

**ECONOMIC ANALYSIS OF THE
FINAL TSCA SECTION 402(a)(3) LEAD-BASED PAINT
ACCREDITATION AND CERTIFICATION FEE RULE**

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EXECUTIVE SUMMARY

On August 29, 1996, EPA published requirements for lead-based paint activities in target housing and child-occupied facilities.¹ Lead-based paint activities are lead inspection, risk assessment, and abatement. The primary objective of these requirements is to ensure the availability of a trained and qualified workforce to identify and address lead-based paint hazards and to ensure that individuals and firms conduct lead-based paint activities in a way that safeguards the environment and protects the health of occupants, especially children under seven years of age. The regulation, which was promulgated under Section 402(a) of the Toxic Substances Control Act (TSCA), sets standards for performing lead-based paint activities that are reliable, effective, and safe. It also requires that all individuals engaged in lead-based paint activities be properly trained, that training programs be accredited, and that firms and individuals be certified for conducting lead-based paint activities.

TSCA §402(a)(3) directs the Administrator of EPA to impose accreditation and certification fees to cover the costs of administering and enforcing these standards and regulations in States and Tribal Areas that are not authorized to operate their own lead-based paint programs. On September 2, 1998, EPA published a proposed rule and a final rule to establish these fees.² This report supports EPA's new final accreditation and certification fee rulemaking by: (1) estimating the total costs to administer and enforce the TSCA §402(a) certification program in States and Tribal Areas without an authorized program; (2) estimating the fees required to cover these costs; and (3) analyzing the potential impact of these fees on small entities and low-income and minority populations.

EPA considered a wide range of data in preparing this report. The most important sources of data were nine State lead-based paint accreditation and certification programs³ and the Regulatory Impact Analysis for the Section 402(a) and 404 rulemaking.⁴ Other data sources, which are discussed throughout the report, include interviews with industry experts, U.S. Bureau of the Census, Dun and Bradstreet, prior EPA analyses, and public comments on the final rulemaking.

This Executive Summary discusses the five basic analytical steps in the report and the associated findings:

- Projecting the universe of fee payers and the corresponding number of applications for accreditation and certification (Chapter 2);
- Estimating Section 402 program costs (Chapter 3);
- Calculating the fee levels to recover costs under several regulatory options (Chapter 4);

¹ Final rule at 61 *Federal Register* 45778; codified at 40 CFR Part 745.

² Proposed rule at 63 *Federal Register* 46734; final rule at 63 *Federal Register* 46668.

³ *Data Summary for Nine State Lead Accreditation and Certification Programs*, U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics, Economics, Exposure and Technology Division, Economic and Policy Analysis Branch, March 1998 (updated August 1998).

⁴ *TSCA Title IV, Sections 402(a) and 404: Target Housing and Child-Occupied Facilities Final Rule Regulatory Impact Analysis*, August 1996.

- Examining the sensitivity of estimates to key parameters (Chapter 5); and
- Assessing the economic impact of the fees on small entities (Chapter 6) and low-income and minority populations (Chapter 7).

Other required analyses completed for this rulemaking are briefly discussed in Chapter 8. They are analyses required by the Paperwork Reduction Act, Executive Order 12866, and the Unfunded Mandates Reform Act and analyses of the impact of the fees on international trade and technical innovation. Chapter 9 presents conclusions of the analysis.

Projected Number of Applications

The national universe of potential accreditation and certification fee payers is composed of training providers, firms, and individuals involved in lead-based paint activities. EPA estimated the national demand for lead-based paint accreditation and certification by developing a proxy for the total number of potential fee payers. To develop this proxy, EPA determined the average ratio of accredited training providers and certified firms and individuals to the number of housing units with damaged lead-based paint in eight States. Using this ratio, EPA extrapolated to all U.S. States, Tribal Areas, and U.S. Territories to estimate the national universe of training providers, firms, and individuals. (See Exhibit ES-1.)

**Exhibit ES-1
Estimated EPA-Administered Universe**

Type of Entity	National Universe	EPA-Administered Universe				
		Year 1	Year 2	Year 3	Year 4	Year 5
Accredited Training Providers*	177	51	51	44	37	30
Certified Firms	4,069	1,167	1,167	1,011	856	700
Certified Individuals	17,249	4,948	4,948	4,287	3,628	2,969
Total Number of Entities *	21,495	6,166	6,166	5,342	4,521	3,699

* Includes both for-profit training providers (60 percent) and State, local government, and nonprofit training providers (40 percent).

EPA made a simplifying assumption that the size of the national universe of fee payers will remain constant over a five-year projection period. As States adopt their own lead accreditation and certification programs, however, the size of the EPA-administered universe will decline. In this analysis, EPA assumed that 32 States and the District of Columbia will be authorized to operate their own lead accreditation and certification programs by the first year of the program and that the EPA-administered universe of 18 States, Tribal Areas, and U.S. Territories will decrease between years three and five as EPA authorizes another seven State programs.

EPA used the annual EPA-administered universe estimates to project the annual number of applications to EPA Regional offices for accreditation and certification. The projections incorporate assumptions about the periodic expiration of accreditations and certifications, the rate of entry and exit from the lead-based paint services industry by fee payers, and the training programs offered by training providers. The projected annual number of accreditations and certifications over five years is summarized in Exhibit ES-2 below. The number of accreditations and certifications is high in the first year of the program as the

accreditation and certification requirements take effect. The level of activity drops considerably in years two and three as only new entrants into the industry submit applications. The level of activity increases in the fourth and fifth years because of the expiration of the initial accreditations and certifications issued in the first two years of the program. The number of re-accreditations, certification extensions, and re-certifications, however, is substantially lower than the number of initial accreditations and certifications in years one and two. The number declines primarily because the number of States in the EPA-administered universe decreases starting in year three.

Exhibit ES-2
Accreditations, Re-accreditations, Certifications,
Certification Extensions, and Re-certifications Per Year

Type of Entity	EPA-Administered Universe				
	Year 1	Year 2	Year 3	Year 4	Year 5
Training Providers*					
-- Training Program Accreditations	320	4	4	0	0
-- Training Program Re-accreditations	0	0	0	0	184
Firms					
-- Certifications	1,167	117	101	86	70
-- Certification Extensions *	0	0	0	624	51
Individuals					
-- Certifications	4,948	1,104	956	809	664
-- Re-certifications	0	0	0	0	692
Total Number of Applications **	6,435	1,225	1,061	1,519	1,661

* The number of firm certification extensions is presented here but was not included in the universe for the initial fee calculations. In response to public comments received on the final rule published on September 2, 1998, a firm certification extension fee was added to the program, allowing a direct reduction of worker fees. See Section 4.2.

** Includes both for-profit training providers (60 percent) and State, local government, and nonprofit training providers (40 percent).

The estimates for training providers include both for-profit (60 percent) and not-for-profit training providers (40 percent). However, only training programs offered by for-profit training providers will be assessed accreditation fees because TSCA §402(a)(3) states that EPA (or an authorized State) shall not impose fees “on any State, local government, or nonprofit training program.”

TSCA §402(a) Program Costs

To estimate the cost of administering and enforcing the TSCA §402(a) program in areas without authorized programs, EPA identified the specific activities that EPA Headquarters or Regions will perform and then estimated the costs for each activity. Costs include salaries, overhead multipliers, and direct costs. The total cost is the sum of EPA’s Headquarters administrative costs, Headquarters enforcement costs, Regional administrative costs, and Regional enforcement costs.

EPA estimated the costs for Regional administrative activities on a *per application* basis (e.g., cost to review an application, cost to issue a certificate), since these costs depend largely on the number and type of applications received. The total program cost for EPA Regional administrative activities is the sum of the

EPA Regional administrative costs for each type of application multiplied by the total number of that type of application.

EPA directly estimated total costs for enforcement activities and Headquarters administrative activities, since these activities cannot be linked to specific applications. As more States receive authorization over the five-year modeling period, the annual cost for enforcement activities and Headquarters administrative activities is assumed to decrease proportionally with the number of entities in the EPA-administered universe.

Over the first two years, total program costs are estimated to decrease abruptly from \$2.3 million to \$0.9 million as the first-year application surge passes. In the third and fourth years, costs decline further as more States are assumed to be authorized for their own lead accreditation and certification programs. In the fifth year, the costs increase due to the re-accreditation and re-certification of entities that were initially accredited or certified in the first year. Regional administrative costs account for approximately 47 percent of cumulative program costs. Most of the remaining costs are for Regional enforcement activities, including enforcement of the work practice standards. See Exhibit ES-3.

Exhibit ES-3
EPA Section 402 Program Costs Over Five Years

Headquarters Administrative Costs	\$170,000
Regional Administrative Costs	
Accreditation	\$603,000
Firm Certification	\$421,000
Firm Certification Extension	\$110,000
Individual Certification	\$1,502,000
Headquarters Enforcement Costs	\$315,000
Regional Enforcement Costs	\$2,478,000
Total*	\$5,600,000

* Total may not sum due to rounding.

This report also separately examines costs that will arise only for certain fee payers, including the costs of: (1) taking certification examinations, which are not required for all lead-based paint disciplines; (2) obtaining accreditation or certification in an EPA-administered State or Tribal Area while already possessing accreditation or certification in another EPA-administered jurisdiction or in an authorized State (multi-jurisdiction registration); and (3) replacing lost identification cards and certificates. The estimated fee for certification examinations is \$70. The estimated fee for registering in multiple EPA-administered jurisdictions is \$35. However, training providers, firms, and individuals seeking an initial accreditation or certification in an EPA-administered jurisdiction while already possessing accreditation or certification in an authorized State must pay the full initial accreditation or certification fee for the EPA-administered program. The estimated fee for replacing lost cards and certificates is \$15. These costs are not included in Exhibit ES-3.

Fee Levels under Regulatory Options

EPA estimated the TSCA §402(a)(3) fee levels required to cover the costs of administering and enforcing the program under four different regulatory options based on two separate questions:

- (1) *How should EPA assign costs that cannot be attributed to specific applications across fee payers?* EPA is considering allocating its enforcement costs and Headquarters administrative costs to all entities in the Section 402 universe using the following two methods:
- ▶ *Fixed amount per application.* In this approach, the same dollar amount of enforcement costs and Headquarters administrative costs would be attributed to each applicant.
 - ▶ *Fixed ratio of Regional administrative costs to EPA enforcement costs and Headquarters administrative costs.* In this approach, the Regional administrative costs for each type of accreditation or certification (e.g., supervisor training program accreditation, firm certification) would be multiplied by a fixed ratio to determine the portion of other costs each applicant would pay.
- (2) *How many different categories of fees should be used for training providers and individuals?* EPA is considering two fee structure options to specify which training providers or individuals would pay the same fees. (There is only one fee for firms because they all face the same certification requirements.)
- ▶ *Stratified Average Cost.* Under this option, fee levels for different types of applicants are estimated based on the administrative and enforcement burden they impose on EPA. This option results in 31 different fees.
 - ▶ *Simplified Average Cost.* Under this option, an average fee level is estimated for broad groups of training providers or individuals. The fee generally does not vary according to the relative burden that a fee payer within the larger group imposes on EPA. This option results in five separate fees.

Thus, the four options are: (1) Fixed Amount, Stratified Average Cost; (2) Fixed Amount, Simplified Average Cost; (3) Fixed Ratio, Stratified Average Cost; and (4) Fixed Ratio, Simplified Average Cost. The estimated fee levels for the four regulatory options are summarized in Exhibit ES-4 below.

The accreditation fee levels for the Fixed Ratio options are consistently higher for all training providers than the Fixed Amount options. The reason for these higher fees is that allocating enforcement costs and Headquarters administrative costs using the Fixed Ratio approach, whether using the Stratified Average Cost or the Simplified Average Cost method, attributes more costs to those fee categories with higher aggregate Regional administrative costs, namely certification fees. Consequently, the Fixed Ratio approach results in higher overall fees for training providers and firms and lower fees for individuals⁵. The reverse is true using the Fixed Amount approach.

The Stratified Average Cost options result in a wider range of fee levels than the Simplified Average Cost options because fee levels are set based on the activities and associated burdens required to accredit or certify a particular type of applicant (e.g., initial supervisor training program) rather than an average burden for an entire category of applicants (e.g., all initial and refresher training programs). As a result, under the

⁵ Exceptions to this general result include slightly higher initial certification fees for Inspectors and marginally lower re-accreditation fees for Project Designers under the Fixed Ratio, Stratified Average Cost option.

Exhibit ES-4
Estimated Fee Levels under Four Options

Training Program		Stratified Average Cost Approach				Simplified Average Cost Approach			
		Fixed Amount		Fixed Ratio		Fixed Amount		Fixed Ratio	
		Accreditation	Re-accreditation	Accreditation	Re-accreditation	Accreditation	Re-accreditation	Accreditation	Re-accreditation
<i>Initial Training</i>	Inspector	\$2,500	\$1,600	\$4,860	\$2,900	\$1,640	\$1,080	\$3,000	\$1,770
	Risk Assessor	\$1,760	\$1,150	\$3,240	\$1,940	\$1,640	\$1,080	\$3,000	\$1,770
	Supervisor	\$3,250	\$2,050	\$6,490	\$3,870	\$1,640	\$1,080	\$3,000	\$1,770
	Worker	\$1,760	\$1,150	\$3,240	\$1,940	\$1,640	\$1,080	\$3,000	\$1,770
	Project Designer	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
<i>Refresher Training</i>	Inspector	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Risk Assessor	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Supervisor	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Worker	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Project Designer	\$640	\$490	\$810	\$480	\$1,640	\$1,080	\$3,000	\$1,770
Firms*		Certification	Certification Extension	Certification	Certification Extension	Certification	Certification Extension	Certification	Certification Extension
		\$540	\$430	\$590	\$430	\$540	\$430	\$590	\$430
Individuals		Certification	Re-certification	Certification	Re-certification	Certification	Re-certification	Certification	Re-certification
Inspector**		\$470	\$350	\$370	\$190	\$500	\$380	\$430	\$250
Risk Assessor**		\$590	\$420	\$620	\$340	\$500	\$380	\$430	\$250
Supervisor**		\$540	\$390	\$520	\$280	\$500	\$380	\$430	\$250
Worker*		\$280	\$240	\$120	\$50	\$350	\$300	\$280	\$170
Project Designer		\$470	\$390	\$450	\$280	\$430	\$380	\$360	\$250

* Fees are adjusted in response to public comments received on the final rulemaking published on September 2, 1998 (see Section 4.2).

** Fees include the \$70 examination fee (see Section 3.5.1).

Stratified Average Cost approach, the fees paid by any specific type of training provider or individual would be more reflective of the actual burden incurred by EPA to accredit or certify that specific type of applicant. While the Stratified Average Cost approach offers greater precision, the Simplified Average Cost approach has the benefit of administrative simplicity by creating five rather than 31 separate fees. Firm certification fees are not affected, however, since a single fee category is estimated for them under both fee structure options.

EPA will to use the Fixed Amount approach because, *overall*, the fees result in lower potential economic impacts than with the Fixed Ratio approach. That is, the burden is more evenly distributed over all fee payers, rather than directed at the relatively few (for-profit) training providers. Furthermore, the fee levels under the Fixed Amount option more closely match state lead accreditation and certification fee levels.

In response to public comments that the Agency received on the September 2, 1998 final rulemaking, EPA decided to create a firm certification extension fee. Several firms commented that the worker fees seemed high relative to the firm fees. They suggested reducing the worker fees and increasing the firm fees. A large portion of the fees on firms and workers reflects the cost of Regional enforcement activities. EPA enforcement of firm and worker standards is typically directed at firms instead of workers. The fees, however, assumed that these enforcement costs would be similar for firms and workers. To address this issue, the Agency is creating a firm certification extension fee and using the revenue from this fee to reduce Regional enforcement costs charged to workers. Under the new final rule, firms are required to extend their certification every three years.

The firms applying for extension of their certifications will add an administrative burden to the program. The program costs increase by the \$163 additional administrative burden of processing the certification extension per applicant, approximately \$110,000. To raise additional revenue, EPA decided to charge the firms applying for extensions the average estimated cost of Regional enforcement per applicant, which is approximately \$263. By assessing the 675 firms expected to apply for certification extensions in years four and five the average cost of Regional enforcement per applicant (\$263), EPA can generate an additional \$180,000 of revenue. This revenue, if redistributed among the 2,305 workers that will apply for certification and re-certification over the five-year modeling period, decreases worker certification and re-certification fees by \$80 per applicant. Therefore, for all fee options, EPA assigned firm certification extension fees of \$430 (\$263 Regional enforcement cost + \$163 administrative processing cost) and reduced worker fees by \$80. To simplify the analysis, the same fee adjustments were used for the Fixed Ratio approach.

EPA compared the Section 402 fees estimated in this analysis with those charged for lead accreditation and certification by the nine States that participated in EPA's data gathering effort (California, Illinois, Maine, Massachusetts, New Hampshire, Ohio, Rhode Island, Vermont, and Virginia) and Arkansas, Louisiana, Oklahoma, and Texas, whose fees were identified by EPA Region VI. After adjusting for differences in the renewal periods, the difference between the estimated Federal Section 402 fees and State fees are often substantial. These differences largely reflect a key difference between the Federal and State programs: State fee levels are not necessarily set to recover the full costs to administer and enforce a State's lead accreditation and certification program. State fee levels in Arkansas, California, Illinois, Louisiana, Ohio, Oklahoma, Texas, and Virginia were intended to fully recover the costs of their lead accreditation and certification programs. In practice, however, program costs substantially exceed the amount recovered in fee revenues. Virginia is the only State in this analysis reporting a self-supporting lead accreditation and certification fee program. The estimated Section 402 fee levels are largely comparable to the corresponding fees levied by Virginia.

Sensitivity of Estimates to Key Parameters

EPA examined the sensitivity of the TSCA §402(a) program cost and fee level estimates to the following key assumptions or inputs:

- The estimated size of the universe of fee payers;
- The potential number of States in which EPA will administer the Section 402 program over the five-year projection period;
- The distribution of certified individuals among lead-based paint disciplines; and
- The rates at which training providers, firms, and individuals are assumed to enter and exit the industry.

The sensitivity analysis indicated that, overall, the estimated program costs and fee levels are fairly robust with respect to the underlying methodology and assumptions. A fundamental reason for this robustness is that the costs to administer and enforce the Section 402 program are estimated as much as possible on a *per application* basis. Only costs that cannot be linked to specific transactions (i.e., enforcement costs and Headquarters administrative costs) are allocated using either a Fixed Amount or Fixed Ratio approach. This approach reduces the sensitivity of the estimated fees to the size of the regulated universe and other key analytical assumptions.

Impact of Fees on Small Entities

To address the requirements of the Regulatory Flexibility Act (5 U.S.C. Section 601-602), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), EPA examined two issues:

- The number of small entities affected by the rule; and
- The extent of the rule's impacts on these entities.

Under the rule, two types of organizations involved in lead-based paint activities will be required to pay fees: training providers and firms.

To estimate how these fees affect for-profit training providers that offer different combinations of training programs, EPA analyzed potential impacts on two categories of training providers: (1) partial-service providers offering initial and refresher training in two disciplines: worker and supervisor; and (2) full-service providers offering both initial and refresher training in four or five disciplines. Sixty percent of full-service training providers (30 percent of all firms) are assumed to offer four training programs (worker, supervisor, inspector, and risk assessor), and the remaining 40 percent of full-service training providers are assumed also to offer initial and refresher project designer training. EPA did not examine impacts on State, local government, and nonprofit training providers because they are exempt from accreditation fees.

To estimate how the fees may impact small firms, EPA analyzed the potential effect of both firm and individual certification fees. Certified firms may pay the certification fees for their employees, in addition to the firm certification fee. Since the extent of this practice is uncertain, EPA analyzed two scenarios: (1) all firms pay employee certification fees, plus a firm certification fee; and (2) half of all firms pay employee certification fees, plus a firm certification fee. Based on State program experience, EPA believes that a few nonprofit organizations and local governments may seek firm certification and pay certification fees for themselves and their employees.

Exhibit ES-5 summarizes the number of small businesses experiencing different levels of economic impacts for the Fixed Amount, Stratified Average Cost option. Using national data on businesses in SIC 1799 (Special Trade Contractors), 12 of 31 for-profit training providers are expected to incur impacts greater than three percent as a result of the rule. Using data on the revenue of actual lead training providers in Massachusetts and Ohio, however, no training providers are projected to have impacts greater than three percent of their annual revenue. In comparison, all lead-based paint activities firms are expected to incur impacts below one percent in all scenarios. The largest impact is expected for the firms in the smallest revenue category that pay all employee certification fees. The cost impact for those firms is estimated at 0.87 percent of total annual revenue. Thus, firms can be expected to face lower impacts than training providers from the rule.

Exhibit ES-5
Annual Small Business Impacts
(Fixed Amount, Stratified Average Cost Option)

Impact Estimate	All Firms	Training Firms *		Lead-based Paint Activities Firms		
		Full-Service	Partial Service	Scenario 1: Pay All Fees	Scenario 2: Half Pay Fees	
					Pay	No Pay
Less than 1 percent	1,553 firms (99% of total)	6 firms (19%)	6 firms (19%)	1,541 firms (100%)	770 firms (50%)	770 firms (50%)
More than 1 percent	18 firms (1% of total)	9 firms (29%)	9 firms (29%)	0 firms (0%)	0 firms (0%)	0 firms (0%)
More than 3 percent	12 firms (1% of total)	6 firms (19%)	6 firms (19%)	0 firms (0%)	0 firms (0%)	0 firms (0%)

* Based on SIC 1799 data. Using Massachusetts and Ohio data, no training firms are in the greater than 3 percent impact category, 1 training firm is in the greater than 1 percent category, and 30 firms are in the less than 1 percent category.

** Individual entries may not sum to totals due to rounding.

Environmental Justice Considerations

Executive Order 12898 requires Federal agencies to develop an environmental justice strategy and identify disproportionately adverse human health or environmental effects of programs, policies, and activities on minority and low-income populations. Section 402(a)(3) directs EPA to impose fees on persons operating accredited training programs and on firms and individuals certified to perform lead-based paint activities. These fees must cover the costs of administering and enforcing the regulations and standards under TSCA §402 in States where EPA is responsible for program implementation. The environmental justice analysis focuses on the potential environmental justice impacts of the fees on disadvantaged households and described programs that assist low-income and minority households in obtaining lead-based paint services, which may help offset the potential negative impacts of the fees. The analysis also considers possible impacts of the fees on minority and low-income firms and workers.

The fees are not likely to cause severe or disproportionate impacts for minority or low-income populations. Fees, even if passed on, are a small fraction of the cost of lead hazard evaluation and abatement projects; the fees are not likely to result in fewer lead hazard evaluation or abatement activities. Further, EPA, HUD, and others have developed programs to help these communities respond to lead risks; these programs may offset any potential negative impacts of the fee.

EPA lacks sufficient data at this time to determine whether the lead accreditation and certification fees will disproportionately burden minority-owned firms or burden low-income or minority workers engaged in lead-based paint activities. There are, however, several federally and locally funded programs to assist minorities in getting training and certification.

CHAPTER 1: INTRODUCTION

1.1 Legislative and Regulatory Background

In response to continuing concerns about lead poisoning among American children, Congress passed the Housing and Community Development Act of 1992, which included Title X: The Residential Lead-Based Paint Hazard Reduction Act of 1992. Title X amended several existing housing, worker safety, and environmental statutes and amended the Toxic Substances Control Act (TSCA) by adding Title IV: Lead Exposure Reduction.

TSCA §402(a) (15 U.S.C. 2682(a)) requires the Administrator of the U. S. Environmental Protection Agency (EPA) to promulgate regulations governing lead-based paint activities, namely lead inspection, risk assessment, and abatement. Section 402(a) does not require lead-based paint activities but ensures that individuals engaged in such activities are properly trained; that training programs are accredited; and that firms engaged in such activities are certified. Title IV also requires EPA to establish standards for performing lead-based paint activities that are reliable, effective, and safe. Under Section 404 (15 U.S.C. 2684), EPA may authorize a State or an Indian Tribe to administer and enforce its own lead-based paint program, which shall be “as protective as” EPA’s program under Section 402(a).

On August 29, 1996, EPA published requirements for lead-based paint activities in target housing and child-occupied facilities (61 *Federal Register* 45778) at 40 CFR Part 745 under Sections 402 and 404 of TSCA. The primary objective of this regulation is to ensure the availability of a trained and qualified workforce to identify and address lead-based paint hazards and to ensure that individuals and firms conducting lead-based paint activities will do so in a way that safeguards the environment and protects the health of occupants, especially children aged six years and under.

Under Subpart L of the rule, EPA established accreditation requirements for training programs at 40 CFR 745.225 and certification requirements for firms and individuals at 40 CFR 745.226. These regulations apply to training providers, firms, and individuals performing lead-based paint activities in target housing or child-occupied facilities. They define requirements in the following five lead-based paint disciplines:

- Inspector;
- Risk assessor;
- Supervisor;
- Worker; and
- Project designer.

The Agency established specific work practice standards for each of these disciplines at 40 CFR 745.227.

Under Subpart Q, EPA established the requirements that State or Tribal programs must meet for authorization by the Administrator and the procedures EPA will follow in approving, revising, and withdrawing approval of State or Tribal programs. At the time of this analysis, almost two-thirds of all States have established their own lead accreditation and certification programs or have passed, or are in the process of passing, enabling legislation to do so. EPA will administer and enforce the 40 CFR Part 745, Subparts L and Q regulations only in States and Tribal Areas that do not apply for and receive EPA authorization.

TSCA §402(a)(3) (15 U.S.C. 2682(a)(3)) states that EPA (or an authorized State) shall impose fees on: “(A) persons operating training programs accredited under this title; and (B) lead-based paint activities contractors certified in accordance with paragraph (1).” EPA has interpreted the term “contractors” to include both firms and individuals conducting lead-based paint activities. Thus, fees will be imposed on training providers, firms, and individuals.

TSCA §402(a)(3) states that EPA (or an authorized State) shall establish fees “at such a level as is necessary to cover the costs of administering and enforcing the standards and regulations under this section which are applicable to such programs and contractors.” EPA has interpreted this statutory language to mean that fees under the Federal program will be collected to cover all the costs of administering and enforcing the Section 402 program in non-authorized States, excluding Section 402 program development costs. Pursuant to 31 U.S.C. 3302(b), EPA must deposit fees it collects for government use under this program into the U.S. Treasury as miscellaneous receipts.

TSCA §402(a)(3) also states that EPA (or an authorized State) shall not impose fees “on any State, local government, or nonprofit training program” and “may waive the fee for lead-based paint activities contractors under subparagraph (A) for the purpose of training their own employees.” This report addresses the issues raised by these provisions, namely who will pay for the costs of accrediting State, local government, and nonprofit training programs and whether EPA should waive accreditation fees for firms who train their own employees. On September 2, 1998, EPA published a proposed and final lead accreditation and certification fees rule, soliciting public comment on the final rule.

1.2 Overview of the Report

This analysis supports EPA’s new final Section 402(a)(3) lead fee program rulemaking by estimating the costs to administer and enforce the Section 402 accreditation and certification program in States or Tribal Areas without an authorized program, by estimating the associated fee levels and by analyzing the resulting small entity, environmental justice, and other impacts of the fees. This report fulfills these objectives in six basic steps, as outlined in Exhibit 1-1 and described below. Following the discussion of the methodology, this section describes the major data sources for the analysis.

