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Via: Federal eRulemaking Portal:
http://www.regulations.gov

U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics
Mail Code 7407M
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Attention: Hans Scheifele

Re: Lead; Renovation, Repair, and Painting Program for Public and Commercial Buildings; Request for Information and Advance Notice of Public Meeting; Docket EPA-HQ-OPPT-2010-0173

Dear Mr. Scheifele:

Please find attached for filing in Docket EPA-HQ-OPPT-2010-0173 Comments of the Commercial Properties Coalition.

Please let me know if you have any questions.

Sincerely,

Jane C. Luxton

Attachments

COMMENTS OF THE COMMERCIAL PROPERTIES COALITION ON EPA'S LEAD RENOVATION, REPAIR AND PAINTING PROGRAM FOR PUBLIC AND COMMERCIAL BUILDINGS

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COMMENTS OF THE COMMERCIAL PROPERTIES COALITION ON EPA'S LEAD RENOVATION, REPAIR AND PAINTING PROGRAM FOR PUBLIC AND COMMERCIAL BUILDINGS

I. INTRODUCTION AND COALITION DESCRIPTION

Thank you for the opportunity to comment on EPA's Request for Information and Advance Notice of Public Hearing ("RFI"),[1] regarding its "Lead; Renovation, Repair, and Painting Program for Public and Commercial Buildings" ("Public & Commercial LRRP Program"). These comments are submitted by the Commercial Properties Coalition, an informal group of trade associations (the "Coalition") whose members are involved in almost every aspect of commercial real estate development, ownership, management, contracting, and building product supply. Attachment 1 describes the mission and membership of each participating organization in more detail.[2]

The Coalition's members represent companies and other concerns (many of which are small businesses) that would be significantly affected by a Public & Commercial LRRP Program. The viability of the commercial real estate sector depends on constructing, owning, and maintaining buildings in a manner to safeguard the health and well-being of employees, tenants and occupants. Above and beyond regulatory mandates, Coalition members routinely seek voluntary certification and accreditation of their offices, apartment buildings, stores, hotels and other structures to ensure that they are sustainable, efficient – and healthy. Accordingly, the Coalition has a substantial interest in the RFI, any finding under Section 403 of the Toxic Substances Control Act ("TSCA") regarding potentially "dangerous levels of lead" in the building stock at issue, and any additional regulations that will expand federal authority over LRRP activities within and on the exterior of public and commercial buildings. Coalition members have participated in earlier phases of public participation on this topic and incorporate by reference our 2010 comments to EPA's Advanced Notice of Proposed Rulemaking[3] and a proceeding before EPA's Science Advisory Board.[4]

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[1] 77 Fed. Reg. 76,996 (Dec. 31, 2012).

[2] The Coalition's members are: American Hotel & Lodging Association (AH&LA); Associated Builders and Contractors; Associated General Contractors of America (AGC); Building Owners and Managers Association (BOMA) International; CCIM Institute; Electronic Security Association (ESA); the Independent Electrical Contractors (IEC); Institute of Real Estate Management (IREM®); NAIOP, the Commercial Real Estate Development Association; NAREIT®, the National Association of Real Estate Investment Trusts®; National Apartment Association (NAA); the National Association of Home Builders (NAHB); the National Association of REALTORS®; the National Federation of Independent Business (NFIB); the National Leased Housing Association (NLHA); the National Lumber and Building Material Dealers Association (NLBMDA); National Multi Housing Council (NMHC); the Plumbing-Heating-Cooling Contractors—National Association; The Real Estate Roundtable; the U.S. Chamber of Commerce; and Window and Door Manufacturers Association (WDMA). See Attachment 1.

[3] See Attachment 2.

[4] See Attachment 3.

II. EXECUTIVE SUMMARY

Coalition members met with EPA staff on November 5, 2012, to get some general sense of the Agency's direction in developing a Public & Commercial LRRP Program. Since issuing an ANPR in 2010, EPA has not determined if any dangerous levels of lead exist in public and commercial buildings – or whether any lead-based paint hazards are caused by renovation, repair or painting ("RRP") activities in these structures. Recognizing that the agency is at an early stage of fact-finding, at our meeting EPA indicated that the Program's reach may cover buildings that are:

- Constructed before 1978 and owned by federal, state, local or municipal governments;
- Owned by the private sector, without regard to vintage or age of construction;
- Leased in whole or in part by the federal government, the largest commercial office tenant in the country;
- Occupied by women of child-bearing years, or men that may be prone to hypertension;
- Sites of interior renovations where more than six square feet of painted surfaces are disturbed per room; or
- Sites of exterior renovations where more than 20 square feet of painted surfaces are disturbed.

In short, EPA indicated to us that just about every commercial structure in the country might be subject to its regulatory oversight. Given this initiative's potentially staggering scope, as the Agency develops a record to consider any Public & Commercial LRRP Program it must keep in mind the following overarching themes and points of these comments:

A. EPA should complete any "hazard" finding under TSCA § 403 regarding public and commercial buildings well before it proposes any regulations of RRP activities in these structures.

Before it may promulgate a Public & Commercial LRRP Rule to regulate renovation and remodeling activities, EPA must first develop a TSCA Section 403 rule to identify whether "dangerous levels of lead" even exist in those buildings. EPA acknowledges that it can address renovations in public and commercial buildings through rulemaking "to the extent such renovations create lead-based paint hazards."[5] The only section 403 hazard rule that EPA has issued to date covers the residential stock and explicitly states: "[I]t is important to emphasize that this rule only applies to pre-1978 target housing and certain child-occupied facilities, and that *these standards were not intended to identify potential hazards in other*

[5] 77 Fed. Reg. at 76,997 (Dec. 31, 2012).

settings."[6] It took EPA more than seven years *after* publication of the final 403 hazard rule for "target housing" to decide how to regulate renovation activities in residences.[7] A similar deliberative process, within a comparable sequence and time frame for agency action, should be conducted here. EPA should propose any section 403 rule for public and commercial buildings, give stakeholders ample opportunity to comment on that proposal, and then finalize any such rule so all advocates and stakeholders can fairly assess the need for RRP regulations to address lead-based paint hazards – which at this point are unknown *vis à vis* the public and commercial stock.

B. Given the fundamentally different uses, occupancies, and renovation work practices that attend to commercial buildings versus residences, EPA cannot simply rely on information gathered for "target housing" to justify a Public & Commercial LRRP Program.

Sentiments expressed by EPA's Science Advisory Board ("SAB") indicate that, for lack of any better lead-based paint information, the Agency should default to data gathered in the "target housing" context and carry it over to public and commercial buildings. An SAB panel has recognized that there is "insufficient data concerning lead dust exposures in commercial or public buildings to support a reliable standard," but nonetheless has been reported to "suggest[ ] that EPA strengthen its hazard standard to protect children under 6 in private residences … and then apply that standard to commercial buildings."[8] Moreover, in a recent response to questions for a Senate hearing record, EPA cited eight "studies" as potentially relevant to lead-based paint issues in public and commercial buildings.[9] In fact, all of the structures assessed in these studies were pre-1978 target housing (except for a single school built in 1967 and a one-story business well over 150 years old). Two of these studies state – on their face – that they provide no basis upon which to draw conclusions about lead-based paint, RRP activities, or associated hazards in public and commercial structures.

The Coalition strongly cautions against a reductive approach that relies upon studies conducted in residential settings to somehow buttress any Public & Commercial LRRP Program. EPA must recognize and account for the profound differences in uses, occupancies, sizes, and renovation work practices in commercial buildings compared to homes, and between commercial buildings as a stock. The Agency cannot discharge its administrative and legal responsibilities simply by compiling Residential LRRP information and deeming it probative for Public & Commercial LRRP purposes.

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[6] *Lead; Identification of Dangerous Levels of Lead*, 66 Fed. Reg. 1,206, 1,211, (Jan. 5, 2001), (emphasis added).

[7] The Section 403 hazard rule for target housing was published in 2001, *Lead; Identification of Dangerous Levels of Lead*, 66 Fed. Reg. 1,206 (Jan. 5, 2001). The final Residential LRRP Rule was published in 2008, *Lead; Renovation, Repair, and Painting Program; Final Rule*, 73 Fed. Reg. 21,692 (April 22, 2008).

[8] *EPA Science Advisers Urge Tough Lead Dust Cleanup Requirements*, InsideEPA.com (July 13, 2010). See Attachment 4.

[9] See Letter from EPA Associate Administrator Arvin Ganesan to The Honorable David Vitter, and attached answers to questions posed by The Honorable Barbara Boxer and the Honorable James Inhofe, at p. 7 (March 7, 2013). See Attachment 5.

C. EPA should coordinate closely with federal facilities managers to study federal buildings for any lead-based paint hazards, identify actual renovation projects in these structures, and assess the effectiveness of associated work practices.

EPA should be coordinating with its sister agencies and fellow federal staff to collect the scientific, technical, and work practices information sought by the RFI. As Senators Vitter, Inhofe, Crapo and Fischer recently wrote to EPA:[10]

> [T]he General Services Administration ("GSA") is the nation's largest public real estate organization and provides workspace in commercial buildings for more than 1 million federal workers through its Public Buildings Services ("PBS"). PBS's commercial real estate portfolio covers over 8,100 leases in excess of 171 million square feet, and 1,500 government-owned buildings, across the nation.[11] Likewise, the infrastructure of the Department of Defense ("DoD") encompasses several hundred thousand buildings at more than 5,000 different locations or sites.[12] The footprint of the Veterans Administration ("VA") is marked by 5,500 buildings and 1600 leases totaling approximately 142 million square feet, with an average age approaching 60 years.[13] And, the Architect of the Capitol ("AoC") is responsible to the U.S. Congress and Supreme Court to maintain and operate 17.4 million square feet of buildings on Capitol Hill.[14]

The massive stock of federal buildings can serve as a laboratory to develop any Public & Commercial LRRP rule and help assure a sound, scientific, and fact-based record. Similarly, on March 28, 2013, Senators King, Manchin, and Begich wrote to the National Institute of Building Sciences ("NIBS") urging the Institute to work within its authorities to assist with providing information responsive to the RFI.[15] The Coalition stands by to support EPA in coordinating with NIBS, GSA and other agencies and departments to leverage the information and technical resources available in the federal buildings arena.

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[10]See Vitter Letter (Feb. 13, 2013). See Attachment 6.

[11]See *Inventory of Owned and Leased Properties*, Gen. Serv. Admin., http://www.gsa.gov/portal/content/100783 (last visited Mar. 27, 2013).

[12]See *DoD 101: An Introductory Overview of the Department of Defense*, U.S. Dept. of Def. http://www.defense.gov/about/dod101.aspx (last visited Mar. 27, 2013).

[13]See Robert L. Neary, Jr., *VA Construction & Facilities Management*, Dept. of Veteran Affairs http://www.acec.org/advocacy/committees/pdf/annconv2011_va.pdf (March 31, 2011), at slide 6.

[14]See *About AOC: Responsibilities of the Architect*, Architect of the Capitol http://aoc.gov/about-aoc/responsibilities-architect (last visited Mar. 27, 2013).

[15]See King Letter (March 28, 2013). See Attachment 7.

D. EPA should inventory and consider whether existing regulatory programs and industry practices already address any potential lead-based paint hazards and renovation work practices in public and commercial buildings.

Executive Order 12866 (Sept. 30, 1993) was adopted to "reform and make more efficient the [federal] regulatory process" with a system that protects and improves the health, safety, environment and well-being of the American people," while "enhanc[ing] planning and coordination with respect to both new and existing regulations …."[16] President Obama amplified these objectives with his own order, which directs executive departments to ensure that their regulatory programs are not "redundant, inconsistent, or overlapping" with other agency programs; "to coordinate[ ] across agencies" in developing new programs in a manner that "promotes … simplification[ ] and harmonization"; and to "identify and use the best, most innovative, and least burdensome tools for achieving regulatory ends …" while "tak[ing] into account benefits and costs, both quantitative and qualitative."[17]

EPA must adhere to these tenets here in developing any Public & Commercial LRRP Program. Myriad other federal programs already provide significant public health protection from exposure to hazardous and toxic substances, in workplaces, as a result of construction activities, or to the environment from release of toxic substances, including lead. EPA must inventory and assess existing authorities already at its disposal, and within the jurisdiction of its sister agencies, that may address and minimize possible lead-based paint hazards – before it enacts an expansive new RRP program for public and commercial buildings.

Each of these overarching points is addressed in more detail throughout these comments. The Coalition reserves the right to supplement these comments as additional information comes to light and our members raise further questions that warrant EPA's consideration.

III. DIVERSITY OF COMMERCIAL BUILDING STOCK: SIZE, TYPE, USE, OCCUPANCY, AND AGE

As EPA considers and collects information for this RFI, it would be misguided if it treats "commercial buildings" as a generic, monolithic grouping. Any rational and reasonable Public & Commercial LRRP Program must account for and reflect the vast diversity of buildings that populate America's cities, communities, and rural areas. Unlike the residential sector which is dominated by single-family homes, the commercial buildings sector is not dominated by structures of a single type, use, activity, or occupancy. The Coalition thus offers the following information to assist EPA in gaining a better understanding of our heterogeneous industry, and a deeper appreciation of the diverse assets that comprise "commercial buildings."

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[16] Exec. Order No. 12,866, *Regulatory Planning and Review* (Sept. 30, 1993), http://www.whitehouse.gov/sites/default/files/omb/inforeg/eo12866/eo12866_10041993.pdf.

[17] Executive Order 13563 §1, *Improving Regulation and Regulatory Review* (Jan. 18, 2011), http://www.whitehouse.gov/the-press-office/2011/01/18/improving-regulation-and-regulatory-review-executive-order.

A. Definitions of "Commercial Building" and "Child Occupied Facility"

The RFI does not define the term "commercial building." Plainly, this is a foundational term that the Agency must define before it can identify any potential lead-based paint hazards in "commercial buildings," and before it may regulate renovation and remodeling activities in those structures to address purported health hazards.

The Energy Information Administration ("EIA"), the data gathering arm of the Department of Energy, periodically surveys U.S. buildings through its Commercial Building Energy Consumption Survey ("CBECS"). It provides basic definitional guidance as follows:[18]

> ***Commercial:*** In the CBECS, commercial refers to any building that is neither residential (used as a dwelling for one or more households), manufacturing/industrial (used for processing or procurement of goods, merchandise raw materials or food), nor agricultural (used for the production, processing, sale, storage, or housing of agricultural products, including livestock). At least 50 percent of the floorspace must be used for purposes other than these for a building to be considered "commercial."
>
> ***Commercial Building:*** A building with more than 50 percent of its floorspace used for commercial activities. Commercial buildings include, but are not limited to, the following: stores, offices, schools, churches, gymnasiums, libraries, museums, hospitals, clinics, warehouses, and jails. Government buildings were included except for buildings on sites with restricted access, such as some military bases. Agricultural buildings, residences, and manufacturing/industrial buildings are excluded.

EPA uses the following definition of "public and commercial building" in the context of implementing TSCA's asbestos provisions. It warrants noting that this definition covers "any" such building constructed before 1978, including industrial facilities:

> ***Public and commercial building*** means any building which is constructed prior to 1978, other than child-occupied facilities as defined by 40 CFR part 745.83, any residential apartment building of fewer than 10 units, or detached single-family homes. The term includes, but is not limited to: industrial and office buildings, residential apartment buildings and condominiums of 10 or more dwelling units, government-owned buildings, colleges, museums, airports, hospitals, churches, stores, warehouses and factories.[19]

[18] See *Commercial Buildings Energy Consumption Survey(CBECS), CBECS Terminology*, U.S. Energy Info. Admin, http://www.eia.gov/consumption/commercial/terminology.cfm (last visited Mar. 27, 2013).

[19] 40 CFR part 763, Subpart E, Appendix C (2012) (interpreting and implementing 15 U.S.C. § 2642(10)).

