

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 745

[EPA-HQ-OPPT-2005-0049; FRL-8823-5]

RIN 2070-AJ57

Lead; Clearance and Clearance Testing Requirements for the Renovation, Repair, and Painting Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing several revisions to the 2008 Lead Renovation, Repair, and Painting Program (RRP) rule that established accreditation, training, certification, and recordkeeping requirements as well as work practice standards for persons performing renovations for compensation in most pre-1978 housing and child-occupied facilities. EPA is particularly concerned about dust-lead hazards generated by renovations because of the well-documented toxicity of lead, especially to younger children. This proposal includes additional requirements designed to ensure that lead-based paint hazards generated by renovation work are adequately cleaned after renovation work is finished and before the work areas are re-occupied. Specifically, EPA is proposing to require dust wipe testing after many renovations covered by the RRP rule. For a subset of jobs involving demolition or removal of plaster through destructive means or the disturbance of paint using machines designed to remove paint through high-speed operation, such as power sanders or abrasive blasters, this proposal would also require the renovation firm to demonstrate, through dust wipe testing, that dust-lead levels remaining in the work area are below regulatory levels.

DATES: Comments must be received on or before July 6, 2010.

ADDRESSES: Submit your comments, identified by docket identification (ID) number EPA-HQ-OPPT-2005-0049, by one of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the online instructions for submitting comments.
- *Mail:* Document Control Office (7407M), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001.
- *Hand Delivery:* OPPT Document Control Office (DCO), EPA East Bldg., Rm. 6428, 1201 Constitution Ave., NW., Washington, DC. Attention: Docket ID Number EPA-HQ-OPPT-2005-0049.

The DCO is open from 8 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The telephone number for the DCO is (202) 564-8930. Such deliveries are only accepted during the DCO's normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to docket ID number EPA-HQ-OPPT-2005-0049. EPA's policy is that all comments received will be included in the docket without change and may be made available online at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through www.regulations.gov or e-mail. The www.regulations.gov Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the docket index available at <http://www.regulations.gov>. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available electronically at <http://www.regulations.gov>, or, if only available in hard copy, at the OPPT Docket. The OPPT Docket is located in the EPA Docket Center (EPA/DC) at Rm. 3334, EPA West Bldg., 1301 Constitution Ave., NW., Washington, DC. The EPA/DC Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number of the EPA/DC Public Reading Room is

(202) 566-1744, and the telephone number for the OPPT Docket is (202) 566-0280. Docket visitors are required to show photographic identification, pass through a metal detector, and sign the EPA visitor log. All visitor bags are processed through an X-ray machine and subject to search. Visitors will be provided an EPA/DC badge that must be visible at all times in the building and returned upon departure.

FOR FURTHER INFORMATION CONTACT: *For general information contact:* Colby Lintner, Regulatory Coordinator, Environmental Assistance Division (7408M), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001; telephone number: (202) 554-1404; e-mail address: TSCA-Hotline@epa.gov.

For technical information contact: Cindy Wheeler, National Program Chemicals Division, Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001; telephone number: (202) 566-0484; e-mail address: wheeler.cindy@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

You may be potentially affected by this action if you perform renovations of target housing or child-occupied facilities for compensation, dust sampling, or dust testing. You may also be affected by this action if you perform lead-based paint inspections, lead hazard screens, risk assessments or abatements in target housing or child-occupied facilities or if you operate a training program for individuals who perform any of these activities. "Target housing" is defined in section 401 of TSCA as any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless any child under age 6 resides or is expected to reside in such housing) or any 0-bedroom dwelling. Under this rule, a child-occupied facility is a building, or a portion of a building, constructed prior to 1978, visited regularly by the same child, under 6 years of age, on at least 2 different days within any week (Sunday through Saturday period), provided that each day's visit lasts at least 3 hours and the combined weekly visits last at least 6 hours, and the combined annual visits last at least 60 hours. Potentially-affected entities may include, but are not limited to:

- Building construction (NAICS code 236), e.g., single family housing

construction, multi-family housing construction, residential remodelers.

- Specialty trade contractors (NAICS code 238), *e.g.*, plumbing, heating, and air-conditioning contractors, painting and wall covering contractors, electrical contractors, finish carpentry contractors, drywall and insulation contractors, siding contractors, tile and terrazzo contractors, glass and glazing contractors.

- Real estate (NAICS code 531), *e.g.*, lessors of residential buildings and dwellings, residential property managers.

- Child day care services (NAICS code 624410).

- Elementary and secondary schools (NAICS code 611110), *e.g.*, elementary schools with kindergarten classrooms.

- Other technical and trade schools (NAICS code 611519), *e.g.*, training providers.

- Engineering services (NAICS code 541330) and building inspection services (NAICS code 541350), *e.g.*, dust sampling technicians.

- Lead abatement professionals (NAICS code 562910), *e.g.*, firms and supervisors engaged in lead-based paint activities.

This listing is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. Other types of entities not listed in this unit could also be affected. The North American Industrial Classification System (NAICS) codes have been provided to assist you and others in determining whether this action might apply to certain entities. If you have any questions regarding the applicability of this action to a particular entity, consult the technical person listed under **FOR FURTHER INFORMATION CONTACT**.

B. What should I consider as I prepare my comments for EPA?

1. *Submitting CBI.* Do not submit this information to EPA through regulations.gov or e-mail. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD-ROM that you mail to EPA, mark the outside of the disk or CD-ROM that you mail to EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be

disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for preparing your comments.* When submitting comments, remember to:

- Identify the document by docket ID number and other identifying information (subject heading, **Federal Register** date and page number).

- Follow directions. The Agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.

- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.

- Describe any assumptions and provide any technical information and/or data that you used.

- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.

- Provide specific examples to illustrate your concerns and suggest alternatives.

- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.

- Make sure to submit your comments by the comment period deadline identified.

II. Introduction

A. What action is the agency taking?

EPA is proposing several revisions to the 2008 Lead Renovation, Repair, and Painting Program (RRP) rule (Ref. 1) that established accreditation, training, certification, and recordkeeping requirements as well as work practice standards for persons performing renovations for compensation in most pre-1978 housing and child-occupied facilities. EPA is particularly concerned about dust-lead hazards generated by renovations because of the well-documented toxicity of lead, especially to younger children. This proposal includes additional requirements designed to ensure that lead-based paint hazards generated by renovation work are adequately cleaned after renovation work is finished and before the areas are re-occupied. Specifically, EPA is proposing to require dust wipe testing after many renovations covered by the RRP rule. For a subset of jobs involving demolition or removal of plaster through destructive means or the disturbance of paint using machines designed to remove paint through high-speed operation, such as power sanders or abrasive blasters, this proposal would also require the renovation firm to demonstrate, through dust wipe testing, that dust-lead levels remaining in the

work area are below regulatory levels. EPA is not, however, reopening other aspects of the work practices required by the 2008 RRP rule.

EPA is also proposing various minor amendments to the regulations concerning applications for training provider accreditation, amending accreditations, course completion certificates, record keeping, State and Tribal program requirements, and grandfathering (*i.e.*, taking a refresher training in lieu of the initial training). In addition, the proposed amendments intend to clarify that certain requirements apply to the RRP rule as well as the Lead-Based Paint Activities (abatement) regulations, that the prohibitions and restrictions on work practices in the RRP rule apply to the disturbance of any painted surface, that certified renovators need only provide on-the-job training to other renovation workers in the work practices required by the rule, that a certified inspector or risk assessor can act as a dust sampling technician, which hands-on training topics are required for renovator and dust sampling technician courses, and requirements for States and Tribes that apply to become authorized to implement the RRP program. Again, EPA is not reopening for consideration any aspects of the existing regulations, except as provided in today's proposal.

B. What is the agency's authority for taking this action?

These work practice requirements for dust wipe testing and clearance, training, certification and accreditation requirements, and State, Territorial and Tribal authorization provisions are being promulgated under the authority of sections 402(c)(3), 404, and 407 of the Toxic Substances Control Act (TSCA), 15 U.S.C. 2682(c)(3), 2684, and 2687.

C. Background

1. *Health effects of lead exposure.* This Unit describes some of the more significant health effects of lead exposure and the routes of exposure associated with lead in paint. Much more information is available in the preamble to the 2008 Lead Renovation, Repair, and Painting (RRP) Rule (Ref. 1) and the Air Quality Criteria for Lead document (Ref. 2).

Lead has been known throughout the ages for its useful properties, having been commonly used in the production of paint, batteries, pipes, solder, pottery, and gasoline. Lead is also known for its "broad array of deleterious effects on multiple organ systems via widely diverse mechanisms of action." (Ref. 2) This array of health effects includes heme biosynthesis and related

functions; neurological development and function; reproduction and physical development; kidney function; cardiovascular function; and immune function. There is also some evidence of lead carcinogenicity, primarily from animal studies, together with limited human evidence of suggestive associations.

Of particular interest to EPA during the RRP rulemaking was the delineation of lowest observed effect levels for those lead-induced effects that are most clearly associated with blood lead levels of less than 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) in children and adults (Ref. 2, at 8–60). As is evident from the Criteria Document, neurotoxic effects in children and cardiovascular effects in adults are among those best substantiated as occurring at blood-lead concentrations as low as 5 to 10 $\mu\text{g}/\text{dL}$ (or possibly lower), so these categories of effects would result in the greatest public health concern. Other newly demonstrated immune and renal system effects among general population groups are also emerging as low-level lead-exposure effects of potential public health concern (Ref. 2, at 8–60).

Among the wide variety of health endpoints associated with lead exposures, there is general consensus that the developing nervous system in children is among the, if not the, most sensitive. While blood lead levels in U.S. children have decreased notably since the late 1970s, newer studies have investigated and reported associations of effects on the neurodevelopment of children with these more recent blood lead levels (Ref. 2, chapter 6). Functional manifestations of lead neurotoxicity during childhood include sensory, motor, cognitive, and behavioral impacts. Numerous epidemiological studies have reported neurocognitive, neurobehavioral, sensory, and motor function effects in children with blood lead levels below 10 $\mu\text{g}/\text{dL}$ (Ref. 2, sections 6.2 and 8.4. [FN 7. Further, neurological effects in general include behavioral effects, such as delinquent behavior (Ref. 2, sections 6.2.6 and 8.4.2.2), sensory effects, such as those related to hearing and vision (Ref. 2, sections 6.2.7 and 8.4.2.3), and deficits in neuromotor function (Ref. 2, p. 8–36).] As discussed in the Criteria Document, “extensive experimental laboratory animal evidence has been generated that (a) substantiates well the plausibility of the epidemiologic findings observed in human children and adults and (b) expands our understanding of likely mechanisms underlying the neurotoxic effects” (Ref. 2, p. 8–25; section 5.3).

Cognitive effects associated with lead exposures that have been observed in epidemiological studies have included decrements in intelligence test results, such as the widely used IQ score, and in academic achievement as assessed by various standardized tests as well as by class ranking and graduation rates (Ref. 2, section 6.2.16 and pp. 8–29 to 8–30). As noted in the Criteria Document with regard to the latter, “Associations between lead exposure and academic achievement observed in the above-noted studies were significant even after adjusting for IQ, suggesting that lead-sensitive neuropsychological processing and learning factors not reflected by global intelligence indices might contribute to reduced performance on academic tasks” (Ref. 2, pp. 8–29 to 8–30).

With regard to potential implications of lead effects on IQ, the Criteria Document recognizes the “critical” distinction between population and individual risk, identifying issues regarding declines in IQ for an individual and for the population. The Criteria Document further states that a “point estimate indicating a modest mean change on a health index at the individual level can have substantial implications at the population level” (Ref. 2, p. 8–77). [FN 8. As an example, the Criteria Document states, “although an increase of a few mm Hg in blood pressure might not be of concern for an individual’s well-being, the same increase in the population mean might be associated with substantial increases in the percentages of individuals with values that are sufficiently extreme that they exceed the criteria used to diagnose hypertension” (Ref. 2, p. 8–77).] A downward shift in the mean IQ value is associated with both substantial decreases in percentages achieving very high scores and substantial increases in the percentage of individuals achieving very low scores (Ref. 2, p. 8–81). [FN 9. For example, for a population mean IQ of 100 (and standard deviation of 15), 2.3% of the population would score above 130, but a shift of the population to a mean of 95 results in only 0.99% of the population scoring above 130 (Ref. 2, pp. 8–81 to 8–82).] For an individual functioning in the low IQ range due to the influence of developmental risk factors other than lead, a lead-associated IQ decline of several points might be sufficient to drop that individual into the range associated with increased risk of educational, vocational, and social failure (Ref. 2, p. 8–77).

Other cognitive effects observed in studies of children have included effects on attention, executive functions,

language, memory, learning, and visuospatial processing (Ref. 2, sections 5.3.5, 6.2.5, and 8.4.2.1), with attention and executive function effects associated with lead exposures indexed by blood lead levels below 10 $\mu\text{g}/\text{dL}$ (Ref. 2, section 6.2.5 and pp. 8–30 to 8–31). The evidence for the role of lead in this suite of effects includes experimental animal findings (Ref. 2, section 8.4.2.1; p. 8–31), which provide strong biological plausibility of lead effects on learning ability, memory and attention (Ref. 2, section 5.3.5), as well as associated mechanistic findings.

The persistence of such lead-induced effects is described in the proposal and the Criteria Document (e.g., Ref. 2, sections 5.3.5, 6.2.11, and 8.5.2). The persistence or irreversibility of such effects can be the result of damage occurring without adequate repair offsets or of the persistence of lead in the body (Ref. 2, section 8.5.2). It is additionally important to note that there may be long-term consequences of such deficits over a lifetime. Poor academic skills and achievement can have “enduring and important effects on objective parameters of success in real life,” as well as increased risk of antisocial and delinquent behavior (Ref. 2, section 6.2.16).

Multiple epidemiologic studies of lead and child development have demonstrated inverse associations between blood lead concentrations and children’s IQ and other cognitive-related outcomes at successively lower lead exposure levels over the past 30 years (Ref. 2, section 6.2.13). For example, the overall weight of the available evidence, described in the Criteria Document, provides clear substantiation of neurocognitive decrements being associated in children with mean blood lead levels in the range of 5 to 10 $\mu\text{g}/\text{dL}$, and some analyses indicate lead effects on intellectual attainment of children for which population mean blood lead levels in the analysis ranged from 2 to 8 $\mu\text{g}/\text{dL}$ (Ref. 2, sections 6.2, 8.4.2, and 8.4.2.6). Thus, while blood lead levels in U.S. children have decreased notably since the late 1970s, newer studies have investigated and reported associations of effects on the neurodevelopment of children with blood lead levels similar to the more recent, lower blood lead levels (Ref. 2, chapter 6).

Paint that contains lead can pose a health threat through various routes of exposure. House dust is the most common exposure pathway through which children are exposed to lead-based paint hazards. Dust created during normal lead-based paint wear (especially around windows and doors)

can create an invisible film over surfaces in a house. Children, particularly younger children, are at risk for high exposures of lead-based paint dust via hand-to-mouth exposure, and may also ingest lead-based paint chips from flaking paint on walls, windows, and doors. Lead from exterior house paint can flake off or leach into the soil around the outside of a home, contaminating children's play areas. Cleaning and renovation activities may actually increase the threat of lead-based paint exposure by dispersing lead dust particles in the air and over accessible household surfaces. In turn, depending on the levels of lead in the dust, both adults and children can receive hazardous exposures by inhaling the dust or by ingesting lead-based paint dust during hand-to-mouth activities.

EPA's Wisconsin Childhood Blood-Lead Study, described more fully in Unit III.C.1.c. of the preamble to the 2006 Proposal, provides ample evidence of a link between renovation activities and elevated blood lead levels in resident children (Ref. 3). This peer-reviewed study concluded that general residential renovation and remodeling is associated with an increased risk of elevated blood lead levels in children and that specific renovation and remodeling activities are also associated with an increase in the risk of elevated blood lead levels in children. In particular, removing paint (using open flame torches, using heat guns, using chemical paint removers, and wet scraping/sanding) and preparing surfaces by sanding or scraping significantly increased the risk of elevated blood lead levels.

Three studies from New York support the findings of the Wisconsin Childhood Blood-Lead Study. In 1995, the New York State Department of Health assessed lead exposure among children resulting from home renovation and remodeling in 1993–1994. A review of the health department records of children with blood lead levels equal to or greater than 20 µg/dL identified 320, or 6.9%, with elevated blood lead levels that were attributable to renovation and remodeling (Ref. 4). An update to that study with data from environmental investigations conducted during 2006–2007 in New York State (excluding New York City) identified renovation, repair, and painting activities as the probable source of lead exposure in 14% of 972 children with blood lead levels equal to or exceeding 20 µg/dL (Ref. 5). The authors concluded that children living in housing undergoing renovation, repair, and painting that was built before 1978, and particularly before 1950, when concentrations of lead in

paint were higher, are at high risk for elevated blood lead levels. The final study was a case-control study that assessed the association between elevated blood lead levels in children younger than 5 years and renovation or repair activities in homes in New York City (Ref. 6). EPA notes that the authors show that when dust and debris was reported (by respondents via telephone interviews) to be “everywhere” following a renovation, the blood lead levels were significantly higher than children at homes that did not report remodeling work. On the other hand, when the respondent reported either “no visible dust and debris” or that “dust and debris was limited to the work area,” there was no statistically significant effect on blood lead levels relative to homes that did not report remodeling work. Although the study found only a weak and nonsignificant link between a report of any renovation activity and the likelihood that a resident child had an elevated blood-lead level, the link to the likelihood of an elevated blood-lead level was statistically significant for surface preparation by sanding and for renovation work that spreads dust and debris beyond the work area. The researchers noted the consistency of their results with EPA's Wisconsin Childhood Blood-Lead Study (Ref. 6, at 509).

Children in minority populations and children whose families are poor have an increased risk of exposure to harmful lead levels (Ref. 7, at e376). Analysis of the National Health and Nutrition Examination Surveys (NHANES) data from 1988 through 2004 shows that the prevalence of blood lead levels equal to or exceeding 10 µg/dL in children aged 1 to 5 years has decreased from 8.6% in 1988–1991 to 1.4% in 1999–2004, which is an 84% decline (Ref. 7, at e377). However, the NHANES data from 1999–2004 indicates that non-Hispanic black children aged 1 to 5 years had higher percentages of blood lead levels equal to or exceeding 10 µg/dL (3.4%) than white children in the same age group (1.2%) (Ref. 7). In addition, among children aged 1 to 5 years over the same period, the geometric mean blood lead level was significantly higher for non-Hispanic blacks (2.8 µg/dL), compared with Mexican Americans (1.9 µg/dL) and non-Hispanic whites (1.7 µg/dL) (Ref. 7, at e377). For children aged 1 to 5 years from families with low income, the geometric mean blood lead level was 2.4 µg/dL (Ref. 7, at e377). Further, the incidences of blood-lead levels greater than 10 µg/dL and greater than or equal to 5 µg/dL were higher for

non-Hispanic blacks (14% and 3.4% respectively) than for Mexican Americans (4.7% and 1.2%, respectively) and non-Hispanic whites (4.4% and 1.2%, respectively). (Ref. 7, at e377). The analysis “indicates that residence in older housing, poverty, age, and being non-Hispanic black are still major risk factors for higher lead levels” (Ref. 7, at e376).

2. *Prior EPA rulemakings under TSCA Sections 402(a) and 403.* TSCA section 402(a) directs EPA to promulgate regulations covering lead-based paint activities, such as abatement, to ensure persons performing these activities are properly trained, that training programs are accredited, and that contractors performing these activities are certified. These regulations must contain standards for performing lead-based paint activities, taking into account reliability, effectiveness, and safety. On August 29, 1996, EPA promulgated final regulations under TSCA section 402(a) that govern lead-based paint inspections, lead hazard screens, risk assessments, and abatements in target housing and child-occupied facilities (also referred to as the Lead-based Paint Activities Regulations) (Ref. 8). These regulations, codified at 40 CFR part 745, subpart L, contain an accreditation program for training providers and training and certification requirements for lead-based paint inspectors, risk assessors, project designers, abatement supervisors, and abatement workers. Work practice standards for lead-based paint activities are included. Pursuant to TSCA section 404, provision was made for interested States, Territories, and Indian Tribes to apply for and receive authorization to administer their own lead-based paint activities programs. The regulations applicable to State, Territorial, and Tribal programs are codified at 40 CFR part 745, subpart Q.

The work practice standards for abatements in the Lead-based Paint Activities Regulations are essentially performance standards. They give a trained and certified abatement contractor some discretion in determining how best to ensure that an abatement is performed safely, so long as the contractor can demonstrate that the abatement has been properly completed and that no lead-based paint hazards remain. Certain high dust generating practices are prohibited and contractors are required to prepare occupant protection plans specifically describing the procedures to be followed on each job to protect occupants from exposures to lead-based paint hazards. In most cases, residents relocate until the abatement has been

completed. Although these additional procedures are not specified in the regulations, abatement supervisor and worker courses provide comprehensive training in the specialized techniques these individuals can use to contain work areas, remove, enclose, or encapsulate lead-based paint and lead-based paint hazards, and clean up after the job is finished. The regulations are much more detailed in describing the procedures that must be followed to ensure that the abatement has been properly completed and that the work area is ready for re-occupancy. These procedures, typically referred to as "clearance," must be performed by a certified inspector or risk assessor. First, a visual inspection must be performed to determine whether deteriorated painted surfaces or visible amounts of dust, debris, or residue are still present. If so, these conditions must be eliminated before the clearance procedures may continue. An exterior abatement project is considered complete after a successful visual inspection. Following a successful visual inspection after an interior abatement project, the inspector or risk assessor must collect dust wipe samples from floors, windowsills, and window troughs in the work area and have them analyzed by a laboratory accredited under the National Lead Laboratory Accreditation Program (NLLAP) for dust lead analysis. After the sampling results are received, the inspector or risk assessor must compare them with the established clearance standards for lead in dust. If all of the samples are below the clearance standards, the abatement is complete and the area may be re-occupied. If any samples are above the standards, the components represented by those samples must be re-cleaned and the clearance process must be repeated until all samples are below the clearance standards. For example, if any interior window sills fail clearance, all of the unsampled window sills, as well as the failed window sills, must be re-cleaned and retested. If the abatement was conducted in multiple dwelling units, and units were selected for random testing, the window sills in the unsampled units would also have to be re-cleaned and retested.

TSCA section 403 directs EPA to promulgate regulations that identify, for the purposes of Title X and Title IV of TSCA, dangerous levels of lead in paint, dust, and soil. These regulations were promulgated on January 5, 2001 and codified at 40 CFR part 745, subpart D (Ref. 9). These hazard standards define lead-based paint hazards in target housing and child-occupied facilities as

paint-lead, dust-lead, and soil-lead hazards. A paint-lead hazard is defined as any damaged or deteriorated lead-based paint, any chewable lead-based painted surface with evidence of teeth marks, or any lead-based paint on a friction surface if lead dust levels underneath the friction surface exceed the dust-lead hazard standards. A dust-lead hazard is surface dust that contains a mass-per-area concentration of lead equal to or exceeding 40 micrograms per square foot ($\mu\text{g}/\text{ft}^2$) on floors or 250 $\mu\text{g}/\text{ft}^2$ on interior windowsills based on wipe samples. A soil-lead hazard is bare soil that contains total lead equal to or exceeding 400 parts per million (ppm), equivalent to 400 micrograms per gram ($\mu\text{g}/\text{g}$), in a play area or average of 1,200 ppm of bare soil in the rest of the yard based on soil samples.

The TSCA section 403 rulemaking also amended the Lead-based Paint Activities Regulations to incorporate new dust-lead clearance standards for abatements. These standards are 40 $\mu\text{g}/\text{ft}^2$ on floors, 250 $\mu\text{g}/\text{ft}^2$ on interior windowsills, and 400 $\mu\text{g}/\text{ft}^2$ on window troughs, based on wipe samples.