1.2.1 Methodology

Project the Universe of Fee Payers

In Chapter 2, EPA projects the universe of training providers, firms, and individuals who will seek EPA accreditation or certification over the first five years of the program. Specifically, EPA:

*“SECTION 402. LEAD-BASED PAINT ACTIVITIES
TRAINING AND CERTIFICATION.*

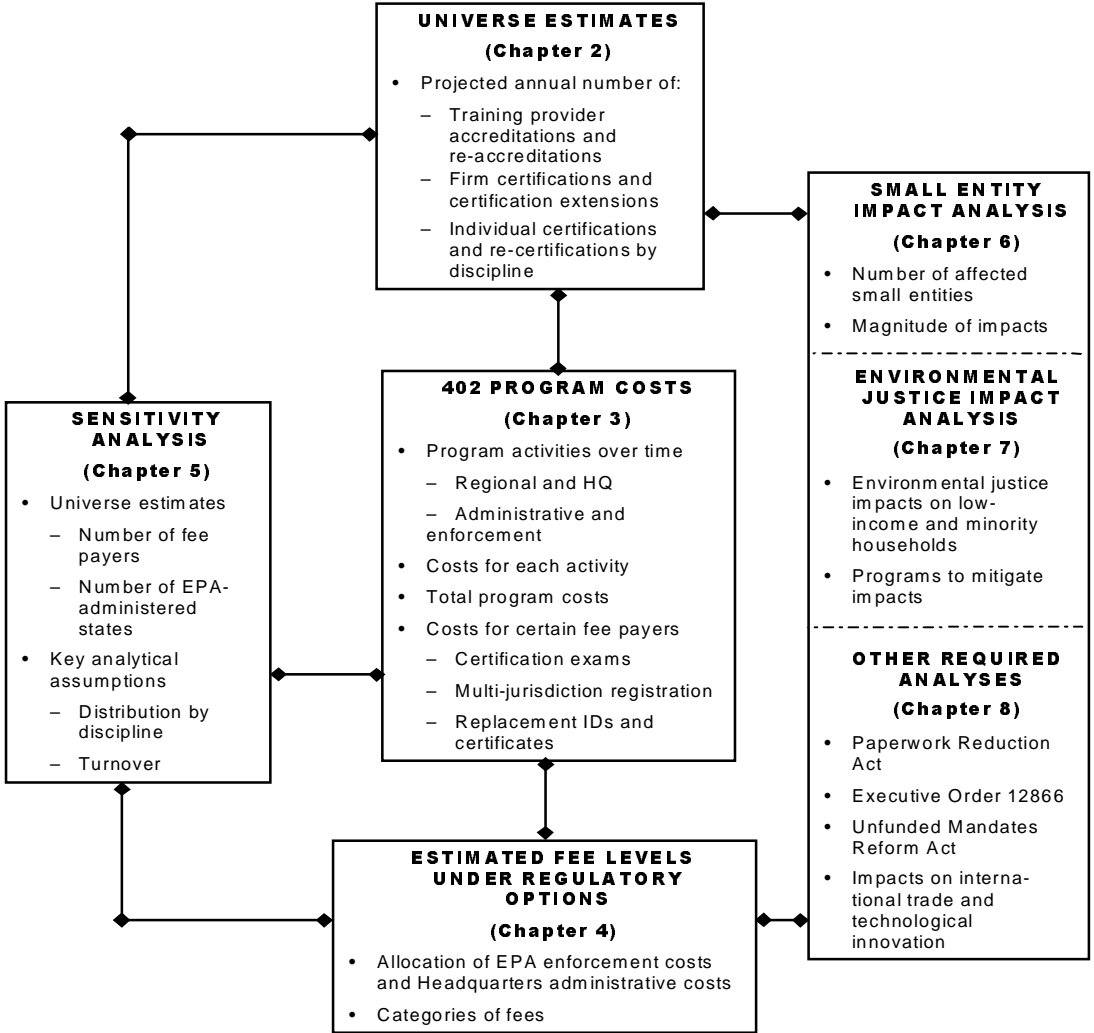
(a)(3) ACCREDITATION AND CERTIFICATION FEES.
The Administrator (or the State in the case of an authorized State program) shall impose a fee on ---

(A) persons operating training programs accredited under this title; and

(B) lead-based paint activities contractors certified in accordance with paragraph (1).

The fees shall be established at such a level as is necessary to cover the costs of administering and enforcing the standards and regulations under this section which are applicable to such programs and contractors. The fee shall not be imposed on any State, local government, or nonprofit training program. The Administrator (or the State in the case of an authorized State program) may waive the fee for lead-based paint activities contractors under subparagraph (A) for the purpose of training their own employees.”

**Exhibit 1-1
Conceptual Diagram of Methodology**



- Estimates the national universe of fee payers;
- Reduces the estimates to reflect the universe only in non-authorized States, Tribal Areas, and Territories where EPA will implement the Section 402 program; and
- Uses the EPA-administered universe estimates to estimate the number of accreditations and certifications per year by modeling the periodic expiration of accreditations or certifications; the rate of entry and exit from the lead-based paint services industry by training providers, firms, and individuals; and the training programs offered by individual accredited training providers.

Estimate Section 402 Program Costs

In Chapter 3, EPA describes the specific administrative and enforcement activities to be performed by EPA Headquarters or EPA Regions under the Section 402 program. The chapter estimates the costs for each activity or set of activities. The total program cost is the sum of Headquarters administrative costs, Headquarters enforcement costs, Regional administrative costs, and Regional enforcement costs. EPA Regional administrative activities depend directly on the number and type of accreditation or certification applications received and therefore their costs are estimated and allocated on a per application basis. The total cost for EPA Regional administrative activities is the sum of the EPA Regional administrative costs for each type of application multiplied by the total number of that type of application. In contrast, EPA enforcement activities and Headquarters administrative activities generally cannot be linked to specific applications and therefore their costs are estimated and allocated directly. Chapter 3 also separately examines costs that will arise only for certain fee payers, including the costs of (1) taking certification examinations, which are not required for all lead-based paint disciplines; (2) registering in multiple jurisdictions; and (3) replacing lost identification cards and certificates.

Calculate Fee Levels under Regulatory Options

In Chapter 4, EPA estimates the fee levels under a variety of regulatory options. This analysis addresses two separate issues involved in developing the Section 402(a)(3) rulemaking:

- How should EPA enforcement costs and Headquarters administrative costs be allocated across fee payers?
- How many different categories of fees should be used for training providers and individuals? (There is only one fee category for firms because they all face the same certification requirements.)

Examine Sensitivity of Estimates to Key Parameters

In Chapter 5, the Agency examines the sensitivity of the Section 402 program cost and fee level estimates to the following assumptions:

- The estimated size of the universe of fee payers;
- The potential reduction over the five-year projection period in the number of States in which EPA will administer the Section 402 program;

- The distribution of certified individuals among the lead-based paint disciplines; and
- The industry entry and exit rates for training providers, firms, and individuals.

Assess Impact of Fees on Small Entities

To address the requirements of the Regulatory Flexibility Act (5 U.S.C. Section 601-602), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), Chapter 6 examines two questions:

- The number of small entities affected by the final rule; and
- The extent of the final rule's impacts on these entities.

Based on this analysis, the Agency determined that a substantial number of small entities will not bear a significant economic impact as a result of the rule's implementation.

Assess Impact of Fees on Environmental Justice

In accordance with Executive Order 12898, Chapter 7 assesses the environmental justice (equity) impacts of the lead accreditation and certification fees on low-income and minority households. It also describes government programs that may mitigate any negative impacts by assisting these disadvantaged households in obtaining lead-based paint services.

Assess Other Impacts of Fees

Chapter 8 briefly presents other required analyses for this rulemaking:

- Paperwork Reduction Act. Under the Paperwork Reduction Act (PRA), EPA is required to estimate the burden associated with the reporting and recordkeeping requirements under TSCA §402(a).
- Executive Order 12866. Executive Order 12866, *Regulatory Planning and Review*, requires Office of Management and Budget (OMB) review of rules with an impact on the economy of \$100 million or more, or with any other potentially significant impact. In evaluating the impact of a proposed regulation, EPA must determine whether it contains any Federal mandates that would potentially result in the expenditure of \$100 million or more by any particular public or private party.
- Unfunded Mandates Reform Act. Pursuant to Title II of the Unfunded Mandates Reform Act of 1995 (P.L. 104-4), EPA must determine whether the proposed rule contains any “Federal mandates,” as described in the Act, for States, local, or Tribal governments or the private sector.

In Chapter 8, EPA also assesses the potential impacts of the Section 402 rulemaking on international trade and technological innovation.

Chapter 9 presents conclusions of the lead fees economic analysis.

1.2.2 Major Data Sources

EPA used a wide range of data sources in preparing this report. The most important data sources were nine State lead-based paint accreditation and certification programs and the Regulatory Impact Analysis (RIA) for the Section 402(a) and 404 rulemaking. These two data sources are discussed below. Other data sources, which are discussed throughout this report, include interviews with industry experts, U.S. Bureau of the Census, Dun and Bradstreet, prior EPA analyses such as EPA's *Report on the National Survey of Lead in Housing*,¹ burden estimates for the Radon Measurement Proficiency Program and Radon Contractor Proficiency Program, and public comments on the final accreditation and certification fees rulemaking published on September 2, 1998.

State Program Information

To gather data on State accreditation and certification program burdens, fee structures, and related matters, EPA contacted the following nine States with existing lead accreditation and/or certification programs: California, Illinois, Maine, Massachusetts, New Hampshire, Ohio, Rhode Island, Vermont, and Virginia. These States were selected, with input from EPA Regional Lead Contacts, based on:

- The similarity of the State's lead accreditation and certification program requirements to Federal Section 402 requirements;
- The maturity of the State's accreditation and certification program;
- Existence of State accreditation and certification fees; and
- The extent to which the State fees cover all program costs.

EPA used State data for several purposes, including to help project the universe of annual fee payers, to estimate most Federal Section 402 program burdens, and to help identify an appropriate structure of different types of accreditation and certification fees. Although the State data provide the best available information to estimate certain Federal program burdens and set fee levels, they have several limitations. For example, State experience in 1996 to 1997 may not accurately reflect Federal experience in the future because of differences in State and Federal program administrative procedures, pay levels, program maturity, the demand for lead-based paint services, industry structures, and other factors.

Section 402 / Section 404 Regulatory Impact Analysis

A second major data source was the *TSCA Title IV, Sections 402(a) and 404: Target Housing and Child-Occupied Facilities Final Rule Regulatory Impact Analysis*, August 1996. This RIA estimated the benefits, costs, and impacts of the Section 402 / Section 404 rulemaking. As a result, it projected the size and composition of the national universe of accredited training providers and certified individuals. EPA used these national universe estimates to estimate the composition of the EPA-administered Section 402 program. The limitations of these estimates are discussed in the RIA.

Although the Section 402 / Section 404 RIA also estimated program costs in EPA-administered States using data from five States, EPA did not use these estimates in the current analysis for several reasons:

¹*Appendix II: Analysis*, United States Environmental Protection Agency, EPA 747-R95-005, April 1995.

- The Agency desired to use more recent information from States because of the importance of the program cost estimates, which may be used to set actual fee levels.
- More detailed cost estimates were needed to determine the appropriate level for a variety of possible fees.
- The program costs estimated in the RIA may be high since they are based on data from States that were in the process of establishing their lead programs, and operating costs may be higher per accreditation or certification during this startup period than in later periods.
- The RIA estimated the Section 402 / Section 404 universe using unadjusted data from the Department of Housing and Urban Development (HUD) on the number of housing units with deteriorated lead-based paint. EPA published revised data in its *Report on the National Survey of Lead in Housing*.

CHAPTER 2: UNIVERSE OF ACCREDITED TRAINING PROVIDERS, CERTIFIED FIRMS, AND CERTIFIED INDIVIDUALS

This chapter projects the number of training providers, firms, and individuals who will seek EPA accreditation or certification over the first five years of the EPA Section 402 program and the associated number of accreditations and certifications. EPA develops these projections in three steps:

- Step 1: Estimate the national universe of accredited training providers, certified firms, and certified individuals;
- Step 2: Reduce the national estimates to reflect the universe in States, Tribal Areas, and Territories without authorized programs, where EPA will directly administer the Section 402 program; and
- Step 3: Use the EPA-administered universe to estimate the annual number of applications for accreditations and certifications by modeling:
 - ▶ The periodic expiration of accreditations and certifications;
 - ▶ The rate of entry into and exit from the lead-based paint services industry by training providers, firms, and individuals; and
 - ▶ The training programs offered by individual accredited training providers.

These steps and the results are described below.

2.1 EPA-Administered Universe

EPA will incur costs for administering and enforcing the Section 402 program only in States, Tribal Areas, and Territories that do not seek or are not granted authorization to operate their own programs. EPA assumed that 32 States and the District of Columbia will receive EPA authorization by the time the Federal Section 402 program is established and starts to levy accreditation and certification fees. Within the first five years of the program, EPA estimated that another seven States with enabling legislation to establish lead accreditation and certification programs, but no current programs, also will receive EPA authorization. (See Appendix A.)

Thus, at the start of the program, the EPA-administered universe is expected to include 18 States. By the fifth year, the number of EPA-administered States is expected to decrease to 11 States as an additional seven States obtain authorization. EPA assumed that it will administer the program for all Tribal Areas. In addition, EPA assumed that it will administer the Section 402 program in Puerto Rico, the U.S. Virgin Islands, and the remaining Territories (Northern Marianas, Guam, Palau, and American Samoa).

EPA modeled the universe over a five-year period because of uncertainties related to the size of the universe over time. Changes in abatement technology and the associated costs, increased knowledge about and awareness of lead hazards, and changes in the structure of the industry may affect the demand for services and the supply of providers. These changes may affect the number of accreditations and certifications in both EPA-authorized States and EPA-administered States. Moreover, EPA expects that the

number of EPA-administered States will decrease during the first five years of the Section 402 program as more State programs are authorized. Thus, the size of the EPA-administered universe will decline over time, which will reduce EPA program costs and may affect estimated fee levels. Still other changes in administrative efficiencies and enforcement levels, for example, may affect the costs to administer and enforce such accreditations and certifications. Recent and on-going regulatory actions also may affect the size of the Section 402 universe, including the following:

- Residential Lead Hazard Standards - (TSCA §403). Section 403 of TSCA directs EPA to establish criteria for identifying lead-based paint hazards, including lead-contaminated dust hazards, lead-contaminated soil hazards, and lead-based paint hazards. In defining these hazards, this rule will affect the public perception of lead-based paint hazards and, therefore, may affect the demand for lead-based paint activities, training, and the number of accredited training providers and certified firms and individuals under the Section 402 program. EPA published a proposed rule on June 3, 1998 (63 *Federal Register* 30301).
- EPA/HUD Residential Lead-Based Paint Disclosure Program - (Section 1018 of Title X). Under Section 1018 of the Residential Lead-Based Paint Hazard Reduction Act of 1992, EPA and HUD established disclosure requirements for sales and leases of older housing before ratification of a contract for housing sale or lease. See 61 *Federal Register* 9064, March 6, 1996 (24 CFR Part 35 and 40 CFR Part 745). This rule requires sellers and landlords to disclose known lead-based paint and lead-based paint hazards and provide available reports to buyers or renters. Sellers and landlords also must give buyers and renters the pamphlet, developed by EPA, HUD, and the Consumer Product Safety Commission (CPSC), titled *Protect Your Family from Lead in Your Home*. Under this program, home buyers will get a 10-day period to conduct a lead-based paint inspection or risk assessment at their own expense. This program may raise awareness of lead-based paint hazards, increase the demand for lead-based paint activities, and therefore also the demand for accredited and certified entities in authorized and EPA-administered States. The disclosure program took effect at the end of 1996.
- Pre-Renovation and Remodeling Education Program (TSCA §406(b)). Section 406 of TSCA directs EPA to require renovation and remodeling firms to distribute a lead hazard information pamphlet to housing owners and occupants before conducting renovation and remodeling in pre-1978 housing. This information may increase the awareness of lead hazards and therefore the demand for lead-based paint activities and accredited and certified entities. This information also may encourage renovation and remodeling firms to voluntarily seek certification under Section 402. EPA published a final rule to implement Section 406(b) on June 1, 1998, (63 *Federal Register* 29907).

Given these uncertainties, EPA proposes to review the Section 402 fee program periodically to ensure that the fee levels are set appropriately to recover the costs of administering and enforcing the Section 402 program. (See Chapter 5.)

Based on the considerations described above, EPA modeled the EPA-administered universe as follows:

- In the first and second years, the EPA-administered universe is projected to include the participants in 18 States without authorized programs, plus all Tribal Areas and Territories.
- In the fifth year of the Section 402 program, EPA reduced the EPA-administered universe by the number of participants in seven additional States.
- To scale down the universe over the third and fourth years, EPA reduced the universe in the third year by one-third of the total number of training providers, firms, and individuals in those seven additional States. EPA also reduced the universe by an additional one-third in the fourth year.

EPA estimated the EPA-administered universe separately for training providers, firms, and individuals. The results of this analysis are presented in Exhibit 2-1.

**Exhibit 2-1
Estimated EPA-Administered Universe**

Type of Entity	National Universe	EPA-Administered Universe				
		Year 1	Year 2	Year 3	Year 4	Year 5
Accredited Training Providers*	177	51	51	44	37	30
Certified Firms	4,069	1,167	1,167	1,011	856	700
Certified Individuals	17,249	4,948	4,948	4,287	3,628	2,969
Total Number of Entities *	21,495	6,166	6,166	5,342	4,521	3,699

* Includes both for-profit training providers (60 percent) and State, local government, and nonprofit training providers (40 percent).

EPA will begin operating the Federal Section 402 program in EPA-administered States on September 1, 1998. For each year of the Federal program, the EPA-administered universe was calculated by subtracting the estimated number of training providers, firms, and individuals in EPA-authorized States from the national universe estimate for each category of applicant. EPA will begin accrediting training programs on September 1, 1998 and certifying firms and individuals on March 1, 1999. Entities currently in the training or lead activities business in both authorized and EPA-administered States must be accredited or certified by March 1, 1999 or August 30, 1999, respectively. Since EPA assumes that the demand for such activities and training will not increase significantly over the first five years of the program, the accreditation and certification burden in EPA-administered States will be largest in the first two years of the program and will decline to year five as additional States receive authorization. Section 2.2, below, describes EPA's methodology for estimating the national universe of training providers, firms, and individuals.

2.2 National Universe

EPA developed a proxy for national demand for lead accreditation and certification to estimate the number of training providers, firms, and individuals in the Section 402/404 universe. To develop this proxy, EPA used:

- Bureau of Census data for 1990 on the number of occupied housing units in the 50 States, Tribal Areas, District of Columbia, and Territories (Puerto Rico, U.S. Virgin Islands, Northern Marianas, Guam, Palau, and American Samoa); and
- Data from EPA's *Report on the National Survey of Lead-Based Paint in Housing (National Survey)*, which revised HUD's data on the percentage of privately-owned housing units with five or more square feet of non-intact (damaged) lead-based paint on interior and exterior surfaces.

EPA used the five square feet threshold for this analysis because HUD's survey used this area. HUD based this number on standard practices involved in determining when repainting is needed. The area does not reflect analysis of the risks posed by deteriorated lead-based paint.

The *Report on the National Survey of Lead-Based Paint in Housing* estimated the percentage of privately-owned housing units with five or more square feet of damaged lead-based paint on interior and exterior surfaces for each quadrant of the continental United States: Northeast - 28 percent; North Central - 33 percent; South - 10 percent; and West - 5 percent. EPA multiplied the number of housing units in the 50 States, Tribal Areas within the States, and District of Columbia by the estimated percentage for the quadrant in which the State, Tribal Area, or District is located. Since similar data were not available for the Territories, EPA multiplied the estimated number of housing units in the Territories by the estimated percentage for the closest quadrant of the continental United States. Exhibits 2-2(a) through (d) summarize the estimated number of housing units in the 50 States, Tribal Areas, District of Columbia, and Territories with damaged lead-based paint, according to the percentage that was applied.

Next, EPA estimated a ratio of housing units with damaged lead-based paint to the number of accredited training providers, certified firms, and certified individuals in the States that provided data for each category of applicant. These calculations are described separately for training providers, firms, and individuals in the sections that follow. EPA divided the estimated number of housing units in the 50 States, Tribal Areas, District of Columbia, and Territories with damaged lead-based paint, shown in Exhibits 2-2(a) through (d), by this ratio to extrapolate to the number of accredited training providers and certified firms and individuals nationwide.¹ For example, Exhibit 2-2(a) shows that Iowa has slightly more than two percent of the nation's housing units with damaged lead-based paint, based on *National Survey* data showing that about 33 percent of the units in the North Central region had damaged paint.

The result of this calculation is the number of accredited training providers and certified firms and individuals, as summarized in Exhibit 2-1 above. These estimates reflect a simplifying assumption that the size of the national universe remains constant over the five-year projection period, while the size of the EPA-administered universe declines as States adopt their own accreditation and certification programs.

¹Subtotals for the four regions may not add to values shown in Exhibit 2-1 due to rounding.

Exhibit 2-2(a)
Northeast Region:
Housing Units with Damaged Lead-based Paint

State	Housing Units	Units with Damaged Lead-based Paint	% of National Units with Damaged Lead-based Paint
CT	1,230,435	344,522	2.04%
MA	2,247,109	629,191	3.72%
ME	464,765	130,134	0.77%
NH	411,186	115,132	0.68%
NJ	2,794,711	782,519	4.63%
NY	6,634,236	1,857,586	10.99%
PA	4,495,966	1,258,870	7.45%
RI	377,968	105,831	0.63%
VT	210,650	58,982	0.35%
Tribal Areas	5,687	1,592	0.01%
Subtotal	18,872,713	5,284,360	31.26%

*Twenty-eight percent of total housing units in this region have five or greater square feet of interior and exterior damaged lead-based paint, based on EPA's *Report on the National Survey of Lead-Based Paint in Housing*.

Exhibit 2-2(b)
Southern Region:
Housing Units with Damaged Lead-based Paint

State	Housing Units	Units with Damaged Lead-based Paint	% of National Units with Damaged Lead-based Paint
AL	1,506,713	150,671	0.89%
AR	891,179	89,118	0.53%
DC	249,634	24,963	0.15%
DE	247,497	24,750	0.15%
FL	5,133,981	513,398	3.04%
GA	2,366,609	236,661	1.40%
KY	1,379,782	137,978	0.82%
LA	1,499,152	149,915	0.89%
MD	1,748,991	174,899	1.03%
MS	910,435	91,044	0.54%
NC	2,514,922	251,492	1.49%
OK	1,190,869	119,087	0.70%
PR	1,188,985	118,899	0.70%
SC	1,257,990	125,799	0.74%
TN	1,853,725	185,373	1.10%
TX	6,070,720	607,072	3.59%
VA	2,291,778	229,178	1.36%
VI	39,290	3,929	0.02%
WV	688,557	68,856	0.41%
Tribal	19,720	1,972	0.01%
Subtotal	33,050,254	3,305,025	19.55%

*Ten percent of total housing units in this region have five or greater square feet of interior and exterior damaged lead-based paint, based on EPA's *Report on the National Survey of Lead-Based Paint in Housing*.

Exhibit 2-2(c)
North Central Region:
Housing Units with Damaged Lead-based Paint

State	Housing Units	Units with Damaged Lead-based Paint	% of National Units with Damaged Lead-based Paint
IA	1,064,186	351,181	2.08%
IL	4,202,240	1,386,739	8.20%
IN	2,065,355	681,567	4.03%
KS	944,152	311,570	1.84%
MI	3,409,305	1,125,071	6.66%
MN	1,639,030	540,880	3.20%
MO	1,961,206	647,198	3.83%
ND	234,951	77,534	0.46%
NE	599,540	197,848	1.17%
OH	4,087,546	1,348,890	7.98%
SD	243,386	80,317	0.48%
WI	1,812,452	598,109	3.54%
Tribal Areas	53,626	17,697	0.10%
Subtotal	22,316,975	7,364,602	43.57%

*Thirty-three percent of total housing units in this region have five or greater square feet of interior and exterior damaged lead-based paint, based on EPA's *Report on the National Survey of Lead-Based Paint in Housing*.

Exhibit 2-2(d)
Western Region:
Housing Units with Damaged Lead-based Paint

State	Housing Units	Units with Damaged Lead-based Paint	% of National Units with Damaged Lead-based Paint
AK	188,466	9,423	0.06%
AZ	1,330,376	66,519	0.39%
CA	10,362,403	518,120	3.07%
CO	1,279,517	63,976	0.38%
HI	356,267	17,813	0.11%
ID	350,821	17,541	0.10%
MT	288,638	14,432	0.09%
NM	510,252	25,513	0.15%
NV	463,988	23,199	0.14%
OR	1,101,646	55,082	0.33%
Territories	53,704	2,685	0.02%
UT	530,725	26,536	0.16%
WA	1,839,990	92,000	0.54%
WY	161,347	8,067	0.05%
Tribal Areas	171,032	8,552	0.05%
Subtotal	18,989,172	949,459	5.62%

*Five percent of total housing units in this region have five or greater square feet of interior and exterior damaged lead-based paint, based on EPA's *Report on the National Survey of Lead-Based Paint in Housing*.

While the demand for accreditation and certification is influenced by factors other than the number of housing units with damaged lead-based paint, EPA believes that this proxy is reasonable for several reasons:

- The demand for accreditation and certification should closely reflect the demand for lead-based paint services, which itself should reflect the frequency of damaged lead-based paint and other types of lead-based paint hazards.
- Damaged lead-based paint can be a type of lead-based paint hazard and reflects two conditions--the presence of lead-based paint and poor housing conditions--that are directly related to hazards from lead-contaminated soil and dust.
- National data were readily available on the portion of housing units with damaged lead-based paint.

Furthermore, this proxy focuses on the demand for accreditation and certification derived from the demand for lead-based paint activities in housing, even though the Section 402 program also applies to child-occupied facilities. This simplification was necessary because limited data are available on child-occupied facilities. In addition, based on analysis for the Section 402/404 rule, only a small fraction of the Section 402 universe relates to child-occupied facilities.

2.2.1 Training Providers

To extrapolate from State-level data to the national universe of training providers seeking accreditation annually under the Section 402 program, EPA used the general approach described above in Section 2.2. EPA estimated a ratio of private housing units with damaged lead-based paint per accredited training provider by dividing the total number of private housing units with five or more square feet of damaged lead-based paint on interior and exterior surfaces in the seven States that provided accreditation program data by the total average number of accredited training providers in those States. This calculation is summarized in Exhibit 2-3. Since States did not separately identify training providers that were accredited in other States and may be eligible for accreditation through a less expensive multi-jurisdiction registration process (see Section 3.5.2), EPA reduced the annual number of accredited training providers reported by each State by the average fraction of training providers accredited by Massachusetts and Ohio that have addresses outside of these States. On average, 22 percent of training providers accredited in Massachusetts and Ohio in 1996 have out-of-State addresses. EPA used data from these two States because they appeared to have the most complete readily available data.

EPA then divided the total number of housing units in each of the 50 States, Tribal Areas, District of Columbia, and Territories with five or more square feet of damaged lead-based paint on interior and exterior surfaces by this ratio. The sum is the estimated national universe of training providers, as shown in Exhibit 2-1.

Using the approach described above, EPA estimated that 177 training providers will be accredited nationwide to perform lead-based paint activities. Under the terms of TSCA §402(a)(3), however, State, local government, and nonprofit training providers are not subject to accreditation fees. Only for-profit training providers will be fee payers. Based on estimates provided by States and other knowledgeable industry experts, approximately 60 percent (or 106) of all training providers are for-profit entities and would pay accreditation fees, if located in EPA-administered States, Tribal Areas, or

Exhibit 2-3
Average Number of Housing Units with Damaged Lead-based Paint
Per Accredited Training Provider

State	(A) Housing Units with Damaged Lead-based Paint*	(B) Average Accredited Training Providers Per Year**	Units per Provider (A)/(B)
California	518,120	1.60	323,825.00
Maine	130,134	4.00	32,533.50
Massachusetts	629,191	8.50	74,022.47
New Hampshire	115,132	2.40	47,971.67
Ohio	1,348,890	4.80	281,018.75
Vermont	58,982	1.20	49,151.67
Virginia	229,178	9.20	24,910.65
Totals	3,029,627	31.70	95,571.83

* Housing units with five or more square feet of interior and exterior damaged lead-based paint.