The definition of "public and commercial building" cited above for the asbestos program cross-references EPA's term "child-occupied facilities," as used in the Residential LRRP Program:

> ***Child-occupied facility*** means a building, *or 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 include, but are not limited to, day care centers, preschools and kindergarten classrooms. *Child-occupied facilities may be located in* target housing or in *public and commercial buildings.* With respect to common areas in public or commercial buildings that contain child-occupied facilities, the child-occupied facility encompasses only those common areas that are routinely used by children under age 6, such as restrooms and cafeterias. Common areas that children under age 6 only pass through, such as hallways, stairways, and garages are not included. In addition, with respect to exteriors of public or commercial buildings that contain child-occupied facilities, the child-occupied facility encompasses only the exterior sides of the building that are immediately adjacent to the child-occupied facility or the common areas routinely used by children under age 6.[20]

Accordingly, EPA's current definition of "child-occupied facility" has important ramifications for the scope of any Public & Commercial LRRP Program. If a "public or commercial building" (however it is ultimately defined) contains a "child-occupied facility," then that facility is already subject to EPA's Residential LRRP Program. For example, day care centers in private office buildings are already within the scope of Residential LRRP rules.

Based on EPA's own definition, it follows that any Public & Commercial LRRP Program would cover buildings and spaces outside "child-occupied facilities." Thus, a Public & Commercial LRRP Program could apply to: (1) buildings that do not have "child-occupied facilities" in them; and (2) areas in non-"target housing" buildings that are occupied by: (a) children under age six who are transient visitors of less than 60 hours annually, and/or (b) just about anyone age six or older.

The potential reach of the Public & Commercial LRRP program is, accordingly, massive. It is unclear what (if any) buildings might be excluded from EPA's oversight. If the Agency truly intends for a Public & Commercial LRRP Program to be so boundless in scope, then it is incumbent on the Agency to make sure that all federal, state, local, municipal, non-profit and private sector building owners, managers and contractors have a clear understanding of what is at stake in this RFI.

[20] 40 CFR § 745.83 (2012) (emphasis added).

B. General Characteristics of U.S. Commercial Buildings

The general definitions discussed above are helpful guides. But they do not reflect the real breadth of complexity and diversity between and among public and commercial structures. Except for the fact that it does not include the full range of manufacturing, industrial, and agricultural buildings, CBECS provides the most comprehensive data on the sundry characteristics of the public and commercial stock property types.[21]

Information collected through CBECS is used throughout the government and private sectors to answer basic questions about commercial real estate, such as: What building types are there? How large are they? How old are they? Where are they? CBECS has been recognized as part of President Obama's "Open Government Initiative" to expand use of and reliance on data sets generated by the federal government.[22] Congress has cited CBECS data, recognizing its value to government programs.[23] CBECS data reflecting the size, age, and myriad uses of buildings are reported as conclusive by the U.S. Census.[24] And, as explained below, CBECS provides essential information for other program offices within EPA.

Among other things, the most recent version of available CBECS data reports:[25]

- ***Amount:*** There are nearly 4.9 million commercial buildings in the U.S. spanning a broad spectrum of types and uses, and comprising more than 71.6 billion square feet of floorspace.

- ***Size:*** Commercial buildings range widely in size. The vast majority of commercial buildings are in the smaller size categories. More than half of buildings are 5,000 square feet in size or smaller, and nearly three-fourths are 10,000 square feet or smaller.

- ***Vintage:*** Buildings constructed from 1970 to 2003 comprise 58 percent of buildings and 63 percent of floorspace.

- ***Growth Trends:*** Since the first CBECS in 1979, the commercial buildings sector has increased in size. From 1979 to 2003, the

[21]EPA will need to justify its basis for including or excluding any categories of structures from the scope of the Program.

[22]See *Commercial Buildings Energy Consumption Survey*, DATA.gov, http://www.data.gov/energy/datasets/commercial-buildings-energy-consumption-survey (last visited Mar. 27, 2013).

[23]See Letter from High-Performance Building Congressional Caucus Coalition to Senate Energy & Water Appropriations Subcommittee Staff (July 25, 2011) http://www.hpbccc.org/CBECSMemo.pdf.

[24]U.S. Census Bureau, Statistical Abstract of the United States: 2012, Table 1006 at p. 630.

[25]See *Overview of Commercial Buildings, 2003*, U.S. Energy Info. Admin., http://www.eia.gov/emeu/cbecs/cbecs2003/overview1.html (last visited Mar. 27, 2013). This information is from the 2003 edition of CBECS. A survey is being conducted by EIA this year, with preliminary results scheduled to be reported in 2014. See *How Will Buildings Be Selected for the 2012 CBECS?*, U.S. Energy Info. Admin., http://www.eia.gov/consumption/commercial/2012-cbecs-building-sampling.cfm.

number of commercial buildings increased from 3.8 million to 4.9 million. And, the amount of commercial floorspace increased from 51 billion to 72 billion square feet.[26]

- ***Location:*** The South Census Region, the most populous of the four regions, accounts for more than one-third of both commercial buildings and floorspace. The fewest commercial buildings are found in the Northeast Census Region, while the smallest amount of commercial floor space is found in the West Census Region.

- ***Occupancy:*** Key occupancy information such as numbers of workers, median square feet per worker, and median hours per week of operation, significantly vary across all building types and sub-types.

C. Diversity of Commercial Buildings: Types, Uses, and Occupancies.

The most recent CBECS survey identified more than 100 specific activities, aggregated into fourteen "principal building activities" which are then broken down into numerous sub-types based on the primary business, commerce or function conducted within each structure, as follows:[27]

Bldng. Type	Definition	Subcategories
Education	Buildings used for academic or technical classroom instruction, such as elementary, middle, or high schools, and classroom buildings on college or university campuses. Buildings on education campuses for which the main use is not classroom are included in the category relating to their use. For example, administration buildings are part of "Office," dormitories are "Lodging," and libraries are "Public Assembly."	• elementary or middle school • high school • college or university • preschool or daycare • adult education • career or vocational training • religious education
Food Sales	Buildings used for retail or wholesale of food.	• grocery store or food market • gas station (w/ convenience

[26] See *Overview of Commercial Buildings, 2003*, U.S. Energy Info. Admin., http://www.eia.gov/emeu/cbecs/cbecs2003/overview2.html (last visited Mar. 27, 2013).

[27] See *Commercial Buildings Energy Consumption Survey (CBECS) Building Type Definitions*, http://www.eia.gov/consumption/commercial/building-type-definitions.cfm (last visited Mar. 27, 2013).

Bldng. Type	Definition	Subcategories
		store) • convenience store
Food Service	Buildings used for preparation and sale of food and beverages for consumption.	• fast food • restaurant or cafeteria
Health Care (Inpatient)	Buildings used as diagnostic and treatment facilities for inpatient care.	• hospital • inpatient rehabilitation
Health Care (Outpatient)	Buildings used as diagnostic and treatment facilities for outpatient care. Medical offices are included here if they use any type of diagnostic medical equipment (if they do not, they are categorized as an office building).	• medical office (see previous column) • clinic or other outpatient health care • outpatient rehabilitation • veterinarian
Lodging	Buildings used to offer multiple accommodations for short-term or long-term residents, including skilled nursing and other residential care buildings.	• motel or inn • hotel • dormitory, fraternity, or sorority • retirement home • nursing home, assisted living, or other residential care • convent or monastery • shelter, orphanage, or children's home • halfway house
Mercantile (Retail Other Than Mall)	Buildings used for the sale and display of goods other than food.	• retail store • beer, wine, or liquor store • rental center • dealership or showroom for

Bldng. Type	Definition	Subcategories
		vehicles or boats • studio/gallery
Mercantile (Enclosed and Strip Malls)	Shopping malls comprised of multiple connected establishments.	• enclosed mall • strip shopping center
Office	Buildings used for general office space, professional office, or administrative offices. Medical offices are included here if they do not use any type of diagnostic medical equipment (if they do, they are categorized as an outpatient health care building).	• administrative or professional office • government office • mixed-use office • bank or other financial institution • medical office (see previous column) • sales office • contractor's office (*e.g.* construction, plumbing, HVAC) • non-profit or social services • research and development • city hall or city center • religious office • call center
Public Assembly	Buildings in which people gather for social or recreational activities, whether in private or non-private meeting halls.	• social or meeting (*e.g.* community center, lodge, meeting hall, convention center, senior center) • recreation (*e.g.* gymnasium, health club, bowling alley, ice rink, field house, indoor racquet sports)

Bldng. Type	Definition	Subcategories
		• entertainment or culture (*e.g.* museum, theater, cinema, sports arena, casino, night club) • library • funeral home • student activities center • armory • exhibition hall • broadcasting studio • transportation terminal
Public Order and Safety	Buildings used for the preservation of law and order or public safety.	• police station • fire station • jail, reformatory, or penitentiary • courthouse or probation office
Religious Worship	Buildings in which people gather for religious activities, (such as chapels, churches, mosques, synagogues, and temples).	• No subcategories collected
Service	Buildings in which some type of service is provided, other than food service or retail sales of goods	• vehicle service or vehicle repair shop • vehicle storage/ maintenance (car barn) • repair shop • dry cleaner or laundromat • post office or postal center • car wash • gas station

Bldng. Type	Definition	Subcategories
		• photo processing shop • beauty parlor or barber shop • tanning salon • copy center or printing shop • kennel
Warehouse and Storage	Buildings used to store goods, manufactured products, merchandise, raw materials, or personal belongings (such as self-storage).	• refrigerated warehouse • non-refrigerated warehouse • distribution or shipping center
Other	Buildings that are industrial or agricultural with some retail space; buildings having several different commercial activities that, together, comprise 50 percent or more of the floorspace, but whose largest single activity is agricultural, industrial/ manufacturing, or residential; and all other miscellaneous buildings that do not fit into any other category.	• airplane hangar • crematorium • laboratory • telephone switching • agricultural with some retail space • manufacturing or industrial with some retail space • data center or server farm
Vacant	Buildings in which more floorspace was vacant than was used for any single commercial activity at the time of interview. Therefore, a vacant building may have some occupied floorspace.	• No subcategories collected.

<u>Note as per CBECS:</u> These subcategories are not exhaustive lists of the types of buildings included in each category. For every general category, there are some "other" types of buildings that did not fit into any of these given subcategories.

Significantly, EPA *itself* relies upon CBECS's differentiations of building types and sub-types to support and justify its programs. The ENERGY STAR office recognizes the heterogeneous composition of the commercial building stock, as identified by CBECS. EPA ENERGY STAR has identified fifteen unique types of structures for purposes of its commercial building ratings – and even these represent only about 50 percent of the commercial floor space

in the United States.[28] Moreover, ENERGY STAR recognizes different characteristics with regard to non-owner-occupied multifamily buildings[29] – such as apartments (yet another type of structure that may fall within the ambit of any Public & Commercial LRRP Rule).

The U.S. Green Building Council ("USGBC"), a non-governmental organization that provides voluntary rating platforms for buildings based on a number of environmental and sustainability criteria, likewise appreciates the complexity and diversity of the commercial real estate stock. Consideration of USGBC's Leadership in Energy and Environmental Design ("LEED") program is especially appropriate, as federal buildings and spaces within the real estate portfolio of the General Services Administration ("GSA") must meet LEED "Gold" status in many cases.[30] One of USGBC's rating platforms, for "Core and Shell Development" ("CS"), sets performance standards for certifying the design and construction of commercial or institutional buildings and high-rise residential buildings of all sizes, both public and private.[31] LEED CS recognizes that "demonstrating compliance with some LEED credits can prove challenging and complex" given the varying numbers of occupants that are expected to be present across the wide range of commercial buildings.[32] To assist with LEED compliance, the rating system thus provides "Default Occupancy Numbers" based on the square footage that "Transients" versus more permanent "Employees" can be expected to occupy across 13 different categories of buildings:[33]

[28]See *Energy Strategies for Buildings & Plants: Portfolio Manager Overview*, EnergyStar.gov, http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager (last visited Mar. 27, 2013). The 15 varied commercial building types that are eligible to receive ratings from EPA's ENERGY STAR office are bank/financial institution; courthouse; data center; hospital (general medical and surgical); hotel; house of worship; K-12 school; medical office; municipal waste treatment plant; office; residence hall/dormitory; retail store; senior care facility; supermarket; and warehouse (refrigerated and non-refrigerated).

[29]See *Energy Strategies for Buildings & Plants: ENERGY STAR for Multifamily Housing*, EnergyStar.gov http://www.energystar.gov/index.cfm?c=multifam_housing.bus_multifam_housing (last visited Mar. 27, 2013).

[30]See *GSA Moves to LEED Gold for All New Federal Buildings and Renovations*, U.S. Gen. Serv. Admin. News Releases, http://www.gsa.gov/portal/content/197325 (last visited Mar. 27, 2013). GSA is presently soliciting comment on its use of various building rating systems, as required by Congress. LEED ratings are part of this review based on the findings of an interagency discussion group. See 78 Fed. Reg. 8,145 (Feb. 5, 2013).

[31]See U.S. Green Bldg. Council, *LEED 2009 for Core & Shell Development*, http://new.usgbc.org/sites/default/files/LEED%202009%20Rating_CS-GLOBAL_07-2012_8c.pdf (July 2012) , pp. xiii-xiv.

[32]*Id.*, Appendix 1, p. 85.

[33]*Id.*

Default Occupancy Numbers Used by LEED, Core & Shell Development

	Gross Square Feet per Occupant	
	Employees	**Transients**
General office	250	0
Retail, general	550	130
Retail or service (*e.g.*, financial, auto)	600	130
Restaurant	435	95
Grocery store	550	115
Medical office	225	330
R&D or laboratory	400	0
Warehouse, distribution	2,500	0
Warehouse, storage	20,000	0
Hotel	1,500	700
Educational, daycare	630	105
Educational, K-12	1,300	140
Educational, postsecondary	2,100	150

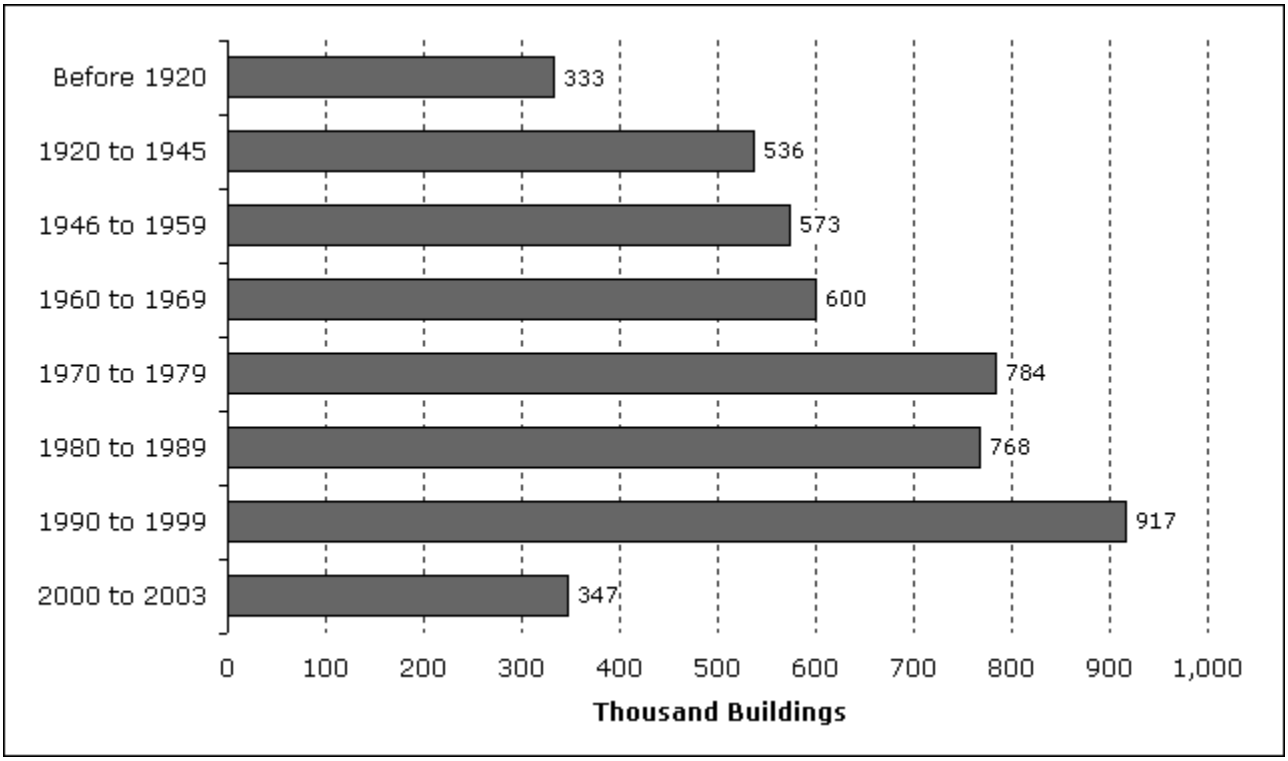
It states the obvious that an "office" is not a "school" or a "store" or a "police station" or a "church" or a "warehouse" or a "hotel" or a "movie theater" – or a "house." EPA must account for these wide variations and patent distinctions between and among the nation's building types, uses and occupancy levels when developing any Public & Commercial LRRP Program. Of course, inclusion of manufacturing, agricultural, and other kinds of commercial structures (which CBECS excludes) would expand the universe of buildings even further.

