

**Supporting Statement for a Request for OMB Review under
the Paperwork Reduction Act**

PART A

1. IDENTIFICATION OF THE INFORMATION COLLECTION

1(a) Title and Number of the Information Collection

Title: Survey of the Public and Commercial Building Industry

EPA ICR No.: 2494.01

OMB Control No.: 2070-NEW

1(b) Short Characterization

EPA seeks to survey construction contractors, property managers and lessors, and building occupants about renovation, repair, and painting activities in public and commercial buildings. EPA's Office of Pollution Prevention and Toxics (OPPT) has initiated a proceeding to investigate whether and what type of regulatory action might be appropriate to control exposures to lead resulting from renovation, repair and painting (RRP) activities in public and commercial buildings (PnCBs).

The information collected through the survey will allow OPPT to predict a baseline for the incidence of different types of RRP activities that disturb lead-based paint in PnCBs, the methods that are used to conduct these activities, the work practices that are used to contain and clean the resulting dust, and the characteristics of the buildings. OPPT will use this information to estimate the resulting exposures to lead dust, which will inform Agency decision making about the need for and scope of potential regulatory or other actions to reduce exposures to lead dust from RRP activities in PnCBs. If EPA determines that a regulation is needed, the Agency will use this data to assess the incremental benefits and costs of potential options to reduce such exposures. If this survey is not conducted, EPA would have to rely on assumptions and anecdotal information. Therefore, this survey is necessary for the proper performance of Agency functions.

The primary objectives of the Public and Commercial Building Industry survey include: (1) gathering information on building and activity patterns that may affect exposures to lead dust from RRP activities in PnCBs; (2) determining the number of firms that perform RRP activities in PnCBs, (3) determining the types and numbers of RRP activities that are performed, (4) determining the extent to which various work practices that disturb painted surfaces are currently being used in RRP jobs in PnCBs, and (5) determining the extent to which various work practices that help with the containment and cleanup of lead dust are currently being used in RRP jobs performed in PnCBs.

The survey will collect information from three different groups: (A) establishments that perform RRP activities in PnCBs for compensation on a contract basis, hereafter referred to as contractors; (B) lessors and managers of PnCBs; and (C) building occupants of PnCBs (both owners and tenants) who may use their own staff to perform RRP activities. There will be separate questionnaires for each group. Information will be collected using telephone and online survey instruments.

The information collection will be a one-time data collection. Participation will be voluntary. Establishments will be selected using a stratified random sampling method. EPA plans to have 402 respondents complete a questionnaire. Because of the difficulty of finding the

population of the establishments engaged in RRP activities in PnCBs, EPA anticipates having to contact approximately 10,650 entities and ask them a few, brief screening questions. All of these entities are counted as respondents for the purpose of calculating the burden of the survey.

Information on whether an establishment performs RRP activities in PnCBs is not available from any readily accessible source. Therefore, it is not feasible to design a random sampling method for the survey without contacting a large number of establishments and asking them a few brief questions in the screening portion of the questionnaire. It is worth noting that the information collected from the estimated 10,650 establishments that will not complete the full questionnaire is still very important to EPA. Specifically, together with the information collected from the 402 respondents expected to complete the full survey it will provide a basis for estimating the population of establishments engaged in RRP activities in PnCBs.

Two-thirds of the entities contacted for screening are owners of PnCBs, since only a small percentage of this group is expected to conduct RRP activities. However, because of the large total number of building occupants, the number of such entities performing RRP activities in PnCBs could potentially equal the number of construction contractors doing such work. Therefore, it is important to include building occupants in the information collection. The questionnaire has been designed to quickly screen out respondents who do not perform RRP activities in PnCBs, in order to reduce the burden of locating eligible respondents.

EPA estimates that the screening portion of the survey will take about 3 minutes to complete on average. For respondents completing the contractor questionnaire, it is estimated that the remaining portion of the survey will require about 30 minutes on average. For respondents completing the property lessor/manager or building occupant questionnaires, the remaining portion of the survey is estimated to require about 5 minutes on average. EPA estimates that the roughly 10,650 survey respondents will incur a total burden of 672 hours at an estimated cost of \$39,191 as a result of this one-time collection. The cost to the agency is estimated to be approximately \$560,000.

2. NEED AND USE FOR THE COLLECTION

2(a) Need and Authority for the Collection

Title IV of TSCA, 15 U.S.C. 2681 et seq. (see Attachment 1), was enacted to assist the Federal Government in reducing lead exposures, particularly those resulting from lead-based paint (LBP). Section 402(c)(3) of TSCA specifically requires EPA to revise its Lead-Based Paint Activities regulations,¹ promulgated under TSCA section 402(a), to apply to those renovation and remodeling activities in target housing, public buildings constructed before 1978, and commercial buildings that create lead-based paint hazards. In April 2008, EPA promulgated the RRP rule (40 CFR part 745; see Attachment 2) under TSCA section 402(c)(3).² The RRP rule covers renovation, repair, and painting activities in target housing (which is most pre-1978 housing) and child-occupied facilities (which includes a subset of PnCBs in which young children spend a significant amount of time).

Several lawsuits were filed against EPA asserting, among other things, that the Agency violated TSCA section 402(c)(3) by failing to address renovation activities in PnCBs. These lawsuits (brought by environmental and children's health advocacy groups as well as a

¹ Lead; Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities; Final Rule. Federal Register (61 FR 45778, August 29, 1996).

²Lead; Renovation, Repair, and Painting Program; Final Rule. Federal Register (73 FR 21692, April 22, 2008).

homebuilders association) were consolidated in the Circuit Court of Appeals for the District of Columbia Circuit. EPA engaged in collective settlement negotiations with all the parties and on August 24, 2009, EPA entered into an agreement with environmental and children's health advocacy groups in settlement of their lawsuits.³ Shortly thereafter the homebuilders association voluntarily dismissed its challenge to the rule. As part of this settlement agreement, EPA agreed to commence rulemaking to address renovations in PnCBs (other than child-occupied facilities) to the extent such renovations create LBP hazards. As an initial step, EPA issued an ANPRM in the Federal Register on renovations in public and commercial buildings on May 6, 2010.⁴

The settlement agreement has been amended and modified several times (primarily to extend deadlines), with the most recent amendment having been entered into by the parties on September 7, 2012. Under the terms of the amended settlement agreement, the date by which EPA has agreed to either sign a proposed rule covering RRP activities in PnCBs, or determine that these activities do not create LBP hazards, is July 1, 2015. If EPA publishes a proposed rule in the Federal Register, EPA agreed to take final action on or before the date 18 months after the proposed rule has published.

In addition, as part of the agreement EPA held a public meeting on June 23, 2013, and offered an opportunity for stakeholders and other interested members of the public to provide data and other information that EPA may use in making its regulatory determinations.

The purpose of this ICR is to fill some of the key data gaps for EPA's exposure assessment and for its economic analysis of potential options to reduce exposure to lead dust from RRP activities in PnCBs. Without the survey, the exposure assessment and the economic analysis would need to rely on assumptions and anecdotal information rather than parameters estimated from a survey designed to use a probability sample to calculate nationally representative parameter estimates. The survey results are expected to be more representative than anecdotal information.

2(b) Practical Utility and Users of the Data

This ICR will allow EPA to produce statistically valid estimates for the population of RRP firms and jobs that disturb paint in PnCBs, and the work practices that are used. EPA will use the data collected through this one-time survey as part of its investigation. Without the proposed information collection, these estimates will have to be derived from assumptions and anecdotal information.

The primary purposes of this survey include estimating the baseline usage of particular work practices, and how this usage varies with the type of RRP job; determining the number of firms that perform RRP activities in PnCBs; and determining the types and numbers of RRP activities that are performed.

Secondly, the survey will attempt to collect information on how the proportion of jobs that use particular practices differs between different types of firms. In addition to baseline work practice data, the survey will collect information on the number of contractors that are already trained and certified under the existing RRP Program.

³ EPA, Sierra Club, etc. Settlement, as amended and modified (2009, 2011, and 2012).

⁴ Lead; Renovation, Repair, and Painting Program for Public and Commercial Buildings; Advanced Notice of Proposed Rulemaking. Federal Register (75 FR 24848, May 6, 2010).

3. NON-DUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA

3(a) Non-Duplication

To the best of EPA's knowledge, the data to be collected through this survey is not available elsewhere. EPA has investigated various sources of data on RRP firms and practices, including other surveys, trade association literature, academic studies, government reports, and information provided to EPA through public comments. In general, other sources of information on RRP either do not address the issues where EPA needs data; are based on judgments rather than a comprehensive and rigorous collection of information; or lack the specificity and level of detail that EPA is requesting in this survey in order to estimate the potential risks, the industry baseline, and the costs and benefits of potential regulatory requirements. Thus, this information collection does not duplicate existing data sources.