** Average number of accredited training providers per year for the years reported by each State. Excludes training providers assumed to have multi-state accreditation.

Territories. Based on analysis presented in the small entity impact analysis of Chapter 6, the for-profit training providers operate in a variety of industries, including: SIC 1799, Special Trade Contractors; SIC 8748, Business Consulting Services; SIC 8331, Job Training and Related Services; and SIC 8742, Management Consulting Services. The industries for the nonprofit providers were not identified.

Subsequently, EPA subtracted the estimated number of accredited training providers in EPA-authorized States from the national universe to estimate the number of accredited training providers in the EPA-administered universe each year. This amount will change as more States obtain authorization for their own programs during the first five years of the Section 402 program.

2.2.2 Certified Firms

To extrapolate from State-level data to the national universe of firms seeking certification annually under the Section 402 program, EPA used the same general approach described for training providers. EPA estimated a ratio of private housing units with damaged lead-based paint per certified firm by dividing the total number of private housing units with five or more square feet of damaged lead-based paint on interior and exterior surfaces in the four States that provided firm certification program data by the total average number of certified firms in those States. This calculation is summarized in Exhibit 2-4. To account for the fraction of firms that will obtain certification through multi-jurisdiction procedures, EPA reduced the number of certified firms reported by the average fraction of out-of-State firms certified by Virginia, Rhode Island, and Illinois, which are the States with the best available data. On average, 20 percent of firms certified by these States in 1996 have out-of-State addresses.

Exhibit 2-4
Average Number of Housing Units with Damaged Lead-based Paint
Per Certified Firm

State	(A) Housing Units with Damaged Lead-based Paint*	(B) Average Certified Firms Per Year**	Units per Firm (A)/(B)
Maine	130,134	17.16	7,583.57
Rhode Island	105,831	13.65	7,753.19
Vermont	58,982	11.51	5,124.41
Virginia	229,178	83.85	2,733.19
Totals	524,125	126.17	4,154.12

* Housing units with five or more square feet of interior and exterior damaged lead-based paint.

** Average number of certified firms per year for the years reported by each State. Excludes firms assumed to have multi-State accreditation.

EPA then divided the total number of housing units in each of the 50 States, Tribal Areas, District of Columbia, and Territories with five or more square feet of damaged lead-based paint on interior and exterior surfaces by this ratio. The sum is the estimated national universe of firms, as shown in Exhibit 2-1.

Using the approach described above, EPA estimated that 4,069 firms will be certified nationwide to perform lead-based paint activities. Based on data from the Section 402/404 RIA, about 64 percent of certified firms are abatement firms in SIC 1799, Special Trade Contractors and the remaining 36 percent are risk assessment and inspection firms in SIC 8734, Testing Laboratories.

Subsequently, EPA subtracted the estimated number of certified firms in EPA-authorized States from the national universe to estimate the number of certified firms in the EPA-administered universe each year. This amount will change as more States obtain authorization for their own programs during the first five years of the Section 402 program.

2.2.3 Certified Individuals

To extrapolate from State-level data to the national universe of individuals seeking certification annually under the Section 402 program, EPA used the same general approach described for training providers and firms. EPA estimated a ratio of private housing units with damaged lead-based paint per certified individual by dividing the total number of private housing units with five or more square feet of damaged lead-based paint on interior and exterior surfaces in the eight States that provided individual certification program data by the total average number of certified individuals in those States. This calculation is summarized in Exhibit 2-5. To account for the fraction of individuals who will obtain certification through multi-jurisdiction procedures, EPA reduced the number of certified individuals by the average fraction of individuals certified by Massachusetts and Ohio with out-of-State addresses. On average, 14 percent of these individuals certified in 1996 have out-of-State addresses. See Exhibit 2-5.

Exhibit 2-5
Average Number of Housing Units with Damaged Lead-based Paint
Per Certified Individual

State	(A) Housing Units with Damaged Lead-based Paint*	(B) Average Certified Individuals Per Year**	Units per Individual (A)/(B)
California	518,120	892.25	580.69
Maine	130,134	90.30	1,441.13
Massachusetts	629,191	748.11	841.04
New Hampshire	115,132	133.01	865.59
Ohio	1,348,890	330.38	4,082.84
Rhode Island	105,831	80.20	1,319.59
Vermont	58,982	79.98	737.46
Virginia	229,178	845.38	271.09
Totals	3,135,458	3,199.62	979.95

* Housing units with five or more square feet of interior and exterior damaged interior lead-based paint.

** Average number of certified individuals per year for the years reported by each State. Excludes individuals assumed to have multi-State accreditation.

EPA then divided the total number of housing units in each of the 50 States, Tribal Areas, District of Columbia, and Territories with five or more square feet of damaged lead-based paint on interior and exterior surfaces by this ratio. The sum is the estimated national universe of individuals, as shown in Exhibit 2-1.

Using the approach described above, EPA estimated that 17,249 individuals will be certified nationwide to perform lead-based paint activities. Subsequently, EPA subtracted the estimated number of certified individuals in EPA-authorized States from the national universe to estimate the number of certified individuals in the EPA-administered universe each year. This amount will change as more States obtain authorization for their own programs during the first five years of the Section 402 program.

Exhibit 2-6 summarizes the national distribution of individuals by discipline. EPA modeled the distribution of individuals engaged in lead activities by discipline using estimates developed in the Section 402/404 RIA:

- 30 percent inspectors;
- 24 percent risk assessors;
- 22 percent supervisors;
- 23 percent workers; and
- 1 percent project designers.

This distribution of individuals into disciplines was based on inspection and abatement rates observed in Massachusetts and the estimated number of certified individuals of each type required to perform these activities.

Exhibit 2-6
National Universe of Certified Individuals by Discipline

Discipline	National Universe
Inspectors	5,175
Risk Assessors	4,140
Supervisors	3,795
Workers	3,967
Project Designers	172
Totals	17,249

EPA used this distribution, rather than the data collected from States, because most of the nine States contacted did not offer certification in each of the five disciplines defined by the Section 402 rules. EPA expects that individual participation levels in 1996 and 1997 in these States, which have relatively mature programs, will be similar to participation levels in EPA-administered States during the five-year projection period. While the contacted States may create new discipline categories to be consistent with the Federal rules, EPA expects that these changes will redistribute the universe of certified individuals into new categories rather than increase the size of the universe.

2.3 Annual Number of Accreditations and Certifications

EPA used the EPA-administered universe projections to estimate the annual number of accreditations, re-accreditations, certifications, and re-certifications by modeling:

- Periodic expiration and renewal of accreditations and certifications, as specified by the Section 402 rules;
- The number of training providers, firms, and individuals expected to enter and exit the universe each year; and
- The training programs for which individual training providers are accredited.

These issues are discussed below. The results are summarized in Exhibit 2-7.

2.3.1 Periodic Expiration

40 CFR 745.225(f) specifies that initial or refresher training programs offered by a training provider must be re-accredited every four years. 40 CFR 745.226(e) specifies that a certified individual engaged in lead-based paint activities must obtain re-certification every five years if the individual completed a training program with a proficiency test or every three years if the individual completed a training program with a course test and hands-on assessment. To simplify this analysis, EPA modeled the expiration period for both training program accreditation and individual certification at four years. This assumption does not significantly affect the estimated fee levels, but does cause the estimated number of individual re-certifications to be artificially low in year four and high in year five.

The Federal certification rules do not require periodic re-certification of firms. However, in response to public comments on the final accreditation and certification fees rulemaking, EPA has decided to require

Exhibit 2-7
Accreditations, Re-accreditations, Certifications,
Certification Extensions, and Re-certifications Per Year

Type of Entity	EPA-Administered Universe				
	Year 1	Year 2	Year 3	Year 4	Year 5
Training Programs*					
-- Accreditations	320	4	4	0	0
-- Re-accreditations	0	0	0	0	184
Firms					
-- Certifications	1,167	117	101	86	70
-- Certification Extensions	0	0	0	624	51
Individuals					
-- Certifications	4,948	1,104	956	809	664
-- Re-certifications	0	0	0	0	692
Totals	6,435	1,225	1,061	1,519	1,661

* Includes both for-profit training providers (60 percent) and State, local government, and nonprofit training providers (40 percent).

firms to apply for an extension of their certification every three years. The certification extension fee allows a reallocation of Regional enforcement payments to firms and away from workers. (See Chapter 4.)

2.3.2 Entry and Exit Rates

Training providers, firms, and individuals periodically enter and exit the market for a variety of reasons. To account for this change, EPA applied the following annual turnover rates:

- 2 percent for training providers;
- 10 percent for firms;
- 20 percent for inspectors, risk assessors, supervisors, and project designers; and
- 30 percent for workers.

The turnover rates indicate the percent of the universe both exiting the market and, assuming steady-state participation levels each year, entering the market.

EPA expects that accredited training providers will tend to remain in the universe because of the high costs and requirements for obtaining accreditation, even though they may participate in other business areas. Thus, EPA estimated a relatively low turnover rate of two percent for training providers. State representatives corroborated this figure.

The estimated certified firm turnover rate of 10 percent is consistent with the findings presented in the small entity impact analysis in Chapter 6. In that analysis, EPA estimated an amortization rate for certification costs using establishment birth and death rates from the Bureau of the Census as a surrogate for firm entry and exit rates. EPA estimated that the average lifespan of a certified firm ranges from 7.3 years (for abatement firms in SIC 1799) to 12.5 years (for risk assessment and inspection firms in SIC 8734), for an average annual turnover rate of approximately 10 percent.

For individuals, EPA initially examined the turnover rates from the Section 402/404 RIA: 25 percent per year for inspectors, risk assessors, and project designers; and 29 percent per year for supervisors and workers. Since the Section 402/404 RIA developed the rates based upon data from Massachusetts only, EPA sought input from other States to verify these estimates. Based on the responses, EPA modified the turnover rates for individuals to 20 or 30 percent, as noted above. The relatively high turnover rate for workers, 30 percent, reflects State indications that individuals in this category tend to be employed seasonally and therefore enter and exit the universe more frequently. See EPA's *Data Summary for Nine State Lead Accreditation and Certification Programs*.

2.3.3 Training Programs Offered by Training Providers

For purposes of estimating the number of accreditations per year, EPA estimated that:

- 20 percent of all training providers would seek accreditation for both initial and refresher training programs in all five disciplines;
- Another 30 percent would seek accreditation for both initial and refresher training programs in only four disciplines: worker, supervisor, inspector, and risk assessor; and
- The remaining 50 percent of training providers would seek accreditation for both initial and refresher training programs in only two disciplines: worker and supervisor.

This distribution was based on the experience of the State programs contacted, as summarized in EPA's *Data Summary for Nine State Lead Accreditation and Certification Programs*. Because training providers will offer several training programs each, the number of accreditations for specific training programs will exceed the number of accredited training providers, as can be seen in Exhibits 2-1 and 2-7.

CHAPTER 3: SECTION 402 PROGRAM COSTS

This Chapter describes the methodology EPA used to estimate the costs for administering and enforcing the TSCA §402 program standards and regulations for training providers, firms, and individuals in States without authorized programs. Most of these costs are categorized as arising from activities that vary in two dimensions: (1) where the activities are located--at EPA Headquarters or EPA Regional offices; and (2) whether the activities involve program administration or program enforcement. The first four sections of this chapter are organized by these dimensions. They discuss four categories of activities and the methodologies for estimating the associated costs:

- EPA Headquarters administration;
- EPA Regional administration;
- EPA Headquarters enforcement; and
- EPA Regional enforcement.

The labor involved in these activities is identified as technical, clerical, or managerial to help estimate costs. EPA Regional administrative activities depend directly on the number and type of accreditation or certification applications received and therefore their costs are estimated on a per application basis. In contrast, EPA Headquarters administrative and enforcement activities and EPA Regional enforcement activities generally cannot be directly linked to specific applications and therefore these costs are allocated differently, as is discussed further in Chapter 4.

The fifth section of this chapter address three types of activities that will arise for certain accredited training providers or certified firms or individuals: (1) certification examinations, which are required only for individuals in certain lead-based paint disciplines; (2) registering in multiple jurisdictions; and (3) replacing lost documentation of EPA accreditation or certification, such as certificates or identification cards.

The sixth and final section presents the total estimated program costs. Chapter 4 allocates these costs to estimate accreditation and certification fee levels.

3.1 EPA Headquarters Administrative Costs

The major types of EPA Headquarters administrative activities under the Section 402 program are as follows:

- Coordinating with EPA Regions. *Technical* activities in this category include periodically preparing or reviewing reports and other documents related to the Section 402 program for or from Regions for purposes of addressing inquiries, coordinating efforts, or assuring proper implementation of the Section 402 program.
- Maintain central database and registry. *Clerical* activities involve periodically receiving and entering or replicating electronic data from Regions into a central database. *Technical* activities consist primarily of maintaining the central database (e.g., assuring that the data are current and that the database remains functional through periodic upgrades) and also assuring its compatibility with any Regional database(s).

- Public assistance. Clerical activities encompass processing inquiries from the public and producing public outreach documents. Technical activities consist of answering inquiries from the public and also may include operating a hotline or producing informational materials regarding the Section 402 program.
- Other. Other clerical activities include providing clerical support to EPA Headquarters management and technical staff for miscellaneous program activities (e.g., updating Section 402 forms). Other technical activities entail technical support to EPA Headquarters management for other Headquarters activities (e.g., updating Section 402 forms, accounting). Managerial activities cover general oversight of the Section 402 program (e.g., planning program budgets, coordinating with EPA Regional managers).

EPA estimated the number of full-time equivalent employees (FTEs) required to perform these tasks based on its professional judgment and consultations with States. To estimate the costs associated with the FTE burdens, EPA applied the following labor rates: \$42.91 per hour for managerial staff (GS-13, Step 1), \$30.11 per hour for technical staff (GS-11, Step 1), and \$18.30 per hour for clerical staff (GS-6, Step 1).¹ As shown in Exhibit 3-1, the annual labor costs for EPA Headquarters administration of the Section 402 program is \$29,067.

Exhibit 3-1
Annual EPA Headquarters Administrative Costs

Activity	Labor Type/ Hourly Rate**	FTEs*	Annual Cost
Coordinate with Regions	Technical: \$30.11	0.05	\$3,132
Maintain Central Database/Registry	Clerical: \$18.30	0.1	\$3,807
	Technical: \$30.11	0.05	\$3,132
Public Assistance	Clerical: \$18.30	0.05	\$1,904
	Technical: \$30.11	0.05	\$3,132
Other	Clerical: \$18.30	0.05	\$1,904
	Technical: \$30.11	0.05	\$3,132
	Managerial \$42.91	0.1	\$8,926
Total	--	0.5	\$29,067

* FTE is equivalent to 2,080 hours per year.

** EPA applied the following labor rates: \$42.91 per hour for managerial staff (GS-13, Step 1), \$30.11 per hour for technical staff (GS-11, Step 1), and \$18.30 per hour for clerical staff (GS-6, Step 1).

¹ 1998 General Schedule and Locality Pay Tables, U.S. Office of Personnel Management. To derive these hourly estimates, EPA divided annual compensation based on the 1998 GS pay scale for the Washington, D.C. metropolitan locality by 2,080 (the number of hours in a Federal work year) and multiplied by the standard government factor of 1.6 to cover benefits and overhead.

EPA also will incur startup costs for establishing recordkeeping and information systems. EPA estimated these costs to be \$15,000 based on EPA Region I's experience developing the Certified Environmental Registry and Tracking (CERT) database. The CERT database was identified for possible use in meeting the Section 402 program registration and tracking needs. EPA estimated that an incremental cost of \$20,000 would be needed to modify the database for the Section 402 program by adding additional fields for tracking fee invoices.² Lastly, EPA estimated the costs for preparing application materials and evaluation materials to be \$6,000 each, based on its professional judgment.

In summary, the Section 402 program startup costs for ongoing administrative activities conducted at EPA Headquarters are \$47,000. The annualized startup cost is \$11,463, assuming a seven percent discount rate over a five-year period. Thus, the total annual EPA Headquarters administrative cost is \$40,530 (\$29,067 + \$11,463). These administrative costs are assumed to start in year one. For simplicity, the annual cost for EPA Headquarters administrative activities is assumed to decrease proportionally with the size of the EPA-administered universe as more States become authorized over the five-year modeling period.

3.2 EPA Regional Administrative Costs

EPA Regions will have primary responsibility for implementing the Section 402 program. They will conduct a range of administrative activities, which will vary somewhat for different types of accreditation and certification. The major types of EPA Regional administrative activities are as follows:

- Application processing and recordkeeping. *Clerical* activities encompass receiving, opening, logging, filing, storing, and updating applications and other correspondence. They also may include tracking accredited training programs and certified firms and other related support activities. *Technical* activities include examining applications for completeness and verifying compliance with all applicable requirements for accreditation or certification (e.g., course materials and curriculum or firm experience and educational background). For training providers, this process may include an on-site review of the training programs being considered for accreditation. Other technical activities include approving applicants to take certification exams, approving accreditation or certification status, and resolving appeals by firms or individuals denied accreditation or certification.
- Fee transactions and waivers. *Clerical* activities entail receiving and processing fees; issuing payment requests, renewal notifications, and receipts; and tracking fee waivers and payment transactions. *Technical* activities include approving fee waiver requests from training providers.
- Issuance of accreditation and certification documents. *Clerical* activities entail producing and issuing certificates and worker identification cards.
- Other. Other *clerical* activities include making application forms and instructions available, answering phone inquiries regarding the Section 402 program or status of applications, and performing other customer service activities. *Technical* activities include communicating information to or from other EPA Regions and EPA

² *Contact Report for the Economic Analysis of the Proposed TSCA §402(a)(3) Lead-based Paint Accreditation and Certification Fees Rule*, U.S. Environmental Protection Agency, Office of Pollution Prevention and Toxics. Economics, Exposure and Technology Division, Economic and Policy Analysis Branch, September 1998. Henceforth referred to as "*Contact Report*."

Headquarters staff. *Managerial* activities encompass managing day-to-day activities to administer the program, including overseeing personnel and finances.

EPA estimated the costs to perform these administrative tasks based on data collected from nine States with lead accreditation and/or certification programs: California, Illinois, Maine, Massachusetts, New Hampshire, Ohio, Rhode Island, Vermont, and Virginia, as described in Section 1.2.2. EPA asked participating States to estimate the burdens to administer lead accreditation and certification in terms of the time required to perform each administrative activity on a *per applicant* basis (see Appendix B.) States provided data on the administrative burdens associated with accrediting or certifying a “typical” training provider, firm, and individual, rather than a detailed breakdown of burdens associated with accrediting or certifying each available discipline, firm type, and training program because of the extensive effort that would have been needed to assemble this detailed information.

EPA estimated the administrative burdens associated with accrediting or certifying *specific* disciplines and training program types in the Federal program from the State data for “typical” entities in three basic steps:

- (1) Calculate a State-specific or average amount of time for State managerial, technical, or clerical personnel to accredit or certify a "typical" applicant for training program accreditation, firm certification, or individual certification.
- (2) Adjust the mean “typical” time or burden estimate for accreditation or certification to be consistent with the requirements for a specific discipline, firm, or training program in the Federal program.
- (3) Multiply the time estimate derived above by the following labor rates: \$42.18 per hour for managerial staff (GS-13, Step 1), \$29.58 per hour for technical staff (GS-11, Step 1), and \$17.98 per hour for clerical staff (GS-6, Step 1), to obtain the administrative costs for personnel at EPA Regions to perform similar accreditation and certification activities.³ These rates are slightly lower than the EPA Headquarters rates.

The following text describes the approach to accomplish these steps for the following categories of Regional administrative costs: training program accreditation, firm certification, and individual certification.

3.2.1 Regional Administrative Costs for Training Program Accreditation

EPA estimated the average State managerial, technical, and clerical burden to accredit or re-accredit a typical training program based on State estimates of the time needed to perform the types of accreditation activities described earlier. EPA initially explored adjusting State-specific burden estimates to reflect the level of effort that may be required at Federal level. Based on this review, however, EPA concluded that all contacted States have accreditation requirements comparable to the Federal program, thereby obviating the need for such an adjustment.

³ 1998 General Schedule and Locality Pay Tables, U.S. Office of Personnel Management.

As discussed in Section 2.3.3, EPA expects training providers to seek accreditation for multiple training programs. To account for the reduced time needed to review duplicative information submitted by a training provider for multiple training programs, EPA reduced the average State burden for a typical training program by 15 percent. This adjustment factor was based on comments by the contacted States.

Next, EPA calculated a relative burden rating to adjust the average State burden to distinguish the level of effort required to review and accredit or re-accredit different types of training programs under the Federal program. The Federal rules specify minimum course hours for each discipline. Since the minimum course hours for the Section 402 program were based on the amount of time needed to teach the required subject matter for a specific training program, EPA assumed that the level of effort to accredit or re-accredit a specific training program would vary directly with the extent of subject matter required for that discipline. Thus, EPA used the required course hours, established in 40 CFR 745.226(c)(6) and (e)(2), as a proxy for the level of effort to accredit or re-accredit different types of training programs. EPA assigned a score of 1 to reviewing each 8 hours of training required for an initial or refresher training program. Following this convention, a 32-hour supervisor training program received a score of 4, while an eight-hour project designer training program received a score of 1. To calculate the relative burden for each training program, EPA divided the scores for each training program by the average for the five disciplines (2.4). These relative burdens are presented in Exhibit 3-2.

<i>Procedure for Estimating Accreditation Costs by Training Program</i>	
①	Calculate the average State burdens to accredit or re-accredit a typical training program.
②	Reduce average State burden for a typical program to reflect time savings because training providers seek accreditation for multiple training programs.
③	For each type of initial and refresher training program, calculate the relative burden, which represents the burden to review this specific training program relative to the other training programs.
④	Multiply the average State burden by the relative burden for each training program and by Regional labor rates to calculate Regional administrative costs for each training program.

**Exhibit 3-2
Relative Burden Ratings for Training
Program Accreditation and Re-accreditation**

Training Program	Initial	Refresher
Inspector	125%	42%
Risk Assessor	83%	42%
Supervisor	167%	42%
Worker	83%	42%
Project Designer	42%	21%

Finally, EPA estimated the Regional administrative costs for accrediting each training program by multiplying the average State burden by the relative burden for each training program and the Regional labor rates. (See Exhibit 3-3.) The Regional administrative costs are substantially higher for accreditation than for certification. In addition, Regional administrative costs vary substantially among training programs, with the highest cost for an initial accreditation being \$2,985 for a supervisor training program. Re-accreditation is

substantially less expensive than accreditation and refresher training program accreditation is less expensive than initial training program accreditation.

**Exhibit 3-3
Regional Administrative Costs for Training Program
Accreditation and Re-accreditation**

Training Program	Accreditation	Re-accreditation
Initial Training Program		
Inspector	\$2,239	\$1,336
Risk Assessor	\$1,492	\$891
Supervisor	\$2,985	\$1,781
Worker	\$1,492	\$891
Project Designer	\$746	\$445
Refresher Training Program		
Inspector	\$746	\$445
Risk Assessor	\$746	\$445
Supervisor	\$746	\$445
Worker	\$746	\$445
Project Designer	\$373	\$223

3.2.2 Regional Administrative Costs for Firm Certification and Certification Extension

EPA calculated a State-specific managerial, technical, and clerical burden to certify a typical firm. These estimates reflect States' estimates of the amount of time needed to perform each of the types of firm certification activities listed above. State and Federal requirements for certifying firms are significantly different. Thus, EPA adjusted the State burden estimates to reflect the differences between the State and Federal programs.

Under the Federal program, Regional staff must review a signed statement that the firm employs only certified individuals, conducts work in accordance with work practice standards, and follows record-keeping requirements. In contrast, under five of the six State programs that provided firm certification data, State employees must review extensive submittals, which require a level of effort higher than under the Federal program. For example, State employees often must review the following kinds of reports: medical examination and blood lead test results for all employees, workers' compensation and employee protection information, description of standard operating procedures, and description of past legal claims. In addition, employees of these States also must review information concerning the individual certification, training, education, and experience of the agent of

Procedure for Estimating Costs for Certifying Firms

- ① Calculate State-specific burdens to certify a typical firm.
- ② Adjust the State-specific burdens to reflect the differences between the State and Federal programs.
- ③ Average the adjusted State burdens and multiply the average by Regional labor rates to calculate the Regional administrative costs for firm certification.

the firm that is designated to hold the firm's certificate. Because a higher level of administrative effort is expected for these States to certify a firm, EPA divided these State burden estimates by a factor of four. In other words, the Federal burden is roughly one-fourth of the burden for these State programs. In one of the six States, the Federal and State burdens were seen as equivalent.

Finally, EPA estimated the national cost for certifying a “typical firm” in the Federal program by averaging the adjusted average State burdens and multiplying the average by the EPA Regional labor rates. The result is a Regional administrative cost of \$273 per firm certification, which is somewhat higher than the highest Regional administrative cost for an individual certification.

EPA considered applying a second factor to adjust this cost for a typical firm to firms of different sizes. However, based on information from States, EPA concluded that estimates for a typical firm would be representative of most firms seeking certification. Also, the level of effort required to certify a firm is not expected to vary significantly with firm size. For these reasons, EPA did not adopt this adjustment.

The Section 402 certification program does not require certified firms to periodically obtain re-certification. However, in response to public comments on the final fee rule, EPA decided to require firms to apply for an extension of their certification every three years. EPA estimated the Regional administrative cost for extension of a firm’s certification by multiplying the Regional administrative cost by the ratio of Regional administrative costs for training provider accreditation and re-accreditation. The result is a Regional administrative cost of \$163 per firm certification extension. The number of firms seeking certification extensions and the associated costs and revenues collected from those firms were calculated separately from all other program estimates. The numbers were maintained separately to ensure that the revenues collected from these firms would be directly allocated to cover the cost of the extensions and to reduce the worker certification and re-certification fees. See Section 4.2.

3.2.3 Regional Administrative Costs for Individual Certification

EPA estimated the average State managerial, technical, and clerical burden to certify a typical individual certification by summing the individual State burden estimates in each of these three labor categories for the relevant activities described above and then dividing these sums by the number of State respondents.

After developing an average State burden for a typical individual certification, EPA initially adjusted the burden estimates to distinguish between the level of effort for certifications or re-certifications for the State versus Federal programs. EPA, however, observed no significant net effect on estimated costs by using these factors and therefore dropped them to simplify the methodology.

Procedure for Estimating Individual Certification Costs by Discipline

- ① Calculate the average State managerial, technical, and clerical burden to certify a typical individual certification.
- ② For each discipline defined in Section 402, calculate the relative burden, which represents the burden to review this specific discipline relative to the burden for other disciplines.
- ③ Multiply the average State burden by the relative burden for each discipline and by the Regional labor rates to calculate Regional administrative costs for each discipline.

Next, EPA developed a relative burden rating for each discipline. These ratings reflect differences in the level of effort needed to certify or re-certify individuals in different discipline under the Federal regulations. To administer the Federal program, EPA Regional staff will verify that applicants seeking individual certification have met the following requirements:

- Completed an application;
- Successfully completed an accredited training program and obtained a training program completion certificate;
- Passed a standardized exam, if applicable;
- Met or exceeded any experience requirements; and
- Met or exceeded any educational or other certification requirements.⁴

State survey participants indicated that verifying compliance with each of the criteria listed above will require approximately the same level of effort, with the exception of verifying experience requirements, which may require 40 percent more time. Thus, EPA assigned a score of 7 to reviewing experience requirements and a lower (less burdensome) score of 5 to reviewing each of the remaining elements.

To calculate the relative burden rating for each discipline, EPA first summed the scores for each of the relevant types of requirements. For example, to certify a lead abatement worker under the Section 402 program, EPA must: (1) review a completed application; and (2) verify that the applicant has completed an accredited training program for abatement workers and obtained a training program completion certificate. Thus, the score for certifying a lead abatement worker is $5 + 5 = 10$. Then, EPA divided the scores for each discipline by the average for the five disciplines. For example, the relative burden for certifying a lead abatement worker is calculated as: $10/19.2$, or 52 percent (19.2 is the average score for the five types of individual certification). This score indicates that the burden of certifying workers is only 52 percent of the burden of the average certification.