D. Age and Square Footage of U.S. Commercial Buildings Stock

Considering the significance of building age in the context of the Residential LRRP Rule – and that 1978 is widely reported as the year in which lead was banned from commercially available paint products in the U.S. – the vintage of the commercial buildings stock is highly relevant to this RFI. Statistics on size and square footage are also pertinent, to get some sense of the huge number of renovation, repair and painting activities that are bound to occur in public and commercial structures on a daily and ongoing basis.

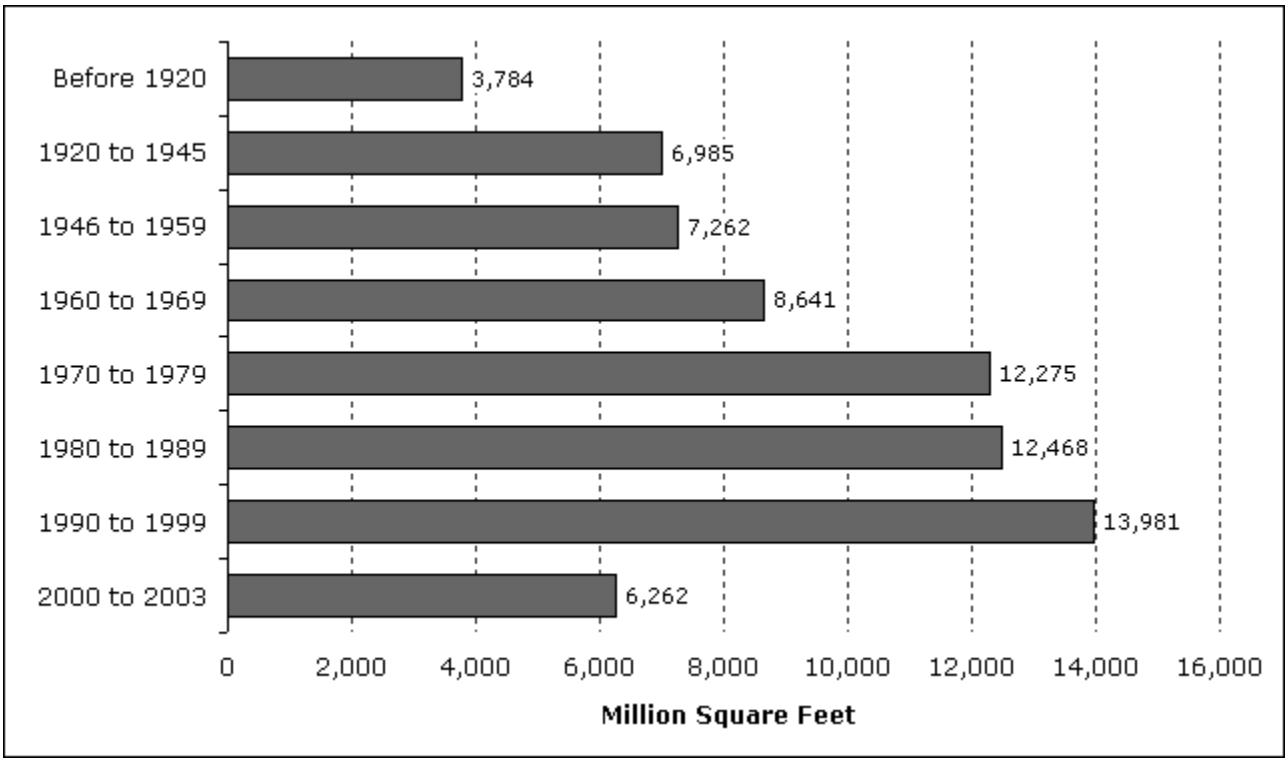
CBECS provides statistics on the age and size of non-residential U.S. buildings:

Age of Commercial Buildings[34]



[34]See U.S. Energy Info. Admin., *Overview of Commercial Buildings, 2003*, Figure 14, ftp://ftp.eia.doe.gov/consumption/overview.pdf (Nov. 14, 2008).

Commercial Building Floor Space, Correlated to Building Age[35]



While this information will necessarily change based on the data gathered through the 2012 CBECS process (which is scheduled for preliminary release in 2014), the following conclusions on building age and size can be drawn from the 2003 data set:

- The median year constructed for all commercial buildings is 1973.
- About 2.8 million of the 4.9 million buildings estimated by the 2003 CBECS, or 58 percent, were constructed from 1970 to 2003. These buildings comprise 63 percent of total commercial floorspace.
- As of 2003, about 2 million of the 4.9 million buildings estimated by the 2003 CBECS – or 42% – were constructed from 1980 to 2003.
- Buildings are getting larger. The mean size of commercial buildings is greatest for the most recently constructed buildings. Buildings constructed between 1970 and 2003 have a mean size of 16,000 square feet while those constructed before 1970 have a

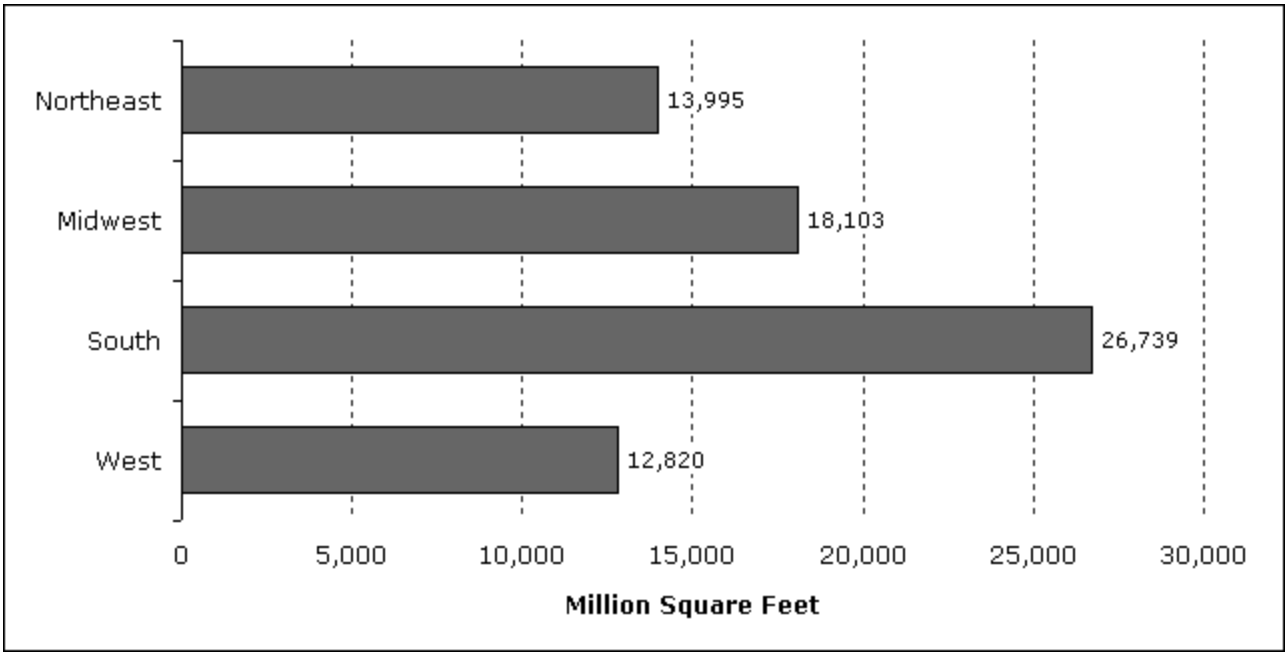
[35]See U.S. Energy Info. Admin., *Overview of Commercial Buildings, 2003*, Figure 13, ftp://ftp.eia.doe.gov/consumption/overview.pdf (Nov. 14, 2008).

mean size of 13,100 square feet, a difference that is statistically significant.

E. Location of Commercial Buildings by U.S. Census Region[36]

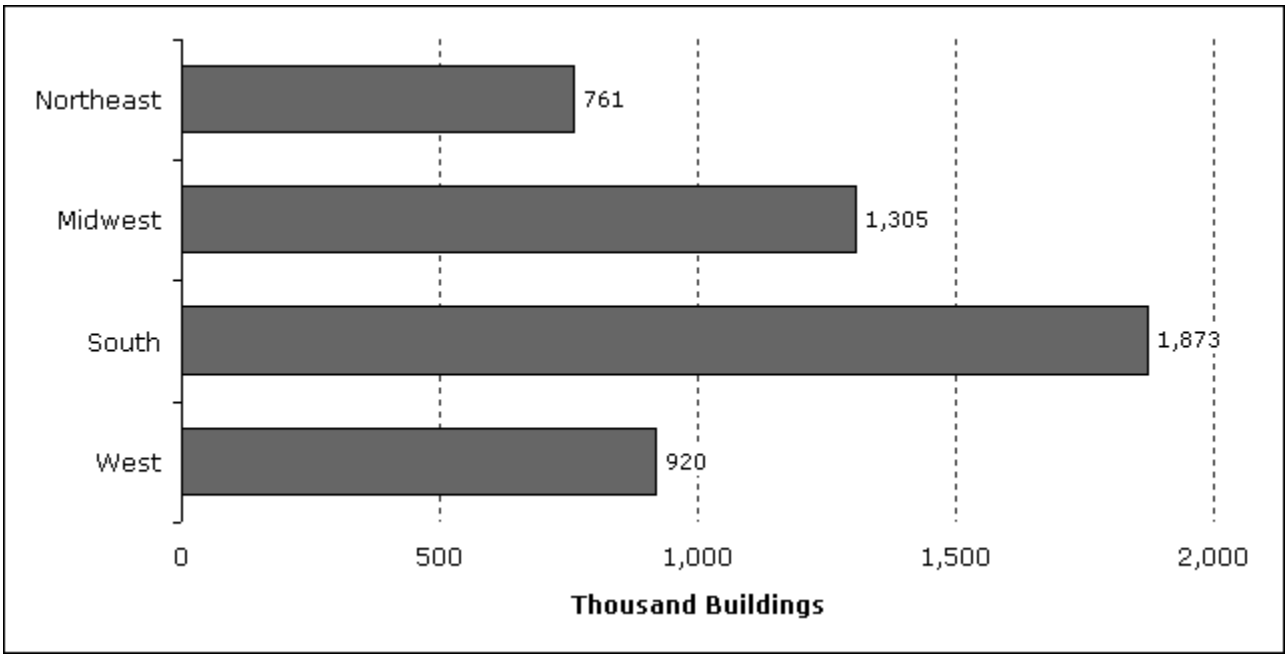
EPA should also understand the impacts of any Public & Commercial LRRP Program across regions of the U.S. The South Census Region, the most populous of the four Census Regions, has the largest percentage of commercial buildings and commercial floorspace (more than one-third of both total buildings and floorspace). Although buildings in the Northeast region are, on average, several thousand square feet larger than buildings in the other regions, the differences are not considered as statistically significant by CBECS.

Nearly 40 percent of commercial floorspace is found in buildings in the South:



[36]See U.S. Energy Info. Admin., *Overview of Commercial Buildings, 2003*, Figures 16, 17, ftp://ftp.eia.doe.gov/consumption/overview.pdf (Nov. 14, 2008).

The fewest buildings are found in the Northeast and the greatest in the South:



F. Summary

The Coalition urges EPA to account for the wide range of asset types, uses, and occupancies when considering information that may be used to justify a Public & Commercial LRRP Program. Building age, size, and location are also highly relevant to this exercise. Considering this diversity in commercial structures, any information on the presence of lead-based paint, associated hazards, work practices, exposure pathways, transport of dust, or other factors deemed relevant for the Residential LRRP Rule has negligible (if any) basis to support a Public & Commercial LRRP Program.

IV. EPA'S SPECIFIC INFORMATION REQUESTS

In addition to providing the above information on the basic characteristics of the U.S. commercial building stock, the Coalition has endeavored to address the agency's five specific information requests. The RFI tracks (nearly verbatim) language from a September 7, 2012, amended litigation settlement agreement with environmental organizations[37] and seeks information concerning:[38]

(1) The manufacture, sale, and uses of lead-based paint after 1978.

(2) The use of lead-based paint in and on public and commercial buildings.

[37] 77 Fed. Reg. at 76, 997 (Dec. 31, 2013).

[38] *Id.*

(3) The frequency and extent of renovations on public and commercial buildings.

(4) Work practices used in renovation of public and commercial buildings.

(5) Dust generation and transportation from exterior and interior renovations of public and commercial buildings.

A. The Coalition's Preliminary Observations and Information Request to EPA

Before describing the information we were able to locate that responds to EPA's specific inquiries, the Coalition appreciates this opportunity to make several preliminary observations:

(1) ***EPA's information requests are vague.*** By emails from the Coalition to EPA dated October 3, 2012 and November 26, 2012, we requested that the Agency clarify basic principles and terms so we could be in a better position to respond to the RFI.[39] The Coalition asked for clarity on:

- Whether EPA had collected any information on items (1)-(5) thus far, and whether we could review it;
- The significance of the 1978 date for any Public & Commercial LRRP Program;
- Whether EPA had any working definition of "renovation" in the Public & Commercial LRRP context, as distinguished from regular day-to-day maintenance activities in these buildings;
- Whether EPA could make available its reported "existing analytical work" concerning "adult health benefits" from avoided lead exposure;
- Whether EPA's consideration of health effects for purposes of any Public & Commercial LRRP Program goes beyond effects on children under age six (the focus of the Residential LRRP program[40]).

The Coalition's initial email is five months old as of this filing, and we renew our request for EPA to answer our questions in detail and with expedition. With respect, as the Coalition has acted diligently to respond to this RFI, we hope the Agency will act with commensurate diligence and provide direction as we request – well before the June 26, 2013 public hearing.

[39] See Attachment 8.

[40] See U.S. Envtl. Prot. Agency, *The Lead-Safe Certified Guide to Renovate Right*, http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf (Sept. 2011).

(2) ***EPA has a responsibility to educate federal building owners and managers about the Public & Commercial LRRP Program, and convene a joint meeting with Coalition members.*** At our November 5 meeting, the Coalition impressed upon EPA the importance for comprehensive, continuous, and coordinated engagement with sister agencies and fellow federal staff that manage federal facilities. Because the LRRP Program at issue will affect public buildings, we continue to suggest that EPA convene a meeting with federal facilities managers and Coalition members to fairly share in the responsibility to identify, gather, and assess information as relevant to the RFI. As explained below, the Coalition has reached out to other federal personnel (as well as key non-federal and industry stakeholders) in the intervening weeks since the RFI was published. Invariably, the first time federal building managers heard about the RFI was due to our communication efforts. We are concerned that EPA has not (thus far) adequately seized opportunities to engage with and gather substantive data from the federal facilities community.