3(b) Public Notice Required Prior to ICR Submission to OMB

Pursuant to the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), prior to submission to OMB, this ICR will be made available to the public for comment through a Federal Register notice. The public will have 60 days to provide comments. Any comments received will be given consideration when completing the supporting statement that is submitted to OMB.

3(c) Consultations

Under 5 CFR 1320.8(d)(1) OMB requires agencies to consult with potential ICR respondents and data users about specific aspects of ICRs before submitting an original or renewal ICR to OMB for review and approval. EPA intends to send surveys to up to nine respondents for each questionnaire in order to identify potential changes to improve the survey instrument, including the survey format, the wording of the instructions and the questions, and the information being requested in the questions. EPA will consider any information that it gains through the consultations or pretesting (as well as public comments submitted during the 60 day comment period for this information collection request, and any discussions with trade associations or others). After considering the comments that it receives, EPA will make any necessary changes to the survey prior to publishing the Federal Register notice announcing the 30 day public comment period on the information collection request, or submitting the information collection request to OMB for approval.

3(d) Effects of Less Frequent Collection

This survey is a *one time only* data collection activity for the respondents.

3(e) General Guidelines

This information collection complies with the guidelines in 5 CFR 1320.5(d)(2).

3(f) Confidentiality

EPA is not collecting information of a sensitive or private nature. EPA will assure confidentiality of survey participants based on the provisions of EPA's governing statutes and other applicable requirements. In addition, only the contractor conducting the survey for EPA, will have access to personal identifiers in the raw survey data. (These personal identifiers include the respondent's name, the respondent's phone number, and the name of the organization the

respondent works for.) All personal identifiers will be stripped from the database before it is conveyed to EPA. The original survey database will remain under the control of the contractor hired to perform the survey. This contractor will be required to keep the information confidential.

3(g) Sensitive Questions

Not applicable. The information requested is not sensitive in nature.

4. THE RESPONDENTS AND THE INFORMATION REQUESTED

4(a) Respondents and NAICS Codes

Table 4.1 shows the North American Industrial Classification System (NAICS) codes of the establishments affected by this ICR.

Table 4.1: Respondents Primary Industries: NAICS and Definitions	
NAICS Code	NAICS Definition
A. Contractors	
2361	Residential Building Construction
2362	Nonresidential Building Construction
2381	Foundation, Structure, and Building Exterior Contractors
2382	Building Equipment Contractors
2383	Building Finishing Contractors
2389	Other Specialty Trade Contractors
B. Lessors, Property Managers, and Facility Support Services	
5612	Facilities Support Services
53112	Lessors of Nonresidential Buildings (except Miniwarehouses)
53131	Real Estate Property Managers
C. Building Occupants	
All	Building occupants include entities from all NAICS except those listed above

4(b) Information Requested

(i) Data Elements

This survey will be administered to (A) contractors, (B) lessors and property managers, and (C) building occupants (both owners and tenants). The survey will employ mixed-mode online and phone data collection. An initial notification letter to respondents will provide instructions for completing the survey online. Those respondents who do not complete the online survey will be contacted by telephone using trained interviewers calling from a survey telephone center. Respondents contacted by telephone will also have the option to begin the survey over the phone and complete it online. Table 4.2 summarizes the information the survey will request from respondents. In order to reduce respondent burden, lessor and property managers and building occupants are not asked all the questions that are being put to contractors. Instead, the other two groups are only asked questions that they are in a unique position to answer.

Question Category	Purpose of Questions	Question Number in Questionnaire		
		Contractor Instrument	Property Manager/ Lessor Instrument	Building Occupant Instrument
Respondent Identification	These questions will be used to identify the individual at the firm with the knowledge required to complete the survey.	S1-S6	S1-S5	S1-S5
Screening and Scope	These questions will be used to determine whether a respondent performs RRP activities in PnCBs. Only those who perform RRP activities in PnCBs will be asked to complete the full survey. Responses from the screening and scope questions will be used to estimate the universe of relevant firms.	Q1-Q2B	Q1-Q3	Q1-Q3
Firm Type and Size	Responses from these questions will be used to assign the appropriate sampling weights.	Q3-Q3C	Q4-Q6	Q4-Q6
Total Number of Activities	<p>The survey includes 11 categories of RRP activities that disturb painted surfaces. For each of these 11 activity categories, the survey asks two questions: (1) the total number of jobs and (2) the total number where more than the de minimus level of paint is disturbed by the respondent firm employees. The response to the second question is of most interest for the analysis. The primary purpose of the first question will be to aid in the respondents' recall of an accurate answer to the second question.</p> <p>Contractors who report painting activities will be asked about the numbers of activities where they use the following paint removal techniques: (1) open flame or torch, (2) high temperature heat gun, (3) abrasive blasting (exterior only), and (4) needle gun/scaler. In general, the survey collects information about paint removal techniques only for the most recent job a respondent performed. However, these four techniques are the exception because they potentially generate high levels of lead dust and are believed to be uncommon enough that information about them may not be captured if respondents are only asked about their most recent job.</p>	Q4-Q5.4	Q7-Q7k2	Q7-Q7k3
Recent Job: Job Size, Job Duration, Access to Work Area	A single activity type that was reportedly performed by each respondent will be randomly selected for a more detailed series of questions. Once the activity type is selected, the respondent will be prompted to recall the most recent job of that type performed in a building built before 1978. (If there were no recent jobs in a pre-1978 building they will be asked about the most recent post-1978 job.) The questions ask about work in a pre-1978 building because (1) these building are more likely to have LBP and, (2) respondents may be more careful about	Q5.5-Q5.10	Q8.1-Q8.5	Q8.1-Q9.5

	<p>minimizing paint dust in older buildings where LBP may be present.</p> <p>Respondents will be asked to characterize the size and type of building. This will provide information on how much paint might be disturbed and the number of people potentially exposed to dust generated.</p> <p>For respondents being asked about a recent painting job, they will be asked how long the paint preparation took, how many workers were doing this work, the percent of the painted surface disturbed, and the percent of paint removed down to the bare substrate. This will be used to estimate how much paint was removed.</p> <p>For respondents being asked about a recent window or exterior door job, they will be asked how many windows or doors were replaced. This will be used to estimate how much paint was disturbed.</p> <p>All respondents will be asked about: (1) the total duration of the job, (2) the times of day the work was done, and (3) access to the work area by building occupants. Responses to these questions will be used to inform the level of exposure building occupants might experience.</p>			
Job Combinations	For the most recent activity a respondent is asked about, s/he will be asked to report what other activities were performed at the same time. The responses to these questions will be used to ensure that the estimates of the number of activities are not based on double counting.	Q6-Q6k	N/A	N/A
Containment	There are seven questions related to dust containment practices. Responses to these questions will be used to estimate the extent to which firms are already using containment practices. One question is asked to all respondents (Q8a), three are only asked to those being asked about a recent exterior job (Q8b, Q8c, Q8d), and three are only asked to those being asked about a recent interior job (Q8e, Q8f, Q8g).	Q7-Q8g	N/A	N/A
Cleanup	Responses to these questions will be used to estimate the extent to which firms are already using cleaning practices. There are eight questions related to cleanup practices that will be asked to all respondents being asked about a recent interior job. Those that report vacuuming will be asked if they used a HEPA vacuum. Those that reported that there were uncarpeted floors will be asked if they mopped.	Q9-Q9h	N/A	N/A

Paint Removal Techniques	<p>Respondents being asked about a recent job involving paint preparation will be asked about the paint removal techniques they used. There are a total of 18 questions about paint removal techniques:</p> <ul style="list-style-type: none"> • 6 are asked to all respondents, • 3 are asked to all respondents being asked about a recent exterior paint preparation job, • 4 are asked conditional on an affirmative response to another question (exterior and interior eligible), • 3 are asked conditional on an affirmative response to another question (recent exterior paint prep only eligible), and • 2 are asked conditional on an affirmative response to another question (recent interior paint prep only eligible). 	Q10-Q11	N/A	N/A
Routine Cleaning	Respondents will be asked how often most areas of the building receive routine janitorial cleaning.	N/A	Q9	Q10
LBP Testing	Respondents will be asked about whether they tested for LBP, and if so, whether or not the test indicated the presence of LBP. This will inform the baseline level of testing and whether work practices are different when lead is either identified or ruled out.	Q12-Q12a	Q10	Q11
Motivation for lead-safe work practices	Respondents will be asked what one or two factors usually influence the level of dust containment and cleaning for a given job in PnCBs. This is asked to help EPA understand what motivates the use of lead safe work practices.	Q13	N/A	N/A
Baseline RRP Certification	Respondents will be asked whether they are already certified under the residential rule. This is asked because being certified for residential work may affect firms' baseline work practices in PnCBs. It will also be used to estimate the potential costs if additional firms are required to become certified in order to work in PnCBs.	Q14	N/A	N/A
Open Ended	Respondents will be given the option to provide additional comments or information.	Q15	Q11	Q12

(ii) Respondent Activities

Individuals who are contacted to participate in this survey could potentially perform each of the following tasks:

- Read notification letter;
- Listen to or read to introductory information;
- Respond to screening questions; and
- Complete survey

These activities represent a voluntary information collection for each respondent and are not customary practices of the respondents.