EPA used these relative burden ratings for both certification and re-certification based on discussions with States indicating that the relative re-certification burden depends on the amount of information submitted in the certification applications. The burden ratings and the results of these calculations are described in Exhibit 3-4 below.

⁴ Under the Section 402 program, individuals also may seek certification based on alternative standards concerning prior training. In lieu of completing an accredited initial training program, such individuals must complete an accredited refresher training program and demonstrate that they have received classroom training or on-the-job training during the period between October 1, 1990 and March 1, 1999. State contacts expressed that, while individuals seeking certification based on prior training would benefit from fewer required course hours and a lower fee for refresher training, the administrative burden to certify such individuals, in general, would remain unchanged. For this reason, the analysis assumes that the cost for administrative activities associated with certifying an individual would be the same whether based on prior training or through conventional certification.

Exhibit 3-4
Relative Burden Ratings for Individual
Certification and Re-certification

Discipline	Certification and Re-certification Requirements					Total	Relative Burden
	1	2	3	4	5		
Inspector	5	5	5	0	0	15	78% (15/19.2)
Risk Assessor*	5	5	5	5	7	27	141% (27/19.2)
Supervisor	5	5	5	0	7	22	115% (22/19.2)
Worker	5	5	0	0	0	10	52% (10/19.2)
Project Designer*	5	5	0	5	7	22	115% (22/19.2)

<u>Key:</u>	<u>Requirement</u>	<u>Relative Administrative Burden</u>
	1. Application	5
	2. Completion of accredited training course	5
	3. Exam	5
	4. Experience	5
	5. Education or other certification	7

*Risk assessors and project designers may rely on either (1) their experience or other certification or (2) a combination of education and experience or other certification. For purposes of estimating the Regional administrative costs, this exhibit assumes that they generally use the second approach.

Finally, EPA estimated the Regional administrative costs per application for each discipline by multiplying (1) the average State managerial, technical, and clerical burden for a typical individual certification by (2) the relative burden for each discipline and by (3) the EPA Regional managerial, technical, and clerical labor rates. The results are presented in Exhibit 3-5 below. The certification costs vary from \$252 for risk assessors to \$93 for workers. Re-certification costs are lower than certification costs for all disciplines.

Exhibit 3-5
EPA Regional Administrative Costs
for Individual Certification and Re-certification

Discipline	Certification	Re-certification
Inspector	\$140	\$88
Risk Assessor	\$252	\$159
Supervisor	\$206	\$129
Workers	\$93	\$59
Project Designer	\$206	\$129

3.3 EPA Headquarters Enforcement Costs

EPA expects that enforcement activities for the Section 402 program will be performed primarily by technical personnel at the EPA Regional level. EPA *technical* staff at EPA Headquarters also will perform enforcement activities to assist EPA Regions, as needed, and to oversee enforcement activities throughout the Section 402 program.

Based on information provided by the Office of Enforcement and Compliance Assurance (OECA), EPA estimated the first-year Headquarters enforcement costs to be \$75,000 per year. OECA estimates that an average of one technical FTE at GS 12, Step 1 level per year will be needed at EPA Headquarters for enforcement activities related to Section 402(a)(3), at a rate of \$36.08 per hour.⁵ These enforcement costs are assumed to start at year one. As more States become authorized over the five-year modeling period, the annual cost for EPA Headquarters enforcement activities is assumed to decrease proportionally with the size of the EPA-administered universe.

3.4 EPA Regional Enforcement Costs

Primarily *technical* personnel at the EPA Regional level will conduct enforcement activities for the Section 402 program. The major types of enforcement activities will be:

- Inspections and compliance audits. Activities include verifying the basis for accreditation and certification (e.g., truth in reporting) and recordkeeping. Additional inspections and compliance audits may be conducted to enforce work practice standards for lead-based paint activities (e.g., an on-site inspection to verify a pre-abatement notification received by EPA). These enforcement activities will likely be more focused on firms or possibly selected individuals (rather than on training programs).
- Enforcement cases. Activities related to enforcement cases (e.g., suspension, revocation, or modification) include notification of problem(s) identified, review of written responses, resolution and remedial actions, hearings, and final review and decision. Other enforcement actions may include seeking civil or criminal penalties for noncompliance.

Based on information provided by the Office of Enforcement and Compliance Assurance, EPA estimated the first-year Regional enforcement costs to be \$590,000 per year. OECA estimates that an average of eight technical FTEs at GS 12, Step 1 level per year will be needed in the 10 Regions to enforce Section 402(a)(3), at a rate of \$35.46 per hour.⁶ These enforcement costs start at year one. As more States become authorized over the five-year modeling period, the annual cost for EPA Regional enforcement activities decrease proportionally with the EPA-administered universe.

3.5 Other Costs

In addition to administrative and enforcement costs associated with accrediting and certifying all entities, EPA will incur costs associated with three types of activities for only some fee payers:

⁵ 1998 General Schedule and Locality Pay Tables, U.S. Office of Personnel Management.

⁶ 1998 General Schedule and Locality Pay Tables, U.S. Office of Personnel Management.

- Certification examinations;
- Multi-jurisdiction registrations; and
- Identification card and certificate replacements.

These activities and costs are described below.

3.5.1 Certification Examinations

Individuals seeking certification as an inspector, risk assessor, or supervisor must pass a certification exam in the discipline. *Clerical* activities to administer certification examinations consist of receiving, opening, logging, filing, and storing certification exam materials. Other clerical activities include tracking examination scores and other related support activities. *Technical* activities to administer examinations include developing, administering, and grading examinations, and tracking and transmitting scores to applicants and other databases (if multiple institutions are involved in administering the Section 402 program). *Managerial* activities encompass those related to grading examinations.

EPA estimated costs associated with certification examinations based on the burdens required for Agency clerical, technical, and managerial staff to perform similar tasks. Except for exam development costs, all key tasks and their burdens were based on estimates of exam-related tasks developed for the Radon Proficiency Program.⁷ The same labor rates for EPA Regional administrative costs described in Section 3.2 were applied.

Based on data from OPPT's National Program Chemicals Division, EPA estimated a cost of \$430,000 to develop the certification exams (see *Contact Report*). EPA anticipates that: (1) technical staff at EPA Headquarters will revise the certification examinations every five years in order to incorporate new concepts and techniques; and (2) individuals in authorized States as well as EPA-administered States will use this exam. Thus, EPA has annualized the cost to develop the certification examination over five years at a rate of seven percent and attributed this amount equally among all inspectors, risk assessors, and supervisors in the national universe to estimate a cost of \$8.02 per exam.

The estimated cost for individual certification exams is \$70.41, as shown in Exhibit 3-6. EPA rounded this amount to the nearest five-dollar value for an estimated fee of \$70. This fee will be rolled into a single certification fee for an applicant seeking certification as an inspector, risk assessor, or supervisor in an EPA-administered State. (The technical labor hours for developing the exams and supporting materials were back calculated based on the \$8.02 per exam estimate described above.)

3.5.2 Multi-Jurisdiction Registration

Before operating in any EPA-administered State or Tribal Area, training providers, firms, or individuals must obtain accreditation or certification from EPA through the process outlined in 40 CFR 745.225 and 745.226. Subsequently, the individual or organization may register to participate in additional EPA-administered jurisdictions by submitting proof of existing accreditation or certification.

⁷ Supporting Statement for Information Collection Request Number 1732.01, "Application to or Participation in the National Radon Measurement Proficiency (RMP) Program and/or the National Radon Contractor Proficiency (RCP) Program," Radon Division, EPA Office of Radiation and Indoor Air, October 11, 1994.

Exhibit 3-6
Certification Exam Cost Per Applicant

Activity	Hourly Rate (\$/hr.)	Hours/Certification Exam	Cost/ Certification Exam
Compile and send out exam materials	Clerical: \$17.98	0.25	\$4.50
	Technical: \$29.58	0.25	\$7.40
Grade exams	Technical: \$29.58	0.50	\$14.79
	Managerial: \$42.18	0.25	\$10.54
Enter exam results into database	Clerical: \$17.98	0.25	\$4.50
Print and mail pass/fail letters to applicants	Clerical: \$17.98	0.25	\$4.50
	Technical: \$29.58	0.10	\$2.96
	Managerial \$42.18	0.10	\$4.22
Keep records of exams and correspondence	Clerical: \$17.98	0.50	\$8.99
Develop exams and supporting materials	Technical: \$29.58	0.27	\$8.02
Total Exam Cost	--	--	\$70.41

EPA estimated the costs of registering in multiple EPA-administered jurisdictions based upon the burdens required for Agency clerical, technical, and managerial staff to perform the associated tasks. *Clerical* activities to register an accredited or certified entity to perform lead-based paint activities in multiple jurisdictions encompass registering, tracking, and collecting fees from accredited and certified entities seeking to practice in two or more jurisdictions. *Technical* activities include reviewing and approving applicants for multi-jurisdiction registration. These tasks were identified by EPA. Associated burdens were estimated for similar tasks under the Radon Proficiency Program.⁸ The same labor rates used elsewhere for EPA Regional administrative costs (see Section 3.1) were applied.

Exhibit 3-7 summarizes the components of multi-jurisdiction registration costs. Using this approach, multi-jurisdiction registration is estimated to cost approximately \$37.27 per applicant. EPA rounded this amount to the nearest five-dollar value for an estimated fee of \$35. Thus, an applicant that is accredited or certified in an EPA-administered State or Tribal Area and is seeking to register to provide training or perform lead-based paint activities in an additional EPA-administered jurisdiction would have to pay \$35 per additional EPA-administered jurisdiction to cover such registration costs. For purposes of this multi-jurisdiction registration fee, and EPA-administered jurisdiction is either an individual State without an authorized program or all Indian Tribes without authorized programs that are within a given EPA Region. This approach for Indian Tribes will reduce the negative impact that the multi-jurisdiction fee may have on the availability of lead abatement services in Tribal Areas.

⁸ Ibid.

Exhibit 3-7
Multi-Jurisdiction Registration Cost Per Applicant

Activity	Hourly Rate (\$/hr.)	Hours/ Registration	Cost/ Registration
Receive and log application	Clerical: \$17.98	0.25	\$4.50
Assemble and send correspondence	Clerical: \$17.98	0.50	\$8.99
Enter into database	Clerical: \$17.98	0.25	\$4.50
Track invoice and information	Clerical: \$17.98	0.25	\$4.50
Verify information and approve	Technical: \$29.58	0.50	\$14.79
Total Multi-Jurisdiction Registration Cost	--	--	\$37.27

3.5.3 Cost for Replacement Identification Cards and Certificates

EPA estimated the cost for issuing replacement identification cards and certificates using data EPA collected from State programs. Data from the nine States indicated that, on average, 0.25 hours of clerical staff are required per applicant to issue or re-issue accreditation and certification documents (e.g., worker identification cards or certificates), plus an additional 0.25 clerical hours for collecting and transferring the fee for the document. EPA assumed that technical staff also will use 0.25 hours to verify that an applicant for a replacement document has a valid accreditation or certification, prior to issuing the replacement documents. Applying the rates for EPA Regional clerical and technical staff, listed in Section 3.1 above, EPA calculated a cost of \$16.39 for replace identification cards and certificates. EPA rounded this amount to the nearest five-dollar value for an estimated fee of \$15.

3.6 Summary of Program Costs

Exhibits 3-8 and 3-9 show estimated program costs during the first five years of the Section 402 program. Over the first two years, estimated total program costs decrease abruptly from \$2.3 million to \$0.9 million as the first year surge of applications passes. In years three and four the costs decline further as more States have authorized and operational lead accreditation and certification programs. In year five, the costs increase due to the re-accreditation, extension of certifications, and re-certification of entities that were initially authorized in year one. The Regional administrative costs account for approximately 47 percent of cumulative program costs. Most of the other costs are for Regional enforcement activities.

The program costs summarized in Exhibit 3-9 differ substantially from the program costs estimated in Section 5.4 of the Section 402/404 RIA (\$9.5 million per year for all States without their own accreditation and certification programs). The principal reason for this difference is that the current analysis projects Section 402 program costs based largely on the number and types of accreditations and certifications under the Federal regulations. In contrast, the Section 402/404 RIA projects program costs based on the operating costs reported by five States under their State regulations, which are often more extensive than the Federal regulations and therefore more costly to administer and enforce. Thus, the current approach avoids potential inaccuracies from operational differences between the Federal and State regulations.

**Exhibit 3-8
EPA Section 402 Program Costs Over Five Years**

Headquarters Administrative Costs	\$170,000
Regional Administrative Costs	
Accreditation	\$603,000
Firm Certification	\$421,000
Firm Certification Extension	\$110,000
Individual Certification	\$1,502,000
Headquarters Enforcement Costs	\$315,000
Regional Enforcement Costs	\$2,478,000
Total*	\$5,600,000

* Total may not sum due to rounding.

**Exhibit 3-9
Annual EPA Section 402 Program Costs**

Year	Regional Administrative Costs	Enforcement and Headquarters Administrative Costs	Total Costs*
1	\$1,605,000	\$706,000	\$2,311,000
2	218,000	706,000	923,000
3	189,000	612,000	801,000
4	257,000	517,000	775,000
5	367,000	423,000	790,000
Total*	\$2,636,000	\$2,964,000	\$5,600,000

* Totals may not sum due to rounding. Totals include Regional administrative costs of firm certification extensions in years four (\$102,000) and five (\$8,000).

Furthermore, only 16 States had their own lead accreditation and certification programs in place at the time the Section 402/404 RIA was completed. In this analysis, 32 States and the District of Columbia are assumed to have their own lead accreditation and certification programs in place at the start of the Section 402 program with 7 more States expected to do so by the end of the 5-year modeling period. The current analysis also projects costs for Tribal Areas and Territories. As a result, the Section 402/404 RIA projected costs for operating a Federal lead accreditation and certification program in 34 States and the District of Columbia, representing 10 million housing units with lead hazards, while the current analysis estimates costs for 18 States, Tribal Areas, and U.S. Territories, representing only 4.9 million housing units with lead hazards in the first year, down to 3.0 million (11 States, Tribal Areas, and Territories) in the fifth year. Also, the Section 402/404 RIA used unadjusted data from the HUD's National Survey to estimate the number of housing units with lead hazards, while the current analysis uses data from EPA's *Report on the National Survey of Lead-Based Paint in Housing*, which revised HUD's data.

The types of costs represented in the \$9.5 million estimate developed in the Section 402/404 RIA also are not exhaustively detailed. Section 402(a)(3) directs EPA or an authorized State to recover the costs of administering and enforcing the Section 402 standards and regulations. Based on EPA's interpretation of the statutory language, EPA has decided not to recover the costs of regulation development. Whereas the estimate developed in this analysis represents the total costs to administer and enforce the Section 402 program in EPA-administered States, the estimate developed in the Section 402/404 RIA may include other categories of costs, such as regulation development, thereby resulting in a higher estimate. Finally, the program costs estimated in the Section 402/404 RIA may be high since they are based on data from States that were in the process of establishing State lead programs, and operating costs may be higher during this startup period than in later periods.

3.7 Data Limitations

As described in Sections 3.1 through 3.6, EPA calculated program costs, and therefore fee levels, largely by extrapolating from time burden estimates for nine State lead certification and accreditation programs (see Section 1.2.2) and other EPA programs. In particular, EPA:

- Used State lead program burden data to estimate the burden to perform similar administrative activities in EPA Regions;
- Estimated the burden to perform administrative activities at EPA Headquarters based on the time required to conduct similar activities in other EPA programs (e.g., Radon Measurement Proficiency Program, Radon Contractor Proficiency Program); and
- Estimated all enforcement costs based on the projected allocation of full-time equivalent enforcement personnel to the Section 402 program.

This section discusses some of the limitations concerning the State data used to estimate Regional administrative costs, which compromise almost half of the total program costs.

Overall, there was good clustering of estimates reported by the participating States for the administrative time associated with each *clerical* task. The time reported for each clerical task generally ranged from 5 to 30 minutes. Most States reported efforts in the middle to higher end of this range for electronic processing and record-keeping of applications and in the lower end of this range for fee transactions and issuance of certification documents.

Rhode Island and New Hampshire, however, reported that some application processing and recordkeeping efforts take as little as five minutes. These two States have the smallest programs that were investigated based on number of certifications and/or accreditations issued in a year. They may handle their processing and recordkeeping needs differently than larger programs. On the other hand, some high estimates for clerical administrative tasks were reported by Maine and California. For example, the estimate for application processing and record-keeping associated with firm certification in Maine is four times the mean value for all States, while the estimate for application processing and record-keeping associated with training provider accreditation in California is over 20 times the mean values for all States. The reason for these differences is unclear.

In contrast to the clustering of administrative cost estimates, State estimates of *technical* and *managerial* task hours showed significant variability due to the compounded effects of different State requirements, policies, and implementation procedures. For example, two States reported that the same level

of effort is invested for certification and re-certification, even though most States estimated *re-certification* hours at half or less of the effort for initial certification. For firm and individual certification, approximately half of the participating States reported application review and approval times of 1.5 hours or less, while the remaining States reported times of 1.5 hours to 6 hours. These differences often correlate with the extensiveness of a State's certification and accreditation requirements. For example, most of the surveyed States that offer firm certification require firms to designate an "agent" of the firm to hold the certification. The agent, in turn, is required to submit information concerning his or her individual certification, training, education, and experience. As a result, technical and managerial staff in these States will have higher burdens to verify the additional submittals.

Few of the nine States contacted, however, were able to submit complete burden data for all categories of entities and activities. For example, only four out of the nine States contacted were able to provide data for estimating administrative costs associated with certifying firms. Because of the limited number of data points, there was no basis for determining which data were outliers. Thus, in the current analysis, EPA did not exclude any data submitted by the nine States on the burdens to complete activities to administer lead accreditation and certification.

CHAPTER 4: ESTIMATED FEE LEVELS UNDER REGULATORY OPTIONS

4.1 Overview of Regulatory Issues and Modeling Approach

EPA developed a model, which is illustrated in Exhibit 1-1, to project accreditation and certification fee levels based on the projected universe in EPA-administered States (see Chapter 2), Section 402 program costs (see Chapter 3), and other assumptions. In contrast, fees for certification exams, multi-jurisdiction registration, and replacement of identification cards and certificates were estimated using a simple cost accounting approach. The fees identified in this chapter for inspectors, risk assessors, and supervisors include the \$70 examination fee estimated in Section 3.5.2. The fees for multi-jurisdiction registration and replacement of identification cards and certificates are not included because they apply only when specific entities seek such registration or document replacement.

This chapter describes the key issues that EPA must address in estimating the Section 402(a)(3) fees, the options for addressing these issues, and the differences in the results under these options. The main issues addressed are:

- How should enforcement costs and Headquarters administrative costs be allocated across fee payers? (Regional administrative costs are estimated and allocated directly for specific types of accreditation and certification applications.)
- How many categories of fees should be used for training providers and individuals? (There is only one fee for firms because they all face the same certification requirements.)

These issues are discussed below.

An attachment to this chapter presents the detailed spreadsheet model results under four options that reflect:

- Two methods for allocating fixed activity costs: Fixed Ratio or Fixed Amount; and
- Two methods for structuring the fees: stratified average costs and simplified average costs.

While the attachment shows the impact of simultaneous changes in these different aspects of the model, each of the following sections of this chapter focuses on the impact of options that address a particular issue.

Finally, EPA adjusted the firm and worker fees in response to public comments received on the final rule published on September 2, 1998. These adjustments are described in Section 4.2 and presented in exhibits throughout the chapter.

Exhibit 4-1 compares the program costs and fee revenues over the five-year modeling period for each of the four options. As explained in Section 3.6, program costs are highest in year one when all applicants are assumed to enter the EPA-administered universe. Costs drop abruptly in year two as the first surge of applicants passes and the accreditation and certification activity reflects the entry of new firms into the industry as other firms exit. Costs decrease further in years three and four as additional States receive authorization. The model predicts that program costs increase in the fourth and fifth years of the program

due to the expiration of accreditations and certifications issued in the first years of the program. The surge for re-accreditation of training providers and re-certification of individuals will actually occur in years 4, 5, and 6. This simplifying assumption has no significant effect on this analysis, however, since the fee levels reflect EPA costs over a five-year period.

Exhibit 4-1
Section 402 Program Costs and Fee Revenues

Year	Program Costs*	Fee Revenues by Option*			
		Fixed Amount		Fixed Ratio	
		Stratified Average Cost	Simplified Average Cost	Stratified Average Cost	Simplified Average Cost
One	\$2,311,000	\$3,099,000	\$3,073,000	\$3,095,000	\$3,046,000
Two	\$923,000	\$542,000	\$544,000	\$471,000	\$478,000
Three	\$801,000	\$470,000	\$472,000	\$410,000	\$416,000
Four	\$775,000	\$494,000	\$496,000	\$438,000	\$444,000
Five	\$790,000	\$708,000	\$711,000	\$649,000	\$653,000
Totals**	\$5,600,000	\$5,313,000	\$5,296,000	\$5,063,000	\$5,037,000

* Excludes program costs and fee revenues associated with certification examination for inspectors, risk assessors, and supervisors. Includes program costs associated with firm certification extension applications in years four (\$102,000) and five (\$8,000).

** Individual entries may not sum to totals due to rounding.

Under all options, the fee revenues exceed program costs in year one, while program costs exceed fee revenues in years two through five. This variation by year occurs because:

- Only a nominal level of accreditation and certification activity is assumed to occur in years two through five due to turnover in the industry; and
- Each category of fee reflects the costs over the five-year period, rather than the costs in the year the fee is paid.

Thus, the current methodology calculates fees sufficient to recover costs over a five-year period, rather than sufficient to recover varying annual costs.

The cumulative program cost over five years is \$5.6 million. The cumulative fee revenues over five years vary between \$5.1 million for the Fixed Ratio options and \$5.3 million for the Fixed Amount options. The principal reason for this difference in program costs and fee revenues is the waiver of accreditation fees for not-for-profit training providers. This waiver is required by TSCA §402(a)(3), which states that EPA (or an authorized State) shall not impose accreditation fees “*on any State, local government, or nonprofit training program*” (emphasis added). As discussed in Section 2.2.1, EPA estimates that 40 percent of all accreditation and re-accreditation applications will be from State, local government, or nonprofit training providers. The cumulative program costs for accrediting and re-accrediting training programs taught by not-for profit training providers is almost \$300,000 if enforcement and Headquarters costs are estimated using

the Fixed Amount approach and about \$500,000 using the Fixed Ratio approach. EPA will cover these accreditation and re-accreditation costs out of its Congressional appropriations. Thus, none of the accreditation and re-accreditation costs for not-for-profit training providers will be allocated to for-profit training providers. Another minor reason for this difference, as well as the small difference between the Fixed Ratio options and between the Fixed Amount options, is EPA's decision to round its lead accreditation and certification fees to the nearest \$10. Still, the estimated fee revenues are essentially equal to the costs to administer and enforce the Section 402 program for the non-exempt entities.

4.2 Allocation of EPA Enforcement Costs and Headquarters Administrative Costs

EPA Regional administrative costs depend directly on the number and type of accreditation or certification applications received, while enforcement costs and Headquarters administrative costs generally cannot be linked to specific applications. EPA considered allocating enforcement costs and Headquarters administrative costs to all entities in the EPA-administered Section 402 universe using the following two methods:

- Fixed amount per application. In this approach, EPA calculated a fixed amount per application of \$264 for allocating EPA enforcement costs and Headquarters administrative costs by dividing these costs over the five-year projection period by the number of accreditations, re-accreditations, certifications, and re-certifications over the same period. The Regional administrative costs for each type of accreditation or certification was added to this fixed amount to determine the level of enforcement costs and Headquarters administrative costs each applicant would pay.
- Fixed ratio of Regional administrative costs to enforcement and Headquarters administrative costs. In the second approach, EPA calculated a fixed ratio of 117 percent for allocating enforcement costs and Headquarters administrative costs by dividing these costs over the five-year projection period by the Regional administrative costs. The Regional administrative costs for each type of accreditation or certification was multiplied by this fixed ratio to determine the level of enforcement costs and Headquarters administrative costs each applicant would pay.

Under both the Fixed Amount and Fixed Ratio approaches, the fees for all types of fee payers were calculated using universe and cost estimates that excluded the number and cost of firms seeking certification extensions in years four and five of the program. The firm certification extension fees are calculated separately to allow a direct transfer of revenue to reduce the worker certification and re-certification fees. Further discussion follows later in this Section.

Under both approaches the total Headquarters administrative and enforcement costs (\$490,000) and total Regional enforcement costs (\$2.5 million) over five years is the same. However, the distribution of these costs across different categories of applicants varies as shown in Exhibit 4-2. As described above, under the Fixed Amount approach, the percentage of enforcement and EPA Headquarters administrative costs allocated to each category of applicants is equivalent to the percentage of total applications submitted by that category. Under the Fixed Ratio approach, each category of applicants is allocated the same percentage of enforcement and Headquarters administrative costs as they require Regional administrative costs to accredit or certify. To illustrate the impact of these two approaches for different types of applicants, Exhibit 4-3(a) compares the fee levels under these approaches for the Stratified Average Cost options, prior to calculating

Exhibit 4-2
Distribution of Total Program Costs Over Five Years Among Regulated Entities

ENTITY	Total Applications	Regional Administrative Costs	Fixed Amount Approach		Fixed Ratio Approach	
			+ HQ Administrative Costs	Total Program Costs	+ HQ Administrative Costs	Total Program Costs
For-Profit Training Providers	308 (3%)	\$364,000 (14%)	\$81,000 (3%)	\$445,000 (8%)	\$427,000 (14%)	\$791,000 (14%)
Not-for-Profit Training Providers	204 (2%)	\$239,000 (9%)	\$54,000 (2%)	\$293,000 (5%)	\$280,000 (9%)	\$519,000 (9%)
Firms*	1,541 (14%)	\$421,000 (17%)	\$407,000 (14%)	\$828,000 (15%)	\$494,000 (17%)	\$915,000 (17%)
Individuals	9,173 (82%)	\$1,502,000 (59%)	\$2,422,000 (82%)	\$3,924,000 (71%)	\$1,762,000 (59%)	\$3,264,000 (59%)
Total**	--	\$2,526,000	\$2,964,000	\$5,490,000	\$2,963,000	\$5,490,000

* Totals do not include firm certification extension applications or cost (exclusively Regional administrative cost) in years four (\$102,000) or five (\$8,000).

** Numbers may not sum due to rounding.

the firm certification extension fees and reducing the worker fees. (The differences between these approaches for the Simplified Average Cost options are similar and can be seen in the Attachment to this chapter.) This comparison shows that fee levels for training providers and firms tend to be higher using the Fixed Ratio rather than the Fixed Amount approach. Fee levels for most individuals, however, tend to be lower under the Fixed Ratio option.¹

This difference derives from the skewed distribution of the number of fee payers and the amount of their Regional administrative costs. Accreditations represent five percent of the entire universe of fee transactions but almost 23 percent of Regional administrative costs. In contrast, individual certifications represent about 82 percent of all transactions while accounting for only 59 percent of the Regional administrative costs. (Firm certifications represent 14 percent of transactions and 17 percent of Regional administrative costs.) See Exhibit 4-2.² The much higher number of individual certifications means that individuals will be attributed more of the enforcement costs and Headquarters administrative costs than training providers if a fixed amount is applied. The much higher Regional administrative costs per accreditation, in comparison to those costs for an individual certification, means that training providers will be attributed more of the enforcement costs and Headquarters administrative costs than individuals if a fixed ratio is applied since this ratio is multiplied by the Regional administrative costs per transaction.