On August 10, 2009, EPA received a petition requesting that EPA lower the regulatory dust-lead hazard standard and modify the regulatory definition of lead-based paint. After careful consideration, EPA decided to grant the request and accordingly intends to begin the appropriate proceedings. Although EPA granted the request, the Agency did not commit to either a specific rulemaking outcome or a certain date for promulgation of a final rule. EPA's primary reason for granting the request was based on recent epidemiological studies that indicate the current hazard standards are insufficiently protective. The request was granted under section 553(e) of the Administrative Procedures Act (APA). Additionally, because the Secretary of the Department of Housing and Urban Development (HUD) was given the statutory authority to establish a lower level of lead in paint for purposes of the definition of lead-based paint in target housing, EPA plans to work with HUD on this aspect of the request.

3. *The 2008 Renovation, Repair, and Painting Rule.* TSCA section 402(c) addresses renovation and remodeling. Specifically, TSCA section 402(c)(2) directs EPA to study the extent to which persons engaged in various types of renovation and remodeling activities are exposed to lead during such activities or create a lead-based paint hazard regularly or occasionally. EPA conducted this study in four phases. Phase I, the Environmental Field Sampling Study (EFSS) (Ref. 10),

evaluated the amount of leaded dust released by the following activities:

- Paint removal by abrasive sanding.
- Removal of large structures, including demolition of interior plaster walls.
- Window replacement.
- Carpet removal.
- HVAC repair or replacement, including duct work.
- Repairs resulting in isolated small surface disruptions, including drilling and sawing into wood and plaster.

Phase II, the Worker Characterization and Blood Lead Study (Ref. 11), involved collecting data on blood lead and renovation and remodeling activities from workers. Phase III, the Wisconsin Childhood Blood Lead Study (Ref. 3), was a retrospective study focused on assessing the relationship between renovation and remodeling activities and children's blood-lead levels. Phase IV, the Worker Characterization and Blood-Lead Study of R&R Workers Who Specialize in Renovations of Old or Historic Homes (Ref. 12), was similar to Phase II, but focused on individuals who worked primarily in old historic buildings. More information on the results of these peer-reviewed studies can be found in Unit III.C.1. of the preamble to the 2006 Lead; Renovation, Repair, and Painting Program Proposed Rule ("2006 Proposal") (Ref. 13).

TSCA section 402(c)(3) further directs EPA to revise the Lead-based Paint Activities Regulations to apply to renovation or remodeling activities that create lead-based paint hazards. Accordingly, EPA issued the 2006 Proposal, proposing to conclude that any renovation activity that disturbs lead-based paint can create significant amounts of leaded dust, that most activities created lead-based paint hazards, and that some activities can be reasonably anticipated to create lead-based paint hazards (Ref. 13). This proposed finding was largely based on the results of the studies conducted under TSCA section 402(c)(2).

After the 2006 Proposal was issued, EPA conducted a field study (Characterization of Dust Lead Levels after Renovation, Repair, and Painting Activities) (the "Dust Study") to better characterize dust lead levels resulting from various renovation, repair, and painting activities (Ref. 14). This study, completed in January, 2007, was designed to compare environmental lead levels at appropriate stages after various types of renovation, repair, and painting preparation activities were performed on the interiors and exteriors of target housing units and child-

occupied facilities. The renovation activities were conducted by local professional renovation firms, using personnel who received lead safe work practices training. The activities conducted represented a range of activities that would have been permitted under the 2006 Proposal, including work practices that are restricted or prohibited under the final RRP rule. Of particular interest was the impact of using specific work practices that renovation firms would be required to use under the proposed rule, such as the use of plastic to contain the work area and a multi-step cleaning protocol, as opposed to more typical work practices.

The final RRP rule was published in the **Federal Register** issue of April 22, 2008 (Ref. 1). The final RRP rule, codified in 40 CFR part 745, subparts E, L, and Q, addresses lead-based paint hazards created by renovation, repair, and painting activities that disturb painted surfaces in target housing and child-occupied facilities. "Target housing" is defined in TSCA section 401 as any housing constructed before 1978, except housing for the elderly or persons with disabilities (unless any child under age 6 resides or is expected to reside in such housing) or any 0-bedroom dwelling. Under the final RRP rule, a child-occupied facility is a building, or a portion of a building, constructed prior to 1978, visited regularly by the same child, under 6 years of age, on at least two different days within any week (Sunday through Saturday period), provided that each day's visit lasts at least 3 hours and the combined weekly visits last at least 6 hours, and the combined annual visits last at least 60 hours. Child-occupied facilities may be located in public or commercial buildings or in target housing.

In the final RRP rule, EPA issued its determination that renovation, repair, and painting activities that disturb lead-based paint create lead-based paint hazards. This finding was based on evidence from the TSCA section 402(c)(2) study and the Dust Study that all such activities in the presence of lead-based paint create lead-based paint hazards. Having made this finding, TSCA section 402(c)(3) then directs EPA to revise the Lead-based Paint Activities regulations to apply to such renovations. In the final RRP rule, EPA did not interpret its statutory mandate to require application of the existing TSCA section 402(a) regulations to renovations without change. EPA stated its belief that Congress, by using the word "revise," and creating a separate subsection of the statute for renovation,

intended that EPA make revisions to those existing regulations to adapt them to a different set of actions and a very different regulated community. As discussed in the preamble to the final RRP rule, there are significant differences between renovations and abatements (Ref. 1). For example, performing abatement is a highly specialized skill that workers and supervisors must learn in accredited training courses. However, painters, plumbers and carpenters already know how to perform renovation work, so accredited renovator training courses are designed to teach renovators how to incorporate principles of lead safety into their typical work. Accordingly, the rule did not merely expand the scope of the current abatement requirements to cover renovation and remodeling activities. Instead, EPA considered the elements of the existing abatement regulations and revised them as necessary to craft a rule that is practical for renovation, remodeling and painting businesses and their customers, taking into account reliability, effectiveness, and safety as directed by TSCA section 402(a).

The final RRP rule establishes requirements for training renovators, other renovation workers, and dust sampling technicians; for certifying renovators, dust sampling technicians, and renovation firms; for accrediting providers of renovation and dust sampling technician training; for renovation work practices; and for recordkeeping. Interested States, Territories, and Indian Tribes may apply for and receive authorization to administer and enforce all of the elements of these new renovation requirements.

The final RRP rule created two new training disciplines in the field of lead-based paint: renovator and dust sampling technician. Persons who successfully complete renovator training from an accredited renovation training provider are certified renovators. Certified renovators are responsible for ensuring that renovations to which they are assigned are performed in compliance with the work practice requirements set out in 40 CFR 745.85. Persons who successfully complete dust sampling technician training from an accredited training provider are certified dust sampling technicians. Certified dust sampling technicians may be called upon to collect dust wipe samples after renovation activities have been completed. While the training disciplines, the work practice standards, and the recordkeeping requirements of the final RRP rule differ from those established in the lead-based paint activities regulations, EPA determined

that the accreditation requirements imposed on persons providing lead-based paint activities training would also be effective for persons providing renovation training. Therefore, the final RRP rule amended 40 CFR 745.225 to cover persons who provide or wish to provide renovation training for the purposes of the final RRP rule.

As amended, 40 CFR 745.225 requires training providers who wish to provide lead-based paint activities or renovation training for the purposes of the EPA's lead-based paint programs to be accredited by EPA. The requirements for each course of study are described in detail at 40 CFR 745.225 as are the operational requirements for training programs and the process for obtaining accreditation.

Under the final RRP rule, covered renovations in target housing and child-occupied facilities must be performed by certified renovation firms. A certified firm must ensure that persons who perform renovations on behalf of the firm are properly trained and that the work practice requirements are followed. Renovations must be performed or directed by certified renovators, who are also responsible for compliance with the RRP rule's requirements. The final RRP rule contains a number of work practice requirements that must be followed for every covered renovation. These requirements pertain to warning signs and work area containment, the restriction or prohibition of certain practices (e.g., high heat gun, torch, power sanding, power planing), waste handling, cleaning, and post-renovation cleaning verification. In contrast, the RRP rule did not apply the same performance standard of an abatement-style clearance requirement to demonstrate that lead-based paint hazards created by the renovation have been eliminated. Instead, the RRP rule sets forth the steps that must be taken to isolate and contain the work area before work begins and the cleaning protocol that must be followed after the renovation has been completed.

A final step in the process for interior renovations is cleaning verification. After the RRP rule's specific cleaning protocol has been followed, a visual inspection for visible dust and debris is performed. If no dust or debris is found, a certified renovator must wipe the interior windowsills and uncarpeted floors with wet disposable cleaning cloths and compare each to a cleaning verification card developed and distributed by EPA. If the cloth matches or is lighter than the image on the card, the surface represented by the cloth has passed the post-renovation cleaning

verification. If the cloth is darker than the image on the card, the surface represented by the cloth must be re-cleaned and then wiped with a new wet cloth, which is then compared to the cleaning verification card. If the cloth is still darker than the image on the card, the surface must be allowed to dry for at least an hour. At that time, the surface is wiped with a dry electrostatic cleaning cloth, which completes the cleaning verification process for that surface. When all surfaces in the work area have completed cleaning verification, the renovation has been completed and the work area may be re-occupied.

Shortly after the final RRP rule was promulgated, several petitions were filed challenging the rule. These petitions were consolidated in the Circuit Court of Appeals for the District of Columbia Circuit. On August 26, 2009, EPA signed an agreement with the environmental and children's health advocacy groups in settlement of their petitions. In this agreement EPA committed to propose several changes to the RRP rule, including the changes discussed in this notice.

Throughout this notice, EPA will use several different terms to describe the proposed requirements. EPA will use the term "dust wipe testing" to mean collecting wipe samples of dust on floors and windowsills and in window troughs, analyzing the samples for lead content, and reporting the results of the analysis to the owners and occupants of the building being renovated. Although the term "dust wipe sampling" was used in the settlement agreement to describe these activities, EPA is using "dust wipe testing" in this notice to signal that sample analysis may be performed off-site in a traditional laboratory setting or on-site by a portable laboratory, so long as the entity performing the analysis is accredited or recognized by the National Lead Laboratory Accreditation Program (NLLAP). In this notice, EPA will use the term "dust wipe sampling" to refer to the specific activity of collecting the wipe samples, not to the analysis or reporting of results. EPA will use the term "clearance" to mean demonstrating, through dust wipe testing, that the floors, windowsills, and window troughs in the renovation work area are below the regulatory clearance standards that have been established for the abatement program and codified at 40 CFR 745.227(e)(8). This includes re-cleaning where necessary to achieve the clearance standards.

III. Provisions of This Proposal

A. Dust Wipe Testing and Clearance

1. *Background.* One of the most significant issues arising out of the RRP rulemaking was the issue of how to determine whether a renovation had been properly completed. The Lead-based Paint Activities Rule requires clearance to be achieved in an abatement work area before the abatement is considered complete. As previously discussed, the abatement clearance process involves a visual inspection, dust wipe sampling of floors, windowsills, and window troughs in the work area, analysis by an NLLAP-accredited laboratory, and comparison of the results to the clearance standards. If the sample results are below the clearance standards, clearance has been achieved and the work area may be re-occupied. If the sample results are at or above the standards, the work area must be re-cleaned and the clearance process must begin again. For this reason, abatement projects often include coating floors with a sealant. According to the U.S. Department of Housing and Urban Development's "Guidelines For the Evaluation and Control of Lead-Based Paint Hazards in Housing" (HUD Guidelines), the purpose of sealing floors is not to trap leaded dust underneath the sealant, but to provide a surface that can be cleaned effectively by the resident (Ref. 15). Although achieving clearance is not the main reason for sealing floors, the process typically results in a surface than can achieve clearance and be kept clean by the resident. This is a sensible approach for abatements, because the goal of abatement is to permanently eliminate lead-based paint and lead-based paint hazards. The clearance process ensures that no lead-based paint or lead-based paint hazards remain in the work area.

However, EPA recognized that there are many differences between renovations and abatements. As discussed in the preamble to the final RRP rule, renovations are different from abatements in intent, implementation, type of workforce, funding, and goal (Ref. 1). One of the biggest challenges that faced EPA in revising the TSCA section 402(a) Lead-based Paint Activities Regulations was how to effectively bridge the differences between abatement and renovation and remodeling while acknowledging that many of the activities employed in both (e.g., window replacement) are the same and generate the same amount of dust. Abatements are generally performed in three circumstances. First, abatements may be performed in the residences of

children who have been found to have elevated blood lead levels. Second, abatements are performed in certain housing receiving financial assistance from HUD when required by HUD's Lead-Safe Housing Rule, codified at 24 CFR part 35 (see §§ 35.630 and 35.930(d)). Third, state and local laws and regulations may require abatements in certain situations associated with rental housing, or when abatement orders have been issued when resident young children, typically under age 6, have blood lead levels at or above specified values. Typically, when an abatement is performed, the housing is either unoccupied or the occupants are temporarily relocated to lead-safe housing until the abatement has been demonstrated to have been properly completed through dust clearance testing. Carpet in the housing is usually removed as part of the abatement because it is harder to clean. Uncarpeted floors that have not been replaced during the abatement may need to be refinished or sealed in order to achieve clearance. Abatements have only one purpose—to permanently eliminate lead-based paint or lead-based paint hazards.

On the other hand, renovations are performed for myriad reasons that may have nothing to do with lead-based paint. Renovations involve activities designed to update, maintain, or modify all or part of a building. Renovations may be performed while the property is occupied or unoccupied. If the renovation is performed while the property is occupied, the occupants do not typically relocate pending the completion of the project.

EPA also recognized that dust wipe testing and clearance as required after abatements can be expensive. The costs can be attributed to two major factors: the cost of trained personnel to collect the samples and the cost of the laboratory analysis. EPA preliminarily estimated the cost of three dust wipe samples to be \$160 to collect and analyze (Ref. 13). If EPA had required dust wipe testing and clearance after every renovation project, it would have made up a significant portion of the cost of smaller projects. In addition, laboratory results may not be available for several days. If EPA had required traditional abatement-style clearance after renovations, the work area would not be able to be re-occupied while waiting for the laboratory results.

In addition, EPA was also concerned that requiring clearance after every renovation job could, in some instances, result in the renovation firm being held responsible for abating all dust-lead hazards, including such hazards that

may have existed in the area before the renovation commenced. During the stakeholder input opportunities provided by EPA before issuing the 2006 Proposal, contractors suggested that, if post-renovation dust wipe testing were required, the contractors would have to protect themselves by collecting pre-renovation dust wipe samples, to ensure that they would not be held liable for pre-existing hazards.

To address these various concerns, EPA began looking for an alternative to dust wipe testing and clearance that would be quick, inexpensive, reliable, and easy to perform. EPA conducted a series of studies using commercially available disposable cleaning cloths to determine whether variations of a "white glove" test could serve as an effective alternative to clearance. Based on the favorable final report of these studies, entitled "Electrostatic Cloth and Wet Cloth Field Study in Residential Housing" (Disposable Cleaning Cloth Study) (Ref. 16), EPA's 2006 Proposal included a cleaning verification protocol using wet and dry disposable cleaning cloths.

Unlike the earlier Disposable Cleaning Cloth Study, the Dust Study was not designed specifically to evaluate the cleaning verification in isolation from the rest of the work practices. However, the Dust Study did serve as a valuable field test of the cleaning verification protocol. The Dust Study involved actual renovations performed by local renovation contractors who received instruction in how to perform cleaning verification using wet and dry disposable cleaning cloths and then were left alone to determine whether the cleaning cloths matched or were lighter than the cleaning verification card developed by the EPA. In order to maximize the information collected about cleaning verification in the Dust Study, cleaning verification was conducted after each experiment, not just those experiments that were being conducted in accordance with the proposed rule requirements for containment and cleaning.

EPA received numerous comments on this aspect of the RRP rulemaking. While some commenters supported the proposed work practices, including cleaning verification, many others thought that renovation work areas ought to be tested and cleared for re-occupancy in the same way that abatement work areas are cleared through the clearance process, including dust wipe testing. Many commenters believed that renovation firms should be required to demonstrate that no dust-lead hazards had been left behind in the work area. These commenters

contended that the only reliable, safe, and effective way to do this was through dust wipe testing and clearance.

These commenters contended that the unreliability of cleaning verification made it an unsuitable substitute for dust wipe testing and clearance. They pointed to the sentence in the conclusion section of EPA's Dust Study that states that the cleaning verification protocol was not always accurate in identifying the presence of levels above EPA standards for floors and sills. Some commenters also noted the Dust Study report's discussion of factors that affected the effectiveness of cleaning verification, such as floor condition, contractor performance, job type, and dust particle characteristics. One commenter observed that while all interior experiments resulted in final passed cleaning cloths for all floor zones and for all windowsills, nearly half of the experiments in the study ended with average work room floor lead levels above EPA's dust-lead hazard standard for floors of 40 $\mu\text{g}/\text{ft}^2$. The Clean Air Scientific Advisory Committee, who was asked to review the underlying analysis for the estimation of the effect of the RRP rule on children's blood lead levels, stated that in the Dust Study cleaning verification did not provide sufficiently reliable results, leading to an inaccurate assessment of cleaning efficiency.

EPA agreed with the commenters who argued that cleaning verification was not a suitable substitute for dust wipe testing and clearance. EPA noted in the preamble to the final RRP rule that even though the Disposable Cleaning Cloth Study showed that the cleaning verification cloths that reached "white glove" were approximately 91% to 97% likely to be below the regulatory hazard standard, EPA believes the greater variability seen in the Dust Study, particularly in the experiments where the complete suite of proposed work practices were not used, does not support the characterization of cleaning verification as a direct substitute for clearance testing. Cleaning verification, in itself, is not a substitute for quantitative dust wipe testing. However, EPA continues to believe that the Dust Study supports the validity of cleaning verification as an effective component of the RRP rule's work practices. The cleaning and feedback aspects of cleaning verification are important to its contribution to the effectiveness of the work practices (Ref. 1).

In the Dust Study, for renovations not involving practices restricted or prohibited by the final RRP rule, cleaning verification in combination with the other required work practices

were effective at reducing dust lead levels on surfaces to or below the dust-lead hazard standards, regardless of the condition of the floor. Of the 10 experiments performed in compliance with the RRP rule's work practices, final average lead-based paint dust levels were at or below the regulatory hazard standard (taking into account the accepted level of uncertainty, i.e., within plus or minus 20%, which is the performance criteria for the National Lead Laboratory Accreditation Program). For the experiments not performed according to the RRP rule's work practices, the use of cleaning verification after cleaning reduced, often significantly, the amount of lead dust remaining. EPA determined that there is sufficient consistency in the Dust Study data to support the use of cleaning verification as an effective component of the RRP rule's work practices.

Commenters also expressed concern about the subjectivity of the cleaning verification process. They noted that the effectiveness of cleaning verification relies upon the certified renovator's understanding and application of the protocol, ability to define the floor sampling area or areas, and use of the cleaning verification card to determine whether a surface has been adequately cleaned. Some commenters speculated that the certified renovator's accuracy in comparing the cleaning cloth to the verification card could depend on factors such as his or her visual acuity, the lighting in the room, or simply differences in judgment among certified renovators. The issue of a person (*i.e.*, the certified renovator on the project) verifying cleaning of a project that he or she has worked on also raised concerns about actual or potential conflict of interest, which might, even unconsciously, affect the person's judgment. One thought that the lack of corrections for surface conditions, the experience of the person conducting the visual assessment, or pre-existing conditions might bias the results of testing.

EPA agreed that the visual comparison of a cleaning cloth to a cleaning verification card has an element of subjectivity because the visual comparison of cloth to card requires some exercise of judgment on the part of the person doing the comparing. However, EPA did not agree that this necessarily makes the comparison suspect. The Dust Study represented a real-world test of the ability of renovators to learn how to do cleaning verification and to apply it in the field. Although one Dust Study participant expressed concern about subjectivity, cleaning verification was

successfully performed by the renovation contractors in all of the experiments performed in compliance with the work practices in the final RRP rule. In addition, cleaning verification was predictive of whether renovators had cleaned-up the lead-based paint hazards created during the renovation activity to the dust-lead standard, particularly when the proposed work practices were used. The cleaning verifications performed during the Dust Study were conducted by various persons in various lighting conditions and on various surface conditions.

Other commenters did not support dust wipe testing and clearance. One reason cited by these commenters was the cost of dust wipe testing, especially if required to be performed by independent certified inspectors or risk assessors. Some also contended that dust clearance testing is time consuming and an obstacle to completing the renovation job. One commenter noted that a major component of the cost of performing clearance is due to the fact that the portion of the premises affected by the renovation would have to remain unoccupied. Another commenter noted that it is not uncommon for the abatement clearance process to be conducted up to three times on a home to make sure that lead levels are sufficiently low. Again, commenters expressed the concern that a requirement for dust wipe testing and clearance would have the effect of holding renovation firms responsible for pre-existing dust-lead hazards.

Based on the weight of the evidence in the rulemaking record, primarily from the Disposable Cleaning Cloth Study and the Dust Study, EPA determined that, once certain high dust generating practices were prohibited or restricted, the full suite of work practice requirements, including containment, cleaning, and cleaning verification, was effective at minimizing exposure to lead-based paint hazards created by renovation, repair, and painting activities. At the same time, EPA recognizes that cleaning verification is an imperfect check on whether the dust-lead hazard standard has been achieved. Among other things, as commenters pointed out, there is an element of subjectivity to cleaning verification, which is not present in dust wipe testing.

In the final RRP rule, EPA gave significant weight to the cost, timing, and liability concerns expressed by commenters. In balancing the various considerations, EPA concluded that cleaning verification, as part of the full suite of work practices, was an appropriate check on the effectiveness

of the work practices. EPA has continued to balance these considerations in today's proposal, but has preliminarily concluded that, for certain jobs, the additional benefits of dust wipe testing, and in some cases clearance, warrant imposing these additional requirements.

2. *Proposed requirements for dust wipe testing after certain renovations.* This proposal contains dust wipe testing requirements for many renovations. In most of these situations, the renovation firm will only be required to provide the dust wipe testing results to the building owners and occupants. However, as discussed more fully in Unit III.A.3. of this preamble below, after two types of renovations, this proposal would also require renovation firms to achieve clearance.

EPA has evaluated the value of the information that would be available to renovation firms and building owners and occupants through such testing. EPA expects two kinds of benefits to flow from proposed dust wipe testing requirements. The first are the direct benefits of the information to the owners and occupants, the pure value of the information on dust lead levels remaining in the renovation work area, including leaded dust that may have been generated during the renovation activity. For building owners and occupants, this information is likely to improve their understanding and awareness of dust-lead hazards. It will also greatly improve their ability to make further risk management decisions. This information is particularly critical where dust lead levels approach or exceed the regulatory hazard standards. One commenter on the 2008 RRP rule described the value of dust wipe testing results in this way: "Because the white glove test does not provide a numeric result, a family is given limited information from which to make informed decisions and worse yet, may be given a false sense of security." (Ref. 17) The commenter then argued that, "although the federal floor dust standard is set at 40 µg/ft², there is sufficient evidence to suggest that floors well below this standard may endanger children. Property owners and residents should be provided quantitative information so they can choose what actions to take based on those levels." The commenter believed that in instances where floor dust wipe test results are just below the EPA regulatory standard, the owners or occupants may want to undertake additional cleaning. The value of this information has new significance in light of recent epidemiological studies that indicate

the current lead-based hazard standards are insufficiently protective.