5. THE INFORMATION COLLECTED - AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION

5(a) Agency Activities

The Agency will conduct the following activities to complete the survey:

- Send letters to respondents, notifying them of the upcoming survey and instructions on how to complete the online version of the final approved questionnaire;
- Place telephone calls to each respondent who did not complete the survey online to identify a knowledgeable person to complete the survey and complete the survey over the phone using the Computer Assisted Telephone Interview (CATI) instrument based on final approved questionnaire;
- Preliminary data review;
- Calculation of sampling weights;
- Non-response bias study;
- Performance of weighted statistical summaries, variance estimation, and technical analyses; and
- Report findings.

5(b) Collection Methodology and Management

Information will be collected using telephone and online survey instruments. Samples of RRP contractors and building owners/managers will be drawn from the Dun & Bradstreet “Dun’s Market Identifiers” (DMI) file provided by Survey Sampling, Inc. A telephone and online mixed-mode survey appears to be the most appropriate approach for minimizing the two main anticipated challenges: (1) problems of recall (working from memory) and understanding (are the terms used familiar to the respondent), and (2) problems in contacting people who may spend little time in an office. Telephone surveys maximize cooperation through direct contact with the respondents and provide an opportunity to clarify terms and aid recollection through probes. Telephone surveys also provide a rapid turnaround time. Many respondents who may spend little time in the office and have busy schedules may be more likely to respond to an online survey. The online questionnaire can also include more instructions and definitions of terms for respondents that need clarification. In addition, the online survey is expected to make it easier to elicit responses from larger firms, who are less likely to have a single individual who can provide the answers to all questions, because multiple individuals can collaborate on the response.

The survey field period will be relatively short and the target population is not likely to be motivated to participate in the survey.⁵ A mail survey would be very ineffective in this situation. Respondents will receive an initial notification letter encouraging them to follow the instructions provided for completing the survey using the online instrument. Those respondents who do not complete the survey online will be contacted by telephone by trained interviewers calling from a survey telephone center (Abt SRBI). Respondents contacted by telephone will also have the option to begin the survey over the phone and complete it online. The telephone survey instrument will use a CATI screener questionnaire and detailed interview questionnaire. The main advantage of a telephone survey is the ability to make multiple call attempts over a relatively short field period. The call attempts and scheduled call backs can be customized to the hours that contractors are available to respond to the survey – this may involve early morning calls and late afternoon/evening calls. The screener questionnaire includes several questions involving skip patterns and terminations that depend on whether the respondent is eligible to complete the detailed interview. The detailed interview also contains some key skip patterns and a series of questions related to work practices. This type of questionnaire design is well suited for both the online and CATI administration. The telephone survey will be conducted from an Abt SRBI telephone center where trained supervisors and interviewers will be assigned to the study.

5(c) Small Entity Flexibility

Small entities make up the majority of the establishments that perform the RRP projects that are of interest in this survey. Therefore, since this is the primary target population for the survey, the majority of respondents will be small entities. The instrument has been developed to minimize the burden on all respondents while obtaining sufficient and accurate information.

5(d) Collection Schedule

Exhibit 5.1 provides the schedule of the various tasks involved in conducting the proposed survey. As shown in the schedule, data collection would start within one week of OMB approval of the ICR and would end nine weeks later. Telephone data collection will start one week after the pre-notification letter. An email alert will be sent to the screened and eligible non-responding businesses after seven weeks to encourage them to complete the survey on the online. EPA would then process the data and analyze it for potential non-response bias.

⁵ Based on experience with prior informal EPA surveys (i.e., surveys administered to fewer than 10 respondents), this population is not likely to be motivated to participate in the survey.

Exhibit 5.1: Survey Collection Schedule														
Task	Week (from receipt of OMB approval)													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Send pre-notification letter to respondents in selected sample	■													
Conduct telephone calls to conduct screener and main questionnaire to complete 120 responses		■	■											
Analyze data collection of the first two weeks to decide if sample allocation needs to be modified				■	■									
Resume telephone interviews						■	■							
Send out email alert to eligible non-responding sample								■	■					
Process data										■	■			
Analyze data, including potential non-response bias												■	■	■

6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION

6(a) Estimating Respondent Burden

This section details the estimated burden to respondents participating in this ICR. The estimates of the time burden involved in responding to the survey are based on the length of the current draft of the survey instruments. It is worth noting that the burden on respondents will be less than the length of the questionnaires might seem to imply because no respondents will need to answer all of the questions listed. For example, after a respondent completes Question 4 in the contractor questionnaire a single activity type will be selected and the respondent will only need to respond to additional questions relevant to that job type. For example, respondents who are being asked about replacing windows will not be asked questions about paint removal techniques, and respondents being asked about exterior painting will not be asked questions about interior containment and clean-up practices.

The respondent burden is presented by respondent type. Two types of respondents were identified:

- Ineligible respondents do not perform or make decisions related to RRP activities in PnCBs. They complete a portion of the survey screening to determine their ineligibility. Hereafter, respondents of this type are referred to as initial completes.
- Eligible respondents perform or make decisions related to RRP activities in PnCBs. Hereafter, respondents of this type are referred to as full completes.

It is estimated that the screening portion of the survey will take about 3 minutes on average. For respondents completing the contractor questionnaire, it is estimated that the remaining portion of the survey will require about 30 minutes on average. For respondents completing the property lessor/manager or building occupant questionnaires, the remaining

portion of the survey is estimated to require about 5 minutes on average. Table 6.1 summarizes the burden per respondent.

Table 6.1: Average Burden Per Respondent	
Respondent Type	Average Per-Respondent Burden*
Initial Completes	0.05 hours
Full Completes (Contractors)	0.55 hours
Full Completes (Lessors, Property Managers, and Facility Support Services; Building Occupants)	0.13 hours
*Note that the respondent burden for a full complete includes the time to answer the screening questions.	

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

EPA estimated respondent costs using the burden estimates presented above and the average wage figures provided by the Bureau of Labor Statistics (BLS) occupational employment statistics series. Wage rates for each category of personnel are derived with methods and from sources either identical to or similar to those used in prior ICR renewals and economic analyses for EPA's RRP program. According to the December 2012 BLS data for Employer Costs for Employee Compensation, wages and salaries accounted for 69.2% of employee compensation, implying a wage multiplier of 1.445.⁶ Based on Appendix I of the National Association of Home Builders' 2010 Cost of Doing Business Study, an additional 8.3% was added to the fringe multiplier for overhead costs to estimate a multiplier of 1.53 for fully loading wages. A uniform loading factor of 53% for fringe benefits and overhead was applied to all categories of labor for this ICR.

Contractors' fully loaded wages (\$47/hour) are estimated from the wages earned by First-Line Supervisors/Managers of Construction Trades and Extraction Workers (Occupation 47-1011). Lessors and property managers' fully loaded wages (\$47/hour) are estimated from the wages earned by Property, Real Estate and Community Association Managers (Occupation 11-9140). The wage rates (\$78/hour) for building occupant respondents are estimated as the fully loaded wages earned by Miscellaneous Managers (Occupation 11-9190). Table 6.2 presents the wages for the occupations that best match the ICR labor categories. Table 6.3 presents the individual respondent costs by respondent type associated with this ICR.

⁶ The percent of employee compensation that accounts for salaries and wages is based on civilian works, which includes private industry workers, as well as state and local government workers. This information is available at: <http://www.bls.gov/news.release/pdf/ecec.pdf> (released March 12, 2013).

<i>ICR Labor Category</i>	<i>BLS Occupation Category</i>	<i>May 2012 Hourly Wage Rate</i>	<i>Hourly Wage with Fringe and Overhead</i>
Contractors	First-Line Supervisors of Construction Trades and Extraction Workers	\$30.40	\$47
Lessors and Property Managers	Property, Real Estate, and Community Association Managers	\$30.56	\$47
Building Occupants	Miscellaneous Managers	\$50.79	\$78

Respondent Type	Average Per-Respondent Burden*	Respondent Loaded Hourly Wage (2012\$)	Average Labor Cost per-Respondent
Contractors			
Initial Completes	0.05 hours	\$47	\$2.35
Full Completes	0.55 hours	\$47	\$25.85
Lessors and Property Managers			
Initial Completes	0.05 hours	\$47	\$2.35
Full Completes	0.13 hours	\$47	\$6.11
Building Occupants			
Initial Completes	0.05 hours	\$78	\$3.90
Full Completes	0.13 hours	\$78	\$10.14

*Note that the respondent burden for a full complete includes the time to answer the screening question.