In response to public comments that the Agency received on the September 2, 1998 final rulemaking, EPA decided to create a firm certification extension fee. Several firms commented that the worker fees seemed high relative to the firm fees. They suggested revising the fee levels accordingly. A large portion of the fees on firms and workers reflects the cost of Regional enforcement activities. EPA enforcement of firm and worker standards is typically directed at firms instead of workers. The fees, however, assumed that these enforcement costs would be similar for firms and workers. To address this issue, the Agency is creating a firm certification extension fee and using the revenue from this fee to reduce Regional enforcement costs charged to workers. Under the new final rule, firms are required to extend their certification every three years.

The change in fees was calculated as follows. First, the firms applying for extension of their certifications will add an administrative burden to the program. The program costs increase by the \$163 additional administrative burden of processing the certification extension. See Section 3.2.2. Second, EPA decided to charge the firms applying for extensions the average estimated cost of Regional enforcement per applicant, which is approximately \$263. By assessing the 675 firms expected to apply for certification extensions in years four and five the average cost of Regional enforcement per applicant (\$263), EPA can generate \$180,000 of revenue. This revenue, if redistributed among the 2,305 workers that will apply for certification and re-certification over the five-year modeling period, decreases worker certification and re-certification fees by \$80 per applicant. Therefore, for all fee options, EPA assigned firm certification extension fees of \$430 (\$263 Regional enforcement cost + \$163 administrative processing cost) and reduced worker fees by \$80. To simplify the analysis, the same fee adjustments were used for the Fixed Ratio approach. The revised fees under the Stratified Average Cost approach are presented in Exhibit 4-3(b).

The accreditation and re-accreditation fees generated using the Fixed Ratio approach can reach twice the fees under the Fixed Amount approach, and therefore result in greater potential economic impacts, for

¹ Exceptions to this general result include slightly higher initial certification fees for Inspectors and marginally lower re-accreditation fees for Project Designers under the Fixed Ratio, Stratified Average Cost option.

² These calculations are based on the initial fee calculations, prior to development of the firm certification extension fee.

Exhibit 4-3(a)
Fixed Amount Versus Fixed Ratio Approaches
(Stratified Average Cost Approach)

Training Programs		Fixed Amount		Fixed Ratio	
		Accreditation	Re-accreditation	Accreditation	Re-accreditation
<i>Initial Training</i>	Inspector	\$2,500	\$1,600	\$4,860	\$2,900
	Risk Assessor	\$1,760	\$1,150	\$3,240	\$1,940
	Supervisor	\$3,250	\$2,050	\$6,490	\$3,870
	Worker	\$1,760	\$1,150	\$3,240	\$1,940
	Project Designer	\$1,010	\$710	\$1,620	\$970
<i>Refresher Training</i>	Inspector	\$1,010	\$710	\$1,620	\$970
	Risk Assessor	\$1,010	\$710	\$1,620	\$970
	Supervisor	\$1,010	\$710	\$1,620	\$970
	Worker	\$1,010	\$710	\$1,620	\$970
	Project Designer	\$640	\$490	\$810	\$480
Firms *		Certification	Certification Extension	Certification	Certification Extension
		\$540	*	\$590	*
Individuals		Certification	Re-certification	Certification	Re-certification
	Inspector**	\$470	\$350	\$370	\$190
	Risk Assessor**	\$590	\$420	\$620	\$340
	Supervisor**	\$540	\$390	\$520	\$280
	Worker*	\$360	\$320	\$200	\$130
	Project Designer	\$470	\$390	\$450	\$280

* Fees presented do not include the firm certification extension fee or worker certification and certification extension fee adjustment developed in response to public comment. Exhibit 4-3(b) presents those results.

* Fees include the \$70 examination fee (see Section 3.5.1).

training providers. In fact, for the Stratified Average Cost approach, the fees calculated using the Fixed Ratio method result in potential impacts on the smallest training providers (13.6 percent) that are six percent higher, measured as annual fee costs over annual revenue, than the impacts from fees calculated using the Fixed Amount approach (7.6 percent). Even though the Fixed Ratio approach tends to produce lower fees and potential impacts on most individuals and firms³ than those generated using the Fixed Amount approach, it turns out that the difference in the potential impacts between the Fixed Ratio and Fixed Amount approaches on firms is negligible, even if a firm pays for the certification of its employees. (The Small Entity Impact Analysis presents a more detailed discussion of the potential impacts on small entities under each option.)

³ While firm certification fees increase slightly under the Fixed Ratio option, the analysis assumes that firms pay a portion or all of the employee certification costs, which are generally lower under the Fixed Ratio option. As such, a firm's overall burden would be somewhat lower under the Fixed Ratio option. See The Small Entity Impact Analysis for detail.

Exhibit 4-3(b)
Fixed Amount Versus Fixed Ratio Approaches
Including the Firm Certification Extension and Worker Fee Adjustments
(Stratified Average Cost Approach)

Training Programs		Fixed Amount		Fixed Ratio	
		Accreditation	Re-accreditation	Accreditation	Re-accreditation
<i>Initial Training</i>	Inspector	\$2,500	\$1,600	\$4,860	\$2,900
	Risk Assessor	\$1,760	\$1,150	\$3,240	\$1,940
	Supervisor	\$3,250	\$2,050	\$6,490	\$3,870
	Worker	\$1,760	\$1,150	\$3,240	\$1,940
	Project Designer	\$1,010	\$710	\$1,620	\$970
<i>Refresher Training</i>	Inspector	\$1,010	\$710	\$1,620	\$970
	Risk Assessor	\$1,010	\$710	\$1,620	\$970
	Supervisor	\$1,010	\$710	\$1,620	\$970
	Worker	\$1,010	\$710	\$1,620	\$970
	Project Designer	\$640	\$490	\$810	\$480
Firms		Certification	Certification Extension	Certification	Certification Extension
		\$540	\$430	\$590	\$430
Individuals		Certification	Re-certification	Certification	Re-certification
	Inspector*	\$470	\$350	\$370	\$190
	Risk Assessor*	\$590	\$420	\$620	\$340
	Supervisor*	\$540	\$390	\$520	\$280
	Worker	\$280	\$240	\$120	\$50
	Project Designer	\$470	\$390	\$450	\$280

* Fees include the \$70 examination fee (see Section 3.5.1).

EPA proposes to use the Fixed Amount approach because, *overall*, the fees result in lower potential economic impacts than with the Fixed Ratio approach. That is, the burden is more evenly distributed over all fee payers, rather than directed at the relatively few (for-profit) training providers. Furthermore, the fee levels under the Fixed Amount option more closely match state lead accreditation and certification fee levels.

4.3 Fee Structure Options

EPA estimated fee levels for two fee structure approaches: Stratified Average Cost and Simplified Average Cost. These approaches specify which training providers, firms, or individuals would pay the same fees. For both approaches, EPA is assumed to pay for the costs of accrediting and re-accrediting State, local government, and nonprofit training providers. The two fee structure options are described below.

Under the *Stratified Average Cost approach*, fee levels for different types of participants are based on the administrative and enforcement burden they impose on government. This option results in 31 different categories of fees, as outlined below:

- Training providers. Fees depend on whether the training provider is applying for accreditation or re-accreditation of an initial or refresher training program in each of five disciplines, thereby resulting in 20 separate fees. Under this option, however, the estimated accreditation fee and the estimated re-accreditation fee for four categories of refresher training programs are the same. This occurs since the EPA Regional administrative costs, based on State data, are equal for these four categories.
- Firms. Fees depend on whether the firm is applying for certification or an extension of their certification. The certification extension fee covers the administrative cost of processing the application and an additional charge for Regional enforcement costs.
- Individuals. Fees vary by discipline and for initial certification or re-certification, thereby resulting in 10 separate fees.

In contrast, under the *Simplified Average Cost approach*, an average fee level is estimated for broad groups of training providers, firms, and individuals and generally does not vary according to the relative burden that a fee payer within this larger group imposes on the government. This option results in five separate fees, as outlined below:

- Training providers. Fees do not vary by discipline or by initial versus refresher training program. Instead, they depend on whether the training provider is applying for accreditation or re-accreditation of a training program, thereby resulting in two separate fee levels.
- Firms. Fees depend on whether the firm is applying for certification or an extension of their certification. The certification extension fee covers the administrative cost of processing the application and an additional charge for Regional enforcement costs.
- Individuals. Fees vary by two groups of disciplines: (1) inspectors, risk assessors, and supervisors; and (2) workers and project designers. The fees do not depend on whether the individual is applying for initial certification or re-certification, thereby resulting in two separate fees.

Under this approach, EPA calculated a five-year average cost for the combined Regional administrative costs for the various types of accreditation or certification covered by a fee and then added the fixed amount or fixed ratio costs to cover enforcement costs and Headquarters administrative costs. The following text compares the two options and then compares the fees to State fees.

EPA proposes to use the Stratified Average Cost approach because it more accurately reflects the burdens of accreditation and certification attributable to the various types of applicants. This option bases the fee levels on EPA's costs to perform activities required to accredit or certify a particular type of applicant, rather than an average amount.

4.3.1 Comparison of Fee Structure Options

Exhibit 4-4 shows the corresponding fee levels for the two fee structure options using the Fixed Amount method for allocating enforcement and Headquarters administrative costs. (The Attachments to this chapter shows the results under the Stratified Average Cost and Simplified Average Cost approaches for the Fixed Ratio options, with and without the fee adjustments made for firms and workers.)

The Stratified Average Cost approach results in a wide range of fee levels, varying, for example, from \$1,010 to \$3,250 for initial training program accreditation and from \$280 to \$590 for individual certification. The Simplified Average Cost approach estimates fee levels by calculating an average EPA burden of accreditation or certification. As a result, under the Simplified Average Cost approach, some training providers and individuals would have to pay more or less than the actual burden incurred by EPA to accredit or certify them. A comparison of fees under the two approaches shows that some training providers could be charged more than twice as much under the Simplified Average Cost approach. For example, under the Simplified Average Cost approach, the fee for accrediting a refresher training program for project designers is \$1,640 in contrast to \$640 under the Stratified Average Cost approach, for the Fixed Ratio approach. Firm certification fees are not affected, however, since a single fee category is estimated for them under both fee structure options.

4.3.2 Comparison with State Fee Levels

Exhibit 4-5(a) summarizes the renewal periods and fees charged for lead accreditation and certification by nine States that participated in EPA's data gathering effort, based on contact with State agencies in 1996, 1997, and 1998. Fees and renewal periods also are shown for Arkansas, Louisiana, Oklahoma, and Texas, based on data provided by EPA Region VI.

In Exhibit 4-5(b), the fees in Exhibit 4-5(a) for training providers and individuals are adjusted to reflect State requirements that fees be paid annually or, in some cases, every two or three years, while Federal fees last three to five years. Thus, a \$250 fee for initial certification, including a \$50 third-party examination fee, and \$100 fee for annual renewal certification in a State would be adjusted to \$550 to reflect that certification lasts, on average, for four years under the Section 402 program ($\$250 + (\$100 \times 3)$). A \$2,000 fee for initial and renewal accreditation that lasts two years in a State would be adjusted to \$4,000 ($\$2,000 \times 2$) to reflect an accreditation that lasts four years in the Section 402 program. State firm certification fees in Exhibit 4(b) are adjusted to reflect certification over a three-year modeling period, equal to the validity of the firm certification. Thus, a \$100 fee for firm certification that lasts one year in a State would be adjusted to \$300 to reflect the three-year projection period ($\$100 \times 3$).

As shown in Exhibit 4-5(b), the difference between the estimated Section 402 fees and State fees, even after accounting for the Section 402 renewal period, can be substantial. The estimated Section 402 fee for accrediting an initial inspector training program, for example, is \$2,500 under the Fixed Amount, Stratified Average Cost option in comparison to \$2,000 for accrediting the same training program for four years in New Hampshire. This difference in fee levels derives from a key difference between the Federal and State programs: State fee levels are not necessarily set to recover the full costs to administer and enforce a State's lead accreditation and certification program. States that receive Federal grants, for example, would set fee levels to cover program costs less the amount of the matching grant. States also may subsidize lead accreditation and certification costs with funds collected for other lead or other agency programs. Consequently, fee levels in such States would be lower than Federal fee levels that are set to recover program costs according to Section 402.

Exhibit 4-4
Accreditation Fees under Two Fee Structure Approaches
(Fixed Amount Approach)

Fee Payers	Accreditation/ Certification		Re-accreditation/ Re-certification/ Certification Extension	
	Stratified Average	Simplified Average	Stratified Average	Simplified Average
Training Programs: Initial Training				
Inspector	\$2,500	\$1,640	\$1,600	\$1,080
Risk Assessor	\$1,760	\$1,640	\$1,150	\$1,080
Supervisor	\$3,250	\$1,640	\$2,050	\$1,080
Worker	\$1,760	\$1,640	\$1,150	\$1,080
Project Designer	\$1,010	\$1,640	\$710	\$1,080
Training Programs: Refresher Training				
Inspector/Risk Assessor	\$1,010	\$1,640	\$710	\$1,080
Supervisor/Worker	\$1,010	\$1,640	\$710	\$1,080
Project Designer	\$640	\$1,640	\$490	\$1,080
Firms *	\$540	\$540	\$430	\$430
Individuals				
Inspector **	\$470	\$500	\$350	\$380
Risk Assessor **	\$590	\$500	\$420	\$380
Supervisor **	\$540	\$500	\$390	\$380
Worker *	\$280	\$350	\$240	\$300
Project Designer	\$470	\$430	\$390	\$380

* Fees are adjusted in response to public comments received by EPA (see Section 4.2).

** Fees include the \$70 examination fee (see Section 3.5.1).

**Exhibit 4-5(a)
State Fees and Renewal Periods**

State	Training Provider				Firm		Individual									
	Initial Training Fee*	Duration (Years)	Refresher Training Fee*	Duration (Years)	Fee	Duration (Years)	Worker Fee	Duration (Years)	Supervisor Fee	Duration (Years)	Inspector Fee	Duration (Years)	Risk Assessor Fee	Duration (Years)	Project Designer Fee	Duration (Years)
Arkansas	\$900	1	\$900	1	\$1,200	1	\$35	1	\$150	1	\$150	1	\$150	1	\$150	1
California	**	3	**	3	NA	NA	\$75	1	\$75	1	NA	NA	\$75	1	\$75	1
Illinois	\$500	1	\$250	1	\$500	1	\$75	1	\$100	1	\$150	1	\$150	1	NA	NA
Louisiana	\$500	1	\$500	1	\$500	1	\$50	1	\$250	1	\$150	1	\$250	1	\$500	1
Maine	\$500	NA	\$500	NA	\$275	1	\$75	1	\$125	1	\$200	1	\$250	1	\$225	1
Massachusetts	\$875***	1	\$875***	1	\$275	1	****	1	\$75	1	NA	NA	NA	NA	NA	NA
New Hampshire	\$500	1	\$500	1	\$250	1	\$50	1	\$100	1	\$75	1	NA	NA	\$200	1
Ohio	\$750	3	\$250	3	\$500	2	\$50	2	NA	NA	\$250	2	\$250	2	\$500	2
Oklahoma	\$600	1	\$600	1	\$50	1	\$30	1	\$150	1	\$200	1	\$300	1	\$500	1
Rhode Island	\$650	2	\$650	2	\$150	1	\$20	1	\$75	1	\$75	1	\$150	1	NA	NA
Texas	\$500	1	\$500	1	\$500	1	\$50	1	\$150	1	\$150	1	\$300	1	\$300	1
Vermont	\$400	1	\$400	1	\$500	1	\$50	1	\$100	1	\$150	1	\$150	1	\$150	1
Virginia	\$1,360	2	\$400	2	\$50	1	\$35	1	\$35	1	\$35	1	\$35	1	\$35	1

Listed fees for Illinois, Ohio, Rhode Island, and Virginia do not include accreditation and certification exam fees charged to applicants. Exhibit 4-5(b) reflects these additional fee payer costs.

NA = Program not available in this State.

* = The accreditation fee for initial and refresher training programs is the same across all five disciplines, except in Rhode Island and Virginia. In Rhode Island and Virginia accreditation fees shown are averaged across five disciplines.

** = No fees charged as of March 1998.

*** = This State accredits training providers and charges the same accreditation fee regardless of the number of training programs offered by a training provider.

**** = No fees charged as of August 1998.

Source: *Summary Data for Nine State Lead Accreditation and Certification Programs*, March 1998 (updated August 1998); and EPA Region VI.

Exhibit 4-5(b)
State Fees Adjusted to Reflect Federal Renewal Periods
(Training Provider Fees Adjusted to Four Years, Firm Fees Adjusted to Three Years)

State	Training Provider		Firm	Individual				
	Initial Training Fee*	Refresher Training Fee*	Fee	Worker Fee	Supervisor Fee	Inspector Fee	Risk Assessor Fee	Project Designer Fee
Arkansas	\$3,600	\$3,600	\$3,600	\$140	\$600	\$600	\$600	\$600
California	**	**	NA	\$300	\$300	NA	\$300	\$300
Illinois	\$2,000	\$1,000	\$1,500	\$150	\$250	\$450	\$450	NA
Louisiana	\$2,000	\$2,000	\$1,500	\$200	\$1,000	\$600	\$1,000	\$2,000
Maine	\$2,000	\$2,000	\$825	\$300	\$500	\$800	\$1,000	\$900
Massachusetts	\$3,500***	\$3,500***	\$825	****	\$300	NA	NA	NA
New Hampshire	\$2,000	\$2,000	\$750	\$200	\$400	\$300	NA	\$800
Ohio	\$1,000	\$333	\$750	\$150	NA	\$570	\$570	\$1,000
Oklahoma	\$1,650	\$1,650	\$150	\$75	\$375	\$500	\$750	\$1,250
Rhode Island	\$1,375	\$1,375	\$450	\$130	\$350	\$350	\$650	NA
Texas	\$2,000	\$2,000	\$1,500	\$200	\$600	\$600	\$1,200	\$1,200
Vermont	\$1,600	\$1,600	\$1,500	\$200	\$400	\$600	\$600	\$600
Virginia	\$1,560	\$600	\$150	\$140	\$165	\$165	\$165	\$140

Fees listed include examination charges and reduced renewal fees, as applicable, for fee payers in Illinois, Ohio, Oklahoma, Rhode Island, and Virginia.

NA = Program not available in this State.

* = The accreditation fee for initial and refresher training programs is the same across all five disciplines, except in Rhode Island and Virginia. In Rhode Island and Virginia accreditation fees shown are averaged across five disciplines. In Virginia, training providers pay an annual renewal fee of \$100 after the initial accreditation expires.

** = No fees charged as of March 1998.

*** = This State accredits training providers and charges the same accreditation fee regardless of the number of training programs offered by a training provider.

**** = No fees charged as of August 1998.

Source: *Summary Data for Nine State Lead Accreditation and Certification Programs*, March 1998 (updated August 1998); and EPA Region VI.

State fee levels in Arkansas, California, Illinois, Louisiana, Ohio, Oklahoma, Texas, and Virginia were intended to fully recover the costs of their lead accreditation and certification programs. In practice, however, program costs substantially exceed the amount recovered in fee revenues. For example, California has studied the actual costs to accredit and certify entities in the State and concluded that the market simply will not bear the actual costs of the program. California estimates that, in practice, it costs the State \$5,000 to accredit each training program. The certification fees are close to the actual costs to *administer* certification. The certification fees are not high enough, however, to cover *enforcement* costs and so will never fully recover program costs.

A key challenge cited by all States unable to fully recover program costs through fees is that the actual demand for accreditation and certification falls far below projected demand so that fees set based on projected demand simply are not high enough to recover the costs. Some States also report that program costs have been higher than expected, particularly during the first few years of a program when agencies need to work more extensively with applicants to help them understand how to meet the requirements for obtaining accreditation or certification under the State's lead program.

In addition, several States noted that a substantial number of applicants are exempt from fees because they are non-profit entities and consequently the fees collected from the for-profit applicants are not set high enough to cover the total program costs, including those for accrediting and certifying non-profit entities. The subsidization of costs to accredit or certify non-profit entities through fees paid by for-profit entities shows that the goals for fee collection may be different under the Federal and State programs.

Since the fee-setting methodology and even the components of the "full" costs to be recovered will vary and are not known for each State, further conclusions concerning differences in fee levels due to programmatic differences cannot be drawn.

Among the States that participated in EPA's data gathering effort, Virginia is the only State reporting a self-supporting lead accreditation and certification fee program. To further assess the Section 402 fee levels, EPA compared them with the corresponding fees for Virginia in Exhibit 4-6. Over a corresponding period of four years (i.e., the average duration of a certification under the Federal program), a certified inspector, supervisor, or risk assessor in Virginia would pay \$165, which is the sum of the \$35 annual fee over four years and a one-time \$25 examination fee. The corresponding Federal fee under the Stratified Average Cost approach for each of these disciplines is about three times Virginia's fee, whether enforcement and Headquarters administrative costs are allocated using a fixed amount or fixed ratio. Over a period of three years, a certified firm in Virginia would pay \$150, which is less than one-third the estimated Federal fee level under the Fixed Amount options (\$540) and almost one-quarter of the estimated Federal fee level under the Fixed Ratio option (\$590). This comparison is the same for both the Stratified Average Cost approach and the Simplified Average Cost approach since these methods yield the same fee levels. In addition, in Virginia the firm would continue to pay \$50 per year, or \$150 every three years, whereas under the Federal program, the firms will be required to pay a firm certification fee of \$430 every three years.

Average fees for training providers in Virginia and the Federal program are more similar, particularly under the Fixed Amount method. Over a period of four years, an accredited training provider in Virginia would pay, on average, \$2,160 for one initial training program plus one refresher training program. The corresponding average Federal fee is about 40 percent more than this figure under the Stratified Average Cost, Fixed Amount option (\$3,000), although it is almost 150 percent more than this figure under the Stratified Average Cost, Fixed Ratio option (\$5,280). The average fee for accrediting one initial plus one refresher training program under the Simplified Average Cost, Fixed Amount option (\$3,280) is about 50 percent more than Virginia's corresponding fee, while the average fee under the Simplified Average Cost, Fixed Ratio option (\$5,920) is about 200 percent more than Virginia's fees for the same accreditations.

**Exhibit 4-6
Virginia and EPA Accreditation and Certification Fees***

		Training Provider		Firm	Individual				
		Average Initial Cost*	Average Refresher Cost*	Cost	Worker Cost	Supervisor Cost**	Inspector Cost**	Risk Assessor Cost**	Project Designer Cost
Virginia		\$1,560	\$600	\$150	\$140	\$165	\$165	\$165	\$140
Stratified Average Cost Approach	EPA-Fixed Amount	\$2,060	\$940	\$540	\$280	\$470	\$590	\$540	\$470
	EPA-Fixed Ratio	\$3,840	\$1,440	\$590	\$120	\$370	\$610	\$510	\$440
Simplified Average Cost Approach	EPA-Fixed Amount	\$1,640	\$1,640	\$540	\$360	\$510	\$510	\$510	\$440
	EPA-Fixed Ratio	\$2,960	\$2,960	\$590	\$300	\$450	\$450	\$450	\$380

* Accreditation fees are averaged across five disciplines.

** EPA certification fees for supervisors, inspectors, and risk assessors include a \$70 examination fee (see Section 3.5.1). Worker fees include adjustments made in response to public comments received on the final rule published September 2, 1998 (see Section 4.2).

Several reasons contribute to the difference between Virginia and Federal accreditation fees. In this comparison, the average fee in Virginia for accrediting a refresher training program (\$400) is much lower than its average fee for accrediting an initial training program (\$1,360). The average burden to accredit a refresher training program, based on the experience of several States programs, suggests that to fully recover the costs to administer and enforce this certification the Federal fee should be set at a higher level. Virginia also charges only \$100 to renew an accredited training program, an amount that is less than one-fourth of the State's fee for initial accreditation for an initial or a refresher training program. This may reflect differences in the level of review an accredited training program would be subject to under the Virginia versus the Federal program. Finally, Virginia indicated that both the lead accreditation and certification program costs they seek to recover through fees may be lower than those experienced by other States and EPA due to some cost-sharing arrangements between the 27 occupational licensing programs within the State's Department of Professional and Occupational Licensing.

4.4 Accreditation Fee Waivers for Firms that Train Their Own Employees

TSCA §402(a)(3) states that EPA (or an authorized State) “*may waive the fee for lead-based paint activities contractors under subparagraph (A) for the purpose of training their own employees.*” Potential issues that could arise in establishing a waiver under the Federal Section 402 program could include:

- The advantages or disadvantages of encouraging firms to train their own employees, such as lower training costs but possibly a greater need for enforcement activities to ensure that such firms provide complete training programs and pass only persons who meet the training requirements. A waiver may reduce costs for firms that have existing training programs for their employees. It may be less costly for them to add a module with a qualified trainer than to send their employees to third-party training providers, especially if training opportunities are limited in their area. On the other hand, the availability of training opportunities for the smaller firms and individuals may suffer if most training for larger firm employees is done in-house. In addition, quality assurance/control concerns may arise for training that is not done by independent training firms.
- The equity between firms that obtain a waiver and for-profit training providers that must pay a fee. The Agency burden of reviewing accreditation applications is expected to be the same for firms and for-profit training providers, and the enforcement burden may be greater for firms due to the concerns listed above. The for-profit providers are already competing with the non-profit providers that have an accreditation fee waiver. A waiver for firms training their own employees may increase competitive pressures on the for-profit training providers.
- The source of the funds to subsidize the waived fees. This cost would have to be funded out of EPA's budget.

None of the nine States contacted by EPA allow such a waiver under their lead accreditation programs.

Attachment 1 to Chapter 4
Estimated Fee Levels under Four Options: Revised (Includes Firm Certification Extension Fee and Worker Fee Adjustment)

Training Program		Stratified Average Cost Approach				Simplified Average Cost Approach			
		Fixed Amount		Fixed Ratio		Fixed Amount		Fixed Ratio	
		Accreditation	Re-accreditation	Accreditation	Re-accreditation	Accreditation	Re-accreditation	Accreditation	Re-accreditation
<i>Initial Training</i>	Inspector	\$2,500	\$1,600	\$4,860	\$2,900	\$1,640	\$1,080	\$3,000	\$1,770
	Risk Assessor	\$1,760	\$1,150	\$3,240	\$1,940	\$1,640	\$1,080	\$3,000	\$1,770
	Supervisor	\$3,250	\$2,050	\$6,490	\$3,870	\$1,640	\$1,080	\$3,000	\$1,770
	Worker	\$1,760	\$1,150	\$3,240	\$1,940	\$1,640	\$1,080	\$3,000	\$1,770
	Project Designer	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
<i>Refresher Training</i>	Inspector	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Risk Assessor	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Supervisor	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Worker	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Project Designer	\$640	\$490	\$810	\$480	\$1,640	\$1,080	\$3,000	\$1,770
Firms		Certification	Certification Extension	Certification	Certification Extension	Certification	Certification Extension	Certification	Certification Extension
		\$540	\$430	\$590	\$430	\$540	\$430	\$590	\$430
Individuals		Certification	Re-certification	Certification	Re-certification	Certification	Re-certification	Certification	Re-certification
Inspector*		\$470	\$350	\$370	\$190	\$500	\$380	\$430	\$250
Risk Assessor*		\$590	\$420	\$620	\$340	\$500	\$380	\$430	\$250
Supervisor*		\$540	\$390	\$520	\$280	\$500	\$380	\$430	\$250
Worker		\$280	\$240	\$120	\$50	\$350	\$300	\$280	\$170
Project Designer		\$470	\$390	\$450	\$280	\$430	\$380	\$360	\$250

* Fees include the \$70 examination fee (see Section 3.5.1).