In addition, in enacting the Residential Lead-based Paint Hazard Reduction Act of 1992, Congress recognized that there is a value in providing information to property owners and occupants. Section 1018 of the Act requires the disclosure of information on lead-based paint and lead-based paint hazards to purchasers and tenants of target housing. Even if no specific information on the housing to be sold or rented is available, the seller or landlord must provide a lead hazard information pamphlet to the purchaser or tenant. Similarly, TSCA section 406(b) requires renovators or their firms to provide a lead hazard information pamphlet to the owners and occupants of target housing before beginning a renovation in the housing. The information provided by dust wipe testing after renovations is a different and more targeted benefit, i.e., a more accurate check on whether the hazard standard has been met at completion of the job, but it is in line with the broader statutory emphasis on disclosure of information related to possible lead-based paint hazards. This information is beneficial in the same way that disclosure of known lead-based paint and lead-based paint hazards is beneficial to purchasers and tenants under Section 1018.

The other benefits that EPA expects to flow from a dust wipe testing requirement are the benefits that may result from changed behavior on the part of renovation firms. EPA believes that dust wipe testing results will also provide valuable feedback to renovation firms on how well they are cleaning up after renovations. In its Evaluation of the HUD Lead-Based Paint Hazard Control Grant Program (Ref. 18), HUD noted that the rate of passing initial clearance was associated with repetition of lead hazard control activities. As renovation firms become more familiar with the performance requirements for cleaning on projects covered by the RRP rule, their projects are more likely to require fewer cleaning cycles.

It is also likely that having to provide to owners and occupants the specific dust lead levels contained in dust wipe testing results will increase renovation firm cleaning efficiency. Renovation firms will be incentivized to lower the dust lead levels remaining after renovation jobs, even if the levels are at or near the regulatory standards. In particular, firms that might otherwise be inclined to be less than thorough in the use of the disposable cleaning cloths in order to avoid darkening the cloths will be incentivized to perform cleaning

verification thoroughly. Because proper cleanup plays such a vital role in the minimization of dust-lead hazards created by renovations, providing information on dust lead levels remaining after renovations to building owners and occupants will serve as an incentive for firms to perform post-renovation cleaning efficiently, thoroughly, and correctly so that the benefits of the RRP rule may be fully realized.

EPA is therefore proposing to require that dust wipe testing be performed after many renovation jobs. EPA has determined that dust wipe testing results will provide a valuable check on the performance of cleaning verification and the other work practices for most of the paint-disturbing renovations covered by the Dust Study (Ref. 14). In reviewing the data from the Dust Study, EPA believes that, of the jobs performed in the Dust Study, the additional safeguard of dust wipe testing is warranted where the floor dust-lead levels changed markedly from pre-work to post-cleaning to post-cleaning verifications. The only jobs where this did not occur were the renovations involving cut-outs, which also created significantly less dust than most other renovations.

Accordingly, today's proposal would require dust wipe testing on uncarpeted floors, windowsills, and window troughs in the work area after the following types of interior renovations:

- Use of a heat gun at temperatures below 1100 degrees Fahrenheit.
- Removal or replacement of window or door frames.
- Scraping 60 ft² or more of painted surfaces.
- Removing more than 40 ft² of trim, molding, cabinets, or other fixtures.

These jobs represent all of the experiments conducted in the Dust Study other than those involving cut-outs or practices prohibited or restricted by the final RRP rule. The experiments labeled "kitchen gut" in the Dust Study mostly involved the removal of kitchen cabinets and kitchen fixtures. The scraping experiments involved the scraping of approximately 60 ft² or more of lead-based paint, so EPA is proposing to limit the dust wipe testing requirement to renovations during which at least that much painted surface is scraped. EPA requests comment, information, or data on whether the threshold for dust wipe testing after renovations involving scraping should be lowered to 6 ft², which is the minor maintenance threshold, or to some other number. Likewise, the trim and molding removal experiments all involved the removal of more than 40 ft² of trim or

molding, so EPA is proposing to limit the dust wipe testing requirement to renovations during which at least that much trim or molding is removed. EPA also requests comment, information, or data on whether the threshold for dust wipe testing after trim, molding, cabinet, or fixture removal should be lowered. EPA acknowledges that the benefits identified above of dust wipe testing would apply for these smaller jobs, as well as the larger jobs covered by today's proposal. At the same time, in order to ensure a program that is practical for renovation activities, EPA has tried in this proposal to maintain some proportionality between the complexity and cost of the proposed requirements on one hand, and the size and cost of the renovation job on the other.

EPA wishes to clarify that the size thresholds for scraping painted surfaces and removing trim, molding, cabinets, or other fixtures would be calculated on a per-job basis. This is in contrast to the minor repair and maintenance exception, which is calculated on a per-room basis for interior projects.

EPA is also requesting comment on whether dust wipe testing should be required in situations where a surface fails the cleaning verification process twice, *i.e.*, when the second wet disposable cleaning cloth is darker than the cleaning verification card. In that case, the surface must be allowed to dry for at least an hour, after which the certified renovator must wipe the surface with a dry electrostatic cleaning cloth. In the Dust Study, only four surfaces failed cleaning verification twice, representing two of the sixty experiments. In one experiment involving cut-outs, a vinyl floor in poor condition failed cleaning verification twice. The average dust-lead level on the floor after the second wet disposable cleaning cloth was 61.5 µg/ft², and after the dry electrostatic cleaning cloth, the level was 57.2 µg/ft². However, this floor was in such poor condition that after two pre-cleanings, the cleanings done before any experiments were conducted, the floor dust lead levels were still 95 µg/ft². Thus, the floor was cleaner than when it started, even though it failed cleaning verification twice. In the other experiment, a kitchen gut performed on a tile floor in fair condition, three floor sections failed the second cleaning verification. After the second wet disposable cleaning cloth, the average dust lead levels on two of the three failed sections were less than 10 µg/ft², while the other was significantly higher at 150 µg/ft². Nevertheless, after the dry electrostatic cleaning cloth wipe, the dust lead levels

for all floor sections averaged 41.4 µg/ft², which is within the accepted level of uncertainty, *i.e.*, within plus or minus 20%, for the National Lead Laboratory Accreditation Program (NLLAP).

The dust wipe testing would have to be performed in a manner similar to the abatement clearance sampling requirements at 40 CFR 745.227(e)(8). After the cleaning required by 40 CFR 745.85(a)(5) has been performed, a certified inspector, certified risk assessor, or certified dust sampling technician would be required to perform a visual inspection to ensure that the work area is free of visible dust, debris or residue. EPA is proposing to require this second visual inspection, in addition to the one performed by the certified renovator before cleaning verification, because, in many cases, the person performing the dust wipe testing will not be the same person who performed the cleaning verification. In addition, there may be a delay between the completion of cleaning verification and the beginning of dust wipe testing. EPA believes that the requirement for a visual inspection immediately prior to dust wipe testing will give the certified inspector, risk assessor, or dust sampling technician a means to address any concerns they may have as to the cleanliness of the work area. The locations for dust wipe samples would be dependent on the number of rooms, hallways, or stairwells within the work area. If there is more than 1 room, hallway, or stairwell within the work area, the following samples would have to be collected:

- 1 windowsill sample, 1 window trough sample, and 1 floor sample within each room, hallway, or stairwell (no more than 4 rooms, hallways, or stairwells need be sampled).
- 1 floor sample adjacent to the work area, but not in an area that has been cleaned.

If the work area is a single room, hallway, or stairwell, or a smaller area, the following samples would have to be collected:

- 1 windowsill sample, 1 window trough sample, and 1 floor sample.
- 1 floor sample adjacent to the work area, but not in an area that has been cleaned.

If there are no uncarpeted floors in the work area, then no floor samples would need to be collected. The same would be true for windows and windowsill or trough samples. Dust wipe samples would be collected in accordance with the protocol in "Residential Sampling for Lead: Protocols for Dust and Soil Sampling" (Ref. 19).

HUD's Lead Safe Housing Rule, at 24 CFR 35.1340(g), requires the sample

adjacent to the work area to be collected within 5 feet of the work area in an area that is connected to the work area. This specifically precludes samples from being collected from rooms separated from the work area by a solid wall. EPA requests comment on whether these provisions should be incorporated into this rulemaking.

EPA also requests comment on whether this protocol is sufficient to determine dust lead levels remaining on floors, windowsills, and window troughs. This protocol has been used for more than a decade in clearance examinations after lead abatements and HUD interim lead hazard control work. However, one test per surface may not always be enough to accurately characterize the dust lead levels over the entire surface. While the physical variability of dust loadings and lead concentrations across a room has not been thoroughly investigated, several studies including EPA's EFSS have found high variability in side-by-side samples collected before and after various activities (Ref. 10). EPA requests comment on whether more tests should be required, and, if so, what protocol should be followed in determining the number and location of additional tests. For example, one option would be to follow the ASTM International "Standard Practice for Clearance Examinations Following Lead Hazard Reduction Activities in Dwellings, and Other Child-Occupied Facilities." This document says that for rooms that exceed 500 ft², the floor should be divided into two or more equal parts of 500 ft² or less and a sample collected in each part (Ref. 20).

EPA requests comment on whether the provision for random clearance sampling in multi-unit buildings in the Lead-based Paint Activities regulations at 40 CFR 745.227(e)(9) should be incorporated into this regulation. This would permit random testing of individual housing units after renovations affecting multiple individual housing units in a multi-family dwelling with similarly constructed and maintained residences. Consistent with 40 CFR 745.227(e)(9), to take advantage of this provision, the certified renovators and other trained persons who renovate or clean the individual housing units would not know in advance which units would be selected for random testing. In addition, the dust wipe testing would have to be performed by a certified inspector or certified risk assessor and the number of residential units selected for dust wipe testing would have to be sufficient to provide a 95 percent level of confidence such that, if clearance were required, no

more than 5 percent or 50 of the residential units (whichever is smaller) in the randomly-sampled population would exceed the applicable clearance levels. This is the standard for random clearance sampling after abatement projects and this particular requirement would be designed to allow certified inspectors and certified risk assessors to use the training they have already received on random clearance sampling after abatement projects to decide which units to test after a renovation in a multi-family dwelling.

Although random dust wipe testing has the potential to reduce costs for a large multi-unit renovation project, it may not be appropriate for this rule, given that an important purpose for the proposed dust wipe testing requirements is the provision of information to building owners and occupants. However, random sampling is already accepted by EPA and HUD for disclosure of information on lead-based paint inspections, risk assessments and abatement clearances under the Disclosure Rule (Ref. 21), and for notification after activities other than abatement under HUD's Lead Safe Housing Rule at 24 CFR 35.125(b) and 35.1340(b)(2)(i). EPA also requests comment on whether a random sampling provision should be incorporated, but limited to situations where the HUD rule applies or to situations where the housing is completely vacant, e.g., an entire apartment building is vacant and being renovated.

In addition, the current requirements for dust sampling technician courses do not include random sampling, so dust sampling technicians would not be able to select the units and locations for random dust wipe testing. Dust sampling technicians could perform the actual sampling or testing, so long as the locations for testing were selected by a certified inspector or risk assessor. EPA requests comment on whether EPA should modify the dust sampling technician course requirements to include random testing in multi-family buildings so that dust sampling technicians would be able to select units randomly as do certified inspectors and certified risk assessors. EPA also requests comment on whether this could be done and still allow the course to be taught within a single 8-hour day.

Dust wipe testing results would have to be provided by an entity accredited or recognized under the NLLAP. EPA established the NLLAP in accordance with TSCA section 405(b) to assure the public that analytical laboratories recognized by the EPA have demonstrated that they are capable of

accurately analyzing for lead in paint chip, dust, and soil samples. In January 2008, the Agency announced in the **Federal Register** changes to NLLAP that expand the opportunity to participate in the NLLAP to all lead testing service providers (Ref. 22). These providers include:

- Fixed-site operations that perform analytical lead testing at a permanent location under controlled environmental conditions;
- Mobile facilities, or transportable, self-contained operations that can perform analytical lead testing under controlled environmental conditions; and
- Field sampling and measurement organizations (FSMOs), or operations that perform on-site sampling and lead testing using portable testing technologies.

Portable testing technologies that might be employed by FSMOs, once accredited or recognized, include devices such as an x-ray fluorescence (XRF) analyzer, an anodic stripping voltammetry (ASV) analyzer, or any other portable technology that has been shown to accurately and verifiably measure lead content in dust, paint chip, or soil. EPA believes these NLLAP changes remove barriers and provide a process so that all types of lead testing service providers may participate in the NLLAP. This can make the NLLAP more efficient and cost-effective while maintaining the high standard of quality, science and technology for those who purchase analytical services related to lead hazard identification and control. The ability for portable dust testing technologies to become accredited under NLLAP is particularly relevant to this rulemaking, because EPA believes that this will make dust wipe testing less expensive and time-consuming.

EPA requests comment on additional technologies that may be available for sampling or testing for lead in dust. EPA is seeking information on what technologies are available, along with information on the research or evaluations that may have been conducted on these technologies. EPA is also interested in research or other information on technologies that show promise for commercial development.

Persons performing visual inspections, collecting dust wipe samples, or analyzing dust wipe samples would not be required to be third parties independent of the firm performing the renovation. This is consistent with the final RRP rule and EPA's abatement regulations. EPA has historically not required independent

third parties to perform testing for two reasons. The first is the cost savings and convenience of being able to hire just one firm to perform all necessary lead-based paint activities. The second is the potential regional scarcity of firms to perform the work. As discussed in the preamble to the final RRP rule, these considerations are also likely to be applicable to the renovation sector (Ref. 1, at 21711). EPA does recommend, however, that the renovation firm comply with the HUD's prohibition against the same person performing both the renovation activity and the clearance process. (See 24 CFR 35.1340(f)). EPA requests comment on whether EPA should impose the same prohibition or a similar prohibition with perhaps an exception for single person firms.

Under this proposal, dust wipe testing would be performed after cleaning verification, not instead of it. Cleaning verification is useful because it combines fine cleaning properties with feedback to the certified renovator on the effectiveness of the post-renovation cleaning process. As discussed in the preamble to the final RRP rule, the Dust Study demonstrated that cleaning verification is quite often needed to minimize exposure to dust-lead hazards created during renovations (Ref. 1, at 21744). In 4 of the 10 experiments performed in accordance with the final RRP rule requirements for containment, cleaning, and cleaning verification, the average post-cleaning floor dust lead levels were above the clearance standards. In those experiments, cleaning verification was needed to reduce average dust lead levels below the standards. In addition, dust wipe testing only tests part of the surface, and, as discussed above, leaded dust may not be distributed uniformly over the entire surface. In contrast, cleaning verification provides feedback on cleaning effectiveness over the entire surface so variability in distribution presents fewer challenges. EPA remains concerned that if dust wipe testing were allowed instead of cleaning verification, without an accompanying requirement that the renovation firm re-clean until clearance is achieved, the RRP rule would actually be less protective because the surfaces in the work area could be left less clean than if cleaning verification were performed. Accordingly, dust wipe testing would be performed after cleaning verification has been performed in accordance with the existing protocol. After the dust wipe samples have been collected, the renovation would be considered complete, the warning signs could be

removed, and the work area could be re-occupied. Re-occupancy would not have to wait until the results of the testing were available.

However, because re-occupancy can occur immediately after the dust wipe samples are collected, it is important to ensure that the results of the dust wipe testing be communicated to owners and occupants as soon as practicable. Accordingly, this proposal requires the certified inspector, certified risk assessor, or certified dust sampling technician to prepare a dust wipe testing report and provide it to the renovation firm within 3 days of the date that the results are obtained. If the dust wipe testing results are to be determined by a fixed-site laboratory, the samples would have to be sent to the laboratory within 1 business day of the date that they are collected. The dust wipe testing report would include the name and signature of each certified person collecting the samples or performing the testing, the name and address of each certified firm employing the person(s) conducting the sampling or testing, the start and completion dates of the renovation, a brief written description of the renovation, the results of the visual inspection, a detailed written description of the specific sampling or testing locations or a detailed drawing that clearly identifies the location of each sample or test, the name of the NLLAP-recognized entity analyzing the results, the results of each sample or test, and the clearance standard that is applicable to each sample or test. EPA does not expect long, involved narrative descriptions in these reports. The results of the visual inspection could be as simple as "no dust, debris, or residue was visible in the work area," while the brief written description of the renovation could be as simple as "replaced all of the windows in the upstairs bedrooms." The report should be organized and presented in such a way that the recipients of the report will be able to easily understand the information presented. The report must be a single document, with clearly-identifiable attachments, such as analytical reports from NLLAP laboratories, where appropriate. If a significant number of tests are involved, the certified individual preparing the report should incorporate an executive summary presenting the overall results, with particular attention given to those results that exceeded the applicable clearance standards.

The renovation firm would be required to provide this report to the owner of renovated target housing or child-occupied facilities within 3 days

of the date that the renovation firm receives the report. The renovation firm would also have to provide the report within 3 days of receipt to the occupants of individual housing units that have been renovated, if the housing units are not owner-occupied. Similarly, the report would have to be provided within 3 days to the proprietor of renovated child-occupied facilities if they are not operated by the building owner. If the renovation firm has chosen to notify each individual housing unit affected by a renovation in a common area of target housing, or each parent or guardian of a child under age 6 using a renovated child-occupied facility, the renovation firm would also have to provide these persons with the dust wipe testing report within 3 days of the date that the renovation firm receives the report. In cases where the renovation firm has chosen to post signs to notify tenants affected by common area renovations, or parents and guardians of children under age 6 using a child-occupied facility, the renovation firm would have to provide the dust wipe testing report upon request. EPA requests comment on whether the renovation firm should be required to provide the dust wipe testing report to the building owner and occupants with the final invoice or within 3 days of the date that the report is received, whichever is earlier.

3. *Clearance.* For two types of renovations that can create large amounts of difficult-to-clean dust, EPA remains concerned about the possibility that dust lead levels remaining, even after cleaning verification, may substantially exceed the clearance standards. These are renovations that disturb paint using machines designed to remove paint through high speed operation, such as power sanders or abrasive blasting, when equipped with high-efficiency particulate air (HEPA) exhaust controls and the demolition, or removal, through destructive means, of plaster and lath walls, ceilings or other building components. If renovation firms choose to utilize these methods, EPA is also proposing to require that renovation firms demonstrate, through dust wipe testing, that they have met the clearance standards before the renovation will be considered completed.

EPA's Dust Study demonstrated that machines that remove paint through high-speed operation, in the absence of HEPA exhaust control, create enormous amounts of leaded dust that is particularly difficult to clean up. In the Dust Study, the geometric mean post-work floor dust lead levels after experiments involving power planing

were 201,902 $\mu\text{g}/\text{ft}^2$. That was the only type of power tool experiment done indoors during the Dust Study. However, two additional high speed tool experiments were done on exteriors, power sanding and needle gun. In these cases, using the Dust Study results from the surface of the plastic containment required by the rule, the geometric mean post-work floor dust lead levels that could be expected from work done using these types of tools without HEPA exhaust control are 591,491 $\mu\text{g}/\text{ft}^2$ for power sanding, and 195,372 $\mu\text{g}/\text{ft}^2$ for the needle gun.

In the Dust Study, the work practices required by the final RRP rule, containment, specialized cleaning, and cleaning verification, were, in most cases, unable to reduce the dust lead levels remaining on the work area floors after power planing to anything close to the clearance standard of 40 $\mu\text{g}/\text{ft}^2$. Accordingly, EPA banned the use of machines that remove lead-based paint through high speed operation without HEPA exhaust control.

EPA did not perform any experiments in the Dust Study with power tools equipped with HEPA exhaust control. However, EPA has subsequently reviewed 14 published studies that examined the effectiveness of HEPA exhaust control on power tools (Ref. 23). These 14 studies reported reductions in airborne dust levels ranging from 70 to 99 percent. However, most studies (9) reported reductions in airborne dust levels between 90 and 95 percent. Applying a 90 to 95 percent reduction to the post-work dust lead levels generated by the power tools in the Dust Study results in dust-lead levels of 20,190 $\mu\text{g}/\text{ft}^2$ to 10,095 $\mu\text{g}/\text{ft}^2$ for door planing, 59,149 $\mu\text{g}/\text{ft}^2$ to 29,575 $\mu\text{g}/\text{ft}^2$ for power sanding, and 19,537 $\mu\text{g}/\text{ft}^2$ to 9,769 $\mu\text{g}/\text{ft}^2$ for needle gun use. It is likely that the work practices required by the final RRP rule will be unable to reduce these levels to anything approximating the clearance level of 40 $\mu\text{g}/\text{ft}^2$ at the end of the job because of the quantity of the dust generated and the particular characteristics of this dust that make it hard to clean up.

In addition, in order to achieve 90 to 95 percent effectiveness, the HEPA exhaust control must be maintained properly and used correctly. Any lapse in either maintenance or use could result in much higher dust lead levels remaining after a renovation. For example, when sanding a mantle, if the sander worker moves half of the sander off the edge of the mantle, the HEPA exhaust control will not be operating at maximum collection efficiency. The same problem would

occur any time that the entire sander is not in contact with the surface, such as when sanding a curved surface.

With respect to the demolition of plaster, EPA did not perform any experiments involving that kind of renovation activity in the Dust Study. However, demolition of several different plaster walls was studied in the EFSS. The EFSS measured worker exposures by personal air monitoring, and estimated occupant exposures by dust wipe sampling. Dust wipe sampling in the EFSS was done from stainless steel dustfall collectors placed at various locations adjacent to and at varying distances from the activity. The estimated lead loading over a 6 ft^2 area resulting from the demolition of a plaster wall was 19,500 μg , the highest loading for any of the typical activities studied. However, according to the EFSS, no collectors were placed adjacent to demolition activities "due to the large amount of debris." (Ref. 10, at 9–10) EPA was able to determine the functional relationship between settled dust and distance for the demolition activity, but the relationship "does not take into account the amount of lead that settles at a location directly adjacent to the activity. Since the settled dust samples associated with the demolition were all located at a distance from the activity space, the estimated 6-foot by 1-foot gradient lead loading in the demolition activity is interpreted as being the amount of lead found in the 6-foot by 1-foot region that was airborne in dust and smaller particles, rather than the total amount of lead disturbed." (Ref. 10, at 9–10)

In the EFSS, EPA also reviewed data on plaster wall demolition available from OSHA (Ref. 10). The study monitored the demolition of interior plaster walls and ceilings in a home using hammers and claw-bars. This study involved only personal air monitoring, not settled dust sampling. The geometric mean worker exposure for the demolition activities studied by the EFSS was 107 $\mu\text{g}/\text{m}^3$, while the geometric mean worker exposure for the OSHA study was 166 $\mu\text{g}/\text{m}^3$. Because of the length of time involved in demolishing a plaster wall, both of these activities are likely to substantially exceed the OSHA permissible exposure limit of 50 $\mu\text{g}/\text{m}^3$ as an 8-hour time-weighted average.

These studies demonstrate that plaster wall demolition creates large amounts of lead-contaminated dust. EPA also believes that this dust is particularly difficult to clean up, because of the qualities of plaster and the way in which such demolition is typically done through destructive means such as

sledgehammers. The dust created by this activity is likely to consist of very fine particles. EPA is concerned that, like the dust produced by machines that remove paint through high speed operation, the large quantities of dust created by plaster wall demolition will overwhelm the containment, specialized cleaning, and cleaning verification processes and result in renovation work areas being re-occupied with lead-based paint hazards created by the renovation still in place.

Given these concerns, EPA is proposing to require renovation firms to follow a clearance process similar to that performed after abatement projects after renovations involving the disturbance of paint using machines designed to remove paint through high speed operation or the demolition, or removal, through destructive means, of more than 6 ft^2 of plaster and lath building component. After the cleaning required by 40 CFR 745.85(a)(5) and the cleaning verification required by 40 CFR 745.85(b)(1), dust wipe testing would have to be performed in exactly the same way that it would be required after the renovations discussed in Unit III.A.2. of this preamble. If any of the test results equal or exceed the regulatory clearance standards in 40 CFR 745.85(b)(4), the renovation firm would be required to re-clean the surfaces represented by those tests in accordance with 40 CFR 745.85(a)(5)(ii). Those surfaces would have to be re-tested, and the results compared to the clearance standards.