(3) ***To date, EPA has virtually no data on lead-based paint issues in the public and commercial buildings stock.*** The paucity of data regarding lead-based paint issues in public and commercial buildings is perhaps best evidenced by answers to questions from a Senate hearing, provided by EPA last month to Senators Boxer, Inhofe and Vitter ("Senate QFRs"). EPA stated that while it has yet to take "further regulatory action" on a Public & Commercial LRRP Program, it "has completed extensive studies on renovation activities on a variety of buildings, both residential and public and commercial … ."[41] EPA then listed bullet points that purport to identify eight studies for the Senators' consideration. The Coalition has examined each of EPA's cited studies. With regard to whether lead-based paint hazards arise from RRP activities in public and commercial buildings, our review shows that EPA has given the Senators no – that is, *zero* – information:

- The 2000 study listed at bullet point 1 is a "Final Summary Report" of "Lead Exposure Associated with Renovation and Remodeling Activities." The section of the study titled "Environmental Field Sampling Study" states: "For each monitored R&R activity, buildings containing lead-based paint suitable for typical application of the activity were selected."[42] A data collection effort noted as "Phase IV" was designed to assess whether workers *"performing R&R work in high risk homes"* had increased risk of elevated blood-lead concentrations.[43] A worker questionnaire "captured data on how often each worker conducted specific target activities in *any home, including pre-1950 homes* …."[44]

[41] Questions for the Record from EPA to The Honorable Barbara Boxer and The Honorable James Inhofe, United States Senate Committee on Environment and Public Works, July 12, 2012 hearing on *The Latest Science on Lead's Impacts on Children's Development and Public Health*, (transmitted by March 7, 2013 letter from Arvin Ganesan, EPA Assistant Administrator to the Honorable James Vitter), at p. 6. See Attachment 6.

[42] *Lead Exposure Associated with Renovation and Remodeling Activities, Final Summary Report*, EPA 747-S-00-001 (January 2000), at p. 2.

[43] *Id.* (emphasis added).

[44] *Id.* at p. 4 (emphasis added).

The results of the Phase III portion of the study "indicate that children *residing in homes* where R&R activities were conducted are more likely to have elevated blood-lead concentrations than children *residing in homes* where R&R was not conducted."[45] The Coalition could otherwise find no indications in this study as to whether buildings in the field sample included non-target housing.

- EPA states that the study listed at bullet point 2 in the Senate QFRs is expressly limited to *"residential buildings."*[46]

- Likewise, EPA states that the study listed at bullet point 3 is expressly limited to *"residential buildings."*[47]

- The report listed at bullet point 4 in the Senate QFRs is a "Summary Report" from May 1997, of a study denoted as EPA 747-R-96 (the "EPA 747 Study"), titled "Lead Exposure Associated with Renovation and Remodeling Activities." Based upon the Coalition's review of the Summary Report, there is nothing in that document to consider whether the EPA 747 Study developed any information whatsoever regarding public and commercial buildings. In fact, the Summary Report admits: *"[T]here are no data at this time to assess whether environmental exposures monitored in target housing are representative of environmental exposures encountered in public or commercial buildings."*[48]

- The report listed at bullet point 5 in the Senate QFRs is the "Worker Characterization and Blood-Lead Study" component of the general EPA 747 Study. This component included worker questionnaires and telephone interviews, and collection of worker blood samples, with sampling frames identified by union membership lists and workers targeted in St. Louis and Philadelphia. The 585 surveyed workers reported that they "were evenly divided between those that worked in residential and nonresidential buildings."[49] Yet, the questionnaire results emphasized that the sampled workers conducted renovation and

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[45] *Id.* at p. 8 (emphasis added).

[46] *Executive Summary for the report Lead 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) (emphasis added).

[47] *Executive Summary for the report Lead Exposure Associated with Renovation and Remodeling Activities: Phase III, Wisconsin Childhood Blood-Lead Study*, EPA 747-R-99-002 (March 1999) (emphasis added).

[48] *Lead Exposure Associated with Remodeling Activities: Summary Report*, EPA 747-R-96-005 (May 1997), at p. 17 (emphasis added).

[49] *Lead Exposure Associated with Remodeling Activities: Worker Characterization and Blood-Lead Study*, EPA 747-R-96-006 (May 1997), at p. 4-1.

remodeling activities on 17 days over the course of a month – and "they spent on average 11 of these 17 days in *pre-1950 homes."*[50] Based upon the Coalition's review, there is nothing to indicate that sampled workers were questioned specifically about RRP activities in public and commercial buildings, or that building occupants other than construction workers were surveyed.

- The report listed at bullet point 6 in the Senate QFRs is Volume I of the "Environmental Field Sampling Study" component of the EPA 747 Study. This component studied carpet removal, window replacement, and "controlled experimentally designed" analysis of several targeted renovation activities like demolition, sawing, and paint removal. Study of large renovation projects at public facilities (such as hospitals, schools and universities), military bases, and government buildings was "abandoned" because of the difficulty in obtaining approvals.[51] The Field Sampling Study plainly states: *"[T]here are no data at this time to assess whether environmental exposures monitored in target housing are representative of environmental exposures encountered in public and commercial buildings."*[52] Indeed:

    - the carpet removal phase was conducted at four homes located in Oakland, California, and four homes located in Missouri, ranging from 50 – 100 years old (as of 1993);[53]
    - the window replacement phase was conducted at three homes, and a one-story business, in Ohio between 100 to 150 years old[54];
    - the "controlled" phase was conducted at two "row house" sites in Baltimore, Maryland, and four dwelling units in Denver, Colorado (no age specified).[55]

- The report listed at bullet point 7 in the Senate QFRs simply provides the "Volume II Appendices" for the Field Study discussed immediately above.[56] The Appendices' exclusive universe of structures is the very

[50] *Id.* (emphasis added).

[51] *Id.* at p. 5-6. Notably, the "only solid prospect … was a seminary in Ohio. Although the seminary was more than 60 years old, no lead paint was found in the interior."

[52] *Exposure Associated with Remodeling Activities: Environmental Field Sampling Study, Volume I: Technical Report*, EPA 747-R-96-007 (May 1997), at p. 4-5 (emphasis added).

[53] *Id.* at pp. 8-6 – 8-7, Table 8A-2.

[54] *Id.* at p. 5-5; p. 8-26, Table 8B-2.

[55] *Id.* at p. 8-45; pp. 8-49 – 8-51, Table 8C-1.

[56] *Exposure Associated with Remodeling Activities: Environmental Field Sampling Study, Volume II: Appendices*, EPA 747-R-96-008 (May 1997).

same 18 residential units, ranging from 50 to 150 years of age, in California, Colorado, Maryland and Missouri considered for the EPA 747 Field Study.

- The report listed at bullet point 8 in the Senate QFRs is from January 2007, titled "Draft Final Report on Characterization of Dust Lead Levels after Renovation, Repair, and Painting Activities." The scope of this study covers "15 housing units and one [child occupied facility] … to complete the 75 experiments."[57] *The only non-residential site considered in this study was a school in Columbus, Ohio built in 1967.*

In sum: A single school built in 1967, and a one-story business well over 100 years old, were the *only* non-residential structures within the scope of *any* of the studies that EPA offered to the Senate as relevant on lead-based paint matters. Considering that there are about 4.9 million commercial structures in the United States, the infinitesimal evidence of lead dust found in a late 60's-era school cannot rationally support the weight of a Public & Commercial LRRP Program – which could cover *all* such structures in the U.S., *regardless* of age. As EPA's own cited studies state on their face, thus far the Agency has no data upon which to draw any conclusions regarding lead-based paint hazards from RRP activities in public and commercial buildings.

B. The Coalition's Efforts to Gather Information Responsive to the RFI

The Coalition has acted with due diligence to gather information responsive to the RFI. In fact, we have pursued many of the outreach strategies recommended by the Senators from the Environment and Public Works Committee in their letter dated February 13, 2013.[58] As EPA must develop a sound administrative record upon which it must base any rational decisions for a Public & Commercial LRRP Program, we recommend that the Agency make affirmative efforts to connect with these and other stakeholders to supplement information collected by the Coalition.

Aside from leveraging our own internal resources to research and gather information for the RFI, Coalition members:

- Met with staff from the Small Business Administration's Office of Advocacy on December 14, 2012, to raise its awareness regarding the RFI's imminent publication at that point;

- Held a meeting and call with several federal facilities managers on January 14, 2013, to make sure they were aware of the RFI. Invitees and participants included representatives on behalf of the General Services Administration, Office of the Secretary of

[57] *Draft Final Report on Characterization of Dust Lead Levels After Renovation, Repair, and Painting Activities*, EPA Contract No. EP-W-04-021 (January 23, 2007), at p. 6-1.

[58] See Attachment 6.

Defense, the Naval Facilities Engineering Command (NAVFAC), and the Department of Veterans Affairs;

- Conducted outreach to the National Association of State Facilities Administrators (http://www.nasfa.net/) through a call and email on January 31, 2013;

- Contacted the National Association of County Organizations (http://www.naco.org) through emails beginning on February 8, 2013;

- Conducted outreach to the U.S. Conference of Mayors (http://www.usmayors.org) through emails beginning on February 8, 2013;

- Met with senior staff at the American Coatings Association (www.paint.org), on February 20, 2013;

- Conducted outreach to the National League of Cities (www.nlc.org), through emails beginning on February 22, 2013;

- Conducted outreach to CoStar Group (www.costar.com), a leading provider of commercial real estate information and analytic services, beginning on February 22, 2013;

- Met with executives and staff of NIBS (www.nibs.org) on February 5, 2013.

- Successfully urged that NIBS proactively initiate contact with both the American Coating Association and the Master Painters Institute (http://www.paintinfo.com/).

- Presented information on the RFI on March 19, 2013, at NIBS's offices to federal personnel participating on the Board of Direction and Advisory Committee of the Whole Building Design Guide ("WBDG") (http://www.wbdg.org/). Federal agency staff invited to attend the meeting – in addition to EPA – included facilities managers from the General Services Administration; the Departments of Agriculture, Energy, Health and Human Services, Homeland Security, Interior, Justice, State, Transportation, Veterans Affairs; the military branches and associated personnel including the Air Force, Army, Army Corps of Engineers, Coast Guard, Navy; the Social Security Administration; the National Science Foundation; the National Park Service; the National Institutes of Health; the Federal Aviation Administration; the Administrative Office of the U.S. Courts; and the Architect of the Capitol. More information on the WBDG is discussed below.

The Coalition reiterates that it is of paramount importance for EPA to educate and engage federal and other government building managers regarding its consideration of a Public & Commercial LRRP Program. While we have started that process, we hope EPA will join us in a substantive outreach plan to GSA, NIBS, the military branches, the Architect of the Capitol, and other public buildings entities that may be profoundly impacted by this program.

C. Specific Responses to EPA's Information Requests.

(1) ***Request 1:*** *Information concerning the manufacture, sale, and uses of lead-based paint after 1978*

The Coalition does not represent firms that have this type of information but we did seek to assist the Agency in collecting this information by contacting the American Coatings Association ("ACA"; formerly known as the National Paint and Coatings Association, Inc.), the trade association for pigment and paint manufacturers whose mission is to "advance the interests of the coatings industry and serve as its chief advocate and spokesperson before the government and public. [ACA] undertake[s] programs and services that support the coatings industry's commitment to environmental protection, product stewardship, health and safety, and the advancement of science and technology." The Coalition also contacted the Master Painters Institute (MPI), an association founded in 1895 that develops standards, approves product performance, and trains professionals in the technology and use of commercial/architectural coatings. As MPI does not manufacture paint, it referred our questions to the ACA.

ACA provided us with the U.S. Paint Industry Database (dated September 1992) that contains information related to the manufacture and sale of leaded paint up to 1992.[59] ACA said that this publication was the most recent it could offer as the association no longer collects this type of data.

ACA representatives observed that once the Consumer Product Safety Commission ("CPSC") acted to restrict the sale of lead-based paint ("LBP") in 1978 for use on residential properties, this became the standard for paint used on other property types. To its knowledge, improved paint formulations were developed that had superior performance characteristics and were preferable to older style paints for use in/on buildings. Moreover, these coatings met the standards that the CPSC had established for use on residential buildings. ACA staff indicated that even before CPSC acted to limit the concentration of lead in paint, several states had established restrictions on the sale of this product. For example, New Jersey banned the sale of LBP for use in/on buildings in 1960. After 1978, ACA believes that LBP would not have been specified by designers or used by contractors, as better performing lead-free products were widely available in the marketplace. Lead-based coatings continue to be manufactured for use in industrial settings and as corrosion inhibiting coatings for steel and mechanical components.[60] According to ACA, some state highway administrations still use leaded paint for traffic markings.

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[59] See Attachment 9.

[60] Under Title X, factory primed, fire-rated metal components are not considered as "lead coated surfaces" since the lead on these components is considered to be bound to the underlying matrix. See Department of Housing and Urban Development ("HUD") *Technical Bulletin: Inspecting for Lead-Based Paint on Painted Metal Doors*

(2) ***Request 2: Information concerning the use of lead-based paint in and on public and commercial buildings***

The Coalition has been unable to identify surveys of the prevalence of lead in public and commercial buildings. A common paint history is not the norm in commercial and public spaces where triple net leases, tenant improvements and build-out allowances result in each tenanted space being dissimilar to other spaces in many respects, including paint history. Unlike multi-tenanted residential buildings, there is no federally approved protocol for assessing painted surfaces in public and commercial spaces that does not involve testing each painted surface throughout a building. In the context of multi-tenanted residential spaces, a sampling protocol based on a common paint history was developed.[61] EPA incorporated the HUD Guidelines as a *Documented Methodology* to determine whether or not pre-1978 residential properties are subject to regulation under Title X.[62]

The RFI suggests that EPA is considering applying regulations to a vast number of buildings without having performed the most basic level of analysis.[63] In developing regulations to guide the control of lead based paint hazards in housing, federal agencies conducted several large-scale surveys. HUD and EPA were concerned about the data quality in these studies and jointly sponsored a survey that was published in 1995. The Executive Summary of the *Report on the National Survey of Lead-Based Paint in Housing* shows the effort that federal regulators put into obtaining the data that would be used to regulate housing providers:

> The 1987 amendments to the Lead-Based Paint Poisoning Prevention Act required the Secretary of Housing and Urban Development (HUD) to prepare and transmit to Congress "a comprehensive and workable plan" for the abatement of lead-based paint in housing and "an estimate of the amount, characteristics and regional distribution of housing in the United States that contains lead-based paint hazards at differing levels of contamination." In response to this mandate, HUD sponsored a

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and Frames (Feb. 24, 1994), transmitted to Patrick Connor, President, Connor Environmental Services, by HUD Office of Lead Hazard Control. See Attachment 10. Similarly, the State of Maryland recognizes surfaces with factory-applied lead-based primer as lead-free. See MD Code Regs. 26.16.02.02 (2013).

[61] See U.S. Dep't of Hous. and Urban Dev., *Guidelines for the Evaluation and Control of Lead-based Paint Hazards in Housing – Chapter 7 – Lead-based Paint Inspections*, http://portal.hud.gov/hudportal/documents/huddoc?id=lbph-09.pdf (July 2010). HUD determined if lead levels in all units, common areas or exterior sites tested were found to be below 1.0 mg/cm2 standard, these sample sizes provide 95 percent confidence that: (1) For pre-1960 housing units, less than 5 percent or fewer than 50 (whichever is less) units, common areas or exterior sites, have lead at or above the standard; and (2) For 1960 to 1977 housing units, less than 10 percent or fewer than 50 (whichever is less) units, common areas, or exterior sites, have lead at or above the standard.

[62] 40 CFR Part 745.227 (2012). *Documented Methodology* was first published in 1995, revised in 1997 and the Second Edition released in 2012.

[63] *Lead; Renovation, Repair and Painting Program for Public and Commercial Buildings*, 75 Fed. Reg. 24,848, (May 6, 2010).