Attachment 2 to Chapter 4
Estimated Fee Levels under Four Options: Initial Allocation of Fees (Pre-Reallocation of Regional Enforcement Costs)

Training Program		Stratified Average Cost Approach				Simplified Average Cost Approach			
		Fixed Amount		Fixed Ratio		Fixed Amount		Fixed Ratio	
		Accreditation	Re-accreditation	Accreditation	Re-accreditation	Accreditation	Re-accreditation	Accreditation	Re-accreditation
<i>Initial Training</i>	Inspector	\$2,500	\$1,600	\$4,860	\$2,900	\$1,640	\$1,080	\$3,000	\$1,770
	Risk Assessor	\$1,760	\$1,150	\$3,240	\$1,940	\$1,640	\$1,080	\$3,000	\$1,770
	Supervisor	\$3,250	\$2,050	\$6,490	\$3,870	\$1,640	\$1,080	\$3,000	\$1,770
	Worker	\$1,760	\$1,150	\$3,240	\$1,940	\$1,640	\$1,080	\$3,000	\$1,770
	Project Designer	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
<i>Refresher Training</i>	Inspector	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Risk Assessor	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Supervisor	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Worker	\$1,010	\$710	\$1,620	\$970	\$1,640	\$1,080	\$3,000	\$1,770
	Project Designer	\$640	\$490	\$810	\$480	\$1,640	\$1,080	\$3,000	\$1,770
Firms		Certification	Certification Extension	Certification	Certification Extension	Certification	Certification Extension	Certification	Certification Extension
		\$540	Not required	\$590	Not required	\$540	Not required	\$590	Not required
Individuals		Certification	Re-certification	Certification	Re-certification	Certification	Re-certification	Certification	Re-certification
Inspector*		\$470	\$350	\$370	\$190	\$500	\$380	\$430	\$250
Risk Assessor*		\$590	\$420	\$620	\$340	\$500	\$380	\$430	\$250
Supervisor*		\$540	\$390	\$520	\$280	\$500	\$380	\$430	\$250
Worker		\$360	\$320	\$200	\$130	\$430	\$380	\$360	\$250
Project Designer		\$470	\$390	\$450	\$280	\$430	\$380	\$360	\$250

* Fees include the \$70 examination fee (see Section 3.5.1).

CHAPTER 5: SENSITIVITY ANALYSIS

The accuracy of the Section 402 fee level estimates presented in the previous chapter depends largely on three types of factors:

- Cost inputs;
- The estimated size of the universe of accredited training providers and certified firms and individuals in EPA-administered States; and
- Key analytical assumptions.

The data limitations related to cost inputs are described in Section 3.7. This chapter examines the last two factors to better understand their impact on the fee calculations. The findings of the sensitivity analysis indicate that the estimated fee levels are fairly robust with respect to the underlying methodology and most assumptions.

5.1 Universe Estimate

As explained in Section 2.1, EPA modeled the universe over a five-year period because of uncertainties over time related to the size of the universe. Changes in abatement technology and the associated costs, increased knowledge about and awareness of lead hazards, and changes in the structure of the industry will affect the demand for services and the supply of providers. These changes will affect the number of accreditations and certifications in EPA-authorized States and EPA-administered States. Moreover, EPA expects that the number of EPA-administered States will decrease during the first five years of the Section 402 program as more State programs are authorized. Thus, the size of the EPA-administered universe will decline over time, which will reduce EPA program costs and may affect estimated fee levels. Still other changes in administrative efficiencies and enforcement levels, for example, will affect the costs to administer and enforce such accreditations and certifications. Recent and on-going regulatory actions also may affect the size of the Section 402 universe, including the initiatives in the following areas:

- Residential lead hazard standards;
- EPA/HUD residential lead-based paint disclosure program;
- Pre-renovation and remodeling education program; and
- Lead certification and accreditation requirements for buildings and structures.

Given these uncertainties, the Agency plans to review the Section 402 fee program periodically to ensure that the fee levels are set appropriately to recover the costs of administering and enforcing the Section 402 program.

In the Section 402/404 RIA, the national universe of accreditations, re-accreditations, certifications, and re-certifications was estimated based on: (1) the distribution of housing units in the United States with five or more square feet of non-intact lead-based paint, using data from HUD's *National Survey of Lead in Housing* without adjustments by EPA; (2) the rate of lead inspections, assessments, and abatements in Massachusetts; and (3) the estimated number of training providers, firms, and individuals required to meet this demand. In contrast, the current analysis uses: (1) data from EPA's *Report on the National Survey of Lead in Housing*, which re-analyzes data in the HUD survey, to calculate the distribution of housing units in the United States with five or more square feet of non-intact lead-based paint; (2) actual universe data from

eight State lead programs to extrapolate to a national universe of training providers, firms, and individuals; and (3) more current information on the number of States with lead programs.

In addition, in the current analysis, EPA assumes that the EPA-administered universe will include 18 States and all U.S. Territories at the start of the Section 402 program and that this universe will decrease by seven States during the five-year projection period as more States seek and obtain authorization to run their own programs. The main analysis implements this transition by assuming that one-third of the regulated community contained in the seven States will become subject to authorized State programs by year three; another third by year four; and the remaining third by year five. This assumption affects the universe levels in a given year, as well as the cumulative number of participants and program costs over the entire five-year period.

To gauge the sensitivity of fee levels to the national universe estimates, EPA examined two alternative universe scenarios:

- In the first scenario, EPA increased the national universe by 20 percent.
- In the second scenario, EPA reduced the size of the national universe by 20 percent.

In both cases, the methodology described in Section 2.1 was used to calculate the size of the new EPA-administered universe. This sensitivity analysis was run prior to introducing the firm certification extension fee. The certification extension fee was designed to raise additional revenue from firms and to reduce the worker fees. The additional firm applications were not formally included in the universe of activities for the fee calculations, because that would have resulted in small reductions in fees for all other fee payers, rather than allowing EPA to isolate the revenue to be reallocated for the worker population. See Section 4.2.

For the expanded universe, EPA obtained lower fees than in the base case, since enforcement costs and Headquarters administrative costs do not change under the scenario and are distributed over more accreditations and certifications (13,481) than in the base case (11,226). See Section 2.3. In the opposite scenario, EPA obtained higher fees due to a smaller number of accreditations and certifications (8,985) occurring in a diminished universe. For example, the fee for accrediting an initial worker training program is almost three percent lower and the fee for certifying a worker is almost 14 percent lower for the expanded universe than in the base case. The corresponding fees are about three percent and 16 percent higher, respectively, for the diminished universe. On average, EPA found that fee levels for these two scenarios differed by 10 to 15 percent from the base case, despite the more significant change in the size of the EPA-administered universe.

To test the sensitivity of the fees to State authorization projections, EPA examined the rate at which the EPA-administered universe declines as additional States receive EPA authorization for their own program. EPA assumed that the seven additional States assumed to be authorized between years three and five will be authorized instead between years two and four. In this way, one-third of the EPA-administered universe in these seven States will transfer to newly-authorized State programs in year two; another third will transfer in year three; and the remaining third in year four. The size of the EPA-administered universe would remain constant between years four and five, consisting of 11 States and all Tribal Areas and Territories.

The impact of this revision on fee levels is small. Fees increase slightly (less than four percent for any fee), since the universe would decline sooner and the number of accreditations and certifications over the first five years would decrease slightly. This fee increase is consistent with observations, described above for a diminished EPA-administered universe, which indicate that reducing the number of accreditations and certifications should produce higher fees. For this scenario, however, cumulative enforcement costs and Headquarters administrative costs over the first five years decline as the seven States become authorized

sooner. This reduction in enforcement costs and Headquarters administrative costs offsets the effect of a diminished universe, producing only a slight increase in fees for this scenario.

5.2 Key Analytical Assumptions

This section examines the sensitivity of the estimated fees to two major analytical assumptions:

- The distribution of training programs and certified individuals by lead-based paint discipline; and
- The rate that training providers, firms, and individuals enter and exit the lead-based paint services industry.

EPA examined the robustness of the fee level estimates by varying these assumptions in the fee model, while holding all other assumptions constant. The sensitivity results described below, however, address only the Stratified Average Cost approach for determining the number of fees. Nevertheless, the findings under the Simplified Average Cost approach are similar.

5.2.1 Distribution of Training Programs and Individuals by Discipline

The portion of training programs and certified individuals in each of the five lead-based paint disciplines affects the estimated fees levels under both approaches for allocating enforcement costs and Headquarters administrative costs. Changing the distribution of training programs and individuals across disciplines changes the ratio of Regional administrative costs to enforcement and Headquarters administrative costs, since the Regional administrative costs differ by discipline. This change in the fixed ratio (see Section 4.1) will affect the allocation of enforcement costs and Headquarters administrative costs among all accreditations and certifications, and thereby will affect the estimated fee levels under the Fixed Ratio options.

In general, however, changing the distribution of training programs and individuals across disciplines will not change the amount of enforcement costs and Headquarters administrative costs allocated to each applicant under the Fixed Amount options unless the assumption affects the number of accreditations and certifications occurring in the EPA-administered universe. For example, if EPA changes the assumed range of training programs offered by each training provider (e.g., all training providers will offer worker and supervisor training programs but only one-half of the providers will offer project designer training programs), the total number of training program accreditations will change. The corresponding change in the cumulative number of accreditations and certifications over five years due to this distribution will change the fixed amount of enforcement costs and Headquarters administrative costs to be allocated to each accreditation and certification, even though the cumulative enforcement costs and Headquarters administrative costs remains the same. Thus, modifying the distribution of training providers by altering assumptions concerning the number of training programs offered by each type of training provider also could change the estimated fee levels for training providers, firms, and individuals under the Fixed Amount options.

EPA obtained nominal changes in estimated fees by varying its assumptions concerning the distribution of certifications and accreditations by discipline:

- Assuming that 20 percent of certified individuals are in each of the five disciplines, rather than using percentages ranging from 1 to 30 percent (see Section 2.2.3), EPA obtained less than one percent change in the estimated accreditation and certification fees. The impact was small because total Regional administrative costs did not

change significantly and therefore the ratio of these costs to the other costs did not change much either. Increased costs resulting from shifting individuals from lower to higher cost disciplines were largely canceled out by reduced costs from shifting other individuals from higher to lower cost disciplines. In addition, the Regional administrative costs for certifying individuals are relatively small (between \$93 and \$252), and the differences in these costs across disciplines are even smaller.

- Assuming that all, rather than only 20 percent of training providers seek accreditation to teach initial and refresher training programs in all disciplines increases the number of accreditations and re-accreditation over five years from 512 to 800. Fees decreased by up to 15 percent from the base case, since the universe over which enforcement costs and Headquarters administrative costs are spread increases. However, training program accreditations and re-accreditations represent a small fraction of the cumulative number of applications in the EPA-administered universe, while the costs to accredit and re-accredit training programs represent a large fraction of the Regional administrative costs. As a result, an increase in the number of accreditations and re-accreditations produces a larger change in the calculated fixed ratio than the fixed amount used to allocate enforcement costs and Headquarters administrative costs and, thereby, larger differences in fee levels between the base case and the Fixed Ratio options. This finding is consistent with the analysis of the sensitivity of the estimated Federal fees to assumptions concerning the size of the EPA-administered universe (see Section 5.1).

5.2.2 Entry and Exit Rates

The entry and exit or turnover assumptions affect the number of accreditations and certifications in a given year and therefore affect the fee levels under both the Fixed Ratio and Fixed Amount approaches for allocating enforcement costs and Headquarters administrative costs. To assess the sensitivity of the fee levels to these assumptions, EPA varied turnover rates between:

- 2 percent and 10 percent for training providers;
- 5 and 15 percent for firms; and
- 20 to 30 percent for individuals.

In the prior analysis the turnover rates were 2 percent for training providers, 10 percent for firms, and 20 percent for individuals, except workers who were at 30 percent. See Section 2.3.2. Higher turnover rates increase the number of accreditations and certifications issued per year, assuming a constant-sized universe of accredited training providers and certified firms and individuals, thereby increasing the universe over which to spread enforcement and Headquarters administrative costs. Thus, increasing turnover rates will decrease fee levels under both the Fixed Amount and Fixed Ratio options. Using the upper bound turnover rates of 10, 15, and 30 percent, the estimated fees decreased by 12 percent or less for training providers, firms, and individuals. Conversely, using the lower bound rates of 2, 5, and 20 percent increased fees by eight percent or less. The impact was smaller for the lower-bound assumptions because they are closer to the base case assumptions than are the upper-bound assumptions.

5.3 Synthesis

The sensitivity analysis indicated that, overall, the estimated program costs and fee levels are fairly robust with respect to the underlying methodology and assumptions. A fundamental reason for this robustness is that the costs to administer and enforce the Section 402 program are estimated as much as

possible on a *per application* basis. Only costs that cannot be linked to specific transactions (i.e., enforcement costs and Headquarters administrative costs) are allocated incrementally on a per application basis, using either a Fixed Amount or Fixed Ratio approach. This approach reduces the sensitivity of the estimated fees to the size of the regulated universe and other key analytical assumptions.

CHAPTER 6: SMALL ENTITY IMPACT ANALYSIS

6.1 Overview

The Regulatory Flexibility Act (5 U.S.C. Sections 601-602), amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), mandates that agencies assess the impact of proposed rules on small entities including small businesses, organizations, and governmental jurisdictions. Agencies must publish a regulatory flexibility assessment (RFA) with proposed and final rules, unless the agency certifies that the rule will not “have a significant economic impact on a substantial number of small entities.” This chapter addresses these requirements for the lead-based paint accreditation and certification fee rule under TSCA §402(a)(3).

The analysis addresses two basic questions: (1) the number of small entities potentially affected by the lead accreditation and certification fee rule; and (2) the extent of the rule’s potential impact on those entities. The chapter contains the following sections:

- Identification of the small entities potentially affected by the rule;
- Estimation of the costs associated with the rule and the potential impact of these costs on the affected small entities; and
- Synthesis of the analysis.

6.2 Small Entities Potentially Affected by the Rule

Under the lead accreditation and certification fee rule, two types of organizations involved in lead-based paint activities will be required to pay fees: (1) for-profit training providers seeking accreditation, and (2) firms (and other organizations) performing abatement or risk assessment and inspection services seeking certification. The fees will apply to such entities only in States, Tribal Areas, and Territories without EPA-authorized programs. EPA assumes that 18 States will not have EPA-authorized programs when the fees first become effective and that this number will decline to 11 States within five years. EPA expects that the Agency also will implement the Section 402 program in all Tribal Areas and Territories. See Chapter 2.

To the extent that an “individual” is actually a sole-proprietorship (a self-employed inspector for example), EPA considers that entity to be a firm with one employee. Nevertheless, EPA did include individuals’ (i.e. employees’) certification fees in assessing the impact of the rule on small firms. As detailed below, the analysis assumes that firms are likely to pay all or a part of their employees’ certification fees.

The analysis uses the estimates of the universe of training providers, firms, and individuals that EPA developed in its efforts to determine the certification and accreditation fee levels. See Chapter 2. Exhibit 6-1 shows the estimated universe of annual fee payers subject to the rule for the five initial years of the program.

Exhibit 6-1
Estimated EPA-Administered Universe

Certification or Accreditation Type	First Year Certifications or Accreditations	Five Year Total Certifications or Accreditations	Percent of Category
Training Providers			
For-Profit	31	31	60%
Nonprofit	20	21	40%
Total	51	52	100%
Firms			
Abatement Firms	748	988	64%
Risk Assessment and Inspection Firms	419	553	36%
Total	1,167	1,541	100%
Individuals			
Workers	1,138	1,951	23%
Supervisors	1,088	1,866	22%
Project Designers	49	85	1%
Inspectors	1,484	2,544	30%
Risk Assessors	1,188	2,035	24%
Total	4,948	8,481	100%

6.2.1 Small Training Providers

EPA estimates that 52 training providers in the EPA-administered universe will seek accreditation for their lead training programs during the first five years. Fifty-one of those entities are projected to obtain accreditation during the first year of the program. One training provider is projected to seek accreditation during the second through fifth year of the program due to industry turnover. EPA also estimates that 60 percent of these organizations are for-profit firms, which will have to pay accreditation fees; State, local government, and nonprofit training programs are exempt from paying fees. Thus, 31 for-profit training providers are potentially affected by this rule (60 percent of 52), with each of these for-profit training providers seeking accreditation for their lead training programs during the first year of the program.

To determine the standard industrial classification (or SIC) in which these for-profit training providers operate, EPA identified the training providers certified in the States of Massachusetts and Ohio and collected data from Dun and Bradstreet on the SICs, for these entities. After screening out the accredited programs that appeared to be State, local government, or nonprofit organizations, the following four SICs occurred with the greatest frequency:

- 1799: Special Trade Contractors;
- 8748: Business Consulting Services;
- 8331: Job Training and Related Services; and
- 8742: Management Consulting Services.

To estimate the economic impacts of this rulemaking, EPA used Bureau of Census revenue information for SIC 1799 (Special Trade Contractors).¹ EPA selected this SIC because, based on the revenue distributions of the four SICs most frequently attributed to lead-based paint training firms in Massachusetts and Ohio, it provides the most conservative or largest estimate of the impact on small firms.²

As described above, the SBA defines a small business in SIC 1799 as having annual revenues under \$7.0 million. To determine the number of training firms meeting this definition, EPA apportioned the 31 for-profit training organizations in proportion to the number of firms in each revenue category using Bureau of Census data for SIC 1799. Using this procedure, all of the training firms qualify as small businesses, as shown in Exhibit 6-2 below.

Exhibit 6-2
Distribution of For-Profit Training Firms by Revenue, SIC 1799

Annual Revenue	Training Firms Accredited Over Five Years	Percent of Firms	Average Revenue Per Firm
< \$100,000	12	37%	\$43,000
\$100-249,000	7	22%	\$162,000
\$250-499,000	5	15%	\$354,000
\$500-999,000	4	13%	\$703,000
\$1-2.49 million	3	9%	\$1,525,000
\$2.5-4.9 million	1	3%	\$3,435,000
\$5-7 million	0	< 1%	\$5,425,000
“Small” (< \$7 million)	31	99%	\$436,000*
“Large” (> \$7 million)	0	< 1%	\$13,075,000*
Total	31	100%	\$557,000*

* Average Sales Weighted by Number of Firms in Given Revenue Category.

** Numbers may not sum due to rounding.

Source: Bureau of Census, 1992 Survey of Manufacturers

This approach may overestimate the number of training providers (37 percent) in the smallest revenue category (<\$100,000 in annual revenues) and thereby exaggerate the potential impact of the

¹Census Bureau, 1992 Survey of Manufacturers.

²Using the distribution of firms by revenue in SIC 1799 showed the largest number of small firms that would face annual costs from accreditation fees exceeding three percent of their annual revenue.

accreditation fees. For example, to be successful in the training business, training firms are likely to need to offer an array of training programs to capture economies of scale, such as in advertising. Thus, few training firms are likely to have annual revenue of only \$43,000, which is the average for the smallest revenue category.

To verify the validity of the above assumptions, EPA analyzed Dun and Bradstreet data on the for-profit training provider firms in Massachusetts and Ohio. As shown in Exhibit 6-3, the 15 Massachusetts and Ohio firms have a revenue distribution more heavily weighted to larger firms than the firms in SIC 1799 above. Using this distribution would show a smaller potential small business impact than using the SIC 1799 data, as is shown in Section 6.3.1 below.

Exhibit 6-3
Distribution of For-Profit Training Firms by Revenue, Massachusetts and Ohio Data

Annual Revenue	Training Firms Accredited Over Five Years	Percent of Firms	Average Revenue Per Firm
< \$100,000	0	0%	--
\$100-249,000	2	7%	\$220,000
\$250-499,000	12	40%	\$348,000
\$500-999,000	6	20%	\$893,000
\$1-2.49 million	4	13%	\$1,688,000
\$2.5-4.9 million	4	13%	\$4,069,000
\$5-7 million	0	0%	--
“Small” (< \$7 million)	29	93%	\$1,179,000*
“Large” (> \$7 million)	2	7%	\$11,140,000*
Total	31	100%	\$2,424,000*

* Average Sales Weighted by Number of Firms in Given Revenue Category

** Individual entries do not sum to totals due to rounding.

Sources: Bureau of Census, 1992 Survey of Manufacturers; Dun and Bradstreet

6.2.2 Small Lead-Based Paint Activities Entities

The rule would establish certification fees for both firms (and other entities) and individuals conducting lead-based paint activities. Although individuals will be required to pay certification fees, they are not considered as entities for purposes of this analysis³. This section analyzes three types of lead-based paint activities “entities:” for-profit firms, governments, and nonprofit associations.

³ Except, as noted earlier in section 6.2, that if “individuals” are actually sole-proprietorships the analysis considers them as firms, with a single employee. Individuals’ certification fees are included as an expense and component of the firm impact as detailed in Section 6.3.2 below.

6.2.2.1 Small For-Profit Firms

For-profit firms are expected to compose the vast majority of entities conducting lead-based paint activities. Based on previous analyses for the Section 402(a) and 404 final rulemaking, SIC 1799 and SIC 8734 are believed to contain the universe of firms.⁴ Specifically, SIC 1799 (Special Trade Contractors) encompasses firms that perform lead-based paint hazard abatements and SIC 8734 (Testing Laboratories) contains firms that perform inspections and risk assessments. Based on the analysis for the Section 402/404 rule, about 64 percent of certified firms will be in SIC 1799 and the remaining 36 percent in SIC 8734.

The Small Business Administration (SBA) defines “small businesses” for SIC 1799 and SIC 8734 as firms with total annual revenues of less than \$7.0 million and \$5.0 million, respectively. SBREFA requires use of SBA definitions except in cases where such definitions are inappropriate. For this rule, EPA used the SBA definitions.

EPA estimates that 1,541 lead-based paint firms will be certified during the first five years in the States with EPA-administered programs, of which 1,167 are expected to be certified during the first year. Exhibits 6-4 and 6-5 show the distribution and average revenue of firms by revenue categories in SIC 1799 and 8734. These exhibits assume that abatement firms and inspection and risk assessment firms have the same distribution of size by revenue (e.g., same percentage of firms with annual revenues less than \$100,000) as all other firms in SICs 1799 and 8734, respectively. They also assume that these distributions do not differ across the country. Specifically, the distributions of firms by size in SIC 1799 and SIC 8734 are assumed to be consistent between the States with an EPA-administered program and the States with approved programs. Applying these two assumptions, the exhibits illustrate that the vast majority (98%) of the lead-based paint activities firms qualify as “small” under the SBA definitions.

6.2.2.2 Small Governments

SBREFA requires analysis of potential impacts on small governments. Governments will be subject to the certification requirements if they conduct lead abatement, risk assessment, or inspection work. A county, city, state, housing authority, or school district may choose to conduct lead-based paint activities on behalf of its constituents. Thus, some counties, cities, housing authorities, school districts, or other governments may obtain “firm” certification and pay the certification fees. In addition, some of these governments may pay for the certification of their employees.

No data are available on the number of governments that will seek certification to perform lead-based paint activities. EPA, however, believes that the total number will be small, and that most of these governments will be large, having jurisdiction over populations exceeding 50,000. Small governments are less likely to seek certification than large governments because they will tend to lack the economies of scale in doing lead-based paint activities that makes it economical to hire their own staff instead of hiring firms. Even if a small government decides to seek certification to conduct lead-based paint work, the impacts, measured as a percent of revenue, are likely to be small.

⁴U.S. EPA, “TSCA Title IV, Sections 402(a) and 404: Target Housing and Child-Occupied Facilities Final Rule Regulatory Impact Analysis,” August 1996, page 9-2.

Exhibit 6-4
Distribution of Lead Abatement Firms by Revenue Category, SIC 1799

Annual Revenue	Firms Certified Over Five Years	Percent of Firms	Average Revenue per Firm
< \$100,000	367	37%	\$43,000
\$100-249,000	221	22%	\$162,000
\$250-499,000	151	15%	\$354,000
\$500-999,000	126	13%	\$703,000
\$1-2.49 million	84	9%	\$1,525,000
\$2.5-4.9 million	25	3%	\$3,435,000
\$5-6.9 million	4	< 1%	\$5,425,000
“Small” (< \$7 million)	978	99%	\$436,000*
“Large” (> \$7 million)	10	1%	\$13,075,000*
Total	988	100%	\$557,000*

* Average Sales Weighted by Number of Firms in Given Revenue Category.

** Numbers may not sum due to rounding.

Source: Bureau of Census, 1992 Survey of Manufacturers

Exhibit 6-5
Distribution of Risk Assessment and Inspection Firms by Revenue, SIC 8734

Annual Revenue	Firms Certified Over Five Years	Percent of Firms	Average Revenue Per Firm
< \$100,000	71	13%	\$57,000
\$100-249,000	120	22%	\$171,000
\$250-499,000	104	19%	\$358,000
\$500-999,000	99	18%	\$711,000
\$1-2.49 million	100	18%	\$1,588,000
\$2.5-4.9 million	38	7%	\$3,396,000
“Small” (< \$5 million)	533	96%	\$789,000*
“Large” (> \$5 million)	20	4%	\$10,298,000*
Total**	553	100%	\$1,138,000*

* Average Sales Weighted by Number of Firms in Given Revenue Category

** Numbers may not sum due to rounding.

Source: Bureau of Census, 1992 Survey of Manufacturers

6.2.2.3 Small Nonprofit Associations

SBREFA requires the analysis of potential impacts to small organizations. A “small organization” is any nonprofit enterprise that is independently owned and operated and is not dominant in its field. A small nonprofit organization might seek certification to conduct lead-based paint activities. For example, a nonprofit low-income housing association might seek to evaluate and reduce lead hazards with its own employees. The number of these small nonprofit organizations, however, is expected to be small. In addition, any cost impact of the certification fees on small nonprofits is expected to be below.

6.3 Estimated Costs and Potential Economic Impacts to Small Entities

The costs to small entities can be measured by the fees associated with accreditation and certification.

- Training providers may obtain accreditation for training programs in each of the five disciplines. They may obtain accreditation for two types of training programs: an initial training program and a refresher training program. Training firms must pay an accreditation fee and later a re-accreditation fee for each type of training program.
- Firms conducting lead-based paint activities must be certified. Extension of firm certification is required every three years.
- Individuals can be certified as supervisors, workers, project designers, risk assessors, or inspectors. Individuals must be re-certified every three or five years, depending on the level of test they take after their training program.

Exhibit 6-6 shows the fee schedule for the different types of fee payers under the Stratified Average Cost method and two approaches for allocating enforcement and Headquarters costs: Fixed Ratio and Fixed Amount. Accreditation and re-accreditation fees are presented for the training firms, and certification, certification extension, and re-certification fees are presented for each firm and individual category.

The remainder of this section estimates the per firm accreditation and certification costs and the potential effect of these costs on small businesses. The small business impacts are analyzed based on annualized compliance costs as a percent of annual revenues. Section 6.3.1 estimates the accreditation costs and potential impacts for the training firms. Section 6.3.2 estimates the certification costs and potential impacts on abatement firms and risk assessment and inspection firms.

6.3.1 Accreditation Fees and Potential Impacts on Small Training Provider Firms

The accreditation fees for training programs are assessed on for-profit training firms only. The University-based regional lead training centers and other government or nonprofit training entities are exempt from the accreditation fees.

Exhibit 6-6
Estimated Certification and Accreditation Fees
(Stratified Average Cost Approach)

Fee Payer	Estimated Fees	
	Fixed Ratio	Fixed Amount
Training Provider Firms (Accreditation/Re-accreditation)		
Supervisors, Initial Training	\$6,490 / \$3,870	\$3,250 / \$2,050
Supervisors, Refresher Training	\$1,620 / \$970	\$1,010 / \$710
Workers, Initial Training	\$3,240 / \$1,940	\$1,760 / \$1,150
Workers, Refresher Training	\$1,620 / \$970	\$1,010 / \$710
Project Designers, Initial Training	\$1,620 / \$970	\$1,010 / \$710
Project Designers, Refresher Training	\$810 / \$480	\$640 / \$490
Inspector, Initial Training	\$4,860 / \$2,900	\$2,500 / \$1,600
Inspector, Refresher Training	\$1,620 / \$970	\$1,010 / \$710
Risk Assessor, Initial Training	\$3,240 / \$1,940	\$1,760 / \$1,150
Risk Assessor, Refresher Training	\$1,620 / \$970	\$1,010 / \$710
Firms (Certification/Certification Extension)	\$590 / \$430	\$540 / \$430
Individuals (Certification/Re-certification)		
Supervisor	\$520 / \$280	\$540 / \$390
Worker	\$120 / \$50	\$280 / \$240
Project Designer	\$450 / \$280	\$470 / \$390
Inspector	\$370 / \$190	\$470 / \$350
Risk Assessor	\$620 / \$340	\$590 / \$420

Accreditation Costs

To estimate how accreditation fees affect for-profit training firms that offer different combinations of training programs, EPA divided the for-profit training providers into two categories: full-service and partial-service providers.

