both of these lists was compiled, it was possible to determine what percentage of contractors that were required to obtain a license had done so by April 22, 2010, the implementation date. It was also possible to determine the increase in licenses over a one year period. Data from self-employed contractors without employees was compared to the data collected from contractors with employees to measure whether there was a difference in compliance between the two groups.

## **Results**

According to the US Census Bureau tables, there were 4,121 Residential Building Contractors in Massachusetts in 2009 with employees. Of those contractors, 955 were identified as New Single-Family General Contractors, 72 were identified as New Multifamily Housing Construction (except operative builders), and 386 were identified as New Housing Operative Builders. This would give an estimated total of 2,708 contractors involved in the renovation of residential homes (US Census Bureau, 2009) .

The US Census Bureau tables for Nonemployer Statistics lists Residential Building Contractors in Massachusetts that do not have employees. In 2008, the estimate for Residential Building Contractors is 11,567 (US Census Bureau, 2008) . The estimate for the total number of contractors in Massachusetts is 14,275.

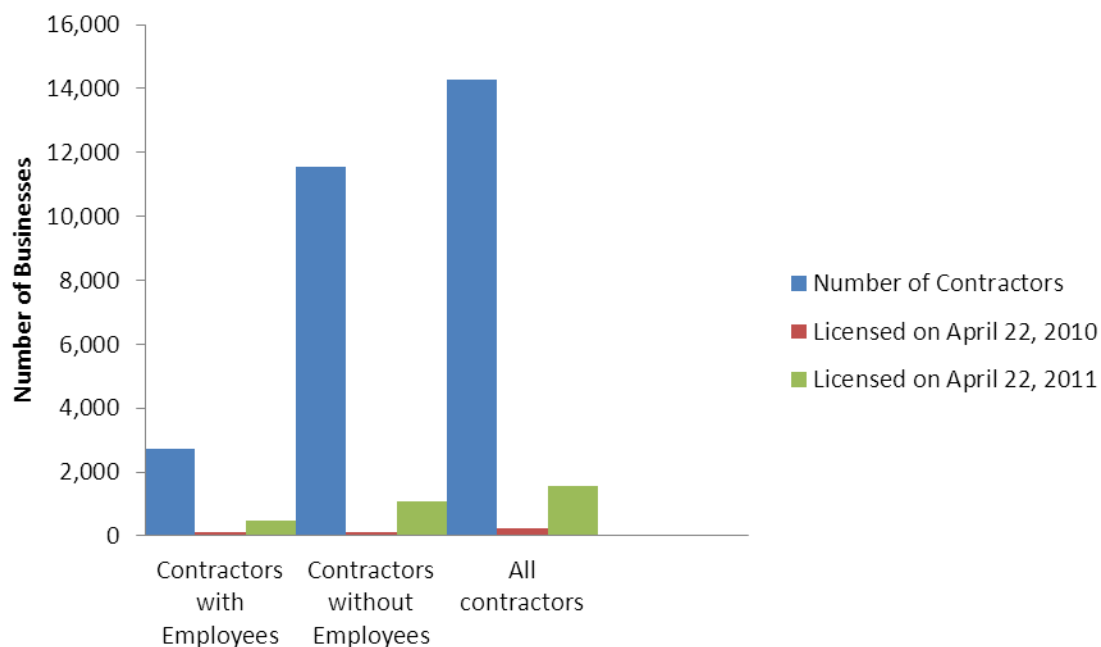
The total number of contractors licensed on May 22, 2010 was 223. Of these contractors, 104 indicated that they had employees and 119 indicated that they did not. On May 22, 2011 the total number of licensed contractors increased

to 1,548, an increase of 1,325. Of those contractors, 478 indicated that they had employees and 1,070 indicated that they did not (MADOS, 2011). The results are summarized in Table 1. Figure 1 compares the number of contractors that were licensed on April 22, 2010 and April 22, 2011. It also compares the contractors that have employees, the contractors that do not have employees, and the total number of contractors at each time period.

Table 1

*Contractors licensed by DOS in Massachusetts*

	Contractors with employees	Contractors without employees	Total contractors
Prior to April 22, 2010	104	119	223
Between April 22, 2010 and April 22, 2011	374	951	1,325
Prior to April 22, 2011	478	1,070	1,548

*Figure 1: Number of contractors licensed vs. total number of contractors in Massachusetts*

On April 22, 2010 the percent of contractors that were licensed was 1.6% with 3.8% of contractors with employees obtaining a license and 1.0% of contractors without employees obtaining a license. On April 22, 2011 those percentages increased to 10.8% of all contractors, 17.6% of contractors with employees, and 9.2% of contractors without employees having the required license. These results are summarized in Table 2.