With respect to plaster removal, the clearance requirement would apply only to walls, ceilings constructed of plaster and lath, not gypsum drywall finished with plaster. The experiments performed and reviewed in the EFSS involved plaster and lath walls, not drywall. In this country, interior walls were commonly constructed of plaster and lath until the 1950's, when drywall began to replace the lath and plaster construction method. Again, this clearance requirement would only apply to plaster removal done through destructive means, such as sledgehammers.

This proposal would not allow renovation firms to skip the cleaning verification step when they are required to perform clearance. The Dust Study demonstrates that cleaning verification is an important part of the cleaning process. Of the 10 experiments completed in the Dust Study in accordance with the final RRP rule requirements, 4 required the additional cleaning provided by cleaning verification to reach an average floor dust lead level below 40 $\mu\text{g}/\text{ft}^2$ (Ref. 14).

The additional cleaning resulting from cleaning verification was particularly dramatic in the window replacement experiments, where the dust lead levels on the floor were cut nearly in half by cleaning verification. EPA is specifically requesting comment on cleaning verification requirements for surfaces that fail clearance due to high dust wipe test results. While the Dust Study shows that cleaning verification is a very effective cleaning method, EPA recognizes that there is a cost associated with multiple cleaning verification passes over a surface, particularly if the surface fails the wet disposable cleaning cloth phase and must be allowed to dry for an hour before using a dry electrostatic disposable cleaning cloth. Although not specifically studied, the Dust Study suggests that it would be unlikely for a surface that had been cleaned and had gone through the cleaning verification process to fail another round of cleaning verification. Sixty interior experiments were performed in the Dust Study; only 3 work room floors failed all rounds of cleaning verification. Two of those were performed using only baseline work practices, no containment or specialized cleaning, on a vinyl floor in poor condition that EPA's contractor had difficulty pre-cleaning to below 40 µg/ft² before beginning the study. The third was on a tile floor in fair condition, with plastic containment but no specialized cleaning. In addition, of the 4 experiments in the Dust Study performed in accordance with the final RRP rule that needed cleaning verification to reduce average floor dust lead levels below 40 µg/ft², failed cleaning verification cloths were only seen in 1. The reductions in dust lead levels seen in the window replacement experiments occurred after only 1 pass with a wet disposable cleaning cloth. In light of these results, this proposal would require surfaces failing clearance due to high dust wipe test results to be re-cleaned in accordance with the RRP rule, HEPA vacuuming followed by wet wiping or mopping, followed by one round of cleaning verification using a wet disposable cleaning cloth. This cloth would not have to be compared to the cleaning verification card, the renovation firm could conduct additional dust wipe testing for clearance purposes on the surface as soon as it has dried.

EPA is also proposing to eliminate the existing provision that allows renovation firms to perform clearance in lieu of cleaning verification when another Federal, State, or local law or regulation, or the contract between the

renovation firm and the property owner, requires the renovation firm to use qualified entities to perform dust wipe testing and requires the renovation firm to achieve clearance. Because cleaning verification has been shown to be such an important part of the post-renovation cleaning process, and because that provision would be inconsistent with this proposal, EPA believes that it should be eliminated. Rather, this proposal would require cleaning verification to be performed in the same way it would have to be performed after jobs involving demolition or removal of plaster through destructive means or the disturbance of paint using machines designed to remove paint through high-speed operation.

The renovation would not be considered complete, and the warning signs would have to remain in place, until the renovation firm can demonstrate through a dust wipe testing report that it has met the clearance standards. The certified inspector, certified risk assessor, or certified dust sampling technician performing the sampling or testing would be required to prepare a clearance report. The clearance report would include the start and completion dates of the renovation; a brief written description of the renovation; the name and address of each certified firm employing each certified inspector, certified risk assessor, or certified dust sampling technician performing the clearance procedures; the name and signature of each certified inspector, certified risk assessor, or certified dust sampling technician performing the clearance procedures and the dates that the clearance procedures were performed; the results of the visual inspection; a detailed written description of the specific sampling or testing locations or a detailed drawing that clearly identifies the location of each sample or test; the results for each dust wipe sample or test; whether or not clearance was achieved; and the name of each recognized entity that conducted the analyses. As with the dust testing report, EPA does not expect long, involved narrative descriptions in these reports. The results of the visual inspection could be as simple as "no dust, debris, or residue was visible in the work area," while the brief written description of the renovation could be as simple as "replaced all of the windows in the upstairs bedrooms." However, the report should be organized and presented in such a way that the recipients of the report will be able to easily understand the information presented. The report must

be a single document, with clearly-identifiable attachments, such as analytical reports from NLLAP laboratories, where appropriate. If a significant number of tests are involved, the certified individual preparing the report should incorporate an executive summary presenting the overall results, with particular attention to those results that exceeded the applicable clearance standards.

The certified inspector, certified risk assessor, or certified dust sampling technician would be required to provide a copy of this report to the renovation firm within 3 days of the date that the dust wipe testing results are obtained. If the dust wipe testing results are to be determined by a fixed-site laboratory, the samples would have to be sent to the laboratory within 1 business day of the date that they are collected. The renovation firm would be required to provide this report to the owner of renovated target housing or child-occupied facilities within 3 days of the date that the renovation firm receives the report. The renovation firm would also have to provide the report within 3 days of receipt to the occupants of individual housing units that have been renovated, if the housing units are not owner-occupied. Similarly, the report would have to be provided within 3 days to the proprietor of renovated child-occupied facilities if they are not operated by the building owner. If the renovation firm has chosen to notify each individual housing unit affected by a renovation in a common area of target housing, or each parent or guardian of a child under age 6 using a renovated child-occupied facility, the renovation firm would also have to provide these persons with the dust wipe testing report within 3 days of the date that the renovation firm receives the results. In cases where the renovation firm has chosen to post signs to notify tenants affected by common area renovations, or parents and guardians of children under age 6 using a child-occupied facility, the renovation firm would have to provide the dust wipe testing report when requested.

In most cases, renovation firms will be able to avoid using the work practices that would require clearance afterwards. Sanding or scraping could be done by hand instead of by power tool. Many plaster removal jobs can be performed by using non-destructive means such as saws and pry-bars to remove sections of plaster and lath wall. At the same time, EPA also understands that renovation firms may encounter floors, windowsills, and window troughs that are in such poor condition that clearance may not be possible. As

discussed previously, the HUD Guidelines recommend using a sealant on floors if necessary to achieve clearance (Ref. 15). The Guidelines suggest that, if any surface fails two clearance tests, the "property owner should consider additional hazard control measures and/or further sealing of the surface" (Ref. 15, at 15–10). EPA's own experience with the Dust Study confirms that surface condition may be a problem, at least in some instances. After several encounters with work room floors that could not be cleaned to the clearance standards in preparation for a new experiment, the Dust Study contractors began using a sealant before testing floors in preparation for beginning work (Ref. 24). When this occurred with windowsills, the contractors used dust collection trays instead of the sill surface for sampling.

Various studies have shown that dust lead levels on surfaces are directly correlated with the condition of the surface. That is, a surface, such as a floor, in poor condition tends to have higher dust lead levels than a floor in fair to good condition. An evaluation of the HUD Lead-Based Paint Hazard Control Grant Program found that the "effect of the condition of the wiped surface at clearance was significant in all analyses. The surfaces in better condition at clearance had lower clearance dust lead loadings and lower failure rates" (Ref. 18, at 7–20). EPA's Dust Study also found that floors in poor condition had higher dust lead levels across the post-work, post-cleaning, and post-cleaning verification sampling stages than floors in better condition, although this could have been due to higher-intensity work (Ref. 14, at 6–14). EPA requests comment on whether this correlation should affect clearance or dust wipe testing requirements, and if, so, in what way. EPA is interested in suggestions on how to address the fact that some floors will be more difficult to clean than others.

In particular, EPA has wrestled with the issue of how to reconcile a clearance requirement when floors are in such poor condition that achieving clearance would require the renovation firm to expand the scope of the original job to include additional remedial action such as refinishing the floor. In part, this situation raises the concern that renovation firms might be required to remediate lead hazards that existed prior to the renovation. To address the situation where achieving lead levels below the lead hazard standards would require expanding the scope of the renovation job, EPA is proposing an exception to the requirement to achieve clearance. Specifically, EPA proposes to

allow renovation firms to stop after the second failed clearance test, regardless of the result, if the renovation firm did not agree to refinish the surface that is failing clearance as part of the renovation contract. For example, if a renovation firm is hired to remove plaster and lath wall sections that partially separate a living and dining room, and repaint the walls (including the windows) in both rooms, then the renovation firm would be required to ensure that the windowsills in the work area achieve clearance, no matter how many times the sills must be re-cleaned and re-tested. However, if the renovation firm was not hired to refinish the floor, the renovation firm would only have to re-clean and re-test the floor once if it failed clearance the first time, no matter what the second dust wipe testing result is. EPA believes that such a provision is necessary, given that renovation firms may encounter floors, windowsills, and window troughs that are in such poor condition that clearance may not be possible.

EPA is also requesting comment on whether renovation firms ought to be allowed to perform pre-renovation dust wipe testing on surfaces in the work area that are in poor condition to help demonstrate that they are not leaving behind dust-lead hazards that they created. In this option, the renovation firm would only have to demonstrate that, for surfaces in poor condition in the work area, the dust-lead levels on these surfaces (which could be windowsills and/or floors) after the renovation are no higher than 150 $\mu\text{g}/\text{ft}^2$. This would ensure that renovation firms are not unduly held accountable for pre-existing lead-based paint hazards. EPA believes that 150 $\mu\text{g}/\text{ft}^2$ is an appropriate upper limit, given that EPA's contractor was able to clean all of the floors encountered in the buildings used for the Dust Study to this level or below (Ref. 14). EPA requests comment on whether there is an appropriate alternate upper limit that should be considered and the available data to support this alternate limit. Any pre-renovation testing option would also include a requirement to provide both the pre-renovation dust wipe testing report as well as the post-renovation report to the building owners and occupants. As part of its consideration, EPA requests comment on how "poor condition" should be defined for this approach.

EPA believes that window troughs are particularly likely to harbor pre-existing dust lead levels at or above the clearance standards. They are also particularly likely to be difficult to clean. Therefore, EPA is requesting

comment on whether EPA should allow renovation firms to close windows in the work area that are not being worked on and cover them with taped-down plastic or other impermeable material to avoid the requirement to ensure that the window troughs achieve clearance standards. EPA would still require renovation firms to test both the sills and troughs of closed and covered windows, and report the results to the building owners and occupants, but firms would only need to ensure that the sills achieve the clearance standards.

EPA is also requesting comment on whether clearance should be required in other situations. In particular, EPA is interested in comment on whether clearance should be required after any of the activities for which EPA is proposing a dust wipe testing requirement. EPA is also interested in comment on whether clearance should be required in rental properties after renovations for which EPA is proposing a dust wipe testing requirement, especially if the renovation firm has been informed that the renovation is being performed to remedy a violation of federal, state, or local laws or regulations or to comply with a federal, state, or local government order, such as an order to correct building code violations, or an abatement order in response to an elevated blood lead level. In this case, EPA is also interested in comment on whether EPA should require renovation firms to affirmatively ask whether the work is being performed to remedy a violation or comply with an order, and whether renovation firms should provide this information to owners and occupants after the renovation. Finally, EPA requests comment on whether dust wipe testing or clearance should be required in any other situations not discussed specifically in this proposal, including situations where a surface has failed cleaning verification twice.

4. Additional requests for comment on dust wipe testing or clearance.

EPA is seeking comment on whether there are other regulatory options for dust wipe testing or clearance that maximize the potential benefits by targeting those activities that are most likely to exceed the clearance standards. For example, should different size thresholds be used for some or all of the renovations affected by this proposal? As discussed, the proposed thresholds for dust wipe testing are taken from the Dust Study. Does the data from the Dust Study, or data from another source, support larger thresholds for some or all of these jobs? Although EPA is concerned about potential confusion

with the definition of minor maintenance and repair, does the data from the Dust Study support applying these proposed thresholds on a per-room basis?

Another potential option would be to apply dust wipe testing or clearance requirements only in homes where pregnant women or children under age 6 reside or in any building that meets the definition of child-occupied facility. EPA requests comment on this option, which does target particularly vulnerable populations but provides no protections for older children, adults and family pets.

EPA also requests comment on whether dust wipe testing should only be required when a surface fails the first round of cleaning verification, and, if dust wipe testing is done, whether the second round of cleaning verification should then be performed. In the Dust Study, if a surface failed the first round of cleaning verification, no dust wipe samples were collected before the surface was cleaned and cleaning verification performed again (Ref. 14). This occurred in 17 of the 60 interior experiments performed. Three of those surfaces also failed the second round of cleaning verification. In each of those 3 cases, at least one surface was also demonstrated to be above the regulatory clearance standards by dust wipe testing. Since no dust wipe samples were collected after the first round of cleaning verification, it is not possible to determine, for certain, what additional reductions in dust lead levels were attributable to the second round of cleaning verification. However, some insight is provided by the reductions in dust lead levels made by the first round of cleaning verification. In many of the experiments that passed the first round of cleaning verification, the cleaning verification step resulted in significant dust lead reductions between the samples taken post-cleaning and the samples taken post-cleaning verification. Thus, the Dust Study demonstrates that the cleaning verification protocol in the 2008 RRP rule is an integral part of the cleaning regimen. Because the second round of cleaning verification likely contributes significantly to the total reduction in dust lead levels attributable to cleaning verification, EPA continues to believe that the second round of cleaning verification is a necessary step in the process, regardless of whether dust wipe samples are collected or not.

Another possible regulatory option would be to require clearance for renovations involving the demolition of plaster or the use of high-speed machines designed to remove paint, or

a larger set of renovation types, or smaller renovation size thresholds, and not require dust wipe testing in the absence of a clearance requirement. EPA requests comment on these options and suggestions for other regulatory options that may be less burdensome but still justifiable based on the available data.

B. Test Kits for Lead in Paint

EPA has worked with test kit vendors to develop kits that can more accurately identify the presence of regulated lead-based paint. Through its Environmental Technology Verification (ETV) program, EPA is currently reviewing five test kits that have been submitted by vendors. More information on this process can be found at <http://www.epa.gov/lead/pubs/testkit.htm#recognize>.

EPA is also proposing to give certified renovators another option for determining whether lead-based paint is present on components to be affected by a renovation. This proposal would permit certified renovators to collect paint chip samples from components to be affected by a renovation instead of using test kits to test the paint on the components. When utilizing this option, the certified renovator would be required to send the samples to a recognized NLLAP laboratory. Because renovator training courses are already required to include training in how and where to use test kits, EPA believes that it would take very little additional time to also provide renovators with training in how to collect a chip sample such that all paint layers are present with a minimal amount of substrate included in the sample, and how to submit these samples to an NLLAP laboratory for analysis. Such an option would not make a certified renovator the equivalent of a certified lead-based paint inspector. Certified renovators would still have to test each affected component, they would not be permitted to exclude components based on similar painting histories or perform random paint sampling in multi-unit buildings. EPA is proposing to allow certified renovators to collect paint chip samples instead of using test kits in order to provide maximum flexibility for certified renovators and renovation firms.

C. Training Provider Accreditation

Training providers who wish to provide renovator, dust sampling technician, or lead-based paint activities training for Federal certification purposes must apply for and receive accreditation from EPA. To become accredited, a provider must employ a training program manager as well as principal instructor(s) who meet certain

education, training and work experience requirements. The training provider must indicate on its application for accreditation that the training program manager and principal instructor(s) meet these requirements; however, currently, no documentation (*e.g.*, resumes) regarding the qualifications of these individuals must be submitted to EPA. The Agency believes it is important to review this information when determining whether to approve a training provider application. When EPA reviews applications for accreditation, it is common for the Agency to request this documentation from training providers in order to verify that the training program manager and principal instructor(s) have the proper qualifications. Requesting this information takes time and can delay the review of an application. Therefore, the Agency is proposing to require that training providers submit documentation regarding the qualifications of the education, training and work experience of training managers and principal instructors with their applications for accreditation.

EPA is also proposing to clarify the role of principal instructors in teaching courses. The current regulation, at 40 CFR 745.227(c)(3), states that principal instructors are responsible for the organization of their courses and oversight of the teaching of all course material. The regulations also define "principal instructor" as "the individual who has the primary responsibility for organizing and teaching a particular course." Nonetheless, the rule also allows training program managers to designate experts in a particular field (*e.g.*, doctors or lawyers) as guest instructors, on an as needed basis, to teach discrete portions of the course. EPA interprets these provisions to require a principal instructor to be present and primarily responsible for teaching the course, although guest instructors may be used to teach some portion(s) of the course. Principal instructors are also responsible for the quality of the instruction delivered by the guest instructors. To ensure that the regulation is clear on this point, EPA is proposing to amend 40 CFR 745.227(c)(3) to state that principal instructor(s) are primarily responsible for teaching the course materials and must be present to provide instruction (or oversight of portions of the course taught by guest instructors) for the course for which he has been designated the principal instructor.

The final RRP rule included requirements for amending the certification of a renovation firm. Firms must submit an amendment within 90

days of the date that a change occurs to information in its most recent application for certification or re-certification. Examples of amendments include a change in the firm's name without transfer of ownership, or a change of address or other contact information. To amend its certification, a firm must submit an application, noting on the form that it was submitted as an amendment. The firm must complete the sections of the application pertaining to the new information, and sign and date the form. EPA has interpreted the training provider accreditation regulations to require accredited training providers to submit amended applications whenever there is a change to the information provided in the training provider's most recent application for accreditation or re-accreditation, including information regarding the training manager and any principal instructor(s) teaching courses offered by the training provider. However, the existing regulations do not specify a time limit for submitting an amendment. Therefore, the Agency is proposing to require training providers to submit amendments within 90 days of the date a change occurs to information in each provider's most recent application. If the training provider does not amend its most recent accreditation application within the 90-day time period, it must stop providing training until the accreditation application is amended. The Agency is also proposing to approve or disapprove amendments for a new training manager, any new or additional principal instructors, or any new permanent training location within 30 days of the date EPA receives the amendment. This 30-day time period will give EPA sufficient time to check the qualifications of the training manager(s) or principal instructor(s) before the training manager begins managing or the principal instructor begins teaching a course. This 30-day time period would also give EPA sufficient time to verify the suitability of a new permanent training location by visiting the location. The training provider would not be permitted to provide training under the new training manager or offer courses taught by any new principal instructor(s) or at the new training location until EPA either approves the amendment or 30 days has passed. Finally, this proposal would also clarify that no fee will be charged for accreditation application or certification amendments.

To become accredited, a training provider must submit a copy of its training course materials with its

application for accreditation for review by the Agency. If a training provider chooses to use the model course developed by EPA or a course approved by an authorized State or Indian Tribe, then it is not currently required to submit the course materials with its application. Instead the training provider indicates on its application that it will use the EPA model course or a course approved by an authorized State or Indian Tribe. Authorized States and Indian Tribes can have renovation or abatement programs that are significantly different from the EPA-administered program which would be reflected in their approved course materials. In these instances, a training course approved by the State or Indian Tribe may not be sufficient for the purposes of training someone on the requirements of the federal program. Therefore, the Agency is proposing to require training providers who apply to EPA for accreditation and wish to use a course approved by an authorized State or Indian Tribe to submit the course materials for EPA review. This will give the Agency the opportunity to identify and address any significant differences between the requirements of EPA and the authorized program that may appear in the course so the Agency can ensure that EPA-accredited training providers are using appropriate course materials. Training providers wishing to use the EPA model courses would not be required to submit those materials with their applications.

As a matter of clarification, Web-based training and other types of alternative training delivery are permitted. In fact, EPA has developed a model on-line renovator course that could be used to deliver the classroom portion of the renovator course. While such alternative training delivery options cannot be used to deliver required hands-on training, EPA encourages training providers to make use of such options where appropriate to increase access to training and make it more affordable. Web-based training courses are considered separate courses and a separate application fee is required for each. This is because EPA must review not only the content of the course, but the mechanics of the delivery of the course.

EPA's model electronic training courses contain certain basic administration and delivery requirements. These include assigning a unique identifier to each student, to allow the training provider to track student course progress and completion. In addition, there are knowledge checks for each chapter, which must be completed before the student can go on

to the next chapter, and a final test for the electronic learning portion which consists of at least 20 questions. Finally, students must be able to save or print an uneditable copy of a record showing completion of the electronic learning portion of the course. Under this proposal, these requirements would be explicitly incorporated into 40 CFR 745.225 to ensure that all training providers wishing to use electronic learning for the classroom portions of lead-based paint courses are aware of these requirements and plan their course development accordingly. EPA requests comment on the specifics of these requirements, such as whether a course test of 20 questions is sufficient and whether a student should be required to score at least 80 percent on the course test in order to pass the classroom portion of the renovator course. EPA also requests comment on whether a final test for the electronic portion of the course is necessary, given that trainees must pass a hands-on skills assessment and the course test in order to receive a course completion certificate. EPA also requests comment on whether other requirements should likewise be incorporated into the regulations.

EPA is requesting comment on whether training providers should be allowed to provide a combined Abatement Worker/Renovator refresher course or a combined Abatement Supervisor/Renovator refresher course or both. After the RRP rule was promulgated, EPA received input from the regulated community and others that indicates that many abatement contractors are likely to also become certified renovation firms. If this is the case, it would be advantageous for such firms to be able to send their employees to combined refreshers so that the employees would more readily be able to keep up their dual certifications. EPA requests comment on the likelihood that this will be the case, and, if combined refreshers are desirable, whether the different certification time periods for individual abatement certification (3 years) and individual renovator certification (5 years) should be harmonized and, if so, how.

Finally, EPA is proposing to require training providers to maintain renovator and dust sampling technician training records for a period of 5 years. Under the existing regulations, training providers must keep training records for 3 years and 6 months. This length of time was chosen because of the length of individual certification periods for lead-based paint activities, which can be as long as 3 years and 6 months including interim certification.

However, the renovator and dust sampling technician certification periods are 5 years, with no interim certification. Therefore, in order to ensure that the training records from the previous training course are available for certified renovators and dust sampling technicians taking refresher courses, the recordkeeping period applicable to these disciplines would be increased to 5 years.

D. State, Territorial, and Tribal Program Authorization

Interested States, Territories, and Indian Tribes may apply for, and receive authorization to, administer and enforce all of the elements of the RRP program. The regulations for the State and Tribal program requirements are found in 40 CFR 745.326. Under this proposed rule EPA is clarifying several parts of this section. First, the Agency is amending the regulations to make it clear that State and Tribal programs do not need to include requirements for the accreditation of dust sampling technicians if they are going to require dust sampling to be performed by a certified inspector or risk assessor. Second, the Agency is proposing to amend the regulations to reflect that both individuals and firms must receive certification. Finally, EPA is proposing to require State and Tribal renovation programs to include procedures and requirements for on-the-job training of renovation workers that do not receive accredited training.