(ii) Estimating Capital and Operations and Maintenance Costs

EPA does not expect respondents to incur any capital or operations and maintenance (O&M) costs. This information collection is voluntary and does not require special equipment.

(iii) Capital/Start-up Operating and Maintenance (O&M) Costs

Not applicable.

(iv) Annualizing Capital Costs

Not applicable.

6(c) Estimating Agency Burden and Costs

EPA will use in-house staff and contractors to conduct the survey. EPA staff will oversee the contractor staff working on the survey, and send out the pre-notification letters to potential respondents. It is estimated that administering the survey will require 1/7th of a full-time employee (FTE) at EPA headquarters. The cost for EPA staff is estimated to be \$77.62 per hour, based on the 2012 wage rate for a GS-13, Step 5 employee in the Washington-Baltimore locality, with a government overhead factor of 1.6 to account for fringe benefits and overhead. This is equivalent to an EPA staff cost of approximately \$23,064. EPA's cost for sending the pre-

notification letters will be \$15,000, the cost of sending 25,000 pre-notification letters costing \$0.60 each (\$0.46 in postage and \$0.14 in materials cost).

EPA will incur costs for contractor staff to administer the telephone survey, process and analyze the data, and prepare survey documentation.

Table 6.4 presents the Agency costs for each activity associated with conducting the survey. Total Agency costs are estimated at \$560,000.

Activity	Agency Cost
EPA Staff Time	\$23,000
Pre-Notification Letters	\$15,000
CATI and Web Programming	\$20,000
Sampling	\$28,000
Interviewing and Web Data Collection	\$426,000
Data Cleaning and Processing	\$31,000
Weighting	\$17,000
Total Cost	\$560,000

6(d) Estimating the Respondent Universe and Total Burden Costs

See section 2(b) of Part B of this supporting statement for a description of how the necessary sample sizes (i.e., respondent universe) were estimated. The per-respondent burden and cost are described above. Table 6.5 presents the respondent universe and the total hour and cost burden by respondent type.

Respondent Type*	Estimated Respondent Universe*	Estimated Universe of Small Respondents**	Per-Respondent Burden* (hours)	Total Respondent Burden (hours)	Per-Respondent Cost (2012\$)	Total Respondent Cost (2012\$)
A. Contractors						
Initial Completes	3,556	3,449	0.05	178	\$2.35	\$8,357
Full Completes	254	246	0.55	140	\$25.85	\$6,566
B. Lessors and Property Managers						
Initial Completes	1,972	1,913	0.05	99	\$2.35	\$4,634
Full Completes	68	66	0.13	9	\$6.11	\$415
C. Building Occupants						
Initial Completes	4,720	4,578	0.05	236	\$3.90	\$18,408
Full Completes	80	78	0.13	10	\$10.14	\$811
Summary for All Respondents						
Initial Completes	10,248	9,941	0.0501	513	\$3.0639	\$31,399
Full Completes	402	390	0.396	159	\$19.3845	\$7,793
All Completes	10,650	10,331	0.0631	672	\$3.6799	\$39,191

*Note that the respondent burden for a full complete includes the time to answer the screening questions.

**Note that larger firms (who are expected perform disproportionately more RRP activities) will be oversampled. While over 99% of the entities in these industries are small, roughly 97% of survey respondents are expected to be small entities.

6(e) Bottom Line Burden Hours and Cost Tables

Table 6.6 details the total bottom-line burden (respondent and EPA) associated with this ICR. Tables 6.1 through 6.5 detail how these total figures were derived.

Cost Category	Labor Hours	Cost
Respondent Labor	672	\$39,191
EPA Labor	N.A.	\$23,000
Other Direct EPA Costs	N.A.	\$537,000
Total	672	\$599,191

6(f) Reasons for Change in Burden

Not applicable because this request does not renew or modify an existing ICR.

6(g) Burden Statement

The annual public burden for this collection of information is estimated to average 0.06 hours per response. This includes an average respondent burden of 0.05 hours for respondents that are not eligible to complete the full study (initial completes) and 0.4 hours for respondents who complete the full study (full completes). Burden is defined in 5 CFR 1320.3(b). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and included on the related collection instrument or form, if applicable.

The Agency has established a public docket for this ICR under Docket ID No. EPA-HQ-OPPT-2013-0715, which is available for online viewing at www.regulations.gov, or in-person viewing at the Pollution Prevention and Toxics Docket in the EPA Docket Center (EPA/DC). The EPA/DC Public Reading Room is located in the EPA West Building, Room 3334, 1301 Constitution Ave., N.W., Washington, DC. The EPA/DC Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the EPA/DC Public Reading Room is (202) 566-1744, and the telephone number for the Pollution Prevention and Toxics Docket is (202) 566-0280.

You may submit comments regarding the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden, including the use of automated collection techniques. Submit your comments, referencing Docket ID No. EPA-HQ-OPPT-2013-0715 and OMB Control No. 2070-0067, to (1) EPA online using www.regulations.gov (our preferred method), or by mail to: Pollution Prevention and Toxics Docket, Environmental Protection Agency Docket Center (EPA/DC), Mailcode: 28221T, 1200 Pennsylvania Ave., N.W., Washington, DC 20460, and (2) OMB by mail to: Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attention: Desk Officer for EPA, 725 17th Street, N.W., Washington, DC 20503.

ATTACHMENTS TO THE SUPPORTING STATEMENT

Attachments to the supporting statement are available in the public docket established for this ICR under docket identification number EPA-HQ-OPPT-2013-0715. These attachments are available for online viewing at www.regulations.gov or otherwise accessed as described in section 6(f) of the supporting statement.

Attachment 1 - Toxic Substances Control Act Section 402; 15 U.S.C. 2681 et. seq.

Attachment 2 - Lead-Based Paint Poisoning Prevention in Certain Residential Structures;
40 CFR 745

Attachment 3 - EPA Public and Commercial Building Contractor Survey Questionnaire

Attachment 4 - EPA Public and Commercial Building Manager/Lessor Survey Questionnaire

Attachment 5 - EPA Public and Commercial Building Building Occupant Survey Questionnaire

PART B OF THE SUPPORTING STATEMENT

1. QUESTIONNAIRE OBJECTIVES, KEY VARIABLES, AND OTHER PRELIMINARIES

1(a) Questionnaire Objectives

As part of its investigation into lead exposure resulting from RRP activities in PnCBs, EPA seeks to obtain a better understanding of the incidence of different types of RRP activities that disturb lead-based paint in PnCBs, the methods that are used to conduct these activities, the work practices that are used to contain and clean the resulting dust, and the characteristics of the buildings. EPA will use this information to estimate the resulting exposures to lead dust. If EPA determines that a regulation is needed, the Agency will use this data to assess the incremental benefits and costs of potential options to reduce such exposures.

EPA's primary objectives are to use the survey data to:

1. Gather information on building and activity patterns that may affect exposures to lead dust from RRP activities in PnCBs;
2. Determine the number of firms that perform RRP activities in PnCBs;
3. Determine the types and numbers of RRP activities that are performed;
4. Determine the extent to which various work practices that disturb painted surfaces are currently being used in RRP jobs in PnCBs; and
5. Determining the extent to which various work practices that help with the containment and cleanup of lead dust are currently being used in RRP jobs performed in PnCBs.

Secondary objectives of the survey include:

1. Attempting to collect information on how the proportion of jobs that use particular practices differs between different types of firms; and
2. Collecting information on the percentage of contractors who already have training and certification under EPA's residential RRP Program.

1(b) Key Variables

The key information to be collected includes the following:

1. Respondent Identification
 - These questions will be used to identify the individual at the firm with the knowledge required to complete the survey.
2. Screening and Scope
 - These questions will be used to determine whether a respondent performs potentially regulated RRP activities in PnCBs. Only those who perform RRP activities in PnCBs will be asked to complete the full survey. Responses from the screening and scope questions will be used to estimate the universe of firms conducting RRP activities in PnCBs.

3. Firm Type and Size

- Responses from these questions will be used to assign the appropriate sampling weights.

4. Total Number of Activities

- The survey includes 11 categories of RRP activities that disturb painted surfaces. For each of these 11 activity categories, the survey asks two questions: (1) the total number of jobs and (2) the total number where more than a small areas of paint (equivalent to the minor maintenance exception in the RRP rule) is disturbed by the respondent firm's employees.
- In addition, contractor respondents who report painting activities will be asked about the numbers of jobs in the past year where they use one of the following paint removal techniques: (1) open flame or torch, (2) high temperature heat gun, (3) abrasive blasting (exterior only), and (4) needle gun/scaler. In general, the survey only asks detailed questions about activity types (including paint removal techniques) and work practices for the most recent job a respondent has completed. Responding about the most recent job may be easier and less burdensome for respondents than if they were asked about all of the jobs they have conducted in the past year, given the difficulty of recalling the details of all of those jobs. And given the variation in jobs a firm may conduct (including job type, job size, and building type), it might be difficult for a respondent to characterize their "typical" work practices. However, the four paint removal techniques described above are the exception to asking about the most recent job because these techniques potentially generate high levels of lead dust and are believed to be uncommon enough that information about them may not be captured if the survey only asks about them in the context of the respondent's most recent job.