- Full-service provider firms are assumed to be accredited to offer both initial and refresher training programs in four or five disciplines. Sixty percent of these training firms (or 30 percent of all training firms) are assumed to offer four training programs (worker, supervisor, inspector, and risk assessor). The remaining forty percent of full-service training firms are assumed also to offer a project designer training program.

- The partial-service provider firms are assumed to be accredited to offer initial and refresher training programs in two disciplines: worker and supervisor.

These assumptions are consistent with the assumptions used to calculate the accreditation fees. For-profit training providers and government and nonprofit training providers are assumed to offer a similar profile of training programs. Based on conversations with training officials, however, government and nonprofit providers tend to be larger and offer a fuller array of training programs than for-profit providers (see *Contact Report*). Thus, for-profit providers may offer fewer training programs and pay less in accreditation fees than assumed. As a result, these assumptions may overestimate the potential impact of the fees on training firms.

Because training program accreditation will be valid for four years, EPA calculated their annual cost by dividing the fees by four. After four years, a training program must be re-accredited. Thus, training programs accredited in year one must be re-accredited in year five. Re-accreditations are valid for four years and therefore their annual cost is one-fourth of the fees. Given the five-year projection period, the average annual cost was calculated by weighting the annual accreditation costs by four-fifths and the annual re-accreditation costs by one-fifth. To simplify the calculations, no training firms exit the industry due to training provider turnover or State program authorization.

Based on the fee estimates in Chapter 4, the weighted average annual costs used in the impact analysis for full-service and partial-service training providers are \$5,812 and \$2,982 under the Fixed Ratio approach and \$3,258 and \$1,637 under the Fixed Amount approach, respectively.

Potential Economic Impacts of Accreditation Costs

Using the distribution of lead-based paint training firms by revenue, as discussed in Section 6.2.2, EPA calculated the annualized accreditation and re-accreditation costs as a percentage of total annual sales for each revenue grouping. Exhibits 6-7(a) and 6-7(b) illustrate the estimated impact of the fees under the Fixed Ratio and Fixed Amount approaches using the revenue distribution of SIC 1799. Assuming that 50 percent of the affected firms are full-service training providers and 50 percent are partial service training providers, as defined above, the Agency determined that 15 training firms, or approximately half of the small for-profit training firms will incur an annualized accreditation fee cost exceeding three percent of their total annual income under the Fixed Ratio approach (Exhibit 6-7(a)), and that 12 training provider firms, or 39 percent of the total, would incur costs above three percent of annual revenues under the Fixed Amount approach (Exhibit 6-7(b)).

The potential impacts based on the Massachusetts and Ohio data are shown in Exhibits 6-8(a) and 6-8(b). These potential impacts are considerably lower than the potential impacts using SIC 1799 data. Eight training firms (26 percent of the for-profit training providers) under the Fixed Ratio approach and one training firm (3 percent) under the Fixed Amount approach, are expected to incur annual impacts over one percent of sales. These training firms are in revenue categories under \$500,000. The Massachusetts and Ohio data suggest that no training firms are expected to incur impacts from the fee rule of over three percent of annual sales.

The potential impacts on for-profit training providers depend on their ability to pass through the accreditation fee cost to their customers. Forty percent of the training provider universe is comprised of State, local government, and nonprofit organizations, who are exempt from the fees rule. Thus, due to competition with the exempt training providers, for-profit training providers are unlikely to pass along the full cost of the accreditation fees to their customers.

Exhibit 6-7(a)
Potential Impacts on For-Profit Training Providers, SIC 1799 Distribution
(Fixed Ratio, Stratified Average Cost Option)

Revenue Category	Firms Accredited over Five Years*	Full-Service Providers (\$5,812/year)		Partial-Service Providers (\$2,982/year)	
		Training Firms Accredited	Annual Fee/Revenues	Training Firms Accredited	Annual Fee/Revenues
< \$100,000	12	6	13.59%	6	6.97%
\$100-249,000	7	3	3.59%	3	1.84%
\$250-499,000	5	2	1.64%	2	0.84%
\$500-999,000	4	2	0.83%	2	0.42%
\$1-2.49 million	3	1	0.38%	1	0.20%
\$2.5-4.9 million	1	0	0.17%	0	0.09%
\$5-7 million	0	0	0.11%	0	0.05%
“Small”	31	15	6.31%	15	3.24%
“Large”	0	0	0.06%	0	0.03%
Total	31	15	6.25%	15	3.21%

* Numbers may not sum due to rounding.

Exhibit 6-7(b)
Potential Impacts on For-Profit Training Providers, SIC 1799 Distribution
(Fixed Amount, Stratified Average Cost Option)

Revenue Category	Firms Accredited over Five Years	Full-Service Providers (\$3,258/year)		Partial-Service Providers (\$1,637/year)	
		Training Firms Accredited	Annual Fee/Revenues	Training Firms Accredited	Annual Fee/Revenues
< \$100,000	12	6	7.62%	6	3.83%
\$100-249,000	7	3	2.01%	3	1.01%
\$250-499,000	5	2	0.92%	2	0.46%
\$500-999,000	4	2	0.46%	2	0.23%
\$1-2.49 million	3	1	0.21%	1	0.11%
\$2.5-4.9 million	1	0	0.09%	0	0.05%
\$5-7 million	0	0	0.06%	0	0.03%
“Small”	31	15	3.54%	15	1.78%
“Large”	0	0	0.03%	0	0.02%
Total	31	15	3.50%	15	1.76%

* Numbers may not sum due to rounding.

Exhibit 6-8(a)
Potential Impacts on For-Profit Training Providers, Massachusetts and Ohio Data
(Fixed Ratio, Stratified Average Cost Option)

Revenue Category	Firms Accredited over Five Years	Full-Service Providers (\$5,812/year)		Partial-Service Providers (\$2,982/year)	
		Training Firms Accredited	Annual Fee/Revenues	Training Firms Accredited	Annual Fee/Revenues
< \$100,000	0	0	--	0	--
\$100-249,000	2	1	2.64%	1	1.36%
\$250-499,000	12	6	1.67%	6	0.86%
\$500-999,000	6	3	0.65%	3	0.33%
\$1-2.49 million	4	2	0.34%	2	0.18%
\$2.5-4.9 million	4	2	0.14%	2	0.07%
\$5-7 million	0	0	--	0	--
“Small”	29	14	1.11%	14	0.57%
“Large”	2	1	0.05%	1	0.03%
Total	31	15	1.04%	15	0.54%

* Numbers may not sum due to rounding.

Exhibit 6-8(b)
Potential Impacts on For-Profit Training Providers, Massachusetts and Ohio Data
(Fixed Amount, Stratified Average Cost Option)

Revenue Category	Firms Accredited over Five Years	Full-Service Providers (\$3,258/year)		Partial-Service Providers (\$1,637/year)	
		Training Firms Accredited	Annual Fee/Revenues	Training Firms Accredited	Annual Fee/Revenues
< \$100,000	0	0	--	0	--
\$100-249,000	2	1	1.48%	1	0.74%
\$250-499,000	12	6	0.94%	6	0.47%
\$500-999,000	6	3	0.36%	3	0.18%
\$1-2.49 million	4	2	0.19%	2	0.10%
\$2.5-4.9 million	4	2	0.08%	2	0.04%
\$5-7 million	0	0	--	0	--
“Small”	29	14	0.62%	14	0.31%
“Large”	2	1	0.03%	1	0.01%
Total	31	15	0.58%	15	0.29%

* Numbers may not sum due to rounding.

6.3.2 Certification Fees and Potential Impacts on Small Firms

Firms conducting lead-based paint activities will incur two types of costs resulting from the fees: the firm certification fee and the individual certification fees of their employees, to the extent that the firm pays these fees for their employees.

Firm Certification Fee

The \$590 or \$540 (Fixed Ratio or Fixed Amount) firm certification fee and the \$430 certification extension fee is required of all entities performing lead-based paint work. Certifications will be valid for three years. Therefore, firms entering the market in year one will have to extend their certification in year four, and firms entering the market in year two will have to extend their certification in year five. To simplify the analysis, the total cost of the certifications and the extensions over the five-year projection period was distributed among all of the firms in the universe to develop an average certification and extension cost per firm.

The firm certification fee is an intangible asset because firms will be unable to perform lead-based paint-related work unless they pay it. An intangible asset should be amortized over the lesser of the asset's useful life or 40 years.⁵ The useful life of the fee is three years, its period of validity. Thus, EPA amortized the fee over three years.

Because the fee is considered an intangible asset, amortization is calculated using an annual discount rate of seven percent. The average annual cost for firms is \$257 for the Fixed Ratio approach, and \$239 for the Fixed Amount approach.

Employee Certification Fees

The costs of employee certification to firms will vary to the extent that firms pay employee certification fees. Conversations with industry experts and State lead program officials indicate that larger firms tend to pay employee certification fees more often than small firms. (See Contact Report.) This analysis contains two estimates of the costs of employee certification fees on small firms. One estimate assumes that all firms pay the certification fees for all of their employees requiring certification, while the other estimate assumes that half of the firms pay full certification fees for their employees and the other half of firms pay no employee certification fees. To the extent that industry and State representatives are correct in their assessment that smaller firms tend to be less willing to pay employee certification fees, the potential impact on small businesses will be overstated, even under the 50 percent assumption.

The employee certification costs were allocated to firms using the following methodology and the universe and fee estimates developed in previous chapters:

- Workers, supervisors, and project designers were assigned to the abatement firms in SIC 1799. Risk assessors and inspectors were assigned to the risk assessment and inspection firms in SIC 8734.
- Each abatement firm was assumed to employ at least one certified supervisor and each risk assessment and inspection firm was assumed to employ at least one risk assessor. These minimum qualifications were selected because, under 40 CFR Part 745, supervisors can perform worker activities and risk assessors can perform

⁵See Accounting Principles Board, Opinion Number 17.

inspections, while the converse is not true. Workers are not qualified to be supervisors and inspectors are not qualified to conduct risk assessments.

- The remaining initial certifications were distributed among firms based on average firm revenues in each revenue category. The number of certifications per dollar of revenue was assumed constant to be across firms after the one supervisor certification per firm assumption was satisfied. Using this approach, abatement firms and risk assessment/inspection firms in the smallest revenue category were assumed to have only one employee.
- The certifications in years two through five caused by employee turnover plus the re-certifications in year five for employees certified in year one were distributed among the firms based on the total number of certified employees in the firm, as calculated above, and the average turnover rate for employees in each SIC. To simplify the analysis, no firms were assumed to exit the industry due to turnover or State program authorization.
- A weighted average annual cost per employee certification or re-certification was calculated. Fees paid in a year were spread over four years to account for the average duration of an individual certification or recertification. The weighted average annual cost, however, reflects only costs incurred during the five-year projection period. For example, the cost of a certification fee paid in year three was spread as follows: one-fourth in year three, one-fourth in year four, and one-fourth in year five. Year six costs are not counted in tabulating the weighted average annual cost because they are outside the projection period.
- This weighted average annual cost per employee certification or re-certification was multiplied by the number certified employees in the firm and the average number of certifications or re-certifications per employee. The resulting average annual cost plus the annual firm certification cost was compared to average annual revenue per firm to estimate the potential impacts of the fees.

Exhibits 6-9(a) and 6-9(b) show the number of employee certifications and re-certifications required per firm in each revenue category and the average annual cost per certification or re-certification under the two methods for allocating EPA enforcement and Headquarters costs, using the Stratified Average Cost approach. The annual costs per firm are higher under the Fixed Amount approach (Exhibit 6-9(b)) because individual certification fees are higher for most employees under this approach.

Potential Economic Impacts of Certification Costs

The potential impact measure for this analysis is the annualized compliance (or certification fee) cost as a percentage of total sales for the firm. This measure may underestimate the impact of the fees in the sense that a firm's decision to remain in or exit the lead-based paint activities industry is likely to be made based on the ratio of compliance costs to revenues related to lead-based paint activities, rather than to all revenues. However, smaller firms are more likely to participate in a narrower range of activities than larger firms, so the impact to smaller firms within the lead-based paint industry might be more closely identified by using total firm sales. Furthermore, the potential impacts are measured using total revenue data for establishments, rather than firms, which will tend to overestimate firm-level impacts to the extent that firms have more than one establishment.

Exhibit 6-9(a)
Weighted Average Annual Employee Certification and Re-certification Costs
(Fixed Ratio, Stratified Average Cost Option)

Revenue Category	Abatement Firms		Risk Assessment and Inspection Firms	
	Employees per Firm	Average Annual Cost/Firm	Employees per Firm	Average Annual Cost/Firm
< \$100,000	1.0	\$104	1.0	\$155
\$100-249,000	1.0	\$104	1.0	\$155
\$250-499,000	1.7	\$177	2.0	\$308
\$500-999,000	3.4	\$350	4.0	\$611
\$1-2.49 million	7.3	\$760	8.8	\$1,365
\$2.5-4.9 million	16.5	\$1,711	18.9	\$2,419
\$5-6.9 million	26.1	\$2,703	*	*
“Small” *	2.5	\$254	4.5	\$695
“Large”	62.4	\$6,457	56.2	\$8,684
Weighted Average**	3.0	\$315	6.4	\$986

* “Small” is defined by the SBA to be firms with less than \$7 million in annual revenues for SIC 1799 and less than \$5 million SIC 8734. Data are not presented for SIC 8734 in the \$5-6.9 million category because those firms are not considered “small” under the SBA definition.

** Certification weighted average.

*** Numbers may not sum due to rounding.

Firms may pass through the costs of certification to their customers, rather than fully absorb the burden of the fees. To the extent that firms raise the prices in response to the fees, and presuming no noticeable decrease in the demand for abatement services in response to a slight price increase, the potential impact estimates will overestimate the actual firm impacts.

Exhibits 6-10(a), 6-10(b), 6-11(a), and 6-11(b) show the annualized compliance costs as a percent of total sales for firms performing lead-based work under fees based on the Fixed Ratio or Fixed Amount approaches and the Stratified Average Cost approach. The first two exhibits present the estimates for abatement firms in SIC 1799. The next two exhibits address risk assessment and inspection firms in SIC 8734. A weighted average of the costs for each of the first five years of the program was calculated for the potential impact assessment. The first set of columns shows the costs to the firms if each firm pays all of the certification costs for their employees. The last two sets of columns show the estimated costs assuming 50 percent of firms pay employee certification fees and the remaining 50 percent of firms do not pay any employee certification fees. These exhibits illustrate that no firms are projected to face an annual cost exceeding 0.87 percent of their annual revenue.

Exhibit 6-9(b)
Weighted Average Annual Employee Certification and Re-certification Costs
(Fixed Amount, Stratified Average Cost Option)

Revenue Category	Abatement Firms		Risk Assessment and Inspection Firms	
	Employees per Firm	Average Annual Cost/ Firm	Employees per Firm	Average Annual Cost/Firm
< \$100,000	1.0	\$133	1.0	\$172
\$100-249,000	1.0	\$133	1.0	\$172
\$250-499,000	1.7	\$226	2.0	\$343
\$500-999,000	3.4	\$449	4.0	\$681
\$1-2.49 million	7.3	\$975	8.8	\$1,521
\$2.5-4.9 million	16.5	\$2,195	18.9	\$3,252
\$5-6.9 million	26.1	\$3,467	*	*
“Small” *	2.5	\$326	4.5	\$774
“Large”	62.4	\$8,281	56.2	\$9,675
Weighted Average**	3.0	\$404	6.4	\$1,098

* “Small” is defined by the SBA to be firms with less than \$7 million in annual revenues for SIC 1799 and less than \$5 million SIC 8734. Data are not presented for SIC 8734 in the \$5-6.9 million category because those firms are not considered “small” under the SBA definition.

** Certification weighted average.

*** Numbers may not sum due to rounding.

6.4 Synthesis

Exhibits 6-12(a) and 6-12(b) summarize the number of small businesses experiencing different levels of potential economic impacts and the associated percentage of all affected small businesses within the given firm category.

The training providers face higher potential impacts than the lead-based paint activities firms from the rule. Half of the 31 for-profit training providers (15 entities) under the Fixed Ratio approach and 39 percent of the for-profit training providers (12 entities) under the Fixed Amount approach are expected to incur impacts greater than three percent as a result of the rule, using the SIC 1799 revenue distribution. However, the Massachusetts and Ohio data suggest that fewer training providers have greater revenues than the SIC 1799 distribution suggests. Using the Massachusetts and Ohio distribution of training providers by revenue, no training firms are shown to have potential impacts exceeding three percent of annual sales.

Exhibit 6-10(a)
Certification Fee Impact Estimates, SIC 1799
(Fixed Ratio, Stratified Average Cost Option)

Revenue Category	All Firms Pay Employee Certification Costs			Half of Firms Pay Employee Certification Costs					
	Number of Firms	Annual Cost	Annual Cost/ Revenue	Pay			Do Not Pay		
				Number of Firms	Annual Cost	Annual Cost/ Revenue	Number of Firms	Annual Cost	Annual Cost/ Revenue
< \$100,000	367	\$360	0.84%	184	\$360	0.84%	184	\$257	0.60%
\$100-249,000	221	\$360	0.22%	111	\$360	0.22%	111	\$257	0.16%
\$250-499,000	151	\$433	0.12%	75	\$433	0.12%	75	\$257	0.07%
\$500-999,000	126	\$607	0.09%	63	\$607	0.09%	63	\$257	0.04%
\$1-2.49 million	84	\$1,016	0.07%	42	\$1,016	0.07%	42	\$257	0.02%
\$2.5-4.9 million	25	\$1,968	0.06%	13	\$1,968	0.06%	13	\$257	0.01%
\$5-7 million	4	\$2,959	0.05%	2	\$2,959	0.05%	2	\$257	<0.01%
“Small”	978	\$511	0.40%	489	\$511	0.40%	489	\$257	0.28%
“Large”	10	\$6,713	0.05%	5	\$6,713	0.05%	5	\$257	<0.01%
Total	988	\$571	0.40%	494	\$571	0.40%	494	\$257	0.28%

* Numbers may not sum due to rounding.

Exhibit 6-10(b)
Certification Fee Impact Estimates, SIC 1799
(Fixed Amount, Stratified Average Cost Option)

Revenue Category	All Firms Pay Employee Certification Costs			Half of Firms Pay Employee Certification Costs					
				Pay			Do Not Pay		
	Number of Firms	Annual Cost	Annual Cost/Revenue	Number of Firms	Annual Cost	Annual Cost/Revenue	Number of Firms	Annual Cost	Annual Cost/Revenue
< \$100,000	367	\$371	0.87%	184	\$371	0.87%	184	\$239	0.56%
\$100-249,000	221	\$371	0.23%	111	\$371	0.23%	111	\$239	0.15%
\$250-499,000	151	\$465	0.13%	75	\$465	0.13%	75	\$239	0.07%
\$500-999,000	126	\$688	0.10%	63	\$688	0.10%	63	\$239	0.03%
\$1-2.49 million	84	\$1,213	0.08%	42	\$1,213	0.08%	42	\$239	0.02%
\$2.5-4.9 million	25	\$2,434	0.07%	13	\$2,434	0.07%	13	\$239	0.01%
\$5-7 million	4	\$3,705	0.07%	2	\$3,705	0.07%	2	\$239	<0.01%
“Small”	978	\$564	0.42%	489	\$564	0.42%	489	\$239	0.26%
“Large”	10	\$8,520	0.07%	5	\$8,520	0.07%	5	\$239	<0.01%
Total	988	\$643	0.42%	494	\$643	0.42%	494	\$239	0.26%

* Numbers may not sum due to rounding.

Exhibit 6-11(a)
Certification Fee Impact Estimates, SIC 8734
(Fixed Ratio, Stratified Average Cost Option)

Revenue Category	All Firms Pay Employee Certification Costs			Half of Firms Pay Employee Certification Costs					
	Number of Firms	Annual Cost	Annual Cost/ Revenue	Pay			Do Not Pay		
				Number of Firms	Annual Cost	Annual Cost/ Revenue	Number of Firms	Annual Cost	Annual Cost/ Revenue
< \$100,000	71	\$411	0.72%	35	\$411	0.72%	35	\$257	0.45%
\$100-249,000	120	\$411	0.24%	60	\$411	0.24%	60	\$257	0.15%
\$250-499,000	104	\$565	0.16%	52	\$565	0.16%	52	\$257	0.07%
\$500-999,000	99	\$868	0.12%	50	\$868	0.12%	50	\$257	0.04%
\$1-2.49 million	100	\$1,622	0.10%	50	\$1,622	0.10%	50	\$257	0.02%
\$2.5-4.9 million	38	\$3,176	0.09%	19	\$3,176	0.09%	19	\$257	0.01%
“Small”	533	\$952	0.23%	267	\$952	0.23%	267	\$257	0.12%
“Large”	20	\$8,941	0.09%	10	\$8,941	0.09%	10	\$257	<0.01%
Total	553	\$1,242	0.22%	277	\$1,242	0.22%	277	\$257	0.10%

* Numbers may not sum due to rounding.

Exhibit 6-11(b)
Certification Fee Impact Estimates, SIC 8734
(Fixed Amount, Stratified Average Cost Option)

Revenue Category	All Firms Pay Employee Certification Costs			Half of Firms Pay Employee Certification Costs					
				Pay			Do Not Pay		
	Number of Firms	Annual Cost	Annual Cost/Revenue	Number of Firms	Annual Cost	Annual Cost/Revenue	Number of Firms	Annual Cost	Annual Cost/Revenue
< \$100,000	71	\$411	0.72%	35	\$411	0.72%	35	\$239	0.42%
\$100-249,000	120	\$411	0.24%	60	\$411	0.24%	60	\$239	0.14%
\$250-499,000	104	\$582	0.16%	52	\$582	0.16%	52	\$239	0.07%
\$500-999,000	99	\$920	0.13%	50	\$920	0.13%	50	\$239	0.03%
\$1-2.49 million	100	\$1,760	0.11%	50	\$1,760	0.11%	50	\$239	0.02%
\$2.5-4.9 million	38	\$3,491	0.10%	19	\$3,491	0.10%	19	\$239	0.01%
“Small”	533	\$1,013	0.23%	267	\$1,013	0.23%	267	\$239	0.11%
“Large”	20	\$9,514	0.10%	10	\$9,514	0.10%	10	\$239	<0.01%
Total	553	\$1,337	0.23%	277	\$1,337	0.23%	277	\$239	0.11%

* Numbers may not sum due to rounding.

EPA expects no adverse impacts on lead-based paint activities firms as a result of the fees. As discussed in Section 6.2.2 above, small governments and small nonprofits conducting lead-based paint activities are not expected to have adverse impacts as a result of the fees. All of the lead abatement firms have potential impacts below one percent of annual sales in both the Fixed Ratio and Fixed Amount options. The largest potential impact is expected for the lead-based paint activities firms in the smallest revenue category that pay all employee certification fees. The potential impact for those firms is estimated at 0.84 percent of annual revenue under the Fixed Ratio approach and 0.87 percent under the Fixed Amount approach.

Although no significant impacts are expected for the for-profit lead-based paint activities firms, significant cost impacts may arise for some for-profit training providers. Using the SIC 1799 revenue distribution and the fee levels, half of the for-profit training providers are expected to have annual impacts of over three percent of annual sales. However, this concern is mitigated by impact estimates calculated using actual revenue distributions for training firms accredited in Massachusetts and Ohio. Using this revenue distribution, the maximum potential impact would occur for the full-service training providers in the smallest revenue category, with an annual cost impact of 2.64 percent under the Fixed Ratio approach (1.48 percent under the Fixed Amount approach). For either the SIC 1799 or Dun and Bradstreet revenue distribution, fees set using the Fixed Ratio approach are more burdensome to training providers than fees set using the Fixed Amount approach. The potential impacts to the smallest training providers may be overestimates because the analysis assumed that all training providers, regardless of size, were equally likely to offer the full range of training programs. If the smallest for-profit training providers tend to offer fewer training programs than assumed above, the actual cost impacts to those firms will be lower than estimated.

Exhibit 6-12(a)
Synthesis of Annual Small Business Impacts
(Fixed Ratio, Stratified Average Cost Option)

Impact Estimate	All Firms	Training Firms *		Lead-based Paint Activities Firms		
		Full-Service	Partial Service	Scenario 1: Pay All Fees	Scenario 2: Half Pay Fees	
					Pay	No Pay
Less than 1 percent	1,551 firms (99% of total)	4 firms (13%)	6 firms (19%)	1,541 firms (100%)	770 firms (50%)	770 firms (50%)
More than 1 percent	21 firms (1% of total)	12 firms (39%)	9 firms (29%)	0 firms (0%)	0 firms (0%)	0 firms (0%)
More than 3 percent	15 firms (1% of total)	9 firms (29%)	6 firms (19%)	0 firms (0%)	0 firms (0%)	0 firms (0%)

* Based on SIC 1799 data. Using Massachusetts and Ohio data, no training firms are in the greater than 3 percent impact category, 8 training firms are in the greater than 1 percent category, and 23 firms are in the less than 1 percent category.

** Numbers may not sum due to rounding.

Exhibit 6-12(b)
Synthesis of Annual Small Business Impacts
(Fixed Amount, Stratified Average Cost Option)

Impact Estimate	All Firms	Training Firms *		Lead-based Paint Activities Firms		
		Full-Service	Partial Service	Scenario 1: Pay All Fees	Scenario 2: Half Pay Fees	
					Pay	No Pay
Less than 1 percent	1,553 firms (99% of total)	6 firms (19%)	6 firms (19%)	1,541 firms (100%)	770 firms (50%)	770 firms (50%)
More than 1 percent	18 firms (1% of total)	9 firms (29%)	9 firms (29%)	0 firms (0%)	0 firms (0%)	0 firms (0%)
More than 3 percent	12 firms (1% of total)	6 firms (19%)	6 firms (19%)	0 firms (0%)	0 firms (0%)	0 firms (0%)

* Based on SIC 1799 data. Using Massachusetts and Ohio data, no training firms are in the greater than 3 percent impact category, 1 training firm is in the greater than 1 percent category, and 30 firms are in the less than 1 percent category.

** Individual entries may not sum to totals due to rounding.

When for-profit training providers and lead-based paint activities firms are considered together, a majority of these entities (99 percent under both the Fixed Ratio approach and the Fixed Amount approach) will have compliance costs of less than one percent of revenues under the lead accreditation and certification rule.

CHAPTER 7: ENVIRONMENTAL JUSTICE ANALYSIS

7.1 Overview

Executive Order 12898 requires Federal agencies to develop an environmental justice strategy and identify disproportionately high adverse human health or environmental effects of programs, policies, and activities on minority and low-income populations. The purpose of this analysis is to assess the environmental justice (equity) effects of the lead accreditation and certification fee rule under TSCA §402(a)(3). Section 402(a)(3) directs EPA to impose fees on persons operating accredited training programs and on firms and individuals certified to perform lead-based paint activities. These fees must cover the costs of administering and enforcing the regulations and standards under TSCA §402 in States where EPA is responsible for program administration.

This chapter addresses the following question: what are the environmental justice impacts of the fee rule on disadvantaged (low-income and minority) populations? It contains three additional sections:

- Analysis of the potential environmental justice impacts of the fees on disadvantaged households;
- Descriptions of programs that assist low-income and minority households in obtaining lead-based paint services, which may help offset the potential negative impact of the fees;
- Analysis of the potential environmental justice impacts of the fees on minority owned firms, or on minority or low-income personnel; and,
- Synthesis of the analysis.