> national survey of lead-based paint in housing and delivered a Report to Congress on a *Comprehensive and Workable Plan for the Abatement of Lead-Based Paint in Privately Owned Housing* in December, 1990. The *Comprehensive and Workable Plan* report was completed under a tight, Congressionally mandated schedule and focused on motivating, developing and presenting the comprehensive plan required by Congress. As such, it only reported the estimates of the extent of lead-based paint in housing required by Congress and provided a brief description of the survey methodology.
>
> This report, sponsored by the Environmental Protection Agency, is a comprehensive technical report on the HUD-sponsored national survey of lead-based paint in housing. It provides a detailed description of the survey methodology. It reports on wide ranging analyses of the national survey data. It reports revised estimates of the extent of lead-based paint in housing, based on a thorough investigation of the multiple sources of error – variability and bias – in the data. These error sources include nonresponse biases, sampling variability between housing units, sampling variability within housing units, X-ray fluorescence device (XRF) measurement error, and laboratory analysis error. The analysis underlying the estimates presented in the *Comprehensive and Workable Plan (CWP)* report incorporated only sampling variability between housing units.[64]

EPA and HUD recognized that the *National Survey* was needed to support a number of research questions including: "analysis of the relationship among sources and pathways of lead in the residential environment; analysis of the characteristics of housing with varying hazard levels; development of indices of lead hazard; analysis of the costs, effectiveness and benefits of alternative strategies of reducing lead-based paint hazards; and the identification of the dimensions of each of these issues."[65]

Unlike the development of regulations for residential buildings, EPA has not commissioned the necessary research to establish the prevalence of LBP across the spectrum of public and commercial buildings. Nor has the Agency undertaken an analysis of the prevalence of lead dust hazards that are created by renovation and repair activities in and on these structures despite a direction from Congress to do so.[66]

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[64]U.S. Dep't of Hous. and Urban Dev. and U.S. Envt'l Prot. Agency, *Report On The National Survey Of Lead-Based Paint In Housing. Base Report*, http://www.epa.gov/lead/pubs/r95-003.pdf (June 1995).

[65]*Id*. at 1-4.

[66]15 U.S.C. §2682 (2010).

(3) ***Request 3:* Information concerning the frequency and extent of renovations on public and commercial buildings**

It is impossible to state with precision the "frequency" and "extent" of public and commercial building renovations in all of those structures across the U.S. In actual practice, the Residential LRRP Program's definitions for "renovation"[67] and "minor repair and maintenance activities"[68] – disturbance of more than six square feet of interior painted surfaces, and more than 20 square feet of exterior painted surfaces – are routine activities in public and commercial buildings. "Renovations" occur "24-7-365" in public and commercial buildings, whenever:

- A new office tenant "fits-out" a leased space, such as when GSA signs a new lease for one of its federal agency clients in a privately-owned building;
- The systems of a commercial or apartment building (such as envelope, lighting, HVAC, and controls) are retrofitted or weatherized to make the structure more energy efficient;
- Personnel needs require structural changes to work spaces, such as when staff and members change offices when a new Congress convenes, or at Executive Branch and embassy buildings when a new Administration is sworn in;
- New carpets are installed, or walls are freshened-up with new paint;
- Displays and advertisements are changed for products in malls, big box stores, other retailers, or movie theaters;
- Exterior walls are cleaned to preserve and protect buildings registered on or eligible for the National Register of Historic Places;
- Hotels, motel or inns update their lobbies, restaurants, rooms, or bathrooms to stay competitive in attracting business and vacation travelers;

[67] "*Renovation* means the structure, or portion thereof, that results in the disturbance of painted surfaces, unless that activity is performed as part of an abatement as defined by this part … The term renovation includes (but is not limited to): The removal, modification or repair of painted surfaces or components (*e.g.*, modification of painted doors, surface restoration, window repair, surface preparation activity (such as sanding, scraping, or other such activities that may generate paint dust)); the removal of building components (*e.g.*, walls, ceilings, plumbing, windows); weatherization projects (*e.g.*, cutting holes in painted surfaces to install blown-in insulation or to gain access to attics, planning thresholds to install weather-stripping), and interim controls that disturb painted surfaces … The term renovation does not include minor repair and maintenance activities." See 40 CFR § 745.83 (2012).

[68] "*Minor repair and maintenance activities* are activities, including minor heating, ventilation or air conditioning work, electrical work, and plumbing, that disrupt 6 square feet or less of painted surfaces per room for interior activities or 20 square feet or less of painted surface for exterior activities …." *Id.*

- Buildings are renovated after natural disasters;
- Restaurants reconfigure guest seating or install new kitchen equipment;
- Schools, colleges or universities expand or contract classrooms or lecture halls to meet students' needs;
- Data centers, trading floors, or financial institutions install computer equipment and server farms;
- Hospital rooms or ambulatory facilities are redesigned to improve patients' well-being;
- Ports, hangars or warehouses install shelving and otherwise reconfigure spaces to accommodate the storage, movement, and distribution of goods;
- Churches or other places of worship repair windows, chapels, and meeting halls;
- Exhibits and attractions are changed at museums, visitor centers, amusement parks, or other recreational buildings, that are managed by national, state, local, or regional parks, non-profits, or the private sector;
- Seating areas, waiting halls, ticket kiosks, or vendor stalls are moved or renovated to improve the safety and flow of passengers at terminals, stations, and depots.

This anecdotal list is the tip of the iceberg. If the definitions that apply in the Residential LRRP Program are considered for non-target housing, then one can conceive of innumerable cases in which a single public or commercial building (particularly a multi-use structure) would be the site for multiple "renovations" in a single day. And, of course, the mass of examples would become even larger if industrial, manufacturing and agricultural commercial structures are included.

Assuming EPA moves forward with a Public & Commercial LRRP Program, the Coalition urges the agency to develop and propose a definition of "renovation" that reflects the LRRP activities in public and commercial buildings and is not artificially confined by the "6 interior/20 exterior" square foot disturbance thresholds used in the residential rule.[69] We provide below a few examples of how various federal agencies and other bodies have defined "renovation" for their own programs. The list is not exhaustive, and these examples are offered only for illustrative purposes as they were never developed to address lead-based paint hazards or associated RRP work practices:

[69]See *supra* note 40.

- **The Department of Health and Human Services ("HHS")** has defined "major renovation" in its regulations for the provision of grants for Head Start facilities and for state assistance for promotion of child care: "[A] structural change to the foundation, roof, floor, or exterior or load-bearing walls of a facility, or extension of an existing facility to increase its floor area. Major renovation also means extensive alteration of an existing facility, such as to significantly change its function and purpose, even if such renovation does not include any structural change to the facility. Major renovation also includes a renovation of any kind which has a cost exceeding the lesser of $200,000, adjusted annually to reflect the percentage change in the Consumer Price Index for All Urban Consumers (issued by the Bureau of Labor Statistics) beginning one year after June 2, 2003, or 25 percent of the total annual direct costs approved for the grantee by ACF for the budget period in which the application is made."[70]

- **HHS regulations** for providing assistance to states to promote child care define "major renovation" as: "(1) structural changes to the foundation, roof, floor, exterior or load-bearing walls of a facility, or the extension of a facility to increase its floor area; or (2) extensive alteration of a facility such as to significantly change its function and purpose, even if such renovation does not include any structural change."[71]

- **The Department of Energy** has a proposed rule that would define the term "major renovation" to include "any renovation that exceeds 25% of the replacement value of the building."[72]

- **The Internal Revenue Service** defines "substantial renovation" as: "[T]he renovation of a major component or substantial structural part of real property that materially increases the value of the property, substantially prolongs the useful life of the property, or adapts the property to a new or different use."[73]

- **The Department of Housing and Urban Development** defines the term "alteration" as: "[A] change to a building or facility or its permanent fixtures or equipment that affects or could affect the usability of the building or facility or part thereof. Alterations

[70] 45 CFR § 1309.3 (2012).

[71] 45 CFR § 98.2 (2012).

[72] *Energy Efficiency and Sustainable Design Standards for New Federal Buildings*, 75 Fed. Reg. 29,933, at 29934; 29935 (May 28, 2010). The rule has not been finalized, but DOE's guidance also uses this definition.

[73] 26 CFR § 1.199-3(m)(5) (2012).

include, but are not limited to, remodeling, renovation, rehabilitation, reconstruction, historic restoration, changes or rearrangements of the structural parts and changes or rearrangements in the plan configuration of walls and full-height partitions. Normal maintenance, re-roofing, painting, or wallpapering or changes to mechanical and electrical systems are not alterations unless they affect the usability of the building or facility."[74]

- **The U.S. Green Building Council ("USGBC")** recognizes the potentially limitless scope of the term "renovation:" "In general parlance, alteration and additions may range from a complete gutting, major renovation, or large new wing to the replacement of an old window, sheet of drywall, or section of carpet."[75] For purposes of one of its rating products, USGBC also distinguishes building "alterations and additions" from "repairs, routine replacements or minor upgrades" as follows: "Alterations and additions" include "construction activity by more than 1 trade specialty, make substantial changes to at least 1 entire room in the building, and require isolation of the work site from regular building occupants." Building "additions" are those that "increase the total building floor area by at least 5% …" On the other hand, "[a]lterations and additions below these limits are considered *repairs, routine replacements, or minor upgrades* …"[76]

- While not defining the term "renovation," **GSA's Public Buildings Service** has a 10,000 square foot leased space threshold for its obligation to locate in ENERGY STAR labeled buildings.[77] Similarly, the Service has a requirement of LEED certification for new construction lease projects of 10,000 square feet or more.[78]

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[74]24 CFR § 9.103 (2012).

[75]U.S. Green Bldg. Council, *U.S. Green Building Council, Leadership in Energy and Environmental Design ("LEED") rating system for Existing Buildings: Operations & Maintenance" ("EBOM")* http://new.usgbc.org/sites/default/files/LEED%202009%20Rating_EBOM-GLOBAL_07-2012_8d_0.pdf (July 2012) at p. xviii.

[76]*Id*. (emphasis added).

[77]See U.S. Gen. Serv. Admin., *Memorandum to Regional Commissioners, PBS, Regional Realty Services Officers*, http://www.gsa.gov/graphics/pbs/Energy_Star_RSL_2010-02-FINAL-508.pdf (Sept. 28, 2010).

[78]See *GSA Moves to LEED Gold for All New Federal Buildings and Renovations*, U.S. Gen. Serv. Admin. News Releases, http://www.gsa.gov/portal/content/197325 (Oct. 28, 2010).

(4) ***Request 4:* Information concerning work practices used in renovation of public and commercial buildings**

The Coalition recommends that EPA survey and assess a range of existing regulatory programs and voluntary industry standards that may address work practices used in public and commercial building renovations. While we do not offer the examples below as any basis to justify an ultimate Public & Commercial LRRP Rule, the following are pertinent to information request # 4, and provide avenues for further EPA outreach and coordination:

(a) OSHA and other regulations

As stated in Section I of the comments above, the Coalition maintains that EPA is required by Executive Orders from both the Clinton and Obama Administrations – and related interagency agreement(s) – to inventory and consider whether existing regulatory programs and industry practices already address any potential lead-based paint hazards and renovation work practices in public and commercial buildings.[79] A myriad of other federal programs in full effect are designed to prevent exposure to lead hazards for workers and building occupants as well as to protect the general environment from releases of toxic substances, including lead, that may be associated with certain construction activities. EPA must identify and assess existing authorities already "on the books" (albeit some within the jurisdiction of its sister agencies) that clearly and adequately addresses lead-based paint hazards before adopting an expansive new RRP program for public and commercial buildings.

Following on the next page is a table comparing existing regulatory programs that may likely cover the same landscape as a Public & Commercial LRRP Program. We provide this comparison for illustrative purposes only, to offer examples of renovation and remodeling work practices as requested in the RFI – and to assist EPA in considering any Public & Commercial LRRP Program that is not redundant, conflicting, or inconsistent with extant programs.

[79] See *supra* notes 16 and 17. See also *Memorandum of Understanding Between U.S. Department of Labor, Occupational Safety and Health Administration, and U.S. Environmental Protection Agency, Office of Enforcement*, U.S. Dept. of Labor, http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=MOU&p_id=237 (Nov, 23, 1990). The memorandum states its purpose "to establish and improve the working relationship between [OSHA and EPA]."

TABLE: Comparison of OSHA, HUD and EPA Lead Programs

Element	**OSHA** Lead in Construction Standard, 29 CFR §1926.62	**HUD** Lead Safe Housing Rule, 24 CFR Part 35	**EPA** LRRP Rule, 40 CFR Part 745, Subpart E
Application	Applies to all construction work where an employee may be exposed to lead. Applies at **any detectable concentration** of lead – not limited to lead-based paint as defined by EPA and the Consumer Product Safety Commission.	Applies in pre-1978 federally-owned or assisted housing and federally-owned housing that is being sold and where lead is present. (HUD's rule does not cover child-occupied facilities outside of residential housing.) *The following provisions apply to firms/individuals performing renovation, repair & painting projects for compensation that disturb more than 2 sq ft interior or 10% of architectural trim component or 20 sq ft of exterior surface.*	Applies in pre-1978 "target housing" and "child-occupied facilities" where lead paint is present. *The following provisions apply to firms/indiv performing renovation, repair & painting projects for compensation that disturb more than 6 sq ft interior or 10% of architectural trim component or 20 sq ft of exterior.*
Initial Assessment / Testing	Air monitoring required.	Certified lead-based paint (LBP) inspector or certified risk assessor; or may presume LBP or LBP hazards, respectively.	Certified LBP inspector or risk assessor; or may presume LBP or LBP hazards, respectively.
	The OSHA monitoring must be performed during the work and may apply even if EPA testing found no LBP.	LBP inspection includes XRF or paint chip analysis of each room (or may presume presence of LBP).	LBP inspection includes XRF or paint chip analysis of each room (or may presume LBP). EPA-approved chemical spot kit tests may be used to test surfaces undergoing repair if lead status unknown.
		Testing or presumption is done before a project starts. Applies to jobs that disturb more than 2 sq ft interior or 10% of architectural trim component or 20 sq ft of	Testing or presumption is done before a project starts. Applies to jobs that disturb more than 6

Element	**OSHA** Lead in Construction Standard, 29 CFR §1926.62	**HUD** Lead Safe Housing Rule, 24 CFR Part 35	**EPA** LRRP Rule, 40 CFR Part 745, Subpart E
		exterior surface. Provide residents advanced written notification of activity and educational materials on lead hazards.	sq ft interior or 10% of architectural trim component or 20 sq ft of exterior. Provide residents advanced written notification of activity and educational materials on lead hazards.
Work Practices/Engineering Controls	All work practices allowed; PPE varies with exposure level (see below). Compressed air may not be used to remove lead from contaminated surfaces unless a ventilation system is in place to capture the dust generated by the compressed air. **Engineering Controls:** Measures include local and general exhaust ventilation, process and equipment modification, material substitution, component replacement, and isolation or automation. Equip power tools used to remove lead-based paint with dust collection shrouds or other attachments so that paint is exhausted through a high-efficiency particulate air (HEPA) vacuum system. For operations such as welding, cutting/burning, or heating, use local exhaust ventilation. Use HEPA vacuums during cleanup operations. For abrasive blasting operations, build a containment structure that is designed to optimize the flow of clean ventilation air. Maintain the affected area under negative pressure to	**Lead Safe Work Practices:** Wet scraping or sanding; Chemical stripping; Heat gun below 1100 F; Power tools with HEPA vacuum.	**Lead Safe Work Practices:** Wet scraping or sanding; Chemical stripping; Heat gun below 1100 F; Power tools with HEPA vacuum.
		Banned practices: Open flame burning or torching; Abrasive blasting or sandblasting without HEPA exhaust control; Heat guns at or above 1100 F; Dry sanding or scraping except around electrical outlets; Paint stripping with methylene chloride	**Banned practices:** Open flame burning or torching; Abrasive blasting or sandblasting without HEPA exhaust control; Heat guns at or above 1100 F; Dry sanding or scraping, except around electrical outlets.
		Exclude occupants from work area; relocate occupants during longer disruptive projects	Exclude occupants from work area; relocate occupants during longer disruptive projects.
		Sealing off work area with plastic sheeting.	Sealing off work area with plastic sheeting.
		Covering or removing furniture and fittings. Covering floors with heavy	Covering or removing furniture and fittings.