5. Recent Job: Job Size, Job Duration, Access to Work Area

- Each respondent will be randomly selected for a more detailed series of questions about a single RRP activity type that they perform (such as removing or replacing painted building components, cutting or making holes in painted surfaces, or surface preparation for painting). Once the activity type is selected, the respondent will be prompted to recall the most recent job of that type performed in a building built before 1978. (If there were no recent jobs in a pre-1978 building they will be asked about the most recent post-1978 job.) The questions ask about work in a pre-1978 building where possible because (1) these building are more likely to have LBP and, (2) respondents may be more careful about minimizing paint dust in older buildings where LBP may be present.
- Respondents will be asked to characterize the size and type of building the work was performed in. This information will allow EPA to estimate how much paint might be disturbed and the number of people potentially exposed to lead dust generated by the RRP activity.

- For respondents being asked about a recent painting job, they will be asked how long the paint preparation took and how many workers were doing this work, the percent of the painted surface disturbed, and the percent of paint removed down to the bare substrate. This information will be used to estimate how much paint was removed.
- For respondents being asked about a recent window or exterior door job, they will be asked how many windows or doors were replaced. This will be used to estimate how much paint was disturbed.
- All respondents will be asked about: (1) the total duration of the job, (2) the times of day the work was done, and (3) access to the work area by building occupants. Responses to these questions will be used in estimating the exposure to lead dust that building occupants might experience.

6. Job Combinations

- For the most recent RRP activity a respondent is asked about, he or she will be asked to report what other RRP activities were performed at the same time (such as replacing windows and performing surface preparation before repainting walls as part of the same job). The responses to these questions will be used to ensure that the estimates of the number of activities are not based on double counting, and to estimate the total lead dust generated from jobs composed of multiple RRP activities.

7. Containment

- There are seven questions related to dust containment practices. Responses to these questions will be used to estimate the extent to which firms are already using practices to contain dust from RRP activities.

8. Cleanup

- Responses to these questions will be used to estimate the extent to which firms are already using practices to clean up dust following RRP activities.

9. Paint Removal Techniques

- Respondents being asked about a recent job involving paint preparation will be asked about the specific paint removal techniques they used.

10. Routine Cleaning

- Respondents will be asked how often most areas of the building receive routine janitorial cleaning. This information will be used to estimate changes in exposures to lead dust over time following an RRP activity.

11. LBP Testing

- Respondents will be asked about whether they tested for LBP, and if so, whether or not the test indicated the presence of LBP. This will inform estimates of the baseline level of testing and whether work practices are different when lead is either identified or ruled out.

12. Motivation for lead-safe work practices

- Respondents will be asked what one or two factors usually influence the level of dust containment and cleaning for a given job in PnCBs.

13. Baseline RRP Certification

- Respondents will be asked whether they are already certified under the residential RRP rule. This is asked because being certified for residential work may affect firms' baseline work practices in PnCBs, and to estimate the potential costs if uncertified firms are required to become certified in order to perform RRP work in PnCBs.

14. Open Ended

- Respondents will be given the option to provide additional comments or information.

1(c) Statistical Approach

This ICR will allow the Agency to produce statistically valid estimates for the population of RRP firms and jobs that disturb paint in PnCBs. Without the proposed information collection, these estimates will have to be derived from assumptions and anecdotal information. Therefore, the Agency has chosen a statistical approach for this ICR.

The Agency will be assisted in this survey effort by Abt Associates, an independent contractor, who will be responsible for developing the survey response database; identifying the survey sample; overseeing the conduct of the survey and creating a cleaned survey data file of the survey results; weighting, tabulating and analyzing data; and reporting results. Abt Associates has extensive experience with sample design, survey methods, internet surveys, telephone data collection using CATI, data editing and cleaning, and calculation of sampling weights.

1(d) Feasibility

A knowledgeable person at the respondent firm should be able to complete the survey. To make respondent recall easier the more detailed questions about the use of work practices are asked only about a recent job – reviewing or consulting company records is not necessary. EPA plans to conduct a pretest of the draft survey and will use the insight gained from the pretest to revise the survey, as needed, to clarify data requests and reduce burden for respondents. EPA has planned for and allocated resources for the efficient and effective management of the information collection.

2. QUESTIONNAIRE DESIGN FOR THE STATISTICAL APPROACH

2(a) Target Population and Coverage

The target population consists of three groups of establishments described in Table B2.1.

	Group 1	Group 2	Group 3
Substantive description <i>[NAICS codes]</i>	Contractors <i>[NAICS 2361, 2362, 2381, 2382, 2383, 2389]</i>	Nonresidential Lessors, Property Managers and Facility Support Services <i>[NAICS 53112, 53131, 5612]</i>	Building Occupants <i>[All other NAICS codes]</i>
1-4 employees	1,328,230 (83.2%)	150,725 (89.9%)	12,561,214 (75.6%)
5-9 employees	142,486 (8.9%)	8,969 (5.4%)	1,577,814 (9.50%)
10-49 employees	106,645 (6.7%)	5,814 (3.5%)	1,390,439 (8.4%)
50+ employees	13,432 (0.8%)	1,327 (0.8%)	371,500 (2.2%)
Unknown size	4,802 (0.3%)	866 (0.5%)	711,991 (4.3%)
Total	1,595,595 (100%)	167,701 (100%)	16,612,958 (100%)

Note: frame counts provided by sample vendor (SSI) using a Dun & Bradstreet database.

The incidence of RRP work disturbing lead-based paint is expected to differ markedly between the three groups, hence the rationale for stratification. Also, the larger companies, while representing fewer establishment in the universe, take a disproportionately larger share of employment, and hence the number of jobs performed and the total amount of lead-based paint they are likely to disturb (all other things being equal). Thus, the larger firms need to be oversampled relative to mid- and small-size firms. Also, the larger establishments from Group 3, the balance of industries, are more likely to have their own maintenance departments that could be conducting RRP jobs disturbing lead-based paint, while the smaller firms may be more likely to subcontract such jobs to establishments in Groups 1 and 2. While over 99% of the entities in the U.S. are small, small entities are expected to represent roughly 97% of the survey respondents.

From this population of establishments, EPA will select a representative sample large enough to support nationally representative estimates of the number of affected firms, number of affected employees, and the number of RRP jobs in which lead-based paint is disturbed.

2(b) Sample Design

At this stage, little information is available except for the frame counts to guide the sample design. The information that EPA needs to continue analyzing RRP activities in PnCBs refers to three different populations:

1. The population of establishments, to estimate the total number of affected establishments, necessary to estimate the potential certification costs.
2. The population of contractor, property management and building maintenance workers to estimate the total number of workers affected, necessary to estimate potential training costs.
3. The population of RRP jobs, to estimate the total number of jobs disturbing lead-based paint, necessary to estimate potential work practice costs and public exposure to lead dust generated by disturbing lead-based paint.

For the first of the above population tasks, a simple random sample (SRS) of establishments is the optimal design to estimate the incidence of RRP work. This can be used to construct a ratio estimator of the total number of firms across the nation conducting such jobs. An SRS solution is conceptually easily to execute and does not require any additional information.

For population task 2 above, the optimal design is a sample proportional to the number of workers employed in RRP jobs. However, this particular sample is not feasible to obtain because the number of RRP workers cannot be identified on the DMI frame. It can only be assumed that a sizeable proportion of the workers in Group 1 establishments (contractors) are likely participants in RRP projects. For Group 2 and especially Group 3, maintenance workers will constitute a small to zero fraction of the total employment of establishments.

Finally, for population task 3, the optimal design would be one that is proportional to the number of jobs performed by a given establishment. Again, such a sample is not feasible because the number of RRP jobs is also not available on the DMI frame.

In order to proceed with the development of a possible sample design that provides some level of utility, assumptions have to be made regarding:

1. the incidence of RRP jobs in the population or its segments; and
2. the relation between the frame information (number of employees) and the target information (number of RRP workers; number of jobs performed by an establishment).

To devise an efficient sampling scheme, it is assumed that the establishment size (number of workers) and the number of jobs are jointly log-normally distributed. The design assumptions made regarding the population parameters are shown in the top half of Table B2.2. The parameters of these distributions are obtained from U.S. Census data.