7.2 Potential Impacts on Disadvantaged Households

This section assesses the potential effect of the lead certification and accreditation fees on disadvantaged (low-income and minority) households.

The fee rule is related to a previous rulemaking to implement Sections 402 and 404 of TSCA, published at 61 *Federal Register* 45778 on August 29, 1996. The Section 402/404 rule provides protection from improper hazard evaluations and abatements by requiring that all individuals engaged in these activities be properly trained, that training programs be accredited, and that lead-based paint activities firms be certified to conduct lead-based paint activities. Section 9.5 of the RIA for the Section 402/404 rule broadly analyzed the environmental justice considerations of the rule, describing the correlations between lead risk, low-income households, and minority communities. Essentially, minority households tend to have lower incomes than white households and are at higher health risk from lead exposure due to elevated levels of lead in residential homes and other targeted buildings, including day-care facilities. Major findings from the 1996 RIA included the following:

- A disproportionate number of low-income and minority groups, particularly African-American and “other” (minority, non-Hispanic) populations, are exposed to lead-based paint hazards in their homes;

- Housing with deteriorating lead-based paint is particularly risky, and low-income and African American populations disproportionately live in such housing;
- Renters and children under six disproportionately live in high-risk housing compared to homeowners and the rest of the population; and
- Because abatements are expensive and voluntary, the benefits of performing better abatements due to TSCA §402(a) and TSCA §404 may tend to be concentrated among the wealthier households living in houses with lead-based paint.¹

The lead certification and accreditation fee rule is designed to recover the Agency's costs associated with administering and enforcing the lead-based paint certification and accreditation programs. The fees will recover the costs of this program directly from the regulated community instead of from general federal tax revenues by assessing fees on lead-based paint risk assessment, inspection, and abatement firms, lead-based paint risk assessment, inspection, and abatement professionals, and for-profit training provider firms. In the first year, the rule will apply only in the 18 States, Tribal Areas, and six U.S. Territories without EPA-authorized programs. EPA estimates the number of States without EPA-authorized programs to decline from 18 to 11 in the first five years of the program. The rule will have no effect in other States.

The fee rule may affect households by altering the cost of lead-based paint abatement, inspection, and risk assessment services. The accreditation and certification fees may increase the operating costs of training, inspection, and abatement firms. To the extent the added operating expenses are not absorbed by suppliers of these services, the fees may raise prices for consumers of these services. In turn, the increase in price may lower the number of abatement projects conducted, particularly in low-income communities.

In practice, the fees are expected to increase the cost of services provided by the lead-based paint activities industry by a small amount. The fees are small compared to the average lead hazard evaluation or abatement project costs, and are therefore unlikely to significantly change the cost of such projects, assuming the costs are passed on to households or property owners. Thus, the new fees are unlikely to have a significant effect on decisions by minorities and low-income populations to conduct lead-based paint activities.

The annual cost of the firm certification fees is expected to be a maximum of \$643 for the average lead abatement firm, and \$1,337 for the average risk assessment/inspection firm.² According to Census data, firms performing abatement services earn an average annual revenue of about \$560,000 (firms in SIC 1799) and risk assessment and inspection firms receive average annual revenues of \$1,130,000 (firms in SIC 8734). The annual costs of certification fees are expected to be 0.42 percent of revenue for the average lead abatement firm and 0.23 percent of revenue for the average risk assessment and inspection firm.³ If affected

¹ "TSCA Title IV, Sections 402(a) and 404: Target Housing and Child-Occupied Facilities Final Rule Regulatory Impact Analysis," Abt Associates, August 1996.

² These estimates assume firms pay the full cost of certifications for all of their employees requiring certification. Thus, these estimates may overstate the impact on businesses. Numbers above are based on the Fixed Amount approach. The average firm fees using the Fixed Ratio approach are slightly lower, primarily due to lower fees for a firm's employees under that approach.

³ These estimates represent the average burden for lead-based paint firms. If firms pay all employee certification costs, the impacts for the smallest firms in each SIC are 0.87 percent and 0.72 percent for lead abatement firms and risk assessment and inspection firms, respectively, under the Fixed Amount approach, and 0.84 percent (SIC 1799, lead
(continued...)

firms pass through the entire cost of the fees to consumers, the lead fees rule may increase the price of lead-based paint abatement services by a maximum of 0.42 percent. If the average household lead abatement project costs between \$4,000 and \$12,000,⁴ then the increase in cost resulting from the fees rule may be between \$17 and \$50 per project. The actual impacts to households may be even less if the full costs of the fees are not passed on to consumers. However, these impacts may be understated because the analysis assumes that all of a firm's revenues are from lead-based paint related work; if a firm has revenue from other sources, it may pass through the cost of the fees only to its customers for lead-related work.

In addition to imposing certification fees on firms, the rule imposes accreditation fees on for-profit training providers; State, local government, and nonprofit training providers will not be required to pay accreditation fees. Based on conservative estimates of the for-profit training provider universe, the average revenue associated with affected training firms is approximately \$560,000. As calculated in the "Small Entity Impact Analysis" in Chapter 6, these training firms will pay an average annual accreditation fee of approximately \$2,400 (assuming that half the training firms are full-service providers and half are partial-service providers).⁵ For-profit training firms may be unable to pass on these costs because of competitive pressures from training providers that are exempt from accreditation fees and represent roughly 40 percent of all training providers.

As described above, the incremental price increases for lead-based paint abatement services due to the lead fees program are likely to be small. Undoubtedly, it will be more difficult for disadvantaged households than for other households to pay these additional costs. However, because the cost increases to consumers are small, this rule is not likely to have significant effects on disadvantaged households.

Selected existing financial assistance programs addressing lead-based paint activities in disadvantaged communities are discussed in Section 7.3. These programs may reduce or eliminate the effects of the fee program on disadvantaged households by making lead hazard evaluation and abatement services more affordable.

7.3 Programs to Mitigate Potential Negative Environmental Justice Impacts

EPA has not identified any programs that have been formed in response to environmental justice concerns over the Section 402(a)(3) rule itself. EPA, HUD, and State and local organizations, however, have created a variety of programs to increase the accessibility and provision of lead hazard evaluation and reduction services to the populations that are in the greatest need of assistance, including low-income inner city and minority neighborhoods. This section reviews some of these programs, which will reduce the potential negative impacts of the fees rule while serving environmental justice goals.

7.3.1 EPA Programs

On June 13, 1997, EPA announced the Lead Poisoning Prevention and Lead Hazard Awareness Public Education and Outreach Grant Program. The grant program targets high-risk populations, defined as

³ (...continued)
abatement firms) and 0.72 percent (SIC 8734, risk assessment and inspection firms) under the Fixed Ratio approach.

⁴ "TSCA Title IV, Sections 402(a) and 404: Target Housing and Child-Occupied Facilities Final Rule Regulatory Impact Analysis," Abt Associates, August 1996, page 2-12.

⁵ Estimate based on the Fixed Amount approach. The Fixed Ratio approach will yield higher accreditation costs, with an average fee of \$4,400 for the for-profit training providers.

low-income and minority populations living in communities with housing stock built before 1978. Its goal is to reduce lead-based paint hazards. This new grant program delivers public education and outreach products and services to increase lead-based paint hazard awareness and promote lead-poisoning prevention to high-risk target audiences. Grant funds will be used for projects that deliver lead hazard awareness and poisoning prevention information to parents, care-takers, or service providers of children under six years of age (e.g., pediatricians), and to other vulnerable populations (e.g., pregnant women) in high-risk target audiences. To the extent that these programs increase the provision of hazard evaluation and reduction services in minority and disadvantaged communities or communicate sources of funding for such work in those communities, the minor potential negative impacts resulting from the fees rule may be mitigated.

An EPA employment program serving environmental justice goals was granted \$1.55 million in Congressional add-on funds to provide training grants to nonprofit organizations engaged in lead-based paint abatement worker training and education activities and to ensure that the number of well-trained workers increases at an acceptable rate. In fiscal year 1995, the Agency was particularly interested in funding nonprofit environmental justice organizations that provide training opportunities for minorities and low-income community residents. This approach provides opportunities for communities to develop local lead hazard evaluation and abatement businesses employing area residents. If the percentage of local residents working in the lead-based paint activities field in low-income and minority communities increases, the availability of service to those communities is likely to increase correspondingly. To the extent that the communities respond to the increased availability of service with requests for hazard evaluation and abatement projects, environmental justice goals may be served by the program and are unlikely to be adversely impacted by the certification and accreditation fees.

7.3.2 HUD Programs

Under Title X of the Housing and Community Development Act of 1992 (Public Law 102-550), known as the Residential Lead-Based Paint Hazard Reduction Act, HUD issues grants of \$1 million to \$4 million to State and local governments for control of lead-based paint hazards in privately-owned, low-income owner-occupied and rental housing. HUD's lead grant program may also increase lead services for disadvantaged households by assisting low-income residents in target communities gain lead-related employment opportunities. Several types of projects are being developed through the HUD grant program:

- Minorities and low-income residents are being trained and employed as hazard evaluation and reduction workers;
- Hazard reduction contracting opportunities are being created; and
- Neighborhood organizations are often becoming subcontractors to the grantees, especially in terms of community education and outreach activities.

In Baltimore, for example, through the cooperation of the local Healthy Start Program designed to assist new single mothers and the City's Lead-Based Paint Hazard Contract Grant Program, young fathers of the families involved in the Healthy Start Program are being afforded opportunities for training and employment previously unavailable to them because of their lack of education and criminal records. In Cleveland, all hazard reduction firms in the grant program are minority-owned businesses.

7.3.3 Other Programs

In addition to independent State and local efforts, EPA, HUD, and the Department of Health and Human Services (HHS) have combined efforts to award grants to local organizations making efforts to increase lead-abatement and disadvantaged business participation in urban and low-income areas. In fiscal

year 1995, six grants were awarded to State and local jurisdictions through the Lead Environmental Justice initiative to develop community-based programs to reduce lead poisoning and create jobs in low-income communities, including Philadelphia, Chicago, Milwaukee, Missoula (MT), Memphis, and Alameda County (CA).

CLEARCorps

The Community Lead Education and Reduction Corps program (CLEARCorps) is a partnership between the University of Maryland Baltimore County, the National Paint and Coatings Association, and AmeriCorps, a program of the National Service Network. Operating in Baltimore, Charleston, and Minneapolis, the program serves qualified low-income households by addressing household lead hazards. CLEARCorps members test lead-dust levels in homes; clean, repair, and help make homes lead safe; and educate parents and other community members on lead risk reduction. Members receive the training and certification required to conduct lead-based paint work. To the extent that AmeriCorps and the National Paint and Coatings Association will be able to maintain funding at sufficient levels to cover the fees created by the fee program, the program will continue to serve communities targeted by environmental justice goals.

Lead-Safe Cambridge

The City of Cambridge (MA) Community Development Department operates a program titled “Lead-Safe Cambridge”. The City assists private property owners in deleading their units by providing:

- Deferred, zero percent interest loans to property owners for lead paint removal projects;
- Assistance with arranging lead inspections and abatement;
- Temporary relocation services to families while their apartments are being deleaded;
- Blood testing and medical follow-up for children under six years old; and
- Educational materials and training sessions for families and service organizations in the community to help them learn more about the dangers of lead and the steps they can take to ensure safety.

Lead-Safe Cambridge will cover inspection costs, abatement costs up to \$10,000, temporary relocation costs, and blood testing costs for children under six years of age.

7.4 Potential Impacts on Minority Firms and Disadvantaged Personnel

The 1996 Section 402/404 RIA also investigated the impact of the fees on minority owned firms and disadvantaged (low-income and minority) personnel. Environmental justice concerns may exist if:

- Minorities tend to be over represented as owners of small firms and small training provider entities. The results of Chapter 6 show that smaller entities bear a greater burden, in terms of the ratio of annual fee to annual revenue, than larger entities.
- The personnel performing lead-based paint activities are disproportionately represented by minorities and low-income households. This is true to the extent that these employees must pay their own

certification fees, or to the extent that firms pass the expense along to employees in the form of reduced benefits, compensation, or staffing levels.

There are no systematic databases that provide information on minority or low-income participation as owners or staff of firms performing lead-based paint activities. As such, this portion of the analysis is limited to anecdotal information collected from interviews with the Regional Lead Training Centers (RLTC) consortium members as a part of the Section 402/404 RIA. Seven consortium members were interviewed. While none had extensive data, they all presented similar impressions. They reported that while most of the entities are small, few are owned by minorities. In terms of individuals receiving training, a relatively high percentage of worker trainees were from minority groups, but supervisor trainees tended to be white. Likewise, fewer minorities appear to be enrolled in inspector and risk assessor courses. Several spoke of programs, both federally and locally funded, to encourage minority training. This anecdotal evidence, however, is insufficient to support any definitive conclusions as to whether there is a disproportionate effect on minority owned firms or disadvantaged personnel.

7.5 Synthesis

The lead certification and accreditation fees are not likely to cause severe or disproportionate impacts for minority or low-income populations. The cost of the fees, even if passed on, is a small fraction of the cost of lead hazard evaluation and abatement projects. Thus, the fees are not likely to result in fewer lead hazard evaluation or abatement activities. EPA, HUD, and State and local organizations have developed programs to help disadvantaged communities respond to lead risks. These programs may offset any negative impacts of the fees. Finally, little evidence exists to support the premise that either minority owned firms or disadvantaged personnel will be disproportionately impacted by the fees.

CHAPTER 8: OTHER REQUIRED ANALYSES

This chapter briefly discusses analyses required by the Paperwork Reduction Act, Executive Order 12866, and the Unfunded Mandates Reform Act. It also addresses the impacts of the rule on international trade and technical innovation.

8.1 Paperwork Reduction Act of 1995

Section 402(a) of TSCA includes a number of reporting and recordkeeping requirements, which are designed to help EPA verify compliance with the rule. Under the Paperwork Reduction Act (PRA), EPA is required to estimate the burden associated with these requirements. EPA has determined that the rule does not impose any additional burden requiring Office of Management and Budget (OMB) approval beyond that already been approved by OMB pursuant to the PRA under EPA Information Collection Request (ICR) No. 1715.02. The ICR was prepared in support of the final rule establishing requirements for lead-based paint activities in target housing and child-occupied facilities (61 *Federal Register* 45777).

8.2 Regulatory Planning and Review

Executive Order 12866, *Regulatory Planning and Review*, requires OMB review for rules with an impact on the economy of \$100 million or more, or with any other potentially significant impact. In evaluating the impact of a proposed regulation, EPA determines whether it contains any Federal mandates that would potentially result in the expenditure of \$100 million or more by any particular public or private party. EPA has determined that the rule does not result in the expenditure of \$100 million or more by any State, local or Tribal government, or by anyone in the private sector.

8.3 Unfunded Mandates Reform Act of 1995

Pursuant to Title II of the Unfunded Mandates Reform Act of 1995 (P.L. 104-4), EPA has determined that the rule does not contain any “federal mandates,” as described in the Act, for the States, local, or Tribal governments or private sector because the rule would implement mandates specifically and explicitly set forth by the Congress in TSCA §402(a) without the exercise of any political authority by EPA.

8.4 Impacts on International Trade

The entities potentially affected by the rule are service, as opposed to manufacturing entities. The reduction of lead-based paint hazards is achieved through the identification and abatement of lead-based paint hazards on structures and in soil in the United States. Both the training and abatement activities covered by the rule are provided domestically, and there is no appreciable international trade in these activities.

8.5 Impacts on Technical Innovation

EPA did not conduct a detailed analysis of the impact of the rule on technical innovation. The rule will shift the cost of accreditation and certification from taxpayers to providers and beneficiaries of lead-based paint training and abatement in States without authorized programs. No appreciable impact on technical innovation is expected to result from this reallocation of accreditation and certification costs.

CHAPTER 9: CONCLUSIONS

This report describes the development of fees for training providers, contractor firms, and individuals performing lead-based paint activities in response to EPA requirements for lead-based paint activities in target housing and child-occupied facilities. TSCA §402(a)(3) directs the EPA Administrator to impose accreditation and certification fees to cover the costs of administering and enforcing these regulations in States and Tribal Areas that are not authorized to operate their own lead-based paint programs. This report supports EPA's accreditation and certification fee rulemaking by: (1) projecting the universe of fee payers; (2) estimating the total costs to administer and enforce the TSCA §402(a) certification program in States and Tribal Areas without an authorized program; (3) estimating the fees required to cover these costs; and (4) analyzing the potential impact of these fees on small entities and low-income and minority populations.

9.1 Universe of Fee Payers

The national universe of potential accreditation and certification fee payers is composed of training providers, firms, and individuals involved in lead-based paint activities. EPA estimated the national demand for lead-based paint accreditation and certification to be 177 training providers, 4,069 certified firms, and 17,249 certified individuals over the first five years of the program. To arrive at these estimates, EPA developed a ratio of accredited training providers and certified firms and individuals to the number of housing units with damaged lead-based paint in eight States and used that ratio to estimate the national universe of training providers, firms, and individuals.

In this analysis, EPA assumed that 32 States and the District of Columbia will be authorized to operate their own lead accreditation and certification programs by the first year of the program and that the EPA-administered universe of 18 States, Tribal Areas, and U.S. Territories will decrease between years three and five as EPA authorizes another seven State programs.

EPA used the EPA-administered universe estimates to project the annual number of applications to EPA Regional offices for accreditation and certification. The projections incorporate assumptions about the periodic expiration of accreditations and certifications, the rate of entry and exit from the lead-based paint services industry by fee payers, and the types of training programs offered by training providers. The number of accreditations and certifications is high in the first year of the program as the accreditation and certification requirements take effect. The level of activity drops considerably in years two and three as only new entrants into the industry submit applications. In the fourth and fifth years of the program, the level of activity increases as the initial accreditations and certifications issued in the first two years of the program expire.

The estimates for training providers include both for-profit (60 percent) and not-for-profit training providers (40 percent). However, only training programs offered by for-profit training providers will be assessed accreditation fees because TSCA §402(a)(3) states that EPA (or an authorized State) shall not impose fees "on any State, local government, or nonprofit training program."

EPA estimated the EPA-administered universe for lead-based paint accreditation and certification to be 51 training providers (31 for-profit), 1,167 certified firms, and 4,948 certified individuals seeking accreditation or certification. The number of firms and individuals seeking accreditation and certification decreases during the first five years of the program.

9.2 TSCA Section 402(a) Program Costs

To estimate the cost of administering and enforcing the TSCA §402(a) program in areas without authorized programs, EPA identified the specific activities that EPA Headquarters and Regions will perform and then estimated the costs for each activity. Costs include salaries, overhead multipliers, and direct costs. The total cost is the sum of EPA's Headquarters administrative costs, Headquarters enforcement costs, Regional administrative costs, and Regional enforcement costs.

EPA estimated the costs for Regional administrative activities on a *per application* basis (e.g., cost to review an application, cost to issue a certificate), since these costs depend largely on the number and type of applications received. The total program cost for EPA Regional administrative activities is the sum of the EPA Regional administrative costs for each type of application multiplied by the total number of that type of application.

EPA directly estimated total costs for enforcement activities and Headquarters administrative activities, since these activities cannot be linked to specific applications. As more States receive authorization over the five-year modeling period, the annual cost for enforcement activities and Headquarters administrative activities is assumed to decrease proportionally with the number of entities in the EPA-administered universe.

During the first five years of the program, Regional administrative costs (\$2.6 million) account for nearly half of the cumulative program costs (\$5.6 million). Most of the remaining costs (\$2.5 million) are for Regional enforcement activities, including enforcement of the work practice standards. The remaining costs are attributed to Headquarters administrative (\$0.2 million) and enforcement (\$0.3 million) activities. Over the first two years, total program costs are estimated to decrease abruptly from \$2.3 million to \$0.9 million as the first-year application surge passes. In the third and fourth years, costs decline further as more States are assumed to be authorized to implement their own lead accreditation and certification programs. In the fourth and fifth years, the administrative costs increase due to the re-accreditation and re-certification of entities that were initially accredited or certified in the first or second years of the program.

This report also separately estimates costs that will arise only for certain fee payers, including the costs of: (1) taking certification examinations, which are not required for all lead-based paint disciplines (\$70); (2) obtaining accreditation or certification in an EPA-administered jurisdiction while already possessing accreditation or certification in another EPA-administered or an authorized State (\$35); and (3) replacing lost identification cards and certificates (\$15).

9.3 Fee Levels

EPA estimated the TSCA §402(a)(3) fee levels required to cover the costs of administering and enforcing the program under four different regulatory options based on two separate decisions: (1) how EPA should assign costs that cannot be attributed to specific applications across fee payers, and (2) how many different categories of fees should be used for training providers and individuals.

The allocation of Regional and Headquarters costs to fee payers can be accomplished using a "Fixed Amount" or "Fixed Ratio" method. In the Fixed Amount method, the same dollar amount of enforcement costs and Headquarters administrative costs would be attributed to each applicant. In the Fixed Ratio method, the Regional administrative costs for each type of accreditation or certification (e.g., supervisor training program accreditation, firm certification) would be multiplied by an unchanging ratio to determine the portion of other costs each applicant would pay.

The accreditation fee levels for the Fixed Ratio options are consistently higher for all training providers than the Fixed Amount options. The reason for these higher fees is that allocating enforcement costs and Headquarters administrative costs using the Fixed Ratio approach attributes more costs to those fee categories with higher Regional administrative costs, namely accreditation fees. Consequently, the Fixed Ratio approach results in higher overall fees for training providers and firms and lower fees for individuals¹. The reverse is true using the Fixed Amount approach.

EPA will use the Fixed Amount approach because, *overall*, the fees result in lower potential economic impacts than with the Fixed Ratio approach. That is, the burden is more evenly distributed over all fee payers, rather than directed at the relatively few (for-profit) training providers. Furthermore, the fee levels under the Fixed Amount option more closely match state lead accreditation and certification fee levels.

To determine how many fee categories should be used for training providers and individuals, EPA considered two fee structure options to specify which training providers or individuals would pay the same fees (there is only one fee for firms because they all face the same certification requirements), the Stratified Average Cost method and the Simplified Average Cost method. In the Stratified Average Cost method, fee levels for different types of applicants are estimated based on the administrative and enforcement burden they impose on EPA. This option results in 31 different fees. In the Simplified Average Cost method, an average fee level is estimated for broad groups of training providers or individuals. The fee generally does not vary according to the relative burden that a fee payer within the larger group imposes on EPA. This option results in five separate fees.

The Stratified Average Cost options result in a wider range of fee levels than the Simplified Average Cost options because fee levels are based on the activities and associated burdens required to accredit or certify a particular type of applicant (e.g., initial supervisor training program) rather than an average burden for an entire category of applicants (e.g., all initial and refresher training programs). As a result, under the Stratified Average Cost Approach, the fees paid by any specific type of training provider or individual would be more reflective of the actual burden incurred by EPA to accredit or certify that specific type of applicant. While the Stratified Average Cost Approach offers greater precision, the Simplified Average Cost approach has the benefit of administrative simplicity by creating five rather than 31 separate fees. Firm certification fees are not affected, however, since a single fee category is estimated for them under both fee structure options.

EPA will use the Stratified Average Cost approach because it more accurately reflects the burdens of accreditation and certification attributable to the various types of applicants. This option bases the fee levels on EPA's costs to perform activities required to accredit or certify a particular type of applicant, rather than an average amount.

In response to public comments received on the September 2, 1998 final rulemaking, EPA decided to create a firm certification extension fee, requiring firms to extend their certification every three years. EPA decided to re-allocate worker fees by the amount paid by workers for Regional enforcement costs.

9.4 Impact of Fees

To address the requirements of the Regulatory Flexibility Act (5 U.S.C. Section 601-602), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA), EPA examined two questions: the number of small entities affected by the rule and the extent of the rule's impacts on these

¹ Exceptions to this general result include slightly higher initial certification fees for Inspectors and marginally lower re-accreditation fees for Project Designers under the Fixed Ratio, Stratified Average Cost option.

entities. To estimate how the fees may impact small firms, EPA analyzed the potential effect of both firm and individual certification fees. Certified firms may pay the certification fees for their employees, in addition to the firm certification fee. Since the extent of this practice is uncertain, EPA analyzed two scenarios: (1) all firms pay employee certification fees, plus a firm certification fee; and (2) half of all firms pay employee certification fees, plus a firm certification fee. Based on State program experience, EPA believes that a few nonprofit organizations and local governments may seek firm certification and pay certification fees for themselves and their employees.

For the universe of estimated fee payers, 1,553 of the 1,571 contractor and training provider firms will experience economic impacts of less than one percent of annual revenues under the Fixed Amount, Stratified Average Cost option. All of the entities expected to experience impacts of over one percent of annual revenues are training provider firms. Using national data on businesses in SIC 1799 (Special Trade Contractors), 18 of the 31 training providers are expected to incur impacts greater than one percent as a result of the rule, and 12 of 31 for-profit training providers are expected to incur impacts greater than three percent as a result of the rule. However, business data from training providers in Massachusetts and Ohio suggest that average training provider revenues tend to be higher than those firms in SIC 1799. Using the distribution of revenues from the Massachusetts and Ohio training providers as a base for the analysis, no firms are expected to incur economic impacts of over three percent of revenues, and only one training provider is expected to incur an economic impact of over one percent of annual revenues.

In summary, since 99 percent of all firms are expected to incur minimal impacts, the Agency determined that a substantial number of small entities will not bear a significant economic impact as a result of the rule's implementation.

In accordance with Executive Order 12898, EPA assessed the environmental justice (equity) impacts of the lead accreditation and certification fees on low-income and minority households and determined that no disproportionate impacts on low-income or minority households are expected as a result of the fees.

EPA also concluded that the fees will not result in significant impacts on paperwork requirements, regulatory planning and review, unfunded mandates, or international trade and technical innovation.

**APPENDIX A:
ASSUMPTIONS CONCERNING STATE AUTHORIZATION
USED IN LEAD FEES MODEL**

	State	Year “Authorized”
1	CT	Year 1
2	ME	Year 1
3	MA	Year 1
4	NH	Year 1
5	RI	Year 1
6	VT	Year 1
7	NJ	Year 1
8	MD	Year 1
9	VA	Year 1
10	GA	Year 1
11	KY	Year 1
12	IL	Year 1
13	OH	Year 1
14	WI	Year 1
15	OK	Year 1
16	TX	Year 1
17	CA	Year 1
18	DE	Year 1
19	DC	Year 1
20	PA	Year 1
21	AL	Year 1
22	MS	Year 1
23	TN	Year 1
24	MN	Year 1
25	IN	Year 1
26	LA	Year 1
27	AR	Year 1
28	IA	Year 1
29	NE	Year 1
30	MO	Year 1
31	AZ	Year 1
32	HI	Year 1
33	OR	Year 1
34	WV	Years 2-4
35	NC	Years 2-4
36	MI	Years 2-4
37	NM	Years 2-4
38	KS	Years 2-4
39	CO	Years 2-4
40	WA	Years 2-4

APPENDIX B:
SUMMARY OF STATE DATA ON AVERAGE HOURLY BURDEN TO ADMINISTER
LEAD ACCREDITATION AND CERTIFICATION
(Hours per Applicant)

Labor Category		Training Providers		Firms		Individuals	
		Accreditation	Re-accreditation	Certification	Re-certification	Certification	Re-certification
Clerical	<i>Mean</i>	3.36	1.40	0.61	0.40	1.56	1.36
	<i>Median</i>	1.50	1.42	0.48	0.31	1.12	0.99
Technical	<i>Mean</i>	56.46	30.78	4.73	4.25	3.24	1.91
	<i>Median</i>	48.84	30.44	1.70	1.13	2.23	1.27
Managerial	<i>Mean</i>	8.93	7.63	2.90	2.90	1.32	0.76
	<i>Median</i>	3.19	2.05	0.57	0.57	0.60	0.60
Total	<i>Mean</i>	68.75	39.80	8.25	7.56	6.12	4.02
	<i>Median</i>	53.53	33.91	2.74	2.01	3.98	2.86