Element	**OSHA** Lead in Construction Standard, 29 CFR §1926.62	**HUD** Lead Safe Housing Rule, 24 CFR Part 35	**EPA** LRRP Rule, 40 CFR Part 745, Subpart E
	reduce the chances that lead dust will contaminate areas outside the enclosure. Equip the containment structure with an adequately sized dust collector to control emissions of particulate matter into the environment.	plastic sheeting.	Covering floors with heavy plastic sheeting.
		Shutting off HVAC and blocking vents. Closing doors and windows.	Shutting off HVAC and blocking vents. Closing doors and windows.
PPE	Respirator requirements vary with exposures.	Recommends NIOSH N100 respirators for high dust activities.	Recommends NIOSH N100 respirators for high dust activities.
Hygiene	Recommends work clothes, booties, hats, face shields.	Recommends work clothes, booties, hats.	Recommends work clothes, booties, hats.
	Separate eating, washing, change areas; showers if feasible.	Prohibits eating, smoking, etc. in work area.	Recommends no eating, smoking, etc. in work area.
Housekeeping Practices	Regular schedule to remove accumulations of lead dust and lead-containing debris. Maintain all surfaces as free of lead contamination as practicable. Vacuuming lead dust with HEPA-filtered equipment or wetting the dust with water before sweeping are effective control measures. In addition, put all lead-containing debris and contaminated items accumulated for disposal into sealed, impermeable bags or other closed impermeable containers. Label bags and containers as lead-containing waste.	Recommends washing, tack pads to clean shoes when leaving work area.	Recommends washing, tack pads to clean shoes when leaving work area.
		Removal of work clothes, vacuuming of outside clothes.	Removal of work clothes, vacuuming of outside clothes.
		Occupants may not enter the worksite during Lead Hazard Reduction activities. Occupants must be temporarily relocated to a suitable unit that is decent, safe, and sanitary and free of lead-based paint hazards during Lead Hazard Reduction activity. Relocation is not always required if area can be safely secured and not interfere with resident activities. Occupants' belongings must	The worksite must be prepared to prevent the release of leaded dust and debris. Use practices to minimize the spread of lead dust, paint chips, soil, and debris.

Element	**OSHA** Lead in Construction Standard, 29 CFR §1926.62	**HUD** Lead Safe Housing Rule, 24 CFR Part 35	**EPA** LRRP Rule, 40 CFR Part 745, Subpart E
		be protected from lead contamination by relocating, covering or sealing them, and securing the worksite against entry during non-work hours. The worksite must be prepared to prevent the release of leaded dust and debris. Use practices to minimize the spread of lead dust, paint chips, soil, and debris.	
Signage	Work area warning signs when exposure is above the PEL.	Place warning signs at each entry where Lead Hazard Reduction activities are conducted when occupants are present. The signs are required at the main and secondary entrance to a building, and at exterior worksites signs must be readable from 20 feet.	Post warning signs.
Cleaning Verification	Use of HEPA vacuum; (HEPA vacuum is required only if the employer chooses to use vacuuming for clean-up; the employer can choose other equally effective methods as described under 29 CFR 1926.62(h) – Housekeeping.)	Use of HEPA vacuum. Vacuum at least daily. At end of project, vacuum top to bottom, and then wash, re-vacuum. Clearance required including visual assessment to assure no dust/debris remains, followed by collection of dust wipes which require laboratory analysis. If dust wipe report shows levels below Sec. 403 defined hazards, then area may be re-occupied. Clearance report required to be provided to occupant. **Qualifications**. A certified risk assessor, certified lead-based paint inspector, or certified lead sampling technician must perform clearance. Sampling technicians are not authorized	Use of HEPA vacuum. Vacuum at least daily. At end of project, vacuum top to bottom, and then wash, re-vacuum. Clearance required including visual assessment to assure no dust/debris remains, followed by collection of dust wipes which require laboratory analysis.

Element	**OSHA** Lead in Construction Standard, 29 CFR §1926.62	**HUD** Lead Safe Housing Rule, 24 CFR Part 35	**EPA** LRRP Rule, 40 CFR Part 745, Subpart E
		to perform clearance after abatement and must always work in accordance with state law. **Passing Clearance**. If the test results equal or exceed the designated standards, the dwelling unit, worksite, or common area fails the clearance examination. Clearance standards are based on lead in dust, as measured by a dust wipe sample, and are: • Floors - 40 µg/ft² • Interior window sills - 250 µg/ft² • Window troughs - 400 µg/ft² **Failing Clearance**. If a unit fails clearance; it must be re-cleaned and clearance must be performed again in the area represented by the clearance sample.	
Compliance Plan	Required when AL exceeded.	HUD requires an occupant protection plan.	EPA requires an occupant protection plan.
Medical Surveillance	Required.	Not covered.	Not covered.
Recordkeeping	Testing results, medical program **30** years.	All required testing/ resident/owner notifications/clearance reports must be maintained– 3 years.	Reports on determinations and notifications must be maintained – 3 years.

EPA information on the LRRP rule for lead-based paint can be found at http://www.epa.gov/lead/pubs/toolkits.htm.
HUD information on lead safe work practices for renovation work can be found at http://www.hud.gov/offices/lead/training/rrp/rrp.cfm.
OSHA information on worker protection for employees exposed to lead-bearing substances can be found at http://www.osha.gov/SLTC/lead/construction.html.

(i) OSHA's Lead Standard

OSHA's Lead Standard for the Construction Industry, Title 29 Code of Federal Regulations Section 1926.62, covers lead in a variety of forms, including metallic lead, all inorganic lead compounds, and organic lead soaps.

OSHA's lead in construction standard applies to all construction work when an employee may be exposed to lead. All work related to construction, alteration, or repair, including painting and decorating, is included. Under this standard, construction includes, but is not limited to:

- Demolition or salvage of structures where lead or materials containing lead are present;
- Removal or encapsulation of materials containing lead;
- New construction, alteration, repair, or renovation of structures, substrates, or portions or materials containing lead;
- Installation of products containing lead;
- Lead contamination from emergency cleanup;
- Transportation, disposal, storage, or containment of lead or materials containing lead where construction activities are performed; and
- Maintenance operations associated with these construction activities.

It is important to recognize that the OSHA Lead in Construction Standard, 29 CFR 1926.62, applies at any detectable concentration of lead – not limited to lead-based paint as defined by EPA and the CSPC. Employers of construction workers are responsible for developing and implementing a worker protection program for employees who may be exposed to lead above the permissible exposure limit ("PEL"). Such a program must include:

- Hazard determination, including exposure assessment;
- Medical surveillance and provisions for medical removal;
- Job-specific compliance programs;
- Engineering and work practice controls;
- Respiratory protection;
- Protective clothing and equipment;
- Housekeeping;
- Hygiene facilities and practices;
- Signs;
- Employee information and training; and
- Recordkeeping.

OSHA's Lead in Construction regulations are designed to protect workers by minimizing their exposure to lead through the use of engineering controls, good work practices and training, and use of personal protective clothing and equipment, including respirators, as required. On every jobsite where lead is present, the employer must designate a competent person capable of identifying existing and predictable lead hazards and who is authorized to take prompt corrective measures to eliminate such problems.

(ii) OSHA Regulations Protect Workers and Establish Confined/Monitored Spaces in Which Renovation Tasks Are Conducted

- **Rule Applicability.** OSHA lead regulations apply to *any* work setting where employees come into contact with *any* level of lead or lead bearing coatings.

- **Lead-based paint.** The EPA LRRP rule defines lead-based paint as containing more than 0.5 percent lead by weight. Lead coatings below this threshold are exempt from any special EPA certification, training or work practices. On the other hand, OSHA regulates lead in any amount.

- **Regulated areas.** OSHA mandates under Part 1926.62 that employers establish "regulated areas" when lead or lead-coated surfaces are disturbed. A regulated area requires specific OSHA signage. The EPA signs required by LRRP rule do not meet OSHA requirements for a regulated area.

- **Written compliance program.** OSHA regulations require a detailed compliance program listing specific requirements for employers to document.

- **Mandatory respirator use.** OSHA lead regulations require air monitoring for jobs that may generate lead dust or fumes to which workers will be exposed. OSHA has established three work class tasks for which certain exposures above the permissible exposure limit (PEL) must be assumed when employers fail to perform air monitoring. All of the work practices covered by EPA's LRRP rule require employee respiratory protection under OSHA if the PEL is exceeded. OSHA regulations include a written respirator program, medical clearance, respirator training and fit testing for employees who are required to wear respirators.

- **Protective clothing.** OSHA lead regulations require protective clothing when work tasks disturb lead coatings (without a negative exposure assessment). OSHA requires either disposable clothing or employer laundering. The EPA LRRP rule lists disposable clothing as optional and trains workers to use HEPA vacuums to clean clothing before leaving the worksite. OSHA also requires employers to notify other employees or employers who would launder the contaminated clothing.

- **Annual training.** OSHA regulations require annual training; EPA's residential LRRP rule requires that certified workers receive eight hours of training every five years.

- **Hygiene facilities.** OSHA regulations require a separate area to change from work clothing to street clothing as well as providing for hand/face washing facilities. EPA does not address change facilities and suggests that workers wash their hands and face prior to leaving the work place.

- **Medical surveillance and biological monitoring.** OSHA mandates biological monitoring for workers exposed above the action level for airborne lead dust and fumes. EPA's LRRP rule briefly mentions that the only way to detect lead is with a blood test and does not require routine for biological monitoring.

(iii) Memorandum of Understanding Between OSHA and EPA

The Secretary of the Department of Labor and Administrator of EPA signed a Memorandum of Understanding ("MOU") on November 23, 1990, with the goal of establishing a program for improved environmental and workplace health and safety. At that time, the two agencies agreed that coordination was particularly critical given the potential overlap of EPA-OSHA responsibilities and the need to assure the most effective use of limited federal resources.

The current LRRP Rule and OSHA requirements do not dovetail with one other in many ways. Reports suggest that EPA and OSHA did not collaborate on the rule while it was being written. This disregard of the MOU and the inconsistent requirements raise serious concern for business owners about risks of future liability and potential fines under the current program. These concerns will be exacerbated should EPA expand the scope of LRRP rule's application to public and commercial buildings.

In researching this question the Coalition has spoken to environmental companies that provide testing services for contractors who are renovating commercial buildings. These renovations may involve interior ceilings, mechanical equipment, exterior facades, and demising walls between tenant spaces with the intention of reconfiguring the spaces. As required by OSHA, contractors perform both lead in paint determinations (during the "Job Design" phase) as well as air quality sampling (during the pre-job controlled demolition phase to complete the Negative Exposure Assessment). In addition to establishing whether lead is present, contractors are evaluating the workspace for environmental issues including but not limited to fungal growth, asbestos, and fluorescent lighting ballasts that will be disturbed. Limited test data indicates that painted surfaces in these structures do not have the same or significantly similar paint history. Furthermore, public and commercial spaces due to their frequent change of interior finishes cannot have a stable paint history. The OSHA standard remains protective of the employee and the active work area.

(b) Federal "Whole Building Design Guide"

Work practices used in renovation and remodeling activities – and likely other information components solicited in the RFI – may be provided by the federal Whole Building Design Guide ("WBDG") managed by NIBS. According to the "User's Guide" website for this federal building design platform:

> Conceived in 1997 … [t]he WBDG was created to assist the design community with integrating government criteria, non-government standards, vendor data, and expert knowledge into a "whole building" perspective. This "whole building" concept is an integrated design approach that employs a collaborative team process to achieve high-performance buildings. Since its inception, the WBDG has grown from a handful of pages to a site with thousands of pages visited by over 250,000 users per month.
>
> The WBDG is managed by the National Institute of Building Sciences (NIBS) in Washington, DC while overall development is guided by a Board of Direction and Advisory Committee,

> consisting mostly of the Federal agencies involved in facility design and construction. Content of the WBDG is a collaborative effort among federal agencies, private sector companies, nonprofit organizations and educational institutions. Its success is based on industry and government experts contributing their knowledge and experience to better serve the building community.
>
> The WBDG also sits atop the Construction Criteria Base, a library containing over 12,000 documents, including criteria, standards, and tools. It is the primary criteria distribution system for the federal agencies who have major capital projects. [80]

Furthermore:

> The WDBG is the only web-based portal providing government and industry practitioners one-stop access to up-to-date information on a wide range of building-related guidance, criteria and technology from a "whole buildings" perspective. Currently organized into three major categories—Design Guidance, Project Management and Operations & Maintenance—at the heart of the WBDG are Resource Pages, reductive summaries on particular topics.
>
> Development of the WBDG is a collaborative effort among federal agencies, private sector companies, non-profit organizations and educational institutions. Its success depends on industry and government experts contributing their knowledge and experience to better serve the building community. [81]

EPA is certainly familiar with the WBDG, as it is listed as one of the "participating agencies" in this platform and collaborates with 11 other federal agencies on the Guide, including the General Services Administration and the Department of Defense.[82] Moreover, EPA is itself actively involved in the WDBG, through representatives on both the General Advisory Committee[83] and Sustainability Subcommittee.[84]

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[80] *WBDG User's Guide*, Nat'l Inst. of Bldg. Sci., http://www.wbdg.org/wbdg_ug.php (last visited Mar. 27, 2013).

[81] *About the WBDG*, Nat'l Inst. of Bldg. Sci., http://www.wbdg.org/about.php (last visited Mar. 27, 2013).

[82] Other "participating agencies" in NIBS's Whole Building Design Guide are the Department of Homeland Security, Department of Energy, Department of Veterans Affairs, Administrative Office of the United States Courts, National Institutes of Health, Smithsonian Institution, National Aeronautics and Space Administration, and National Park Service. See *Participating Agencies*, Nat'l Inst. of Bldg. Sci., http://www.wbdg.org/references/partagencies.php (last visited Mar. 27, 2013).

[83] *WBDG Board and Advisory Committee*, Nat'l Inst. of Bldg. Sci., http://www.wbdg.org/wbdg_brd_adv.php (last visited Mar. 27, 2013).

If the WDBG and collaboration among its participating agencies cannot provide information responsive to the RFI, then the Coalition wonders whether *any* group or organization could practicably and feasibly supply the information sought by EPA. We strongly encourage EPA to leverage the wealth of experience and depth of knowledge of the WBDG team for purposes of any Public & Commercial LRRP Program.

(c) Industry practices and standards

(i) <u>U.S. Green Building Council Leadership in Energy and Environmental Design – New Construction and Major Renovations ("LEED NC")</u>

Work practices in USGBC LEED's various rating programs should be considered because "[a]s a result of a 2006 evaluation by GSA of sustainable building rating systems, the Administrator concluded that [LEED] remains the most credible rating system available to meet GSA's needs.[85] The GSA has an "upgraded requirement" for LEED Gold certification as a minimum in all new federal building construction and substantial renovation projects.[86] Moreover, EPA staff from the Agency's Indoor Environment Management Branch serves as a Co-Chair of the Indoor Environmental Quality Technical Advisory Group ("TAG") for LEED's various rating platforms.[87] Thus, it appears that a set of renovation work practices used in LEED ratings have already received some level of EPA review.

- Available at: http://new.usgbc.org/leed/rating-systems/new-construction.

- Scope (p. xiv): "All commercial buildings, as defined by standard building codes, are eligible for certification as [LEED NC]. Examples of commercial occupancies include offices, institutional buildings (libraries, museums, churches, etc.), hotels, and residential buildings of 4 or more habitable stories … [LEED NC] addresses design and construction for both new buildings and major renovations of existing buildings." (p. xiv)

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[84] *WBDG Design and Guidance Subcommittee*, Nat'l Inst. of Bldg. Sci., http://www.wbdg.org/wbdg_dgc.php (last visited Mar. 27, 2013).

[85] *LEED Building Information*, U.S. Gen. Serv. Admin., http://www.gsa.gov/portal/content/105251 (last visited Mar. 27, 2013).

[86] See *GSA Moves to LEED Gold for All New Federal Buildings and Renovations*, U.S. Gen. Serv. Admin. News Releases, http://www.gsa.gov/portal/content/197325 (Oct. 28, 2010). GSA is currently re-evaluating building rating systems as required by a five year review under the Energy Independence and Security Act of 2007. See 78 Fed. Reg. 8,145 (Feb 5, 2013).

[87] See U.S. Green Bldg. Council, *LEED 2009 for Core & Shell Development*, http://new.usgbc.org/sites/default/files/LEED%202009%20Rating_CS-GLOBAL_07-2012_8c.pdf (July 2012) , at p. v.

- Indoor Environmental Quality ("IEQ") Prerequisite 1 (p. 59): Mechanical ventilation systems must be designed using the ventilation rate procedure as defined by ASHRAE 62.1-2007, or the applicable local code, whichever is more stringent. ASHRAE Standard 62.1-2007 User's Manual provides detailed guidance. (p. 59)

- IEQ Credit 1 (p. 62): Install permanent monitoring systems to ensure that ventilation systems maintain design minimum requirements. Configure all monitoring equipment to generate an alarm when airflow values or carbon dioxide (CO2) values vary by 10% or more from the design values via either a building automation system alarm to the building operator or a visual or audible alert to the building occupants. Additional standards for: (1) Mechanically Ventilated Spaces with a design occupant density of 25 people or more per 1,000 square feet; and (2) Naturally Ventilated Spaces.