Additional assumptions used in the design included:

- the costs of the screener and the main interview;
- the form and the strength (R^2 of regression, on the log scales) of the functional dependence between the number of employees of the establishment and the number of RRP jobs it performs;
- the mean and the coefficient of variation of the size distribution (distributions in groups 1 and 2 were assumed to be the same as the Census data and do not provide enough information to specify the distribution of group 2 separately); and
- response rates for the screener and the main interview.

All of these assumptions will need to be verified in the field. After the first 120 cases are completed, the necessary design parameters will be re-estimated, and an improved allocation will be designed.

The bottom half of Table B2.2 shows the proposed design to generate the estimates for the three target population tasks listed above. In developing this design, optimal allocations were derived for each of these population tasks (estimating the total number of establishments performing the RRP jobs; estimating the total number of workers performing RRP jobs; and estimating the total number of RRP jobs). The proposed compromise allocation between NAICS code groups of establishments and the establishment sizes within a NAICS code group was obtained by taking a geometric average of the stratum allocation proportions across those separate optimal allocation proportions.

Table B2.2: Design Assumptions and Proposed Allocations			
	Group 1 Contractors	Group 2 Lessors and Property managers	Group 3 Building Occupants
Design assumptions *			
Incidence of RRP in PnCBs	20%	10%	5%
Fraction of employees in RRP jobs	90%	40%	5%
Avg. number of jobs/year	100	50	10
Proposed design assumptions and estimates			
Allocation proportions for screeners (Total = 100%)	35.80%	19.20%	45.10%
Total no. of screeners (Total = 10,650)	3,810	2,040	4,800
Screeners in 0-4 employees	1,745	935	1,513
Screeners in 5-9 employees	697	374	860
Screeners in 10-49 employees	1,056	565	1,686
Screeners in 50+ employees	312	166	742
Completes (Total = 402)	254	68	80
Margin of error (0.5 base)	± 6.1%	± 11.9%	± 11.0%

**Based on professional judgment*

The effort of the screening is 85% of total effort, and is indicative of the difficulty of finding the population of the establishments engaged in RRP activities in PnCBs. In other words, unlike in many other surveys with eligibility at or close to 100%, most of the firms that will be contacted are not expected to be eligible to participate in the survey. Numerous contractors only work in residences and do not work in PnCBs. Similarly, many lessors and property managers as well as building occupants hire contractors to perform RRP activities, instead of using their own staff. However, information on whether an establishment performs RRP activities in PnCBs is not available in the Dun & Bradstreet database, or through any other readily accessible source. Therefore, it is not feasible to design a random sampling method for the survey without contacting a large number of establishments and screening them through the questionnaire.

This is particularly true among building occupants, where it is assumed that only 5 percent of them engage in RRP activities with their own staff rather than having such work performed by a contractor or property manager. However, because of the large total number of building occupants (over 16 million establishments), the number of such entities performing RRP activities in PnCBs could potentially equal the number of construction contractors doing such work. Therefore, it is important to include building occupants in the information collection. But the questionnaire has been designed to quickly screen out respondents who do not perform RRP activities in PnCBs, in order to reduce the burden of locating eligible respondents.

Adaptive sample design

It is a realistic possibility that the assumptions that were made to obtain allocations in Table B2.2 will be far from the data that could be observed in practice. For these reasons, there will be an initial smaller sample for the purpose of providing more informed parameter estimates for the rest of the study sample. Once a sample size of 10 full completes is achieved in each of the NAICS group by establishment size cell, the assumed parameters in Table B2.2 will be re-estimated in the underlying model. Thus, this initial sample size would be a total of 120 establishments (10 completes \times 12 strata=120) out of the total study sample size of 402 establishments. Based on these initial findings, EPA will re-design the balance of the sample and adaptively optimize the sample allocations to assure the best possible approximation of study estimates. (If deemed necessary, the establishment size categories can be redefined if substantial efficiency gains can be expected from a different size stratification scheme.)

Adaptive sample design is and has been a standard practice in many survey organizations and federal statistical agencies. Groves and Heeringa (2006) provided a review of the current approaches in using process paradata to make interventions into ongoing data collection with the aim of improving coverage or response rates in specific subgroups. The idea of “adaptive” or “responsive” sample design is actually much older, since using the incoming information on the population parameters for which little was known at the design stage has often been a practical, corrective necessity in well-managed and monitored data collection operations over past decades.

(i) Sampling Frame

The Dun & Bradstreet “Dun’s Market Identifiers” DMI file will serve as the sampling frame for this establishment survey. The DMI is considered to be the most comprehensive commercially available list of U.S. businesses. What is essentially critical is that the DMI includes industry and establishment size information necessary for stratifying the sample. Additionally, the sample provider, Survey Sampling, Inc. (SSI), can provide additional information, such as the name, the email address, and the phone number of a named executive for a specified managerial job title.

An establishment will be defined as the business located at a particular address or location. Eligibility for the screener will be determined by verifying that they are still in business. Data will be collected with respect to this location, even if the firm has other locations. The unit of analysis is the worksite, defined as a “single physical location where business is conducted or where services or industrial operations are performed.” The headquarters and other purely administrative sites of the larger contractors, nonresidential lessors, property managers and facility support services firms will be removed at the sampling stage using SSI corporate linkage information.

(ii) Sample Size

It is anticipated that 10,650 establishments will be screened in order to achieve the desired number of 402 full completes. This sample size was selected in order to achieve the precision targets shown in the bottom row of Table B2.2 (between 6.1% and 11.9%).

(iii) Stratification Variables

A key requirement of a successful establishment sample is that it produces reliable estimates by establishment size and industry grouping. The most efficient way to accomplish this goal is to stratify the DMI sampling frame by the cross-classification of establishment size and industry. The initial proposed stratification by industry, to the extent the companies in these NAICS groups are expected to be involved in RRP jobs disturbing lead-based paint, and to the extent that incidence and the number of jobs is expected to vary with sample size, is the one given in Table B2.2.

Establishments will be selected with equal probabilities within each of the 12 strata defined by the establishment size and industry classification groups. Larger establishments will be sampled at a higher rate to ensure that enough large establishments are available for the analysis. It is expected that these larger establishments will account for a disproportionately high fraction of the total RRP jobs. The employer survey weight will correct for the oversampling of large establishments by weighting by the inverse of the probability of selection. The weights will also correct for the expected non-response by using the standard non-response adjustment techniques (non-response cell adjustments or propensity score modeling). Finally, the weights will be normalized to agree with the distribution of the size of establishments as indicated by the Census distribution via the appropriate weight calibration (raking) procedures. This will yield approximately unbiased estimates of establishments in the DMI frame and, assuming it provides adequate coverage, in the United States.

(iv) Sampling Method

Establishments will be selected using the method of stratified random sampling without replacement.

2(c) Precision Requirements

(i) Precision Targets

EPA's survey has been designed to obtain estimates that have margins of error between 6.1% and 11.9% depending on the parameter. EPA feels that these precision rates will be adequate to characterize the number of regulated activities and the extent to which renovators currently use certain containment and cleaning practices.

(ii) Nonsampling Errors

An expected source of non-sampling error for this study will be non-response bias – i.e., that the non-respondents may differ from respondents. Non-response is best handled at the design stage of a survey, rather than after the data have been collected. Therefore, the strategy to minimize non-response for this survey is to use a survey design that will minimize the incidence of non-response. Finally, the data collected in the survey and the follow-up data will be analyzed to determine the extent to which non-response may bias the results. This non-response plan summarizes the approach to dealing with two forms of non-response: unit non-response (i.e.,

when a survey questionnaire is not completed by a sampled facility) and item non-response (i.e., when a survey questionnaire is finished, but some data elements are missing).

There are a number of reasons why selected respondents may not respond to the survey. The four major reasons for potential non-response are likely to be:

1. Mistrust of regulatory agencies – Some individuals contacted may not have responded because they have an inherent mistrust of regulatory agencies and a concern about the actions that they think EPA may take based on the data they provide in the survey.
2. Sensitivity to disclosing technical data – Some individuals contacted may be concerned about disclosing their firms practices and data, which may result in their failing to respond.
3. Burden – Individuals contacted for the survey have limited time to respond. The respondent will need to make time to respond to the survey. Thus, some non-response may occur because the contact person does not have the time to respond or will not make the time to respond.
4. Questions unclear – If the questions in the survey are unclear, then the individual receiving the survey may decline to respond.

The survey instruments have been designed to reduce the number of non-respondents while still gathering the information needed for the Agency's analysis and decision making. Respondents have the option to either complete the survey online or over the phone. The requested information should be readily available to a knowledgeable individual at the firm, not requiring any additional research on their part. The survey asks detailed technical questions only about the respondent's most recent job to make recall easier. And EPA will revise the survey, based on public comments and the result of the pretest, in order to clarify the questions.