Strong enforcement of the lead-based paint regulations by authorized State and Tribal programs is critical to ensuring the safety of the occupants of target housing and child occupied facilities undergoing lead abatement, renovation, repair or painting. The State and Tribal program authorization requirements at 40 CFR 745.327 include provisions for approval of compliance and enforcement programs. Specifically, State and Tribal programs must have adequate compliance monitoring and enforcement authorities. Section 745.327(b)(3)(ii) requires “[a]dministrative or civil actions including penalty authority * * *,” but the rule does not establish a minimum penalty level or other requirements for enforcement authorities comparable to EPA authorities under TSCA. To remedy this, EPA is proposing that in order to be authorized for any of the lead certification programs, State or Tribal programs demonstrate that: (1) The State or Tribe be able to sue to obtain penalties, (2) civil and criminal penalties are assessable for each instance of violation, (3) if violations are continuous, the penalties are assessable

up to the maximum amount for each day of violation, and (4) the burden of proof and degree of knowledge or intent of the respondent is no greater than it is for EPA under TSCA. EPA is also requesting comment on whether a minimum penalty level for civil and criminal fines ought to be established, and, if so, what the minimum level for each should be. States and Tribes may be authorized to administer a number of EPA programs; some of these programs have minimum penalty requirements for State and Tribal programs and some do not. For example, under the Clean Air Act implementing regulations at 40 CFR 70.11(a)(3) and the Resource Conservation and Recovery Act implementing regulations at 40 CFR 271.16(a)(3), State programs must have the authority to assess civil and criminal fines of at least \$10,000 per day per violation. Other programs have established lower minimum penalty requirements. The implementing regulations for the Safe Drinking Water Act require State programs to have the authority to impose a penalty of at least \$1,000 per day per violation on public water systems serving a population of more than 10,000 individuals. Some EPA programs have set no minimum penalty authority requirements for States and Tribes; these programs include the Asbestos Hazard Emergency Response Act program and the State pesticide applicator certification program under the Federal Insecticide, Fungicide, and Rodenticide Act. EPA is proposing that in order to become authorized, State and Tribal lead-based paint programs must have minimum civil and criminal penalty authorities of at least \$10,000 per violation per day. EPA requests comment on whether proposing minimum levels for the maximum civil penalty and criminal fine recoverable under a State or Tribal program is necessary to ensure that enforcement is adequate and, if so, whether \$10,000 should be the minimum level. EPA also requests comment on whether such a minimum requirement would appropriately promote consistency across authorized State and Tribal programs. In addition, EPA is requesting comment on whether these minimum levels should also be adjusted periodically to account for inflation, as required for Federal penalties under Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. 2461 note, as amended by the Debt Collection Improvement Act of 1996, 31 U.S.C. 3701 note. One way of doing this would be to require State and Tribal programs to have minimum civil penalty authority of 40% of the Federal

maximum penalty authority under TSCA section 16, as adjusted for inflation, at the time the State or Tribe is authorized. However, this approach would result in different requirements for States and Tribes depending upon when they apply for authorization. Another way of accomplishing inflation adjustments would be to require State and Tribal authorized programs to have their own established mechanism for adjusting penalties to account for inflation. By requiring all authorized programs to make adjustments for inflation, this approach might be more likely to promote enforcement consistency across programs. Also in the interests of promoting national enforcement consistency, EPA requests comment on what criteria States or Tribes should consider, such as the size of a respondent's business, ability to remain in business, enforcement history, or risk posed by the respondent's actions, in establishing or mitigating penalties.

E. Other Proposed Amendments to the Final RRP Rule

1. *Containment.* EPA is proposing to be more specific about the vertical containment requirements for exterior projects. Under this proposal, the rule would specifically state that vertical containment is required for exterior renovation projects that are covered by the rule and that affect painted surfaces within 10 feet of the property line. In such cases, vertical containment is necessary to ensure that adjacent buildings or properties are not contaminated by leaded dust or debris generated by the renovation. The rule would also note that vertical containment may be required in other situations, such as windy conditions, to prevent contamination of other buildings, other areas of the property, or adjacent buildings or properties. Finally, to clarify what is meant by the term “containment,” this proposal would add a definition of the term that is based on the definition of “Worksite preparation level” from the HUD Guidelines. The definition includes additional information on what constitutes vertical containment.

2. *Prohibited or restricted practices.* EPA is proposing to clarify that the prohibitions and restrictions on work practices in 40 CFR 745.85(a)(3), e.g., the prohibition on open flame burning or torching, apply to all painted surfaces, not just surfaces where the presence of lead-based paint has been confirmed. The term “lead-based paint” was incorrectly and inadvertently used in this subsection, making it inconsistent with the rest of the RRP

rule, which applies in the presence of known lead-based paint as well as paint that has not been tested for lead content. This proposal would replace the term "lead-based paint" with "painted surfaces" in this subsection. Of course, if the painted surface has been tested and found to be free of lead-based paint, the prohibitions and restrictions on work practices in the final RRP rule do not apply. In addition, EPA wishes to clarify that the restriction on the use of machines that remove paint through high speed operation applies where painted surfaces are being disturbed by such machines. The restriction is not limited to situations where all of the paint is removed by such machines. Finally, EPA has received several requests for clarification on what is meant by HEPA exhaust control. In order to better express what is required when machines designed to remove paint through high speed operation are used, EPA is using terminology from the Occupational Safety and Health Administration's Technical Manual (Ref. 25). The use of shrouded tools to remove lead-based paint is discussed in Chapter 3 of Section V, entitled "Controlling Lead Exposures in the Construction Industry: Engineering and Work Practice Controls." Therefore, this proposal would amend 40 CFR 745.85(a)(3)(ii) to read, "The use of machines designed to remove paint through high speed operation such as sanding, grinding, power planing, needle gun, abrasive blasting, or sandblasting, is prohibited on painted surfaces unless such machines are used shrouded and equipped with a HEPA vacuum attachment to collect dust and debris at the point of generation."

3. *HEPA vacuums.* EPA is proposing to clarify that vacuums qualifying as HEPA vacuums for the purposes of this rule must be operated and maintained in accordance with the manufacturer's instructions in order to continue to qualify as HEPA vacuums. This includes following the manufacturer's filter change interval recommendations. EPA would also like to clarify that the standard for HEPA filters, that they be capable of capturing particles of 0.3 microns with 99.97% efficiency, means that the filters must have a Minimum Efficiency Reporting Value (MERV) of 17 or greater (Ref. 26). EPA recommends that renovation firms have information from the manufacturer that the particular model of vacuum that the renovation firm intends to use, or the vacuum's HEPA filter, has been tested in accordance with an applicable test method, such as ASTM F1471-09, "Standard Test Method for Air Cleaning

Performance of a High-Efficiency Particulate Air-Filter System," and has been determined to meet this standard (Ref. 27).

4. *On-the-job training.* EPA is proposing to clarify that the RRP rule requires certified renovators to train other renovation workers in only the work practices required by the RRP rule that the workers will be using in performing their assigned tasks. EPA did not intend to require training in any other subjects, such as how to paint or how to connect pipes. Therefore, EPA is proposing to amend 40 CFR 745.90(b)(2) and (b)(4) to refer specifically to the work practice requirements in 40 CFR 745.85(a).

5. *Grandfathering.* Under the final RRP rule, individuals who successfully completed an accredited abatement worker or supervisor course, and individuals who successfully completed the HUD, EPA, or the joint EPA/HUD model renovation training courses may take an accredited refresher renovation training course in lieu of the initial renovation training to become a certified renovator. In addition, individuals who have successfully completed an accredited lead-based paint inspector or risk assessor course, but are not currently certified in the discipline, may take an accredited refresher dust sampling technician course in lieu of the initial training to become a certified dust sampling technician. EPA inadvertently did not address a time limit in the RRP rule for taking the initial course in lieu of the refresher. Many of the commenters who addressed the issue of grandfathering contended that there should be restrictions based on how much time elapsed since the training was taken. Further, under the lead-based paint activities regulations at 40 CFR 745.226, EPA allowed a similar grandfathering provision but only for a limited time. In today's notice, EPA is proposing to set a limit on when an individual can take advantage of the grandfathering provision under the RRP rule. Under today's proposal, renovators and dust sampling technicians who take the appropriate prerequisite course before July 31, 2011, may take an accredited refresher training course in lieu of the initial training. This time frame is consistent with some of the time limitations suggested in comments on the RRP rule (Ref. 1 at 21724).

6. *Hands-on requirements.* 40 CFR 745.225 includes requirements and procedures that training programs must follow to become accredited in order to provide instruction in lead-based paint courses. Minimum requirements for training curricula are found in this section, which list course topics that

must be included in the different training courses with an indication of the topics that require hands-on instruction. However, EPA inadvertently omitted indicating which course topics required hands-on training for the renovator and dust sampling technician disciplines. Under this proposed rule, EPA identifies in 40 CFR 745.227(d) which topics in the renovator and dust sampling technician courses require hands-on training. For further clarification, EPA is proposing to add a sentence to 40 CFR 745.227(e)(2) stating that refresher courses for all disciplines except project designer must include a hands-on component.

7. *Dust sampling technicians.* Individuals who successfully complete an accredited lead-based paint inspector or risk assessor course, but are not currently certified in the discipline, may take an accredited refresher dust sampling technician course in lieu of the initial training before April 22, 2011 to become a certified dust sampling technician. Inspectors and risk assessors who are certified by EPA or an authorized state program are qualified to perform dust sampling as part of lead hazard screens, risk assessments, or abatements. Therefore, it would be unnecessary for a certified inspector or risk assessor to seek certification as a dust sampling technician. The regulations promulgated in the RRP rule explained who is eligible to take the refresher dust sampling technician course in lieu of the initial training. However, the regulations did not explicitly say that a certified inspector or risk assessor could perform dust sampling. In order to clarify the intent of the regulation, EPA is proposing to amend 40 CFR 745.90(a)(3) to specifically state that a certified inspector or risk assessor may act as a dust sampling technician.

8. *Trainee photographs.* Accredited training programs are required to issue a course completion certificate for each person who passes a training course. A variety of information is required to be on the certificate including the name of the course, the name and address of the student, and contact information for the training program. Course certificates for renovators or dust sampling technicians must include a photograph of the student. Since publishing the RRP rule, the Agency has been asked if there is a minimum size for the photograph. Currently, there are no size requirements or other specifications for the photograph on a course completion certificate. Nonetheless, EPA believes that it would be beneficial to have such requirements to ensure that the person in the photograph is recognizable. Thus,

EPA is proposing to require that the photographs on course completion certificates be an accurate and recognizable image of the trainee and at least one square inch in size. EPA is requesting comments on whether the image quality requirements should be more specific, *e.g.*, more quantitative.

9. *Training requirements.* As stated previously, 40 CFR 745.225 includes requirements and procedures that training programs must follow to become accredited in order to provide instruction in renovator, dust sampling technician, and lead-based paint activities courses. The final RRP rule amended Section 745.225 to cover persons who provide or wish to provide renovator or dust sampling technician training for the purposes of the final RRP rule. There are some instances where the regulations do not specifically mention the renovator or dust sampling technician courses even though the regulations apply to those courses. For example, 40 CFR 745.225(c)(14) explains the requirements which a training provider must follow when submitting notification to EPA after the completion of a training. However, the conforming changes, *i.e.*, to replace “lead-based paint activities courses” with “renovator, dust sampling technician, and lead-based paint activities courses,” were not made to every subparagraph even though all the requirements of that section apply to those courses. Consequently, EPA is proposing to clarify that the requirements in 40 CFR 745.225 apply to renovator and dust sampling technician courses in addition to lead-based paint activities courses. These changes do not alter the requirements but merely clarify them.

IV. References

As indicated under **ADDRESSES**, a docket has been established for this rulemaking under docket ID number EPA-HQ-OPPT-2005-0049. The following is a listing of the documents that are specifically referenced in this document. The docket includes these documents and other information considered by EPA, including documents that are referenced within the documents that are included in the docket, even if the referenced document is not physically located in the docket. For assistance in locating these other documents, please consult the technical contact listed under **FOR FURTHER INFORMATION CONTACT**.

- U.S. Environmental Protection Agency (EPA). Lead; Renovation, Repair, and Painting Program; Final Rule. **Federal Register** (73 FR 21692, April 22, 2008) (FRL-8355-7).
- EPA. Air Quality Criteria for Lead (October 2006).
- EPA. Lead Exposure Associated With Renovation and Remodeling Activities: Phase III. Wisconsin Childhood Blood-Lead Study (EPA 747-R-99-002, March 1999).
- U.S. Department of Health and Human Services (HHS), U.S. Public Health Service (PHS), Centers for Disease Control and Prevention (CDC). Children with Elevated Blood Lead Levels Attributed to Home Renovation and Remodeling Activities—New York, 1993–1994. *Morbidity and Mortality Weekly Report* (45(51): 1120–1123, January 3, 1997).
- HHS, PHS, CDC. Children with Elevated Blood Lead Levels Related to Home Renovation, Repair, and Painting Activities—New York State, 2006–2007. *Morbidity and Mortality Weekly Report* (58(03): 55–58, January 30, 2009).
- Reissman, Dori B., Thomas D. Matte, Karen L. Gurnite, Rachel B. Kaufmann, and Jessica Leighton. “Is Home Renovation or Repair a Risk Factor for Exposure to Lead Among Children Residing in New York City?” *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. Vol. 79, No. 4, 502–511, December 2005.
- Jones, Robert L., David M. Homa, Pamela A. Meyer, Debra J. Brody, Kathleen L. Caldwell, James L. Pirkle, and Mary Jean Brown. “Trends in Blood Lead Levels and Blood Lead Testing Among U.S. Children Aged 1 to 5 Years, 1988–2004.” *Pediatrics: Official Journal of the American Academy of Pediatrics*. Vol. 123, No. 3, pp. e376–e385, March 2009.
- EPA. Lead; Requirements for Lead-based Paint Activities; Final Rule. **Federal Register** (61 FR 45778), August 29, 1996).
- EPA. Lead; Identification of Dangerous Levels of Lead; Final Rule. **Federal Register** (66 FR 1206, January 5, 2001).
- EPA. Lead Exposure Associated With Renovation and Remodeling Activities: Phase I, Environmental Field Sampling Study (EPA 747-R-96-007, May 1997).
- EPA. Lead Exposure Associated With Renovation and Remodeling Activities: Phase II, Worker Characterization and Blood-Lead Study (EPA 747-R-96-006, May 1997).
- EPA. Exposure Associated With Renovation and Remodeling Activities: Phase IV, Worker Characterization and Blood-Lead Study of R&R Workers Who Specialize in Renovation of Old or Historic Homes (EPA 747-R-99-001, March 1999).
- EPA. Lead; Renovation, Repair, and Painting Program; Proposed Rule. **Federal Register** (71 FR 1588, January 10, 2006) (FRL-8355-7).
- EPA. Characterization of Dust Lead Levels After Renovation, Repair, And Painting Activities. (November 13, 2007).
- U.S. Department of Housing and Urban Development (HUD). Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (June 1995).
- EPA. Electrostatic Cloth and Wet Cloth Field Study in Residential Housing (September 2005).
- Rx Solutions International/BTS Laboratories Inc. Comment on EPA’s Proposed Renovation, Remodeling, and Painting Program. EPA-HQ-OPPT-2005-0049-0483. May 22, 2006.
- HUD. Evaluation of the HUD Lead-Based Paint Hazard Control Grant Program: Final Report. May 1, 2004. <http://www.hud.gov/offices/lead/library/misc/NatEval.pdf>.
- EPA. Residential Sampling for Lead: Protocols for Dust and Soil Sampling, March 1995 (EPA 747-R-95-001).
- ASTM International. Standard Practice for Clearance Examinations Following Lead Hazard Reduction Activities in Single-Family Dwellings and Child-Occupied Facilities (E 2271-05a).
- EPA and HUD. Lead; Requirements for Disclosure of Information Concerning Lead-Based Paint in Housing; Final Rule. **Federal Register** (61 FR 9064, March 6, 1996).
- EPA. National Lead Laboratory Accreditation Program (NLLAP); Notice of Availability of Revisions to the NLLAP; Notice of Availability (73 FR 3967 January 23, 2008).
- EPA. Reviewed Studies Pertaining to HEPA Shroud Effectiveness. 2009.
- Battelle Memorial Institute. Encapsulation Treatment of Dust Study Floors. January 2010.
- U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). Technical Manual TED 01-00-015 [TED 1-0.15A]. Revised June 24, 2008.
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). Standard 52.2-2007—Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size (ANSI/ASHRAE Approved) 2007.
- ASTM International. Standard Test Method for Air Cleaning Performance of a High-Efficiency Particulate Air-Filter System (F1471-09).
- EPA. Office of Pollution Prevention and Toxics (OPPT). Economic Analysis of the Proposed Dust Testing and Clearance Amendments to the TSCA Lead Renovation, Repair, and Painting Program for Target Housing and Child-Occupied Facilities. April 2010.
- EPA. Proposed Clearance Rule ICR Addendum for the rulemaking entitled Lead; Clearance and Clearance Testing Requirements for the Renovation, Repair, and Painting Program; Proposed Rule. April 2010.
- EPA. Initial Regulatory Flexibility Analysis for the Clearance and Clearance Testing Requirements for the Lead Renovation, Repair, and Painting Program; Proposed Rule. April 2010.
- EPA. Report of the Small Business Advocacy Review Panel on the Lead-based Paint Certification and Training; Renovation and Remodeling Requirements. March 3, 2000.
- EPA. Unfunded Mandates Reform Act Statement; Lead; Clearance and Clearance Testing Requirements for the Renovation, Repair, and Painting Program; Proposed Rule. April 2010.

- 33. ASTM International. Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination (E1728–03).
- 34. ASTM International. Standard Specification for Wipe Sampling Materials for Lead in Surface Dust (E1792–03).
- 35. ASTM International. Standard Practice for Record Keeping and Record

Preservation for Lead Hazard Activities (E2239–04).

V. Statutory and Executive Order Reviews

EPA has prepared an analysis of the potential costs and benefits associated with this rulemaking. This analysis is contained in the “Economic Analysis of the Proposed Dust Testing and

Clearance Amendments to the TSCA Lead Renovation, Repair, and Painting Program for Target Housing and Child-Occupied Facilities” (Economic Analysis, Ref. 26), which is available in the docket for this action and is briefly summarized here, and in more detail later in this Unit.

Category	Description
Benefits	Benefits are not monetized or quantified, although there may be benefits through: (1) Information on lead-dust levels remaining in the renovation work area, including lead-dust that may have been generated during the renovation activity. (2) Changed behavior on the part of renovation firms, owners, and occupants which may prevent adverse health effects attributable to lead exposure from renovations in pre-1978 buildings. EPA has estimated the size of the population affected by this rule, but does not have sufficient information to estimate the value of information to consumers about lead-dust risks, or the decrease in exposure to lead-dust from renovations in target housing and child-occupied facilities.
Costs	\$272 million annualized (3% discount rate). \$293 million annualized (7% discount rate).

A. Executive Order 12866

Under section 3(f)(1) of Executive Order 12866, entitled “Regulatory Planning and Review” (58 FR 51735, October 4, 1993), this action is an “economically significant regulatory action” because EPA estimates that it will have an annual effect on the economy of \$100 million or more. Accordingly, this action was submitted to the Office of Management and Budget (OMB) for review under Executive Order 12866 and any changes made based on OMB recommendations have been documented in the public docket for this rulemaking as required by section 6(a)(3)(E) of the Executive Order.

The following is a summary of the Economic Analysis (Ref. 28), which is available in the docket for this action.

1. *Options evaluated.* The Economic Analysis analyzes several options. In addition to the proposed rule option, the Economic Analysis includes options with lower and higher thresholds (in terms of the amount of lead-based paint disturbed) for renovations which require dust wipe testing or clearance. In the proposed rule, the renovation events for which clearance is required (use of high speed machines to remove paint, and the demolition or destructive removal of plaster) have a threshold of 6 ft² of lead-based paint disturbed. The thresholds in the proposed rule for the renovation events that require the use of dust wipe testing without necessarily achieving clearance vary from 6 to 60 ft², depending on the type of renovation (use of a heat gun; scraping painted surfaces; removing trim, molding, cabinets, or other fixtures; etc.). In the low threshold option, the thresholds are 6 ft² for all of the affected renovations.

In the high threshold option, the thresholds for the events where clearance is required are 60 ft², while the thresholds for the renovations events that require the use of dust wipe testing without necessarily achieving clearance vary from 60 to 120 ft², depending on the type of renovation. The Economic Analysis also includes three options that use the same threshold sizes as the proposed rule but apply different requirements to them. There is an option that requires dust wipe testing for all of the renovation events covered by the proposed rule without requiring clearance for any of them, as well as an option that requires clearance for all of these events. Finally, there is an option that applies to the same dust wipe testing and clearance events and thresholds as the proposed rule but that requires renovation firms to have the dust wipe sampling performed by an independent third party.

2. *Number of facilities and renovations.* There are approximately 18.7 million renovation events per year covered by EPA’s renovation, repair, and painting program in the 78 million target housing units and child-occupied facilities. The number of renovations affected by this proposed rule depends on the option selected. The low threshold option affects an estimated 1.8 million dust wipe testing only events and 69,000 clearance events per year. The proposed rule is estimated to affect 1.5 million dust wipe testing only events and 69,000 clearance events a year. The high threshold option affects an estimated 1.2 million dust wipe testing only events and 58,000 clearance events per year. The remaining three

options (only dust wipe testing is required for all renovations covered by the proposed rule, clearance is required for all renovations covered by the proposed rule, and third-party dust wipe sampling is required for all renovations covered by the proposed rule) all affect an estimated 1.6 million events per year.

3. *Benefits.* The benefits of the rule result from the prevention of adverse health effects attributable to lead exposure from renovations in pre-1978 buildings. These health effects include impaired cognitive function in children and several illnesses in children and adults, such as increased adverse cardiovascular outcomes (including increased blood pressure, increased incidence of hypertension, cardiovascular morbidity and mortality) and decreased kidney function.

The proposed rule will generate benefits by providing greater assurance that dust-lead hazards created by renovations are adequately cleaned up, primarily by requiring renovation firms to provide building owners and occupants with information on dust lead levels remaining in the work area after many renovation projects, but also by requiring renovation firms to demonstrate that they have achieved regulatory clearance levels after some of the dustiest renovations. These changes will protect individuals residing in target housing or attending a child-occupied facility where these renovation events are performed. It will also protect individuals who move into target housing after such a renovation is performed, or who visit a friend, relative, or caregiver’s house where such a renovation is performed.

EPA has estimated the number of individuals residing in target housing units or attending COFs where renovation events are performed. The proposed rule will benefit 809,000 children under the age of 6 and 7,547,000 individuals age 6 and older (including 96,000 pregnant women) per year by minimizing their exposure to lead dust generated by renovations. The low threshold option would protect 882,000 children under the age of 6 and 8,193,000 individuals age 6 and older, including 105,000 pregnant women. The high threshold option protects 706,000 children and 6,590,000 individuals age 6 and older, including 83,000 pregnant women. The remaining three alternative options (dust wipe testing only, clearance only, and third party dust wipe testing) would affect the same number of individuals as the proposed rule, although the amount of protection provided to some of those individuals may differ from the proposed rule.

4. *Costs.* Firms performing the renovation events covered by the proposed rule will incur costs associated with having a third party perform dust wipe sampling and testing (or with having a firm staff member trained as a dust sampling technician so that they can take their own dust wipe samples and send them to a lab). For jobs subject to the clearance requirements in the proposed rule, firms may incur re-cleaning costs if dust wipe testing after clean-up yields results that exceed the clearance standards. Firms will also incur small costs to provide the dust wipe testing results to owners and occupants of the target housing units and child-occupied facilities where the renovations are performed.

EPA's updated estimate is that the average cost for a renovation firm to hire a third-party lead evaluation firm to take four dust samples, send them to a lab for analysis, and provide a short report is slightly over \$260. However, many renovation firms may find it more cost effective to have a staff member trained and certified as a dust sampling technician rather than hiring a third party to take the samples.

Renovation firms would incur the same dust wipe testing costs for renovations where achieving clearance is required. If dust levels exceed the clearance standards after cleaning verification, the renovation firm will incur additional costs for re-cleaning the work area up to two times. These re-cleaning costs vary from job to job, depending on the size of the space that must be cleaned.

Annualized costs for the rule options are calculated using both a 3% and a 7% discount rate. Total annualized

costs for the proposed rule are \$272 million per year using a 3% discount rate and \$293 million per year using a 7% discount rate. Under the low threshold option, costs are \$312 million per year with a 3% discount rate and \$336 million per year with a 7% rate. Under the high threshold option, costs are \$224 million per year with a 3% discount rate and \$242 million per year with a 7% discount rate. The option that only requires dust wipe testing costs \$268 million per year with a 3% discount rate and \$288 million per year with a 7% discount rate. The option requiring clearance for all renovations covered by the proposed rule costs \$367 million with a 3% discount rate and \$394 million with a 7% discount rate. The option requiring the use of a third party for dust wipe sampling costs \$431 million per year with a 3% discount rate and \$459 million per year with a 7% discount rate.