Table 2

Percentage of Contractors Licensed in Massachusetts		
	Contractors with employees	Contractors without employees
	Total contractors	

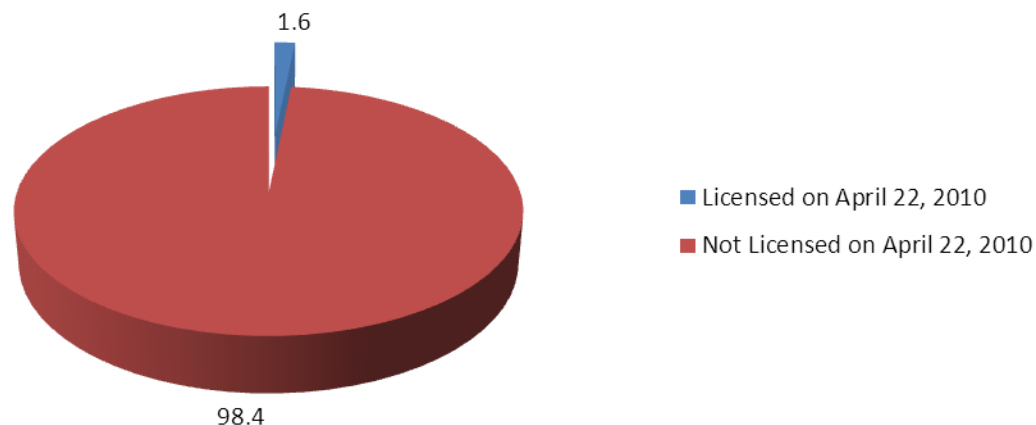
Percent on April 22, 2010	3.8	1.0	1.6
Percent on April 22, 2011	17.6	9.2	10.8
Percent change	+13.8	+8.2	+9.2

## Conclusions

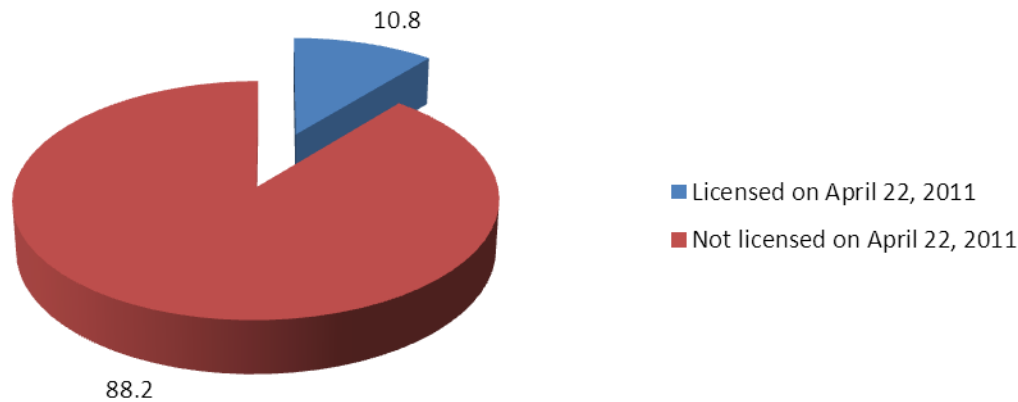
The number of Massachusetts construction companies that were licensed by the USEPA on the effective date of April 22, 2010 was 1.6% of the companies that were required to be licensed. This extremely low percentage of compliance indicates that the outreach efforts of the USEPA do not appear to be effective. On April 22, 2010, only 1.0% of contractors without employees had obtained the license, while 3.8% of companies with employees had obtained the license. This disparity indicates that outreach appeared to be more effective in reaching companies which had employees, although it does not indicate possible causes for this.

One year later, that percentage of contractors that obtained the required license increased to 10.8%. There was still a disparity in the percentages of contractors that obtained the license. 17.6% of contractors with employees and 9.2% of contractors without employees had obtained the license. The difference in the space of the year was that the MADOS, acting on the delegated authority of the USEPA, began to enforce the regulations, including issuing of fines. No additional outreach was conducted over the course of that year. This would indicate that the threat of fines is a better inducement to compliance of the regulation for both contractors with and without employees.

Figure 2 and Figure 3 highlight the percentage of contractors that have obtained the required license on April 22, 2010 and April 22, 2011.



*Figure 2: Percentage of All Licensed Contractors on April 22, 2010*



*Figure 3: Percentage of All Licensed Contractors on April 22, 2011*

The difference in the percentages of businesses with and without employees that have obtained the required license may be partially due to the difference in the way the data for the two sectors was reported by the US Census Bureau. The reason for this difference is not known. It may also be due to the fact that businesses without employees are exempted from many regulations, such as OSHA reporting of accidents and being required to carry workers compensation. These businesses may not have realized that this regulation did not exempt them. If the reasons were known, outreach efforts could be better targeted to reach these businesses when new regulations are implemented.

Given this increase, as enforcement actions continue, the percentage of businesses that are licensed out all of the businesses that are required to obtain a license should continue to increase. Over time, additional factors, such as liability insurance providers requiring the license as part of the environmental and safety submittals and general contractors requiring proof of license of all of the subcontractors on the job may also contribute to increase licensing rate.

No data was collected from other states to see if this pattern is similar in other states or Massachusetts had a unique experience. There may be differences in states that have their own enforcement programs, such as Massachusetts, Washington, or Utah and states such as Maine or South Carolina that do not.

### **Acknowledgements**

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