A multi-staged respondent contact process will be used to reduce the number of initial non-respondents, and to follow up with initial non-respondents in order to convert them to respondents.

Stage 1 – Notification Letter. EPA will send a letter on EPA letterhead notifying firms in the sample that the survey is taking place and telling them that EPA's contractor will contact them by telephone to conduct the survey. The letter will be short and will describe the type of data that EPA is collecting, explain why EPA is collecting the data, note that the identity of the firms will be kept confidential and state EPA's appreciation for their participation in the survey. The letter will also include an address for the online survey.

Stage 2 – Technical Contact Identification Call. EPA's contractor will call all businesses in the sample to determine the identity and contact information for a knowledgeable person who can complete the survey. During the call, the interviewer will reiterate the purpose of the survey.

Stage 3 – EPA contractor conducts interview on phone. This can be the same call as in Stage 2 or a subsequent appointment time. If the interview cannot be completed by telephone, an email will be sent to the key informant of the eligible businesses with a link to the online survey.

Stage 4 – Initial Reminder Phone Call. EPA's contractor will make a reminder phone call to recipients who have not completed their online survey two weeks after the Stage 3 call. If the reminder call reaches the contact person, an offer to complete the survey with a telephone interview will again be made.

All interviewers will be trained to identify and avert potential refusals and attempt to convert non-respondents who refused. Interviewers will record information about refusals, which may facilitate subsequent interview attempts if refusal conversion is deemed possible. The combination of a well-designed and well-executed survey with a highly capable staff of interviewers should minimize the magnitude of non-response and ensure the reliability of the survey results.

Despite efforts to design effective survey instruments, however, some level of non-response is expected. As a final stage in the non-response plan, the data will be analyzed for potential non-response biases. To assess the possibility of non-response bias, the characteristics of respondents and non-respondents will be examined in terms of size, geography, type of firm, etc., to determine whether there could be any significant differences in responses between the two groups. A common procedure in surveys to reduce the bias because of non-response is to adjust the sampling weights of respondents to account for non-respondents after forming weighting classes. The assumption is that respondents and non-respondents within a weighting class are similar. This is a more reasonable assumption than assuming that the total sample of respondents is similar to non-respondents.

For example, if the response rates differ by size of firm and the percentages of interest (i.e., how they answered a question) also differs by size of firm, then size groups can be formed as weighting classes. Within each size group, the weights of respondents can be adjusted to account for non-respondents. There will be a reduction in the bias in the estimate if there is reason to believe that the respondents and non-respondents are similar within a size group. It is worth noting however, that the weighting approach may be only partially successful, since some of the responses may not be closely correlated with firm size or other available characteristics.

A second potential source of non-sampling error is measurement error. If respondents have difficulty interpreting a question, they may provide inconsistent answers, leading to inaccurate responses. Information provided from memory may also be inaccurate. The survey includes instructions for phone interviewers to help them clarify any concepts that are challenging and the online version of the survey instrument will include text boxes that include these clarifications. In addition, the more technical survey questions are focused only on the respondents' most recent job to aid in recall.

2(d) Questionnaire Design

Respondents will receive an initial notification letter encouraging them to follow the instructions provided for completing the survey using the online instrument. Those respondents who do not complete the survey online will be contacted by telephone using trained interviewers calling from a survey telephone center. Respondents contacted by telephone will also have the option to begin the survey over the phone and complete it online.

The telephone survey instrument will use a CATI screener questionnaire and detailed interview questionnaire. Respondents will also have the option to complete the survey online. Skip and branching logic will be programmed into the CATI system and the online survey instrument. This allows irrelevant questions to be skipped automatically (e.g., if a respondent reports that she only does exterior painting, she will not be asked about interior painting) and also allows questions asked later in the survey to be based on earlier questions (e.g., if a respondent indicates that 40 percent of his jobs are interior painting and 60 percent are exterior painting, the survey instrument will be programmed so that there is a 40 percent chance that the most recent job he will be asked about is an interior painting job, and a 60 percent chance that he will be

asked about an exterior painting job). While this type of questionnaire design is well suited to a telephone or online survey, it is not feasible for a mail survey.

The survey instrument includes questions that are multiple choice, numeric (generally asking for counts), and text (open-ended). The open-ended question simply provides respondents with the option to provide any additional information to EPA that they think might be useful.

3. PRETESTS AND PILOT TESTS

3(a) Pre-test

The Agency will pre-test each draft questionnaire with 9 or fewer respondents. In both cases, the reviewers will be asked to comment on the ease of answering the questions and will be asked to describe how they interpret the questions. If their interpretations or understanding of the questions are not consistent with the objectives of the instrument, the questions will be revised accordingly. While an attempt will be made to contact a variety of respondents, this is not intended to be a representative sample of contractors, landlords, or managers.

3(b) Pilot Survey

The Agency does not anticipate that a pilot test will be possible given time and budget constraints.

4. COLLECTION METHODS

EPA has chosen to conduct its survey by telephone and online interview for three reasons:

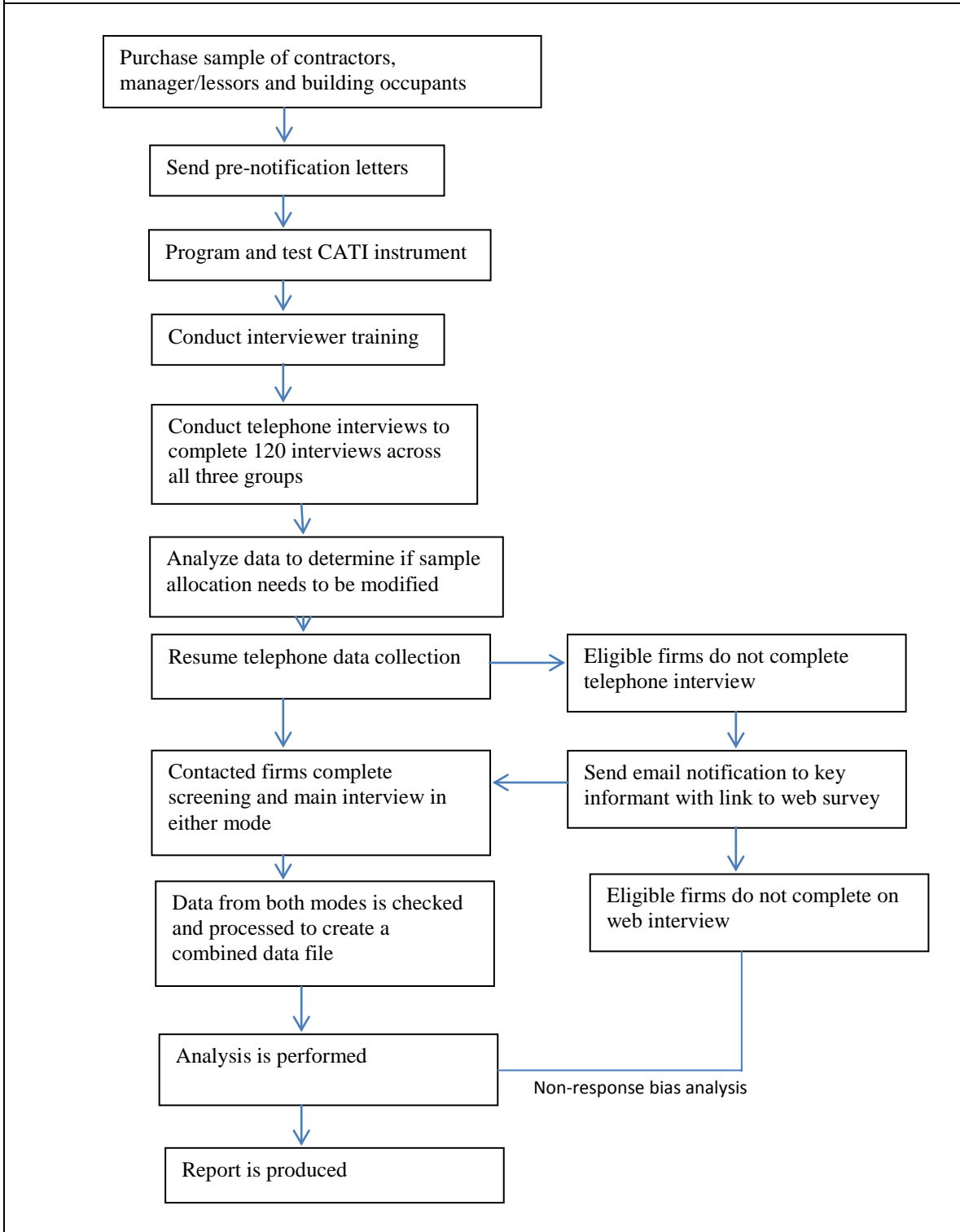
- Skip and branching logic will be programmed into the online instrument and the CATI system. This interactive survey format is not feasible for a mail survey.
- Having both an online and telephone option should maximize cooperation. Some respondents may prefer to respond via an online survey, which will allow them to respond to the survey whenever it is most convenient for them. Also, telephone surveys can maximize cooperation through direct contact with the respondents and provide an opportunity to clarify terms and aid recollection through probes.
- Telephone surveys provide a rapid turnaround time.