B. Paperwork Reduction Act

The information collection requirements contained in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*, EPA has prepared an Information Collection Request (ICR) document to amend an existing approved ICR. The ICR document, referred to as the Proposed Clearance Rule ICR Addendum and identified under EPA ICR No. 2381.01 and OMB Control Number 2070-NEW, has been placed in the docket for this proposed rule (Ref. 29). The information collection requirements are not enforceable until OMB approves them.

Burden under the PRA means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose, or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

The information collection activities contained in this proposed rule are designed to assist the Agency in meeting the core objectives of TSCA section 402. EPA has carefully tailored the recordkeeping requirements so they will

permit the Agency to achieve statutory objectives without imposing an undue burden on those firms that choose to be involved in renovation, repair, and painting activities.

This proposed rule requires renovation firms to provide owners and occupants with a report including the results of the dust wipe testing. Although firms have the option of choosing to engage in the covered activities, once a firm chooses to do so, the information collection activities become mandatory for that firm. The rule may result in an increase in the number of individuals becoming trained as dust sampling technicians, resulting in additional paperwork requirements for training providers.

The ICR document provides a detailed presentation of the estimated paperwork burden and costs resulting from this proposed rule. The burden to firms engaged in renovation, repair, and painting activities and to training providers are summarized in this unit.

The requirement for renovation firms to provide a dust wipe testing report for the renovations covered by the rule will impact about 224,000 firms. The additional burden for these firms arising from the proposed rule is estimated to average nearly 13 hours per firm annually, resulting in a total burden of approximately 2,867,000 hours per year for these firms.

Many certified renovators may become trained and certified as dust sampling technicians so that they can take their own dust wipe samples and send them to a lab for analysis. This will increase the paperwork burden for training providers, since they must submit records to EPA (or an authorizing State, Tribe, or Territory) pertaining to each student attending a training course to become a dust sampling technician. Around 170 training providers are estimated to incur an average burden of about 82 hours, resulting in an increase of approximately 14,000 hours per year in training provider burden as a result of the proposed rule.

Total respondent burden for renovation firms and training providers is estimated to average approximately 2.9 million hours per year during the 3 year period covered by the ICR.

The proposed rule may also result in additional government costs to administer the program (to process the additional training provider notifications and to administer and enforce the program). States, Tribes, and Territories are allowed, but are under no obligation, to apply for and receive authorization to administer these requirements. EPA will directly

administer programs for States, Tribes, and Territories that do not become authorized. Because the number of States, Tribes, and Territories that will become authorized is not known, administrative costs are estimated assuming that EPA will administer the program everywhere. To the extent that other government entities become authorized, EPA's administrative costs will be lower.

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 codified in chapter 40 of the CFR, after appearing in the preamble of the final rule, are listed in 40 CFR part 9, are displayed either by publication in the **Federal Register** or by other appropriate means, such as on the related collection instrument or form, if applicable. When the ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the **Federal Register** to display the OMB control number for the approved information collection requirements contained in the final rule.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, EPA has established a docket for this proposed rule, which includes this ICR, under docket ID number EPA-HQ-OPPT-2005-0049. Submit any comments related to the ICR to EPA and OMB. See **ADDRESSES** for where to submit comments to EPA. Send comments to OMB at the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., NW., Washington, DC 20503, Attention: Desk Office for EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after May 6, 2010, a comment to OMB is best assured of having its full effect if OMB receives it by June 7, 2010. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposed rule.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA), 5 U.S.C. 601 *et seq.*, generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small

businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this proposed rule on small entities, small entity is defined in accordance with section 601 of the RFA as:

(1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201.

(2) A small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000.

(3) A small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

As required by section 603 of the RFA, EPA has prepared an initial regulatory flexibility analysis (IRFA) for this proposed rule. The IRFA is available for review in the docket and is summarized in this unit (Ref. 30).

1. *Reasons why action by the Agency is being considered.* The Agency believes it is in the best interest of the public to require dust wipe testing for many types of renovations (and to require renovation firms to achieve clearance for certain types of renovations). EPA expects two kinds of benefits to flow from the proposed dust wipe testing requirements. The first are the direct benefits of the information to the owners and occupants, the pure value of the information on dust lead levels remaining in the renovation work area. For building owners and occupants, this information is likely to improve their understanding and awareness of dust-lead hazards. It will also greatly improve their ability to make further risk management decisions, especially in light of mounting evidence suggesting that the current dust-lead hazard standards are too high. This information is particularly critical where dust lead levels approach or exceed the regulatory hazard standards. The other benefits that EPA expects to flow from a dust wipe testing requirement are the benefits that may result from changed behavior on the part of renovation firms. EPA believes that dust wipe testing results will also provide valuable feedback to renovation firms on how well they are cleaning up after renovations. It is likely that the specific dust lead levels contained in dust wipe testing results will increase renovation firm cleaning efficiency. Renovation firms will be incentivized to lower the dust lead levels remaining after renovation jobs, even if the levels are at or near the regulatory standards. For two types of renovations that can create large amounts of difficult-to-clean dust, EPA remains concerned about the

possibility that dust lead levels remaining, even after cleaning verification, may substantially exceed the clearance standards. If renovation firms choose to utilize these methods, the firms would be required to demonstrate, through dust wipe testing, that they have met the clearance standards before the renovation will be considered completed.

2. *Legal basis and objectives for this proposed rule.* These work practice requirements for dust wipe testing and clearance, training, certification and accreditation requirements, and State, Territorial and Tribal authorization provisions are being promulgated under the authority of TSCA sections 402(c)(3), 404, and 407, 15 U.S.C. 2682(c)(3), 2684, and 2687. A central objective of this proposed rule is to provide greater assurance that dust-lead hazards created by renovations are adequately cleaned up, primarily by requiring renovation firms to provide building owners and occupants with information on dust lead levels remaining in the work area after many renovation projects, but also by requiring renovation firms to demonstrate that they have achieved regulatory clearance levels after some of the dustiest renovations.

3. *Potentially affected small entities.* Small entities include small businesses, small organizations, and small governmental jurisdictions. The small entities that are potentially directly regulated by this proposed rule include: Small businesses (such as renovation contractors and property owners and managers); small nonprofits (certain childcare centers and private schools); and small governments (school districts which operate pre-schools, kindergartens and certain child care centers).

In determining the number of small businesses affected by the proposed rule, the Agency applied U.S. Economic Census data to the SBA's definition of small business. However, applying the U.S. Economic Census data requires either under- or overestimating the number of small businesses affected by the proposed rule. For example, for many construction establishments, the SBA defines small businesses as having revenues of less than \$14 million. With respect to those establishments, the U.S. Economic Census data groups all establishments with revenues of \$10 million or more into one revenue bracket. On the one hand, using data for the entire industry would overestimate the number of small businesses affected by the proposed rule and would defeat the purpose of estimating impacts on small business. It would also

underestimate the proposed rule's impact on small businesses because the impacts would be calculated using the revenues of large businesses in addition to small businesses. On the other hand, applying the closest, albeit lower, revenue bracket would underestimate the number of small businesses affected by the proposed rule while at the same time overestimating the impacts. Similar issues arose in estimating the fraction of property owners and managers that are small businesses. EPA has concluded that a substantial number of small businesses will be affected by the rule. Consequently, EPA has chosen to be more conservative in estimating the cost impacts of the rule by using the closest, albeit lower, revenue bracket for which U.S. Economic Census data is available. For other sectors (nonprofits operating childcare centers or private schools), EPA assumed that all affected firms are small, which may overestimate the number of small entities affected by the proposed rule.

The vast majority of entities in the industries affected by this proposed rule are small. Using EPA's estimates, these revisions to the renovation, repair, and painting program will affect over 203,000 small entities per year.

4. *Potential economic impacts on small entities.* EPA evaluated two factors in its analysis of the proposed rule's requirements on small entities, the number of firms that would experience the impact, and the size of the impact. Average annual compliance costs as a percentage of average annual revenues were used to assess the potential average impacts of the rule on small businesses and small governments. This ratio is a good measure of entities' ability to afford the costs attributable to a regulatory requirement, because comparing compliance costs to revenues provides a reasonable indication of the magnitude of the regulatory burden relative to a commonly available measure of economic activity. Where regulatory costs represent a small fraction of a typical entity's revenues, the financial impacts of the regulation on such entities may be considered as not significant. For non-profit organizations, impacts were measured by comparing rule costs to annual expenditures. When expenditure data were not available, however, revenue information was used as a proxy for expenditures. It is appropriate to calculate the impact ratios using annualized costs, because these costs are more representative of the continuing costs entities face to comply with the proposed rule.

The cost of the proposed rule to a typical small business averages

approximately \$1,200 per year. This represents 0.4% to 1.1% of revenues depending on the industry sector. Overall, an estimated 203,000 small renovation contractors would be affected by the proposed rule, with average impacts of 0.5% of revenues. Approximately 100 small governments per year would incur a cost of about \$800, resulting in an average impact of less than 0.01%. And around 200 small non-profits per year would incur a cost of about \$600, resulting in an impact of approximately 0.1%.

Some of the small renovation contractors subject to the rule have employees while others are non-employers. The non-employers typically perform fewer jobs than firms with employees, and thus have lower work practice compliance costs. However, they also have lower average revenues than entities with employees, so their impacts (measured as costs divided by revenues) can be higher. Impact estimates for non-employers should be interpreted with caution, as some non-employers may have significant issues related to understatement of income, which would tend to exaggerate the average impact ratio for this class of small entities. There are 151,000 non-employer renovation contractors estimated to be affected by the proposed rule. The average cost to these contractors is estimated to be approximately \$700 apiece. This represents 0.7% to 2.6% of reported revenues, depending on the industry sector.

5. *Relevant Federal rules.* The requirements in this proposed rule will fit within an existing framework of other Federal regulations that address lead-based paint. Notably, the Pre-Renovation Education Rule, 40 CFR 745.85, requires renovation firms to distribute a lead hazard information pamphlet to owners and occupants before conducting a renovation in target housing and child-occupied facilities. This proposed rule's requirement that renovation firms provide owners and occupants with dust wipe testing and clearance reports complements the existing pre-renovation education requirements. Another such Federal regulation is HUD's Lead Safe Housing Rule, 24 CFR part 35, subparts B-R, which requires firms conducting interim controls of lead-based paint hazards (a category which includes RRP work) to provide owners and occupants with dust wipe testing and clearance reports.

6. *Skills needed for compliance.* Under the lead renovation, repair, and painting program requirements, renovators and dust sampling technicians working in target housing

and child-occupied facilities have to take courses to learn the proper techniques for accomplishing the tasks (including dust sampling, preparing a report with the results, and performing specialized cleaning) they will perform during renovations. These courses are intended to provide them with the information they would need to comply with the rule based on the skills they already have. Other renovation workers that have not been formally trained and certified must receive training on the work practices they will be using in performing their assigned tasks from a certified renovator, and a certified renovator must regularly direct work being performed by other renovation workers to ensure that the work practices are being followed, including maintaining the integrity of the containment barriers and ensuring that dust or debris does not spread beyond the work area.

7. *Small Business Advocacy Review Panel.* EPA has been concerned with potential small entity impacts since the earliest stages of planning for the RRP program under section 402(c)(3) of TSCA. EPA conducted outreach to small entities and, pursuant to section 609 of the RFA, convened a Small Business Advocacy Review Panel (the Panel) in 1999 to obtain advice and recommendations of representatives of the regulated small entities. EPA identified eight key elements of a potential renovation and remodeling regulation for the Panel's consideration. These elements were: applicability and scope, firm certification, individual training and certification, accreditation of training courses, work practice standards, prohibited practices, exterior clearance, and interior clearance.

Details on the Panel and its recommendations are provided in the Panel Report (Ref. 31). Information on how EPA implemented the Panel's recommendations in the development of the RRP program is available in Unit VIII.C. of the preamble to the 2006 proposed rule (Ref. 13) and in Unit V.C. of the preamble to the 2008 final rule (Ref. 1). EPA believes that the conclusions it made in 2008 regarding these recommendations are applicable to this proposal. Indeed, EPA has considered input from the 1999 Panel process in this rule precisely because it is so closely related that EPA considers it an extension of the 2008 RRP rulemaking. (See 5 U.S.C. 605(c))

8. *Alternatives considered.* EPA considered alternatives to this proposed rule that could affect the economic impacts of the proposed rule on small entities. These alternatives would have applied to both small and large entities,

but given the number of small entities in the affected industries, these alternatives would primarily affect small entities. For the reasons described in this unit, EPA believes these alternatives are not consistent with the objectives of the rule.

i. *Higher thresholds.* EPA considered an option under which the size thresholds for determining whether renovation jobs would need to perform dust wipe testing or achieve clearance would be higher than those in the proposed rule. By reducing the number of renovations where dust wipe testing or clearance are required, this option would reduce the costs of the rule and thus the estimated small entity impacts. However, higher thresholds would result in more jobs where occupants do not have information on the dust lead levels they are exposed to, or where they are exposed to dust lead levels above the hazard standard. EPA believes that the proposed rule provides the best balance between the benefits of the rule (the value of information from dust wipe testing and the benefits of reduced exposure to lead dust from achieving clearance) compared to the costs (and resulting small business impacts) of dust wipe testing, re-cleaning, and the other requirements of the proposed rule. Therefore, EPA believes that an option with higher thresholds is not consistent with the stated objectives of the proposed rule.

ii. *Dust testing only.* EPA considered an option that would require dust wipe testing but not clearance for any of these renovation events. EPA remains concerned that renovations that disturb paint using machines designed to remove lead-based paint through high speed operation (such as power sanders or abrasive blasting) can create large amounts of difficult-to-clean dust, creating the possibility that dust lead levels may substantially exceed the clearance standards even after cleaning verification. The same is true for the demolition or removal through destructive means of plaster and lath walls, ceilings or other building components with lead-based paint. Therefore, EPA believes that this option is not consistent with the stated objectives of the proposed rule.

As required by section 212 of Small Business Regulatory Enforcement Fairness Act (SBREFA), Public Law 104–121, EPA issued a Small Entity Compliance Guide (the Guide) in December 2008 to help small entities comply with the RRP rule. The Guide is available at: <http://www.epa.gov/lead/pubs/sbcomplianceguide.pdf> or from the National Lead Information Center by calling 1(800) 424-LEAD [5323]. EPA

will revise the Guide, as necessary, to reflect this rulemaking activity.

EPA invites comments on all aspects of the proposal and its impact on small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531–1538, requires Federal agencies, unless otherwise prohibited by law, to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. This rule contains a Federal mandate that may result in expenditures of \$100 million or more by the private sector in any 1 year, but it will not result in such expenditures by State, local, and Tribal governments in the aggregate. Accordingly, EPA has prepared under section 202 of the UMRA a written statement (Ref. 32) which is summarized below. Consistent with section 205 of the UMRA, EPA has identified and considered a reasonable number of regulatory alternatives, also summarized below.

1. *Authorizing legislation.* This proposed rule is issued under the authority of TSCA sections 402(c)(3), 404, and 407 (15 U.S.C. 2682(c)(3), 2684, and 2687).

2. *Cost-benefit analysis.* EPA has prepared an analysis of the costs and benefits associated with this proposed rule, a copy of which is available in the docket for this proposed rule (Ref. 28). The Economic Analysis presents the costs of this proposed rule as well as various regulatory options and is summarized in Unit V.A. EPA has estimated the total annualized costs of this proposed rule are \$272 million per year using a 3% discount rate and \$293 million per year using a 7% discount rate.

The benefits of the proposed rule result from the prevention of adverse health effects attributable to lead exposure from renovations in pre-1978 buildings. These health effects include impaired cognitive function in children and several illnesses in children and adults, such as increased adverse cardiovascular outcomes (including increased blood pressure, increased incidence of hypertension, cardiovascular morbidity and mortality) and decreased kidney function.

3. *State, local, and Tribal government input.* EPA has sought input from State, local and Tribal government representatives throughout the development of the renovation, repair, and painting program. EPA's experience in administering the existing lead-based paint activities program under TSCA section 402(a) suggests that these

governments will play a critical role in the successful implementation of a national program to reduce exposures to lead-based paint hazards associated with renovation, repair, and painting activities. Consequently, as discussed in Unit III.C.2. of the preamble to the 2006 proposed rule (Ref. 13), the Agency has met with State, local, and Tribal government officials on numerous occasions to discuss renovation issues.

4. *Least burdensome option.* EPA has considered a wide variety of options for addressing the risks presented by renovation activities where lead-based paint is present. As part of the development of the renovation, repair, and painting program, EPA considered different options for the scope of the proposed rule, various combinations of training and certification requirements for individuals who perform renovations, various combinations of work practice requirements, and various methods for ensuring that no lead-based paint hazards are left behind by persons performing renovations. The Economic Analysis for this proposed rule analyzed several additional options for the scope of the work practices required, in terms of the size threshold and whether dust wipe testing or clearance is required. As described in Unit V.C., EPA has preliminarily concluded that the options for reducing the scope would result in an unacceptable number of jobs where occupants do not have information on the dust lead levels they are exposed to, or where they are exposed to dust lead levels above the hazard standard.

Currently, EPA believes that the preferred option is the least burdensome option available that achieves a central objective of this proposed rule, which is to provide greater assurance that dust-lead hazards created by renovations are adequately cleaned up, primarily by requiring renovation firms to provide building owners and occupants with information on dust lead levels remaining in the work area after many renovation projects, but also by requiring renovation firms to demonstrate that they have achieved regulatory clearance levels after some of the dustiest renovations.

This rule is not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. Based on the definition of "small government jurisdiction" in RFA section 601, 5 U.S.C. 601, no State governments can be considered small. Small Territorial or Tribal governments may apply for authorization to administer and enforce this program, which would

entail costs, but these small jurisdictions are under no obligation to do so. Small governments operate schools that are child-occupied facilities. If these governments perform renovations in these facilities, they may incur additional costs to perform dust wipe testing or achieve clearance, and to provide residents, parents or guardians with copies of the report documenting the dust wipe testing results. EPA generally measures a significant impact under UMRA as being expenditures, in the aggregate, of more than 1% of small government revenues in any 1 year. As explained in Unit V.C.4., the proposed rule is expected to result in small government impacts well under 1% of revenues. So EPA has determined that the rule does not significantly affect small governments. Nor does the rule uniquely affect small governments, as the proposed rule is not targeted at small governments, does not primarily affect small governments, and does not impose a different burden on small governments than on other entities that operate child-occupied facilities.

E. Executive Order 13132

Pursuant to Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), EPA has determined that this proposed rule does not have "federalism implications," because it will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Thus, Executive Order 13132 does not apply to this proposed rule. States are able to apply for, and receive authorization to administer the lead renovation, repair, and painting program requirements, but are under no obligation to do so. In the absence of a State authorization, EPA will administer the requirements. Nevertheless, in the spirit of the objectives of this Executive Order, and consistent with EPA policy to promote communications between the Agency and State and local governments, EPA consulted with representatives of State and local governments in developing the renovation, repair, and painting program. These consultations were described in the preamble to the 2006 Proposal (Ref. 13).

F. Executive Order 13175

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). EPA has determined that this proposed rule does not have Tribal

implications because it will not have substantial direct effects on Tribal governments, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes, as specified in the Order. Tribes are able to apply for and receive authorization to administer the lead renovation, repair, and painting program on Tribal lands, but Tribes are under no obligation to do so. In the absence of a Tribal authorization, EPA will administer these requirements. While Tribes may operate public housing or child-occupied facilities covered by the rule such as kindergartens, pre-kindergartens, and daycare facilities, EPA has determined that this rule would not have substantial direct effects on the Tribal governments that operate these facilities.

Thus, Executive Order 13175 does not apply to this proposed rule. Although Executive Order 13175 does not apply, EPA consulted with Tribal officials and others by discussing potential renovation regulatory options for the renovation, repair, and painting program at several national lead program meetings hosted by EPA and other interested Federal agencies. EPA specifically solicits additional comment on this proposed action from tribal officials.

G. Executive Order 13045

This action is subject to Executive Order 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997), because it is an "economically significant regulatory action" as defined by Executive Order 12866, and because the environmental health or safety risk addressed by this action may have a disproportionate effect on children.

A central purpose of this proposed rule is to provide greater assurance that dust-lead hazards created by renovations are adequately cleaned up, primarily by requiring renovation firms to provide building owners and occupants with information on dust lead levels remaining in the work area after many renovation projects, but also by requiring renovation firms to demonstrate that they have achieved regulatory clearance levels after some of the dustiest renovations. In the absence of this regulation, owners and occupants would not have information on the dust lead levels remaining following these renovation events, and dust lead levels may substantially exceed the clearance standards for certain renovations that

can create large amounts of difficult-to-clean dust.

The proposed rule will protect children who reside in housing units or attend child-occupied facilities where such renovations occur; who visit a friend, relative, or caregiver's house where such renovations are performed; or who move into such housing when their family purchases it after such a renovation has been performed.

H. Executive Order 13211

This proposed rule is not a "significant energy action" as defined in Executive Order 13211, entitled "Actions concerning Regulations that Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have any adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act of 1995

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113, 12(d) (15 U.S.C. 272 note), directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (*e.g.*, materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This proposed rulemaking involves technical standards. EPA proposes to use the government-unique technical standards described in Unit III of this preamble. EPA has identified several potentially-applicable voluntary consensus standards developed by ASTM International (formerly the American Society for Testing and Materials) that address dust wipe sampling, recordkeeping, and clearance procedures. These standards are: "Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination," "Standard Specification for Wipe Sampling Materials for Lead in Surface Dust," "Standard Practice for Record Keeping and Record Preservation for Lead Hazard Activities," and "Standard Practice for Clearance Examinations Following Lead Hazard Reduction Activities in Single-Family Dwellings and Child-Occupied Facilities" (Refs. 33, 34, 35, 20). Each of

these ASTM documents represents state-of-the-art knowledge regarding the performance of these particular aspects of lead-based paint hazard evaluation and control practices and EPA recommends the use of these documents where appropriate. EPA believes that the proposed amendments to the RRP rule as well as EPA's model training courses for lead-based paint inspectors, risk assessors, and dust sampling technicians are consistent with these ASTM standards. However, because each of these documents is extremely detailed and encompasses many circumstances beyond the scope of this rulemaking, EPA determined that it would be impractical to incorporate these voluntary consensus standards into the rule.

In addition, EPA has identified a potentially-applicable voluntary consensus standard developed by ASTM International for evaluating the performance of HEPA filtration systems, the "Standard Test Method for Air Cleaning Performance of a High-Efficiency Particulate Air-Filter System" (Ref. 27). EPA does recommend that renovation firms in the market for a HEPA vacuum verify that the filter has been tested in accordance with the ASTM standard or an equivalent test method. However, EPA has determined that it would be impractical to incorporate this test method into the rule.

EPA welcomes comments on this aspect of the proposed rulemaking and, specifically, invites the public to identify potentially-applicable voluntary consensus standards and to explain why such standards should be used in this regulation.

Executive Order 12898

Executive Order 12898, entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations

because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. EPA has assessed the potential impact of this proposed rule on minority and low-income populations. The results of this assessment are presented in the Economic Analysis, which is available in the docket for this proposed rule (Ref. 28).

List of Subjects in 40 CFR Part 745

Environmental protection, Child-occupied facility, Housing renovation, Lead, Lead-based paint, Renovation, Reporting and recordkeeping requirements.

Dated: April 22, 2010.

Lisa P. Jackson, Administrator.

Therefore, it is proposed that 40 CFR chapter I be amended as follows:

1. The authority citation for part 745 would continue to read as follows:

Authority: 15 U.S.C. 2605, 2607, 2681-2692 and 42 U.S.C. 4852d.