- IEQ Credit 2 (pp. 63-64): Increased ventilation to provide outdoor air ventilation to improve indoor air quality and promote occupant comfort, well-being and productivity. Practices include the increase in breathing outdoor air ventilation rates to all occupied spaces by at least 30% above the minimum rates required by ASHRAE Standard 62.1-2007; use of CIBSE Application Manual 10:2005, Natural Ventilation in Non-domestic Buildings; and airflow modeling using a macroscopic, multizone analytic model to predict that room-by-room airflows will effectively naturally ventilate for at least 90% of occupied spaces. (pp. 63-64).

- IEQ Credit 3.1 (p. 65): Reduce indoor air quality (IAQ) problems resulting from construction or renovation to promote the comfort and well-being of construction workers and building occupants, by developing and implementing an IAQ management plan for construction and preoccupancy phases.

    - During construction, meet or exceed the recommended control measures of the Sheet Metal and Air Conditioning Contractors National Association (SMACNA), ANSI/SMACNA 008-2008 (Chapter 3).

    - If permanently installed air handlers are used during construction, filtration media must be used at each return air grille that meets one of several criteria:

        - A Minimum Efficiency Reporting Value (MERV) of 8 as determined by ASHRAE Standard 52.2-1999;

- Filtration media at Class 5 or higher as defined by CEN Standard EN 779-2002, Particulate air filters for general ventilation; or

- Filtration media with a dust spot efficiency of 30% or higher and greater than 90% arrestance on a particle size of 3-10 µg;

- Replace all filtration media immediately prior to occupancy.

- IEQ Credit 3.2 (pp. 66-67): Reduce indoor air quality (IAQ) problems resulting from construction or renovation to promote the comfort and well-being of construction workers and building occupants, by developing and implementing an IAQ management plan after all finishes have been installed and the building has been completely cleaned before occupancy. Options to achieve these requirements include:

  - Install new filtration media and perform building flush-out by supplying total air volume of 14,000 cubic feet of outdoor air per square foot of floor area while maintaining an internal air temperature of at least 60°F and relative humidity no higher than 60%.

  - If occupancy is desired prior to completion of the flush-out, the space may be occupied following delivery of a minimum of 3,500 cubic feet of outdoor air per square foot. Once the space is occupied, it must be ventilated at a minimum rate of 0.30 cubic feet per minute per square foot.

  - Conduct baseline IAQ testing after construction ends and prior to occupancy using testing protocols consistent with the EPA Compendium of Methods for the Determination of Air Pollutants in Indoor Air or the ISO Method to demonstrate maximum contaminant concentration levels that cannot be exceeded.

- IEQ Credit 4.2 (p. 70): Sets requirements for low-emitting paints and coatings for building interiors.

  - Architectural paints and coatings applied to interior walls and ceilings must not exceed the volatile organic compound (VOC) content limits established in Green Seal Standard GS-11, Paints, 1st Edition, May 20, 1993.

  - Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates must not exceed VOC content limit of 250g/L (2 lb/gal) established in Green Seal Standard GC-03, Anti-Corrosive Paints, 2nd Edition, January 7, 1997.

- IEQ Credit 5 (pp. 75-76): To minimize building occupant exposure to potentially hazardous particulates and chemical pollutants, implement requirements to minimize and control the entry of pollutants into buildings and later cross-contamination of regularly occupied areas.

  ○ Employ permanent entryway systems of at least 10 feet long in the primary direction of travel to capture dirt and particulates entering the building at regularly used exterior entrances.

  ○ Sufficiently exhaust each space where hazardous gases or chemicals may be present or used (*e.g.*, garages, housekeeping and laundry areas, copying and printing rooms) to create negative pressure with respect to adjacent spaces when the doors to the room are closed. For each of these spaces, provide self-closing doors and deck-to-deck partitions or a hard-lid ceiling. The exhaust rate must be at least 0.50 cubic feet per minute per square foot with no air recirculation.

  ○ In mechanically ventilated buildings, each ventilation system that supplies outdoor air shall comply with the following:

    ▪ Particle filters or air cleaning devices shall be provided to clean the outdoor air at any location prior to its introduction to occupied spaces. These filters or devices shall meet one of the following: (1) Minimum efficiency reporting value (MERV) of 13 or higher in accordance with ASHRAE Standard 52.2; (2) Class F7 or higher, as defined by CEN Standard EN 779:2002; or (3) Minimum dust spot efficiency of 80% or higher and greater than 98% arrestance on a particle size of 3-10 µg.

(ii) <u>LEED Existing Buildings Operations and Maintenance ("LEED EBOM")</u>

- Available at: http://new.usgbc.org/leed/rating-systems/existing-buildings.

- Scope (pp. xvii): Facility alterations and additions "that affect usable space in the building. Mechanical, electrical, or plumbing system upgrades that involve no usable space are excluded."

  ○ Maximum: Alterations that affect no more than 50% of the total building floor area of no more than 50% of regular building occupants; additions that increase total building floor area by no more than 50%. Building alterations that exceed these thresholds would be covered by LEED New Construction.

  ○ Minimum: Alterations that include construction activity by more than 1 trade specialty, make substantial changes to at least 1 entire room in

the building, and require isolation of the work site from regular building occupants for the duration of construction. Also, additions that increase total building floor area by at least 5% are eligible for EBOM certification.

- Materials and Resources ("MR") Prerequisite 1 (p. 41): To reduce the environmental impacts of materials used in the operations, maintenance, and upgrades of buildings, buildings should have in place an Environmentally Preferable Purchasing policy (EPP) that adheres to the "LEED 2009 for EBOM" policy model.

- Indoor Environmental Quality (IEQ) Prerequisite 1 (p. 55): See IEQ Prerequisite 1 for LEED NC, above.

- IEQ Prerequisite 3 (p. 59): Have a green cleaning policy for the building in place to reduce the exposure of building occupants and maintenance personnel to potentially hazardous chemical, biological, and particulate contaminants, which adversely affect air quality, human health, building finishes, building systems, and the environment.

  - Establish standard operating procedures addressing how an effective cleaning and hard floor and carpet maintenance system will be consistently utilized, managed, and audited. Specifically address cleaning to protect vulnerable building occupants.

  - Policy must adhere to "LEED 2009 for EBOM" policy model.

- IEQ Credit 1.1 (p. 60): Develop and implement on an ongoing basis an Indoor Air Quality (IAQ) management program based on the EPA Indoor Air Quality Building Education and Assessment Model (I-BEAM), EPA Reference Number 402-C-01-001, December 2002, available at http://www.epa.gov/iaq/largebldgs/i-beam/index.html.

- IEQ Credit 1.2 (p. 61): To provide capacity for ventilation system monitoring, install permanent, continuous monitoring systems that provide feedback on ventilation system performance to ensure that ventilation systems maintain minimum outdoor air flow rates under all operating conditions.

  - Provide an outdoor airflow measurement device capable of measuring and controlling the minimum airflow rate at all expected system operating conditions within 15% of the design minimum outdoor air rate. Monitoring must be performed for at least 80% of the building's total outdoor air intake flow serving occupied spaces.

- IEQ Credit 1.3 (p. 63): Provide additional outdoor air ventilation to improve indoor air quality (IAQ). See IEQ Credit 2 for LEED NC, above.

- IEQ Credit 1.4 (p. 65): To reduce exposure of building occupants and maintenance personnel to potentially hazardous particulate contaminants, each ventilation system in mechanically ventilated buildings shall adhere to certain requirements for filtration media. See IEQ Credit 5 for LEED NC, above.

- IEQ Credit 1.5 (p. 66): To prevent indoor air quality (IAQ) problems resulting from any construction or renovation projects to help sustain the comfort and well-being of construction workers and building occupants, and IAQ management plan shall be developed and implemented for the construction and occupancy phases. See IEQ Credit 3.1 for LEED NC, above.

- IEQ Credit 2.1 (p. 68): Implement an occupant comfort survey and complaint response system to collect anonymous responses about conditions including indoor air quality, building cleanliness, and other occupant comfort issues. The survey must be from a representative sample of building occupants making up at least 30% of the total occupants.

- IEQ Credit 3.1 (p. 75): To reduce exposure of building occupants and maintenance personnel to potentially hazardous chemicals and particulate contaminants, have in place a high-performance cleaning program that includes cleaning and care of carpets and hard floors.

- IEQ Credit 3.2 (p. 76): To reduce exposure of building occupants and maintenance personnel to potentially hazardous chemicals and particulate contaminants, conduct an audit in accordance with the APPA Leadership in Education Facilities' (APPA) "Custodial Staffing Guidelines": to determine the appearance level of the facility. The facility must score 3 or less.

- IEQ Credit 3.4: (p. 79): To reduce exposure of building occupants and maintenance personnel to potentially hazardous chemicals and particulate contaminants, implement a program for the use of janitorial equipment that reduces building contaminants and minimizes environmental impact. Among other components, cleaning equipment program must include:

    - Carpet extraction equipment used for restorative deep cleaning is certified by the Carpet and Rug Institute's "Seal of Approval" Testing Program for deep-cleaning extractors.

- Powered floor maintenance equipment, including electric and battery-powered floor buffers and burnishers, is equipped with vacuums, guards, and/or other devices for capturing fine particulates.

- Equipment is designed with safeguards, such as rollers or rubber bumpers, to reduce potential damage to building surfaces.

- Keep a log for all powered cleaning equipment to document the date of equipment purchase and all repair and maintenance activities and include vendor specification sheets for each type of equipment in use.

- IEQ Credit 3.5 (p. 80): To reduce exposure of building occupants and maintenance personnel to potentially hazardous chemicals and particulate contaminants, employ permanent entryway systems (grilles, grates, mats) at least 10 feet long in the primary direction of travel to capture dirt and particulates entering the building at all public entry points, and develop the associated cleaning strategies to maintain those entryway systems as well as exterior walkways.

  - Public entryways that are not in use or serve only as emergency exits are excluded, as are private offices.

(iii) <u>LEED Commercial Interiors ("LEED CI")</u>:

- Available at: http://new.usgbc.org/leed/rating-systems/commercial-interiors

- Coverage (pp. xii-xiv): Addresses the specifics of tenant spaces primarily in office, retail, and institutional buildings. Tenants who lease their space or do not occupy the entire building are eligible.

- IEQ Credit 3.1 (p. 44): Reduce indoor air quality (IAQ) problems resulting from construction or renovation to promote the comfort and well-being of construction workers and building occupants, by developing and implementing an IAQ management plan for construction and preoccupancy phases. See IEQ Credit 3.1 for LEED NC, above.

- IEQ Credit 3.2 (pp. 45-46): To reduce indoor air quality (IAQ) problems resulting from construction or renovation, develop an IAQ management plan and implement it after all finishes have been installed and the building has been completely cleaned before occupancy. See IEQ Credit 3.2 for LEED NC, above.

- IEQ Credit 4.2 (p. 49): Sets requirements for low-emitting paintings and coatings for building interiors. See IEQ Credit 4.2 for LEED NC, above.

- IEQ Credit 5 (p. 55):To minimize building occupant exposure to potentially hazardous particulates and chemical pollutants, implement requirements to minimize and control the entry of pollutants into buildings and later cross-contamination of regularly occupied areas. See IEQ Credit 5 for LEED NC, above.

(iv) National Green Building Standard/ICC 700

- Scoring Tools for Certification available at: http://www.homeinnovation.com/services/certification/green_homes_and_products/resources/ngbs_green_scoring.

- Coverage: Design, construction, certification, and operation of new and existing single- and multi-family buildings. The first green building rating system to receive the full consensus process and receive approval from the American National Standards Institute (ANSI) and the only residential system to do so.

- Indoor Environmental Quality criteria:
    - Pollutant sources to be controlled
    - Natural draft furnaces, boilers, or water heaters are not located in conditioned spaces, including conditioned crawlspaces, unless located in a mechanical room that has an outdoor air source and is sealed and insulated to separate it from the conditioned spaces
    - Air handling equipment or return ducts are not located in the garage, unless placed in isolated, air-sealed mechanical rooms with an outside air source
    - Building entrance pollutants control – pollutants are controlled at all main building entrances by one of the following methods:
        - Exterior grilles or mats are installed in a fixed manner and may be removable for cleaning
        - Interior grilles or mats are installed in a fixed manner and may be removable for cleaning
    - Building ventilation systems: (mandatory)
        - One of the following whole building ventilation systems is implemented and is in accordance with specifications in Appendix B:
            - ✓ Exhaust or supply fans ready for continuous operation and with appropriately labeled controls
            - ✓ Balanced exhaust and supply fans with supply intakes located in accordance with the manufacturer's guidelines so as to not introduce polluted air back into the building
            - ✓ Heat-recovery ventilator
            - ✓ Energy-recovery ventilator

- HVAC system protection – one of the following HVAC system protection measures is performed:
  - HVAC supply registers (boots), return grilles, and rough-ins are covered during construction activities to prevent dust and other pollutants from entering the system.
  - Prior to owner occupancy, HVAC supply registers (boots), return grilles, and duct terminations are inspected and vacuumed. In addition, the coils are inspected and cleaned and filter is replaced if necessary.

(v) Green Globes

- Criteria and Point Allocation available at: http://www.thegbi.org/green-globes/continual-improvement-for-existing-buildings.shtml.

- Coverage: The program has modules supporting new construction Green Globes for New Construction ("NC") and existing buildings – Green Globes for Continual Improvement of Existing Buildings ("CIEB"). It is suitable for a wide range of buildings, including large and small offices, multi-family structures and institutional buildings such as courthouses, schools, and universities.

- Indoor Environment Criteria for both NC and CIEB include:

  - Features of a ventilation system designed to avoid entraining pollutants into the ventilation air path include:
    - To avoid re-entrainment, air intakes and outlets to be positioned at least 30 ft. apart, and inlets not to be downwind of outlets.
    - Air intakes to be located more than 60 ft. from major sources of pollution and at least the minimum recommended distances from lesser sources of pollution.
    - Air intake openings to be suitably protected.
    - Ventilation lining that will avoid the release of pollution and fibers into the ventilation air path.
    - Sufficient ventilation be provided to obtain acceptable Indoor Air Quality, in accordance with ANSI/ASHRAE 62.1-2004.
    - Evidence that the mechanical systems will provide effective air exchange with the capability of flushing-out the building with 100% outside air at ambient temperatures above 32°F.
  - Indoor air quality
    - Monitoring via CO_2 monitoring or digital electronic airflow monitoring.
    - Measures specified to prevent the growth of fungus, mold, and bacteria on building surfaces and in concealed spaces.
    - Construction documents indicate measures to mitigate indoor pollution at-source.

- Construction documents specify interior materials that are low-VOC emitting, non-toxic, and chemically inert.
- Tenant/occupant concerns log regarding indoor air quality.
- Indoor air quality audit within the past year.
- Checklist of items connected to IAQ (*e.g.* use of low-VOC emitting, non-toxic, and chemically inert materials) that must be discussed with architects, engineers, contractors, and other professionals prior to renovations and repairs.

(5) ***Request 5:* Information concerning dust generation and transportation from exterior and interior renovations of public and commercial buildings**

Despite the Coalition's best efforts to gather dust generation and transport information as a result from renovation activities in public and commercial buildings, we could not find any. This is not surprising, given that panelists at a Science Advisory Board meeting in 2010 "raised concerns" regarding "insufficient data concerning lead dust exposures in commercial or public buildings."[88] We located no information responsive to Request (5) that has come to light since that 2010 SAB meeting.

To obtain valid information for this request, the Coalition believes that EPA will be required to study and assess actual renovation and remodeling activities at building sites. Again, given the mission and function of NIBS and it management of the WBDG, we strongly recommend that EPA coordinate with the Institute on the suggestion of Senators King, Manchin and Begich to identify appropriate interior and exterior renovation projects to assess dust generation and transport. Also, in consultation with GSA, EPA can locate ongoing and imminent retrofit and remodel projects in commercial office buildings and leased spaces within the jurisdiction of the Public Buildings Service that may inform their research activities in support of this rulemaking. The Coalition welcomes the opportunity to attend meetings with EPA and these federal facility managers to identify appropriate subjects for study.