For those respondents that decide not to complete the survey online, initial contacts and follow-ups will be made using the CATI system. Interviewers will receive training on the intent of the survey, the range of potential responses, and definitions of key terms used or addressed by the survey.

4(a) Collection Methods

The process to conduct this information collection is illustrated in Exhibit B4.1.

Exhibit B4.1: Survey process flow chart.



EPA will send a pre-notification letter to all sampled addresses to inform them about their selection in the sample. The objective of this letter will be to inform them about the study and invite their participation. A link to the online address where the surveys can be completed will be included with this letter. The online survey will allow respondents to complete the screening as well as the main questionnaire. One week after the mailing of this letter, the first phase of

telephone interviews will begin. Businesses in the sample will be called to screen for eligibility and to identify the key informant. Once contacted, interviewers will attempt to complete the screening as well as the main interview. EPA's contractor will attempt to initially complete 120 interviews across the three study groups and analyze the data collection process to determine if sample allocation needs to be modified for the rest of the study.

Telephone data collection will be conducted by interviewers employed by EPA's contractor who are experienced in conducting large-scale national surveys of business populations. Prior to telephone data collection, interviewers will receive training about the study. The objective of the training will be to cover background information about the study, discuss any special characteristics or interviewing protocols, and thoroughly discuss the instrument. Given this is an establishment survey of firms of varying sizes and structures, EPA's contractor will need to develop special calling protocols to increase cooperation and ensure quality. The need for careful training and monitoring of data collection will also be important due to the sensitive nature of some of the questions about work practices being asked. Telephone calls will be conducted on a schedule designed to facilitate successful contact with targeted businesses, which may require making calls during morning and evening hours when respondents are more likely to be available to participate in a phone interview.

When calling each establishment, the interviewer will use a systematic procedure to determine if the intended business has been reached, whether the business is eligible for the study. The interviewer will also attempt to identify an appropriate key informant for the study and will then ask to speak to that person. If the contact person is not available to talk, the interviewer will probe for an appropriate callback time or set up an appointment to talk. The interviewer will also ask for the email address of the contact person so that they can email them a link to the online version of the survey. When telephone contact is made with voicemail, the interviewer will leave a message encouraging survey participation; providing information that the respondent can use to verify the legitimacy of the survey; and offering a toll-free number that the contact person can use to call the interviewer back. If the contact person still refuses to participate, the interviewer will record that information and the reasons given.

When the contact person agrees to participate, the interviewer will conduct the interview over the phone. If the respondent begins the interview but is unable to complete the full interview over the phone, the interviewer will ask for the respondent's email address. The interviewer will send the respondent an email with a link that can be used to complete the remainder of the survey online.

4(b) Survey Response and Follow-up

Identifying and classifying non-responders

To gain some insight into non-responding sample units, the first step is to screen the sample being fielded. Non-responders will fall into two segments, those that were successfully screened and found eligible but chose either not to participate or for some reason an interview could never be conducted. This group is referred to as *Screened Eligible Non-Responders*. The other category consists of sample units that could not be successfully screened and thus their eligibility status is unknown. These are *Unscreened Unknown Eligibility Non-Responders*.

In the Exhibit B4.2 schematic, the Screened Eligible non-responders are in segment A and the Unscreened Unknown Eligibility non-responders are in segment B, which is likely to be this study's largest segment due primarily to non-cooperation and inability to make contact. Regarding segment B, some frame information on these cases will be known, but because of the

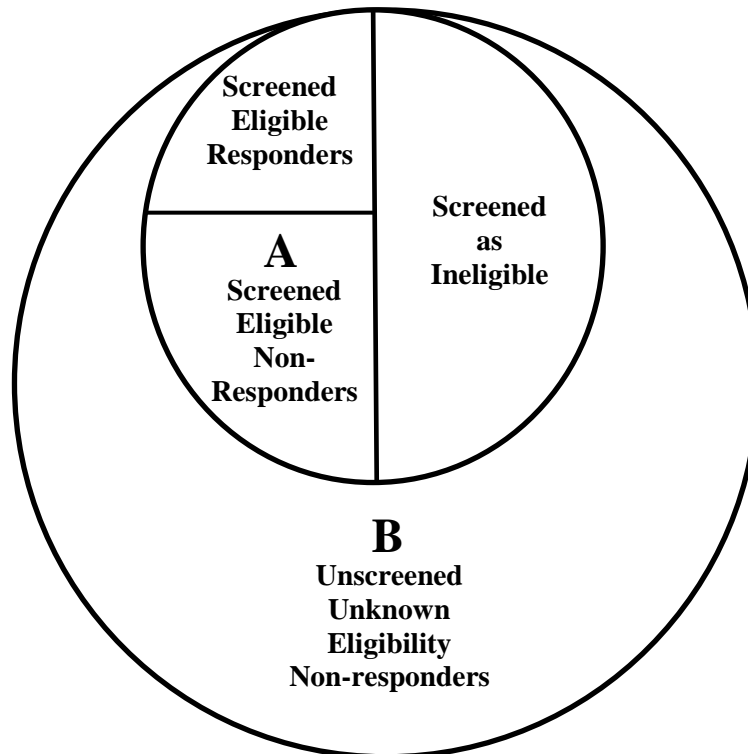
unknown eligibility status, it is impossible to determine which cases may be eligible. Thus, it is not possible to assess if their exclusion contributes to any bias in the study findings. The non-response bias analysis will report, using frame information, any differences that may exist between the screened vs. unscreened entities. However, it would be unknown if any differences are a contributor of bias in the study estimates. Segment A offers some opportunity to examine non-response based entirely on information provided in the frame. If it is assumed that non-participation is uncorrelated with work practices, then the nonresponse analysis could consider whether these non-responders are different from or similar to cooperative responders based exclusively on the frame information.

Response Propensity Models

Analytically, propensity models can be developed to examine whether there are statistical differences between the screened eligible responders and screened eligible non-responders on their likelihood to complete the survey. Likewise, the analysis can examine the propensity to cooperate between all those who were screened (regardless of eligibility status) and those establishments who were not screened. The models would be developed for each of the three study groups for a total of six propensity models.

The Dun and Bradstreet frame offers a few variables that can be used in these analyses. These establishments, within study groups, can be defined by their location (four Census regions), the size based on number of employees (e.g., categorized: 0-4, 5-9, 10-19 100+) and the possibility of NAICS subgroups within study groups, although these NAICS subgroups will have to be evaluated for feasibility and practicality.

Exhibit B4.2. Responder, Non-responder schematic



5. ANALYSIS AND REPORTING QUESTIONNAIRE RESULTS

5(a) Data Preparation

The interview data will be extracted into a database with all identifying respondent information removed.

A weight will be computed for each completed screener and long survey that adjusts for the differential probabilities of selection as well as nonresponse. Specifically, the weight will be computed with the following adjustments:

- a) a base weight reflecting the probability of selection of the establishment;
- b) an adjustment for nonresponse to the screener and extended interview; and
- c) a post-stratification adjustment to Census population controls for the number of establishment in each of the twelve strata defined by size and industry.

The sample design of the employer survey necessitates that appropriate statistical software be used to estimate the precision of the survey estimates. Abt SRBI (the contractor conducting the survey for EPA) shall compute the main weight, as well as the replicate weights for variance estimation that will ensure that the standard errors based on the RRP survey correctly reflect the sample design.

5(b) Analysis

The data will be analyzed using a statistical software package. Data analysis will include both descriptive statistics (e.g., frequencies of survey variables) and relationship analyses (e.g., regression analysis).

5(c) Reporting Results

EPA will use the survey data in preparing exposure and economic analyses. Results of EPA's analyses are usually reported publicly in three ways: (1) within Federal Register notices; (2) within development and supporting documents; and (2) within materials placed in the rulemaking record. All of these classes of documents and non-CBI materials would be made available by EPA on the Internet.

Note that neither EPA nor any other person or entity other than the contractor hired to perform the survey will have access to personal identifiers in the raw survey data. (These personal identifiers include the respondent's name, the respondent's phone number, and the name of the organization the respondent works for.) All personal identifiers will be stripped from the database before it is conveyed to EPA. The original survey database will remain under the control of the contractor hired to perform the survey. This contractor will be required to keep the information confidential.

References

- Groves, R.M. and Heeringa, S.G. (2006). Responsive Design for Household Surveys: Tools for Actively Controlling Survey Errors and Costs, *Journal of the Royal Statistical Society, Series A*, 169, 3, 439-459.