2. In § 745.82, add a new paragraph (a)(3) to read as follows.

§ 745.82 Applicability.

(a) * * *

(3) Renovations in target housing or child-occupied facilities in which a certified renovator has collected a paint chip sample from each painted component affected by the renovation and a laboratory recognized by EPA pursuant to section 405(b) of TSCA as being capable of performing analyses for lead compounds in paint chip samples has determined that the samples are free of paint or other surface coatings that contain lead equal to or in excess of 1.0 mg/cm² or 0.5% by weight. If the components make up an integrated whole, such as the individual stair treads and risers of a single staircase, the renovator is required to test only one of the individual components, unless the individual components appear to have been repainted or refinished separately.

* * * * *

3. In § 745.83, add the definition "Containment" in alphabetical order to read as follows:

§ 745.83 Definitions.

* * * * *

Containment means a set of measures designed to protect residents and the environment from leaded dust, paint chips, or other forms of lead contamination created by renovations

through the erection of barriers and warning signs and the establishment of access control, modifications to heating, ventilation, and air conditioning systems, and other strategies. Vertical containment, required for some exterior renovations, is a vertical barrier consisting of plastic sheeting over scaffolding or a wood or metal frame, or an equivalent system.

* * * * *

4. Section 745.85 is amended as follows:

- a. Revise paragraph (a)(2)(ii)(D);
b. Revise paragraph (a)(3);
c. Remove paragraph (c);
d. Redesignate paragraphs (b) and (d) as paragraphs (c) and (e) respectively;
e. Add new paragraphs (b) and (d);
f. Revise newly-redesignated paragraph (e);

The revisions and additions read as follows:

§ 745.85 Work practice standards.

(a) * * *

(2) * * *

(ii) * * *

(D) If the renovation will affect surfaces within 10 feet of the property line, the renovation firm must erect vertical containment to ensure that dust and debris from the renovation does not contaminate adjacent buildings or migrate to adjacent properties. Vertical containment may also be necessary in other situations, such as in windy conditions, in order to prevent contamination of other buildings, other areas of the property, or adjacent buildings or properties.

(3) Prohibited and restricted practices. The work practices listed below are prohibited or restricted during a renovation as follows:

(i) Open-flame burning or torching of painted surfaces is prohibited.

(ii) The use of machines designed to remove paint through high speed operation such as sanding, grinding, power planing, needle gun, abrasive blasting, or sandblasting, is prohibited on painted surfaces unless such machines are shrouded and equipped with a HEPA vacuum attachment to collect dust and debris at the point of generation.

(iii) Operating a heat gun on painted surfaces is permitted only at temperatures below 1,100 degrees Fahrenheit.

* * * * *

(b) Clearance—(1) Mandatory clearance. Clearance is required after renovations involving the demolition, or removal through destructive means, of more than 6 ft² of plaster and lath building component, or the disturbance

of paint using machines designed to remove paint through high-speed operation, such as sanding, grinding, power planing, needle gun, abrasive blasting or sandblasting. When clearance is required, the following clearance procedures must be performed:

(i) A certified inspector, certified risk assessor, or certified dust sampling technician must perform a visual inspection to determine whether dust, debris or residue is still present in the renovation work area. If dust, debris or residue is present, these conditions must be removed by re-cleaning and another visual inspection must be performed.

(ii) A certified inspector, certified risk assessor, or certified dust sampling technician must collect dust wipe samples in accordance with EPA's "Residential Sampling for Lead: Protocols for Dust and Soil Sampling, EPA-747-R-95-001" or an equivalent protocol that incorporates adequate quality control procedures. Samples must be collected in the following locations:

(A) If there is more than one room, hallway, or stairwell within the work area, the following samples must be collected:

(1) One windowsill sample, one window trough sample, and one floor sample within each room, hallway, or stairwell in the work area. If there are more than four rooms, hallways, or stairwells within the work area, only four rooms, hallways, or stairwells must be sampled.

(2) One floor sample adjacent to the work area, but not in an area that has been cleaned.

(B) If the work area is a single room, hallway, stairwell, or smaller area, the following samples must be collected:

(1) One windowsill sample, one window trough sample, and one floor sample.

(2) One floor sample adjacent to the work area, but not in an area that has been cleaned.

(C) No window sill or trough samples must be collected if there are no windows in the work area.

(iii) Dust wipe samples must be analyzed by a laboratory or other entity recognized by EPA pursuant to section 405(b) of the Toxic Substances Control Act as being capable of performing analyses for lead compounds in dust samples. If a fixed-site laboratory is to be used, the dust wipe samples must be mailed or otherwise transmitted to the laboratory within 1 business day of the date that they are collected.

(iv) A certified inspector, certified risk assessor, or certified dust sampling

technician must compare the residual lead level reported by the EPA-recognized laboratory for each dust sample or test with the applicable clearance level. If the residual lead level in a particular dust sample or test equals or exceeds the applicable clearance level, the components represented by the failed sample or test shall be re-cleaned and re-tested. The applicable clearance levels are:

(A) 40 µg/ft² for floors.

(B) 250 µg/ft² for interior window sills.

(C) 400 µg/ft² for window troughs.

(v) For surfaces in poor condition that the renovation firm did not specifically agree to refinish in the renovation contract, the renovation firm may stop re-cleaning and re-testing after the second failed dust wipe test on that surface.

(vi) The certified inspector, certified risk assessor, or certified dust sampling technician performing the clearance procedures must prepare a clearance report and provide it to the renovation firm within 3 days of the date that the final dust wipe testing results are obtained. The report must be a single document, with attachments, and must include the following information:

(A) Start and completion dates of the renovation.

(B) A brief written description of the renovation.

(C) The name and address of the certified firm employing the certified inspector, certified risk assessor, or certified dust sampling technician performing the clearance procedures.

(D) The name and signature of each certified inspector, certified risk assessor, or certified dust sampling technician performing clearance procedures and the date(s) that clearance procedures were performed.

(E) The results of the visual inspection.

(F) A detailed written description of the specific sampling or testing locations or a detailed drawing that clearly identifies the location of each sample or test.

(G) The results for each dust wipe sample or test, whether or not clearance was achieved, and the name of each recognized laboratory or other entity that conducted the analyses.

(2) *Optional clearance.* Renovation firms that choose to comply with all of the requirements of this paragraph (745.85(b)) need not comply with the requirements of paragraph (d) of this section.

* * * * *

(d) *Dust wipe testing.* (1) Dust wipe testing must be performed after all renovations involving:

(i) Use of a heat gun at temperatures below 1,100 degrees Fahrenheit.

(ii) Removal or replacement of window or door frames.

(iii) Scraping 60 ft² or more of painted surfaces.

(iv) Removing more than 40 ft² of trim, molding, cabinets, or other fixtures.

(2) After cleaning verification has been performed in accordance with paragraph (c) of this section, a certified inspector, certified risk assessor, or certified dust sampling technician must collect dust wipe samples in accordance with EPA's "Residential Sampling for Lead: Protocols for Dust and Soil Sampling, EPA-747-R-95-001" or an equivalent protocol that incorporates adequate quality control procedures. Samples must be collected in the following locations:

(i) If there is more than one room, hallway, or stairwell within the work area, the following samples must be collected:

(A) One windowsill sample, one window trough sample, and one floor sample within each room, hallway, or stairwell in the work area. If there are more than four rooms, hallways, or stairwells within the work area, only four rooms, hallways, or stairwells must be sampled.

(B) One floor sample adjacent to the work area, but not in an area that has been cleaned.

(ii) If the work area is a single room, hallway, stairwell, or smaller area, the following samples must be collected:

(A) One windowsill sample, one window trough sample, and one floor sample.

(B) One floor sample adjacent to the work area, but not in an area that has been cleaned.

(iii) No window sill or trough samples must be collected if there are no windows in the work area.

(3) Dust wipe samples must be analyzed by a laboratory or other entity recognized by EPA pursuant to section 405(b) of the Toxic Substances Control Act as being capable of performing analyses for lead compounds in dust samples. If a fixed-site laboratory is to be used, the dust wipe samples must be mailed or otherwise transmitted to the laboratory within 1 business day of the date that they are collected.

(4) The certified inspector, certified risk assessor, or certified dust sampling technician performing the dust wipe testing must prepare a dust wipe testing report and provide it to the renovation firm within 3 days of the date that the dust wipe testing results are obtained. The report must be a single document,

with attachments, and must include the following information:

- (i) Start and completion dates of the renovation.
- (ii) A brief written description of the renovation.
- (iii) The name and address of the certified firm employing the certified inspector, certified risk assessor, or certified dust sampling technician performing the dust wipe testing.
- (iv) The name and signature of each certified inspector, certified risk assessor, or certified dust sampling technician performing sampling or testing and the date(s) that samples were collected or testing performed.
- (v) The results of the visual inspection.
- (vi) A detailed written description of the specific sampling or testing locations or a detailed drawing that clearly identifies the location of each sample or test.
- (vii) The results for each dust wipe test, a statement of whether or not all samples analyzed were below the applicable clearance standards, and the name of each recognized laboratory or other entity that conducted the analyses.
- (viii) The clearance standard from paragraph (b)(1)(iv) of this section that is applicable to each dust wipe test and, if one or more final dust wipe tests equals or exceeds the applicable clearance standards, a statement that any dust lead levels that equal or exceed the clearance standards will demonstrate that a lead-based paint hazard is present after the work is completed.

(e) *Activities conducted after post-renovation clearance, dust wipe testing, or cleaning verification.* Activities that do not disturb paint, such as applying paint to walls that have already been prepared, are not regulated by this subpart if they are conducted after post-renovation clearance, dust wipe testing, or cleaning verification has been performed.

5. In § 745.86, revise paragraph (d) to read as follows:

§ 745.86 Recordkeeping and reporting requirements.

* * * * *

(d) If clearance or dust wipe testing is performed in accordance with § 745.85, the renovation firm must provide, within 3 days of the date the renovation firm receives the report, a copy of the clearance or dust wipe testing report to:

- (1) The owner of the building; and, if different,
- (2) An adult occupant of the residential dwelling, if the renovation took place within a residential dwelling, or an adult representative of the child-

occupied facility, if the renovation took place within a child-occupied facility.

6. Section 745.90 is amended as follows:
- a. By revising paragraphs (a)(2) and (a)(3).
 - b. By revising paragraphs (b)(2), (b)(4), and (b)(8).

§ 745.90 Renovator certification and dust sampling technician certification.

- (a) * * *
- (2) Individuals who have successfully completed an accredited abatement worker or supervisor course, or individuals who successfully completed an EPA, HUD, or EPA/HUD model renovation training course may take an accredited refresher renovator training course before April 22, 2011 in lieu of the initial renovator training course to become a certified renovator.
- (3) Individuals who have successfully completed an accredited lead-based paint inspector or risk assessor course may take an accredited refresher dust sampling technician course before April 22, 2011 in lieu of the initial training to become a certified dust sampling technician. Individuals who are currently certified as lead-based paint inspectors or risk assessors may act as dust sampling technicians without further training.

* * * * *

- (b) * * *
- (2) Must provide training to workers on the work practices required by § 745.85(a) that they will be using in performing their assigned tasks.

* * * * *

- (4) Must regularly direct work being performed by other individuals to ensure that the work practices required by § 745.85(a) are being followed, including maintaining the integrity of the containment barriers and ensuring that dust or debris does not spread beyond the work area.

* * * * *

- (8) Must prepare the records required by § 745.86(b)(1) and (6).

* * * * *

7. In § 745.92, add paragraph (b)(3) to read as follows:

§ 745.92 Fees for the accreditation of renovation and dust sampling technician training and the certification of renovation firms.

* * * * *

- (b) * * *
- (3) *Accreditation or certification amendments.* No fee will be charged for accreditation or certification amendments.

* * * * *

8. Revise § 745.225 to read as follows:

§ 745.225 Accreditation of training programs: target housing and child-occupied facilities.

(a) *Scope.* (1) A training program may seek accreditation to offer courses in any of the following disciplines: Inspector, risk assessor, supervisor, project designer, abatement worker, renovator, and dust sampling technician. A training program may also seek accreditation to offer refresher courses for each of the above listed disciplines.

(2) Training programs may first apply to EPA for accreditation of their lead-based paint activities courses or refresher courses pursuant to this section on or after August 31, 1998. Training programs may first apply to EPA for accreditation of their renovator or dust sampling technician courses or refresher courses pursuant to this section on or after April 22, 2009.

(3) A training program must not provide, offer, or claim to provide EPA-accredited lead-based paint activities courses without applying for and receiving accreditation from EPA as required under paragraph (b) of this section on or after March 1, 1999. A training program must not provide, offer, or claim to provide EPA-accredited renovator or dust sampling technician courses without applying for and receiving accreditation from EPA as required under paragraph (b) of this section on or after June 23, 2008.

(b) *Application process.* The following are procedures a training program must follow to receive EPA accreditation to offer lead-based paint activities courses, renovator courses, or dust sampling technician courses:

(1) A training program seeking accreditation shall submit a written application to EPA containing the following information:

- (i) The training program's name, address, and telephone number.
- (ii) A list of courses for which it is applying for accreditation. For the purposes of this section, courses taught in different languages and electronic learning courses are considered different courses, and each must independently meet the accreditation requirements.

(iii) The name and documentation of the qualifications of the training program manager.

(iv) The name(s) and documentation of qualifications of any principal instructor(s).

(v) A statement signed by the training program manager certifying that the training program meets the requirements established in paragraph (c) of this section. If a training program uses EPA-recommended model training

materials, or training materials approved by a State or Indian Tribe that has been authorized by EPA under subpart Q of this part, the training program manager shall include a statement certifying that, as well.

(vi) If a training program does not use EPA-recommended model training materials, its application for accreditation shall also include:

(A) A copy of the student and instructor manuals, or other materials to be used for each course.

(B) A copy of the course agenda for each course.

(C) When applying for accreditation of a course in a language other than English, a signed statement from a qualified, independent translator that they had compared the course to the English language version and found the translation to be accurate.

(vii) All training programs shall include in their application for accreditation the following:

(A) A description of the facilities and equipment to be used for lecture and hands-on training.

(B) A copy of the course test blueprint for each course.

(C) A description of the activities and procedures that will be used for conducting the assessment of hands-on skills for each course.

(D) A copy of the quality control plan as described in paragraph (c)(9) of this section.

(2) If a training program meets the requirements in paragraph (c) of this section, then EPA shall approve the application for accreditation no more than 180 days after receiving a complete application from the training program. In the case of approval, a certificate of accreditation shall be sent to the applicant. In the case of disapproval, a letter describing the reasons for disapproval shall be sent to the applicant. Prior to disapproval, EPA may, at its discretion, work with the applicant to address inadequacies in the application for accreditation. EPA may also request additional materials retained by the training program under paragraph (i) of this section. If a training program's application is disapproved, the program may reapply for accreditation at any time.

(3) A training program may apply for accreditation to offer courses or refresher courses in as many disciplines as it chooses. A training program may seek accreditation for additional courses at any time as long as the program can demonstrate that it meets the requirements of this section.

(4) A training program applying for accreditation must submit the

appropriate fees in accordance with § 745.238.

(c) *Requirements for the accreditation of training programs.* For a training program to obtain accreditation from EPA to offer lead-based paint activities courses, renovator courses, or dust sampling technician courses, the program must meet the following requirements:

(1) The training program shall employ a training manager who has:

(i) At least 2 years of experience, education, or training in teaching workers or adults; or

(ii) A bachelor's or graduate degree in building construction technology, engineering, industrial hygiene, safety, public health, education, business administration or program management or a related field; or

(iii) Two years of experience in managing a training program specializing in environmental hazards; and

(iv) Demonstrated experience, education, or training in the construction industry including: Lead or asbestos abatement, painting, carpentry, renovation, remodeling, occupational safety and health, or industrial hygiene.

(2) The training manager shall designate a qualified principal instructor for each course who has:

(i) Demonstrated experience, education, or training in teaching workers or adults; and

(ii) Successfully completed at least 16 hours of any EPA-accredited or EPA-authorized State or Tribal-accredited lead-specific training; and

(iii) Demonstrated experience, education, or training in lead or asbestos abatement, painting, carpentry, renovation, remodeling, occupational safety and health, or industrial hygiene.

(3) The principal instructor shall be responsible for the organization of the course, course delivery, and oversight of the teaching of all course material. The training manager may designate guest instructors as needed for a portion of the course to provide instruction specific to the lecture, hands-on activities, or work practice components of a course.

However, the principal instructor is primarily responsible for teaching the course materials and must be present to provide instruction (or oversight of portions of the course taught by guest instructors) for the course for which he has been designated the principal instructor.

(4) The following documents shall be recognized by EPA as evidence that training managers and principal instructors have the education, work experience, training requirements or demonstrated experience, specifically

listed in paragraphs (c)(1) and (c)(2) of this section. This documentation must be submitted with the accreditation application and retained by the training program as required by the recordkeeping requirements contained in paragraph (i) of this section. Those documents include the following:

(i) Official academic transcripts or diploma as evidence of meeting the education requirements.

(ii) Resumes, letters of reference, or documentation of work experience, as evidence of meeting the work experience requirements.

(iii) Certificates from train-the-trainer courses and lead-specific training courses, as evidence of meeting the training requirements.

(5) The training program shall ensure the availability of, and provide adequate facilities for, the delivery of the lecture, course test, hands-on training, and assessment activities. This includes providing training equipment that reflects current work practices and maintaining or updating the equipment and facilities as needed.

(6) To become accredited in the following disciplines, the training program shall provide training courses that meet the following training requirements:

(i) The inspector course shall last a minimum of 24 training hours, with a minimum of 8 hours devoted to hands-on training activities. The minimum curriculum requirements for the inspector course are contained in paragraph (d)(1) of this section.

(ii) The risk assessor course shall last a minimum of 16 training hours, with a minimum of 4 hours devoted to hands-on training activities. The minimum curriculum requirements for the risk assessor course are contained in paragraph (d)(2) of this section.

(iii) The supervisor course shall last a minimum of 32 training hours, with a minimum of 8 hours devoted to hands-on activities. The minimum curriculum requirements for the supervisor course are contained in paragraph (d)(3) of this section.

(iv) The project designer course shall last a minimum of 8 training hours. The minimum curriculum requirements for the project designer course are contained in paragraph (d)(4) of this section.

(v) The abatement worker course shall last a minimum of 16 training hours, with a minimum of 8 hours devoted to hands-on training activities. The minimum curriculum requirements for the abatement worker course are contained in paragraph (d)(5) of this section.

(vi) The renovator course must last a minimum of 8 training hours, with a minimum of 2 hours devoted to hands-on training activities. The minimum curriculum requirements for the renovator course are contained in paragraph (d)(6) of this section.

(vii) The dust sampling technician course must last a minimum of 8 training hours, with a minimum of 2 hours devoted to hands-on training activities. The minimum curriculum requirements for the dust sampling technician course are contained in paragraph (d)(7) of this section.

(viii) Electronic learning and other alternative course delivery methods are permitted for the classroom portion of renovator, dust sampling technician, or lead-based paint activities courses but not the hands-on portion of these courses. Electronic learning courses must comply with the following requirements:

(A) A unique identifier must be assigned to each student for them to use to launch and re-launch the course.

(B) The training provider must track each student's course log-ins, launches, progress, and completion, and maintain these records in accordance with paragraph (i) of this section.

(C) The course must include knowledge checks for each module, which must be successfully completed before the student can go on to the next module.

(D) There must be a test of at least 20 questions at the end of the electronic learning portion of the course, of which 80% must be answered correctly by the student for successful completion of the electronic learning portion of the course.

(E) Each student must be able to save or print an uneditable copy of an electronic learning course completion certificate.

(7) For each course offered, the training program shall conduct either a course test at the completion of the course, and if applicable, a hands-on skills assessment, or in the alternative, a proficiency test for that discipline. Each individual must successfully complete the hands-on skills assessment and receive a passing score on the course test to pass any course, or successfully complete a proficiency test.

(i) The training manager is responsible for maintaining the validity and integrity of the hands-on skills assessment or proficiency test to ensure that it accurately evaluates the trainees' performance of the work practices and procedures associated with the course topics contained in paragraph (d) of this section.

(ii) The training manager is responsible for maintaining the validity and integrity of the course test to ensure that it accurately evaluates the trainees' knowledge and retention of the course topics.

(iii) The course test shall be developed in accordance with the test blueprint submitted with the training accreditation application.

(8) The training program shall issue unique course completion certificates to each individual who passes the training course. The course completion certificate shall include:

(i) The name, a unique identification number, and address of the individual.

(ii) The name of the particular course that the individual completed.

(iii) Dates of course completion/test passage.

(iv) For initial inspector, risk assessor, project designer, supervisor, or abatement worker course completion certificates, the expiration date of interim certification, which is 6 months from the date of course completion.

(v) The name, address, and telephone number of the training program.

(vi) The language in which the course was taught.

(vii) For renovator and dust sampling technician course completion certificates, a photograph of the individual. The photograph must be an accurate and recognizable image of the individual. As reproduced on the certificate, the photograph must not be smaller than 1 square inch.

(9) The training manager shall develop and implement a quality control plan. The plan shall be used to maintain and improve the quality of the training program over time. This plan shall contain at least the following elements:

(i) Procedures for periodic revision of training materials and the course test to reflect innovations in the field.

(ii) Procedures for the training manager's annual review of principal instructor competency.

(10) Courses offered by the training program must teach the work practice standards contained in § 745.85 or § 745.227, as applicable, in such a manner that trainees are provided with the knowledge needed to perform the renovations or lead-based paint activities they will be responsible for conducting.

(11) The training manager shall be responsible for ensuring that the training program complies at all times with all of the requirements in this section.

(12) The training manager shall allow EPA to audit the training program to verify the contents of the application for

accreditation as described in paragraph (b) of this section.

(13) The training manager must provide notification of renovator, dust sampling technician, or lead-based paint activities courses offered.

(i) The training manager must provide EPA with notification of all renovator, dust sampling technician, or lead-based paint activities courses offered. The original notification must be received by EPA at least 7 business days prior to the start date of any renovator, dust sampling technician, or lead-based paint activities course.

(ii) The training manager must provide EPA updated notification when renovator, dust sampling technician, or lead-based paint activities courses will begin on a date other than the start date specified in the original notification, as follows:

(A) For renovator, dust sampling technician, or lead-based paint activities courses beginning prior to the start date provided to EPA, an updated notification must be received by EPA at least 7 business days before the new start date.

(B) For renovator, dust sampling technician, or lead-based paint activities courses beginning after the start date provided to EPA, an updated notification must be received by EPA at least 2 business days before the start date provided to EPA.

(iii) The training manager must update EPA of any change in location of renovator, dust sampling technician, or lead-based paint activities courses at least 7 business days prior to the start date provided to EPA.

(iv) The training manager must update EPA regarding any course cancellations, or any other change to the original notification. Updated notifications must be received by EPA at least 2 business days prior to the start date provided to EPA.

(v) Each notification, including updates, must include the following:

(A) Notification type (original, update, cancellation).

(B) Training program name, EPA accreditation number, address, and telephone number.

(C) Course discipline, type (initial/ refresher), and the language in which instruction will be given.

(D) Date(s) and time(s) of training.

(E) Training location(s) telephone number, and address.

(F) Principal instructor's name.

(G) Training manager's name and signature.

(vi) Notification must be accomplished using any of the following methods: Written notification, or electronically using the Agency's

Central Data Exchange (CDX). Written notification of lead-based paint activities course schedules can be accomplished by using either the sample form titled "Lead-Based Paint Training Notification" or a similar form containing the information required in paragraph (c)(13)(v) of this section. All written notifications must be delivered by U.S. Postal Service, fax, commercial delivery service, or hand delivery (persons submitting notification by U.S. Postal Service are reminded that they should allow 3 additional business days for delivery in order to ensure that EPA receives the notification by the required date). Instructions and sample forms can be obtained from the NLIC at 1-800-424-LEAD(5323), or on the Internet at <http://www.epa.gov/lead>.

(vii) Renovator, dust sampling technician, or lead-based paint activities courses must not begin on a date, or at a location other than that specified in the original notification unless an updated notification identifying a new start date or location is submitted, in which case the course must begin on the new start date and/or location specified in the updated notification.

(viii) No training program shall provide renovator, dust sampling technician, or lead-based paint activities courses without first notifying EPA of such activities in accordance with the requirements of this paragraph.

(14) The training manager must provide notification following completion of renovator, dust sampling technician, or lead-based paint activities courses.

(i) The training manager must provide EPA notification after the completion of any lead-based paint activities course. This notice must be received by EPA no later than 10 business days following course completion.

(ii) The notification must include the following:

(A) Training program name, EPA accreditation number, address, and telephone number.

(B) Course discipline and type (initial/refresher).

(C) Date(s) of training.

(D) The following information for each student who took the course:

(1) Name.

(2) Address.

(3) Date of birth.

(4) Course completion certificate number.

(5) Course test score.

(6) For renovator or dust sampling technician courses, a digital photograph of the student.

(E) Training manager's name and signature.

(iii) Notification must be accomplished using any of the following

methods: Written notification, or electronically using the Agency's Central Data Exchange (CDX). Written notification following renovator, dust sampling technician, or lead-based paint activities training courses can be accomplished by using either the sample form titled "Lead-Based Paint Training Course Follow-up" or a similar form containing the information required in paragraph (c)(14)(ii) of this section. All written notifications must be delivered by U.S. Postal Service, fax, commercial delivery service, or hand delivery (persons submitting notification by U.S. Postal Service are reminded that they should allow 3 additional business days for delivery in order to ensure that EPA receives the notification by the required date). Instructions and sample forms can be obtained from the NLIC at 1-800-424-LEAD(5323), or on the Internet at <http://www.epa.gov/lead>.

(d) *Minimum training curriculum requirements.* To become accredited to offer lead-based paint courses in the specific disciplines listed below, training programs must ensure that their courses of study include, at a minimum, the following course topics.

(1) *Inspector.* Instruction in the topics described in paragraphs (d)(1)(iv), (v), (vi), and (vii) of this section must be included in the hands-on portion of the course.

(i) Role and responsibilities of an inspector.

(ii) Background information on lead and its adverse health effects.

(iii) Background information on Federal, State, and local regulations and guidance that pertains to lead-based paint and lead-based paint activities.

(iv) Lead-based paint inspection methods, including selection of rooms and components for sampling or testing.

(v) Paint, dust, and soil sampling methodologies.

(vi) Clearance standards and testing, including random sampling.

(vii) Preparation of the final inspection report.

(viii) Recordkeeping.

(2) *Risk assessor.* Instruction in the topics described in paragraphs (d)(2)(iv), (vi), and (vii) of this section must be included in the hands-on portion of the course.

(i) Role and responsibilities of a risk assessor.

(ii) Collection of background information to perform a risk assessment.

(iii) Sources of environmental lead contamination such as paint, surface dust and soil, water, air, packaging, and food.

(iv) Visual inspection for the purposes of identifying potential sources of lead-based paint hazards.

(v) Lead hazard screen protocol.

(vi) Sampling for other sources of lead exposure.

(vii) Interpretation of lead-based paint and other lead sampling results, including all applicable State or Federal guidance or regulations pertaining to lead-based paint hazards.

(viii) Development of hazard control options, the role of interim controls, and operations and maintenance activities to reduce lead-based paint hazards.

(ix) Preparation of a final risk assessment report.

(3) *Supervisor.* Instruction in the topics described in paragraphs (d)(3)(v), (vii), (viii), (ix), and (x) of this section must be included in the hands-on portion of the course.

(i) Role and responsibilities of a supervisor.

(ii) Background information on lead and its adverse health effects.

(iii) Background information on Federal, State, and local regulations and guidance that pertain to lead-based paint abatement.

(iv) Liability and insurance issues relating to lead-based paint abatement.

(v) Risk assessment and inspection report interpretation.

(vi) Development and implementation of an occupant protection plan and abatement report.

(vii) Lead-based paint hazard recognition and control.

(viii) Lead-based paint abatement and lead-based paint hazard reduction methods, including restricted practices.

(ix) Interior dust abatement/cleanup or lead-based paint hazard control and reduction methods.

(x) Soil and exterior dust abatement or lead-based paint hazard control and reduction methods.

(xi) Clearance standards and testing.

(xii) Cleanup and waste disposal.

(xiii) Recordkeeping.

(4) *Project designer.* (i) Role and responsibilities of a project designer.

(ii) Development and implementation of an occupant protection plan for large-scale abatement projects.

(iii) Lead-based paint abatement and lead-based paint hazard reduction methods, including restricted practices for large-scale abatement projects.

(iv) Interior dust abatement/cleanup or lead hazard control and reduction methods for large-scale abatement projects.

(v) Clearance standards and testing for large scale abatement projects.

(vi) Integration of lead-based paint abatement methods with modernization and rehabilitation projects for large scale abatement projects.

(5) *Abatement worker*. Instruction in the topics described in paragraphs (d)(5)(iv), (v), (vi), and (vii) of this section must be included in the hands-on portion of the course.

(i) Role and responsibilities of an abatement worker.

(ii) Background information on lead and its adverse health effects.

(iii) Background information on Federal, State and local regulations and guidance that pertain to lead-based paint abatement.

(iv) Lead-based paint hazard recognition and control.

(v) Lead-based paint abatement and lead-based paint hazard reduction methods, including restricted practices.

(vi) Interior dust abatement methods/cleanup or lead-based paint hazard reduction.

(vii) Soil and exterior dust abatement methods or lead-based paint hazard reduction.

(6) *Renovator*. Instruction in the topics described in paragraphs (d)(6)(iv), (v), (vi), (vii), and (viii) of this section must be included in the hands-on portion of the course.

(i) Role and responsibility of a renovator.

(ii) Background information on lead and its adverse health effects.

(iii) Background information on EPA, HUD, OSHA, and other Federal, State, and local regulations and guidance that pertain to lead-based paint and renovation activities.

(iv) Procedures for using acceptable test kits to determine whether paint is lead-based paint.

(v) Procedures for collecting a paint chip sample and sending it to a laboratory recognized by EPA under section 405(b) of TSCA.

(vi) Renovation methods to minimize the creation of dust and lead-based paint hazards.

(vii) Interior and exterior containment and cleanup methods.

(viii) Methods to ensure that the renovation has been properly completed, including cleaning verification and clearance testing.

(ix) Waste handling and disposal.

(x) Providing on-the-job training to other workers.

(xi) Record preparation.

(7) *Dust sampling technician*.

Instruction in the topics described in paragraphs (d)(6)(iv) and (vi) of this section must be included in the hands-on portion of the course.

(i) Role and responsibility of a dust sampling technician.

(ii) Background information on lead and its adverse health effects.

(iii) Background information on Federal, State, and local regulations and

guidance that pertains to lead-based paint and renovation activities.

(iv) Dust sampling methodologies.

(v) Clearance standards and testing.

(vi) Report preparation.

(e) *Requirements for the accreditation of refresher training programs*. A training program may seek accreditation to offer refresher training courses in any of the following disciplines: Inspector, risk assessor, supervisor, project designer, abatement worker, renovator, and dust sampling technician. To obtain EPA accreditation to offer refresher training, a training program must meet the following minimum requirements:

(1) Each refresher course shall review the curriculum topics of the full-length courses listed under paragraph (d) of this section, as appropriate. In addition, to become accredited to offer refresher training courses, training programs shall ensure that their courses of study include, at a minimum, the following:

(i) An overview of current safety practices relating to lead-based paint in general, as well as specific information pertaining to the appropriate discipline.

(ii) Current laws and regulations relating to lead-based paint in general, as well as specific information pertaining to the appropriate discipline.

(iii) Current technologies relating to lead-based paint in general, as well as specific information pertaining to the appropriate discipline.

(2) Refresher courses for inspector, risk assessor, supervisor, and abatement worker must last a minimum of 8 training hours. Refresher courses for project designer, renovator, and dust sampling technician must last a minimum of 4 training hours. Refresher courses for all disciplines except project designer must include a hands-on component.

(3) For each course offered, the training program shall conduct a hands-on assessment (for all courses except project designer), and at the completion of the course, a course test.

(4) A training program may apply for accreditation of a refresher course concurrently with its application for accreditation of the corresponding training course as described in paragraph (b) of this section. If so, EPA shall use the approval procedure described in paragraph (b) of this section. In addition, the minimum requirements contained in paragraphs (c) (except for the requirements in paragraph (c)(6)), and (e)(1), (e)(2) and (e)(3) of this section shall also apply.

(5) A training program seeking accreditation to offer refresher training courses only shall submit a written application to EPA containing the following information:

(i) The refresher training program's name, address, and telephone number.

(ii) A list of courses for which it is applying for accreditation.

(iii) The name and documentation of the qualifications of the training program manager.

(iv) The name(s) and documentation of the qualifications of the principal instructor(s).

(v) A statement signed by the training program manager certifying that the refresher training program meets the minimum requirements established in paragraph (c) of this section, except for the requirements in paragraph (c)(6) of this section. If a training program uses EPA-developed model training materials, or training materials approved by a State or Indian Tribe that has been authorized by EPA under § 745.324 to develop its refresher training course materials, the training manager shall include a statement certifying that, as well.

(vi) If the refresher training course materials are not based on EPA-developed model training materials, the training program's application for accreditation shall include:

(A) A copy of the student and instructor manuals to be used for each course.

(B) A copy of the course agenda for each course.

(vii) All refresher training programs shall include in their application for accreditation the following:

(A) A description of the facilities and equipment to be used for lecture and hands-on training.

(B) A copy of the course test blueprint for each course.

(C) A description of the activities and procedures that will be used for conducting the assessment of hands-on skills for each course (if applicable).

(D) A copy of the quality control plan as described in paragraph (c)(9) of this section.

(viii) The requirements in paragraphs (c)(1) through (c)(5), and (c)(7) through (c)(14) of this section apply to refresher training providers.

(ix) If a refresher training program meets the requirements listed in this paragraph, then EPA shall approve the application for accreditation no more than 180 days after receiving a complete application from the refresher training program. In the case of approval, a certificate of accreditation shall be sent to the applicant. In the case of disapproval, a letter describing the reasons for disapproval shall be sent to the applicant. Prior to disapproval, EPA may, at its discretion, work with the applicant to address inadequacies in the application for accreditation. EPA may

also request additional materials retained by the refresher training program under paragraph (i) of this section. If a refresher training program's application is disapproved, the program may reapply for accreditation at any time.

(f) *Re-accreditation of training programs.* (1) Unless re-accredited, a training program's accreditation, including refresher training accreditation, shall expire 4 years after the date of issuance. If a training program meets the requirements of this section, the training program shall be re-accredited.

(2) A training program seeking re-accreditation shall submit an application to EPA no later than 180 days before its accreditation expires. If a training program does not submit its application for re-accreditation by that date, EPA cannot guarantee that the program will be re-accredited before the end of the accreditation period.

(3) The training program's application for re-accreditation shall contain:

(i) The training program's name, address, and telephone number.

(ii) A list of courses for which it is applying for re-accreditation.

(iii) The name and qualifications of the training program manager.

(iv) The name(s) and qualifications of the principal instructor(s).

(v) A description of any changes to the training facility, equipment or course materials since its last application was approved that adversely affects the students' ability to learn.

(vi) A statement signed by the program manager stating:

(A) That the training program complies at all times with all requirements in paragraphs (c) and (e) of this section, as applicable; and

(B) The recordkeeping and reporting requirements of paragraph (i) of this section shall be followed.

(vii) A payment of appropriate fees in accordance with § 745.238.

(4) Upon request, the training program shall allow EPA to audit the training program to verify the contents of the application for re-accreditation as described in paragraph (f)(3) of this section.

(g) *Suspension, revocation, and modification of accredited training programs.* (1) EPA may, after notice and an opportunity for hearing, suspend, revoke, or modify training program accreditation, including refresher training accreditation, if a training program, training manager, or other person with supervisory authority over the training program has:

(i) Misrepresented the contents of a training course to EPA and/or the student population.

(ii) Failed to submit required information or notifications in a timely manner.

(iii) Failed to maintain required records.

(iv) Falsified accreditation records, instructor qualifications, or other accreditation-related information or documentation.

(v) Failed to comply with the training standards and requirements in this section.

(vi) Failed to comply with Federal, State, or local lead-based paint statutes or regulations.

(vii) Made false or misleading statements to EPA in its application for accreditation or re-accreditation which EPA relied upon in approving the application.

(2) In addition to an administrative or judicial finding of violation, execution of a consent agreement in settlement of an enforcement action constitutes, for purposes of this section, evidence of a failure to comply with relevant statutes or regulations.

(h) *Procedures for suspension, revocation or modification of training program accreditation.* (1) Prior to taking action to suspend, revoke, or modify the accreditation of a training program, EPA shall notify the affected entity in writing of the following:

(i) The legal and factual basis for the suspension, revocation, or modification.

(ii) The anticipated commencement date and duration of the suspension, revocation, or modification.

(iii) Actions, if any, which the affected entity may take to avoid suspension, revocation, or modification, or to receive accreditation in the future.

(iv) The opportunity and method for requesting a hearing prior to final EPA action to suspend, revoke or modify accreditation.

(v) Any additional information, as appropriate, which EPA may provide.

(2) If a hearing is requested by the accredited training program, EPA shall:

(i) Provide the affected entity an opportunity to offer written statements in response to EPA's assertions of the legal and factual basis for its proposed action, and any other explanations, comments, and arguments it deems relevant to the proposed action.

(ii) Provide the affected entity such other procedural opportunities as EPA may deem appropriate to ensure a fair and impartial hearing.

(iii) Appoint an official of EPA as Presiding Officer to conduct the hearing. No person shall serve as Presiding Officer if he or she has had any prior connection with the specific matter.

(3) The Presiding Officer appointed pursuant to paragraph (h)(2) of this section shall:

(i) Conduct a fair, orderly, and impartial hearing within 90 days of the request for a hearing.

(ii) Consider all relevant evidence, explanation, comment, and argument submitted.

(iii) Notify the affected entity in writing within 90 days of completion of the hearing of his or her decision and order. Such an order is a final agency action which may be subject to judicial review.

(4) If EPA determines that the public health, interest, or welfare warrants immediate action to suspend the accreditation of any training program prior to the opportunity for a hearing, it shall:

(i) Notify the affected entity of its intent to immediately suspend training program accreditation for the reasons listed in paragraph (g)(1) of this section. If a suspension, revocation, or modification notice has not previously been issued pursuant to paragraph (g)(1) of this section, it shall be issued at the same time the emergency suspension notice is issued.

(ii) Notify the affected entity in writing of the grounds for the immediate suspension and why it is necessary to suspend the entity's accreditation before an opportunity for a suspension, revocation or modification hearing.

(iii) Notify the affected entity of the anticipated commencement date and duration of the immediate suspension.

(iv) Notify the affected entity of its right to request a hearing on the immediate suspension within 15 days of the suspension taking place and the procedures for the conduct of such a hearing.

(5) Any notice, decision, or order issued by EPA under this section, any transcripts or other verbatim record of oral testimony, and any documents filed by an accredited training program in a hearing under this section shall be available to the public, except as otherwise provided by section 14 of TSCA or by 40 CFR part 2. Any such hearing at which oral testimony is presented shall be open to the public, except that the Presiding Officer may exclude the public to the extent necessary to allow presentation of information which may be entitled to confidential treatment under section 14 of TSCA or 40 CFR part 2.

(6) The public shall be notified of the suspension, revocation, modification or reinstatement of a training program's accreditation through appropriate mechanisms.

(7) EPA shall maintain a list of parties whose accreditation has been suspended, revoked, modified or reinstated.

(i) *Training program recordkeeping requirements.* (1) Accredited training programs shall maintain, and make available to EPA, upon request, the following records:

(i) All documents specified in paragraph (c)(4) of this section that demonstrate the qualifications listed in paragraphs (c)(1) and (c)(2) of this section of the training manager and principal instructors.

(ii) Current curriculum/course materials and documents reflecting any changes made to these materials.

(iii) The course test blueprint.

(iv) Information regarding how the hands-on assessment is conducted including, but not limited to:

(A) Who conducts the assessment.

(B) How the skills are graded.

(C) What facilities are used.

(D) The pass/fail rate.

(v) The quality control plan as described in paragraph (c)(9) of this section.

(vi) Results of the students' hands-on skills assessments and course tests, and a record of each student's course completion certificate.

(vii) Any other material not listed above in paragraphs (i)(1)(i) through (i)(1)(vi) of this section that was submitted to EPA as part of the program's application for accreditation.

(viii) For renovator refresher and dust sampling technician refresher courses, a copy of each trainee's prior course completion certificate showing that each trainee was eligible to take the refresher course.

(ix) For course modules delivered in an electronic format, a record of each student's log-ins, launches, progress, and completion, and a copy of the electronic learning completion certificate for each student.

(2) The training program must retain records pertaining to lead-based paint activities courses at the address specified on the training program accreditation application (or as modified in accordance with paragraph (i)(3) of this section) for a minimum of 3 years and 6 months. Records pertaining to renovator or dust sampling technician courses must be retained at the address specified on the training program accreditation application (or as modified in accordance with paragraph (i)(3) of this section) for a minimum of 5 years.

(3) The training program shall notify EPA in writing within 30 days of changing the address specified on its training program accreditation

application or transferring the records from that address.

(j) *Amendment of accreditation.* (1) A training program must amend its accreditation within 90 days of the date a change occurs to information included in the program's most recent application. If the training program fails to amend its accreditation within 90 days of the date the change occurs, the program may not provide renovator, dust sampling technician, or lead-based paint activities training until its accreditation is amended.

(2) To amend an accreditation, a training program must submit a completed "Accreditation Application for Training Providers," signed by an authorized agent of the training provider, noting on the form that it is submitted as an amendment and indicating the information that has changed.

(3) If the amendment includes a new training program manager, any new or additional principal instructor(s), or any new permanent training location(s), the training provider is not permitted to provide training under the new training manager or offer courses taught by any new principal instructor(s) or at the new training location(s) until EPA either approves the amendment or 30 days have elapsed, whichever occurs earlier.

9. In § 745.238, add paragraph (c)(5) to read as follows:

§ 745.238 Fees for accreditation and certification of lead-based paint activities.

* * * * *

(c) * * *

(5) No fee will be charged for accreditation amendments.

* * * * *

10. In § 745.326, revise paragraphs (a)(2)(i), (a)(2)(ii), (d), (e)(1), and (e)(3), and add paragraph (f) to read as follows:

§ 745.326 Renovation: State and Tribal program requirements.

(a) * * *

(2) * * *

(i) Procedures and requirements for the accreditation of renovation and dust sampling technician training programs. (Note: a State and Tribal program is not required to include procedures and requirements for the dust sampling technician training discipline if the State or Tribal program requires dust sampling to be performed by a certified lead-based paint inspector or risk assessor.)

(ii) Procedures and requirements for accredited initial and refresher training for renovators and dust sampling technicians and on-the-job training for

other individuals who perform renovations.

* * * * *

(d) *Certification of individuals and/or renovation firms.* To be considered at least as protective as the Federal program, the State or Tribal program must:

(1) Establish procedures and requirements that ensure that individuals who perform or direct renovations are properly trained. These procedures and requirements must include:

(i) A requirement that renovations be performed and directed by at least one individual who has been trained by an accredited training program.

(ii) Procedures and requirements for accredited refresher training for these individuals.

(iii) Procedures and requirements for certified renovators to provide on-the-job training for those individuals who perform renovations but do not receive accredited training.

(2) Establish procedures and requirements for the formal certification and re-certification of either individuals or renovation firms.

(3) Establish procedures for the suspension, revocation, or modification of certifications.

(e) * * *

(1) Renovations must be conducted only by certified individuals and/or certified renovation firms.

* * * * *

(3) Certified individuals and/or renovation firms must retain appropriate records.

(f) *Revisions to renovation program requirements.* If EPA revises the renovation program requirements contained in subparts E and L of this part:

(1) A State or Tribe with a renovation program approved before the effective date of the revisions must demonstrate that it meets the requirements of this section no later than the first report that it submits pursuant to § 745.324(h) no later than one year after the effective date of the revisions.

(2) A State or Tribe with an application for approval of a renovation program submitted but not approved before the effective date of the revisions must demonstrate that it meets the requirements of this section either by amending its application or in the first report that it submits pursuant to § 745.324(h) no later than one year after the effective date of the revisions.

(3) A State or Indian Tribe submitting its application for approval of a renovation program on or after the effective date of the revisions must

demonstrate in its application that it meets the requirements of this section.

11. In § 745.327, revise paragraphs (b)(1), (b)(2), (b)(3), and (c)(2) to read as follows:

§ 745.327 State or Indian Tribal lead-based paint compliance and enforcement programs.

* * * * *

(b) * * *

(1) *Lead-based paint activities or renovation requirements.* State or Tribal lead-based paint compliance and enforcement programs will be considered adequate if the State or Indian Tribe demonstrates, in its application at § 745.324(b)(2), that it has established a lead-based paint program that contains all of the elements specified in § 745.325 or § 745.326, or both, as applicable.

(2) *Authority to enter.* State or Tribal officials must be able to enter, through consent, warrant, or other authority, premises or facilities where lead-based paint violations may occur for purposes of conducting inspections.

(i) State or Tribal officials must be able to enter premises or facilities where those engaged in training for lead-based paint activities or renovations conduct business.

(ii) For the purposes of enforcing a renovation program, State or Tribal officials must be able to enter a firm's place of business or work site.

(iii) State or Tribal officials must have authority to take samples and review

records as part of the lead-based paint inspection process.

(3) *Flexible remedies.* A State or Tribal lead-based paint compliance and enforcement program must provide for a diverse and flexible array of enforcement statutory and regulatory authorities and remedies. At a minimum, these authorities and remedies, which must also be reflected in an enforcement response policy, must include the following:

(i) The authority to issue warning letters, Notices of Noncompliance, Notices of Violation, or the equivalent;

(ii) The authority to assess administrative or civil fines, including a maximum penalty authority for any violation in an amount no less than \$10,000 per violation per day;

(iii) The authority to assess the maximum penalties or fines for each instance of violation and, if the violation is continuous, the authority to assess penalties or fines up to the maximum amount for each day of violation, with all penalties assessed or collected being appropriate for the violation after consideration of the size or viability of the business, enforcement history, risks to human health or the environment posed by the violation, and other similar factors;

(iv) The authority to commence an administrative proceeding or to sue in courts of competent jurisdiction to recover penalties;

(v) The authority to suspend, revoke, or modify the accreditation of any

training provider or the certification of any individual or firm;

(vi) The authority to commence an administrative proceeding or to sue in courts of competent jurisdiction to enjoin any threatened or continuing violation of any program requirement, without the necessity of a prior suspension or revocation of a trainer's accreditation or a firm's or individual's certification;

(vii) The authority to apply criminal sanctions, including recovering fines; and

(viii) The authority to enforce its authorized program using a burden of proof standard, including the degree of knowledge or intent of the respondent that is no greater than it is for EPA under TSCA.

* * * * *

(c) * * *

(2) *Compliance assistance.* A State or Tribal lead-based paint compliance and enforcement program must provide compliance assistance to the public and the regulated community to facilitate awareness and understanding of and compliance with State or Tribal requirements governing the conduct of lead-based paint activities or renovations. The type and nature of this assistance can be defined by the State or Indian Tribe to achieve this goal.

* * * * *

[FR Doc. 2010-10102 Filed 5-5-10; 8:45 am]

BILLING CODE 6560-50-P