We also believe that EPA's outreach to the Architect of the Capitol ("Architect") can prove highly informative with regard to information on dust generation and transport. As the EPW Senators explained in their February 13 letter, the Architect is responsible for the U.S. Congress and Supreme Court and maintaining 17.4 million square feet of buildings on Capitol Hill.[89] A quick review of the Architect's website reveals several recent and future rehabilitation projects[90] that can likely provide helpful information. Notably, the first phase of the rehabilitation of the Capitol Dome "accomplished the removal of nearly 200,000 pounds of lead-based paint … between the inner and outer cast iron shells of the dome," and more recently

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[88] *EPA Science Advisers Urge Tougher Lead Dust Cleanup Requirements*, InsideEPA.com (July 13, 2010). See Attachment 4.

[89] See *About AOC: Responsibilities of the Architect*, Architect of the Capitol, http://aoc.gov/about-aoc/responsibilities-architect (last visited Mar. 27, 2013).

[90] See *About AOC: Projects*, Architect of the Capitol, http://www.aoc.gov/projects, (last visited Mar. 27, 2013).

"repainting phases were completed … to preserve the ironwork during the construction and opening of the Capitol Visitors Center."[91] The Architect was also responsible for "removing lead paint on the exterior and interior surfaces of the skirt and skirt hoop, the brackets supporting the Peristyle, the underside of the Peristyle floor plates, the grand stair, and all masonry walls within the skirt area; repairing the cast iron and stone; as well as repainting the skirt section of the dome …"[92] While the description on the Architect's website sounds more like an abatement project as opposed to renovation and remodeling, we hope that EPA has considered lessons learned from the Capitol Dome's rehabilitation and urge the agency to connect with the Architect if it has not yet taken that opportunity.

In addition, the Architect is responsible for a major restoration of the Cannon House Office Building.[93] Cannon was completed in 1908 and underwent a major remodel in 1932. "[T]he House of Representatives is in the early planning stages for a top-to-bottom renewal of the Cannon Building. [The Architect] has assembled a team of in-house experts and consultants who are working with House leaders to define key aspects of the project. This initial effort will better define the estimated costs, scope of work, and potential timeline for the work. The AOC expects this initial planning to conclude in 2013." It is fortuitous that the time frame for the Cannon Building's restoration complements EPA's schedule to develop the Public & Commercial LRRP Rule, as set forth in the amended litigation settlement agreement. We encourage EPA to contact the Architect's team to learn more about Cannon's renovation, and how it may provide information on dust generation and transport as well as other aspects of the RFI. The Coalition welcomes any opportunity to assist with this outreach.

V. ADDITIONAL CONSIDERATIONS

The Coalition submits that EPA should consider the following additional points in developing any Public & Commercial LRRP Program and associated regulations.

A. Scope of EPA's Legal Authority Under TSCA Regarding Public & Commercial LRRP

As EPA acknowledges in the RFI – and in the terms of its September 7, 2012 amended settlement agreement – the agency's authority to regulate renovations in public and commercial buildings applies only to the "extent such renovations create lead-based paint hazards."[94] Further delimiting the scope of EPA's regulatory authority, a conjunctive reading of TSCA sections 402 and 403 reflects an expected sequence for agency action – requiring EPA

[91] See *Dome Skirt Rehabilitation*, Architect of the Capitol, http://www.aoc.gov/projects/dome-skirt-rehabilitation, (last visited Mar. 27, 2013).

[92] *Id.*

[93] See *Cannon Renewal Project*, Architect of the Capitol, http://www.aoc.gov/cannon-renewal-project, (last visited Mar. 27, 2013).

[94] 77 Fed. Reg. at 76,997 (Dec. 31, 2012), *citing* TSCA §402 (c)(3) (15 U.S.C. §2682 (c)(3)). The statute defines a "lead-based paint hazard" as a "condition that causes exposure to lead… that *would* result in adverse human health effects as established by the Administrator under this subchapter." TSCA § 401(10) (emphasis added).

first to promulgate regulations that "identify… lead-based paint hazards," the results of which are then to be used in determining whether to "apply the regulations [adopted for "target housing"] to renovations" in public and commercial buildings, or, alternatively, to determine that certain categories of renovation do not require regulation.

Thus far, however, EPA has not met this prerequisite for rulemaking with respect to public and commercial buildings, because the only Section 403 rule it has issued that analyzes lead-based paint hazards explicitly stated that its conclusions "were not intended to identify potential hazards in other settings" besides pre-1978 "target housing."[95] As noted above, to provide support for rulemaking, any new 403 rule for public and commercial buildings would need to establish a credible link between exterior and interior renovations and impacts "that would result in adverse health effects," an empirical data gap that EPA's Science Advisory Board has recognized.[96] At a minimum, EPA may not proceed with rulemaking to regulate renovations in public and commercial buildings unless and until it has promulgated a final Section 403 rule identifying lead-based paint hazards in those structures.

EPA's authority is also bounded by other factors, including considerations of reasonableness, practicality and benefit/cost justification. For example, in its 2010 Residential LRRP Program final rule, EPA cautioned that:

> Although there is no known level of lead exposure that is safe, EPA does not believe the intent of Congress was to require elimination of all possible risk arising from a renovation. Nor does TSCA explicitly require EPA to eliminate all possible risk from lead, nor would it be feasible to do so since lead is a component of the earth.[97]

In a similar vein, the Agency noted that "[a]dditionally, EPA has interpreted practicality in implementation to be an element of the statutory directive to take into account effectiveness and reliability."[98] If these caveats were sound in the context of a LRRP rule focused on target housing – the location with the greatest risk that lead exposure would result in adverse human health effects – they apply with even greater force to the much less likely risk prospect represented by public and commercial buildings.

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[95] *Lead; Identification of Dangerous Levels of Lead*, 66 Fed. Reg. 1,206, 1,211, (Jan. 5, 2001).

[96] See Office of Pollution Prevention and Toxics, U.S. Envtl. Prot. Agency, *Approach for Developing Lead Dust Hazard Standards for Residences, SAB Review Draft*, http://yosemite.epa.gov/sab/sabproduct.nsf/0/9C733206A5D642578525769 5004F0CB1/$File/ResidentialPbDust.pdf (Nov. 5, 2010); and *Approach for Developing Lead Dust Hazard Standards for Public and Commercial Buildings, SAB Review Draft*, http://yosemite.epa.gov/sab/sabproduct.nsf/0/9C733206A5D642578525769 5004F0CB1/$File/Pub&CommBldgPbDust.pdf (Nov. 5, 2010) , at 22.

[97] *Lead; Renovation, Repair, and Painting Program*, 73 Fed. Reg. 21,692, 21,700 (April 22, 2008).

[98] *Id.*, at 21,701.

B. Inspector General's Report for the Residential LRRP Program

As noted throughout these comments, the Coalition is concerned that EPA will rely heavily on the Residential LRRP rules to develop any Public & Commercial LRRP Program. This is problematic – aside from the obvious reason that the two rules cover completely different types of structures – because much of the analysis EPA relied on for the residential rule was flawed.

A July 2012 Office of the Inspector General ("OIG") report[99] found that EPA's cost-benefit analysis was so flawed it recommended that "EPA reexamine the costs and benefits of the 2008 Lead Rule and the 2010 amendment to determine whether the rule should be modified, streamlined, expanded, or repealed." EPA did not follow this recommendation.

One serious problem the OIG report identified is that EPA used self-reported information from just nine businesses to develop its estimate for incremental costs and benefits of the 2008 residential rule. In the report, EPA acknowledged that it did this intentionally to avoid Paperwork Reduction Act requirements (and by extension a required review by the Office of Management and Budget), which the Agency said could delay the process up to two years. From the nine responses, EPA determined costs associated with the 2008 rule were relatively low. EPA compounded its misjudgment by reasoning that since the costs were relatively low, it did not need to consider certain opportunity costs such as: increased consumer and producer prices, legal and administrative costs, liability insurance costs, unemployment effects, and indirect costs. Therefore, the analysis significantly underestimated costs of the rule on the regulated community and consumers.

A second concern identified in the OIG report is EPA's failure to include costs associated with EPA-recommended practices. In its required training courses, instructors demonstrate work practices that are "EPA recommended" but not mandatory, which include: using baby wipes to clean tools, attaching plastic sheeting to the exterior of windows, covering all play areas and sandboxes, and using a shroud for HEPA-filtered tools. However, as the report observes, it is unreasonable for EPA to think a contractor will draw a distinction between something required versus something recommended, when it is demonstrated in an EPA-required training program. Therefore, although EPA attempted to clarify the difference between mandatory requirements and recommended practices by making changes to the October 2011 instructor manual, EPA should have included costs for the activities resulting from the recommended practices to more fully and accurately reflect the economic impact from the Residential LRRP Rule.

As EPA moves forward with any Public & Commercial LRRP Program, it should conduct extensive analysis to determine the true cost of the rule on the public. Under no circumstance should it attempt to rely on the flawed analysis it used to justify the Residential LRRP rule.

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[99] Office of Inspector General, U.S. Envtl. Prot. Agency, *Review of Hotline Complaint Concerning Cost and Benefit Estimates for EPA's Lead-Based Paint Rule*, Report No. 12-P-0600 http://www.epa.gov/oig/reports/2012/20120725-12-P-0600.pdf (July 25, 2012).

C. Authority Under the Resource Conservation and Recovery Act ("RCRA")

Assuming any lead-based paint hazards in public and commercial buildings are found to exist as the result of LRRP activities in those structures, EPA should assess whether it already has sufficient enforcement authority – outside of TSCA – to address such hazards.

On at least two occasions, EPA has used the imminent and substantial endangerment clause under section 7003 of RCRA[100] to require abatement of lead paint. See *In the Matter of 17th Street Revocable Trust*, RCRA-03-2000-01, and *Order to Group I Management and M275 LLC of Fall River,* RCRA-01-2001-072[101] (attached).

The *Group I Management* order was issued by EPA under its RCRA 7003 authority after a contractor completed the sandblasting of paint from several floors of a commercial building. Dust from the operations migrated through floors and windows. Debris from the operations left outside the building was sampled and found to contain lead. The property owner was ordered to complete lead paint abatement at the property under the order. Similarly, the *17th Street Order* required abatement of lead paint in a multi-unit residential facility that included a day care center. EPA issued the order under Section 7003 after learning of several reports of lead poisoning in children and obtaining sample results of the paint chips at the property.

D. Authority Under Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA")

Another statutory scheme that regulates lead-based paint hazards specific to exterior renovations, which EPA should also take into account, is available under CERCLA. Under CERCLA §102, EPA is authorized to "promulgate and revise as may be appropriate, regulations designating as hazardous substances, … such elements, compounds, mixtures, solutions and substances which, when released into the environment may present substantial danger to the public health or welfare of the environment.[102] Lead has been identified by EPA as a hazardous substance[103] and repairs/renovations to the exterior of a facility (public or commercial building) that disturb lead based paint may either release or threaten to release lead into the environment outside of the building. [104]

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[100] 42 U.S.C. §6973(a) (2010).

[101] See Attachment 11.

[102] 42 U.S.C. §9602(a) (1994).

[103] 40 C.F.R. §302.4 (1996).

[104] In *ABD Assoc. Ltd Partnership v. American Tobacco Co.,* plaintiff brought suit under CERCLA to recover, inter alia, the response costs associated with the cleanup of lead-based paint from the exterior of buildings. The court acknowledged that lead-based paint was a hazardous substance under CERCLA and stated that the mere presence of lead-based paint on the exterior of a building constituted a threatened released into the environment. 1995 U.S. Dist. LEXIS 11094 (M.D.N.C. 1995).

VI. CONCLUSION

As set forth above, the consequences of a potential EPA Public and Commercial LRRP program are enormous. Before initiating a TSCA Section 403 rulemaking governing these types of buildings, EPA must ensure that it has fully explored and analyzed all relevant data that would be needed to justify such a rule, including:

- Completion of a "hazard" finding under TSCA section 403 for public and commercial buildings that is based on a proper consideration of those categories of structures, rather than seeking to rely on a target housing analysis that explicitly stated its findings were inapplicable to other types of buildings;
- Critical analysis of the wide-ranging breadth and diversity between and among the categories, uses and occupancies of public and commercial buildings, and whether and how any Section 403 hazard finding varies among recognized building types and sub-types;
- Coordination with federal facilities managers on studies in federal buildings of any lead-based paint hazards, actual renovation projects, and the effectiveness of associated work practices to inform the public buildings aspect of any contemplated LRRP program; and
- Conducting a thorough inventory and assessment of whether existing regulatory programs and industry practices already address any potential lead-based paint hazards and renovation work practices in public and commercial buildings, to make sure that any new rule could be legally justified and found consistent with Executive Orders designed to avoid "redundant, inconsistent, or overlapping" regulation, "tak[ing] into account benefits and costs, both quantitative and qualitative."

The Coalition has acted diligently to gather extensive information responsive to EPA's RFI. The Coalition's members stand ready to assist EPA further in completing the necessary groundwork for a well-supported decision as to whether it will propose an LRRP rule for public and commercial buildings or determine that these activities do not create lead-based paint hazards warranting additional rulemaking.

ATTACHMENT 1

LIST OF ORGANIZATIONS IN COMMERCIAL PROPERTIES COALITION

Serving the hospitality industry for more than a century, the **American Hotel & Lodging Association** (AH&LA) is the sole national association representing all sectors and stakeholders in the lodging industry, including individual hotel property members, hotel companies, student and faculty members, and industry suppliers. Headquartered in Washington, D.C., AH&LA provides members with national advocacy on Capitol Hill, public relations and image management, education and training, research and information, and other value-added services to provide bottom line savings and ensure a positive business climate for the lodging industry. AH&LA has been the leading voice of the lodging industry for more than 100 years.

Associated Builders and Contractors (www.abc.org) is a national construction industry trade association representing nearly 22,000 contractors, subcontractors, materials suppliers and construction-related firms within a network of 72 chapters throughout the United States. ABC member contractors employ workers whose training and experience span all of the 20-plus skilled trades that comprise the construction industry. Moreover, the vast majority of contractor members are classified as small businesses. ABC's membership is bound by a shared commitment to the *merit shop philosophy*. This philosophy is based on the principles of nondiscrimination due to labor affiliation and the awarding of construction contracts through open, competitive bidding based on safety, quality and value. This process assures taxpayers and consumers will receive the best product for their construction dollar.

Associated General Contractors of America (AGC) is the leading trade association in the construction industry. It dates back to 1918, and it currently represents 33,000 firms in nearly 100 chapters across the United States. AGC's members include 7,500 of the nation's leading general contractors, nearly 12,500 specialty contractors and more than 13,000 material suppliers and service providers to the construction industry. These members engage in the construction of commercial buildings, hospitals and laboratories, schools, shopping centers, factories, warehouses, highways, bridges, tunnels, airports, levees, water works facilities and multi-family housing units, and they prepare sites and install the utilities necessary for housing development. AGC Building Contractors represent large and small contractors, from those that offer a wide variety of pre-construction and post-construction services to those that offer only traditional construction services. In 2012 nonresidential construction spending in the U.S. totaled $573 billion ($269 billion public, $303 billion private). In 2012, nonresidential building and specialty trade contractors accounted for 2.7 million of the industry's 5.6 million employees.

Building Owners and Managers Association (BOMA) International is a federation of 93 BOMA U.S. associations, BOMA Canada and its 11 regional associations and 13 BOMA international affiliates. Founded in 1907, BOMA represents the owners and managers of all commercial property types including nearly 10 billion square feet of U.S. office space that supports 3.7 million jobs and contributes $205 billion to the U.S. GDP. Its mission is to advance the interests of the entire commercial real estate industry through advocacy, education, research,

standards and information. BOMA International is a primary source of information on building management and operations, development, leasing, building operating costs, energy consumption patterns, local and national building codes, legislation, occupancy statistics, technological developments and other industry trends.

CCIM Institute is an affiliate of the NATIONAL ASSOCIATION OF REALTORS® (NAR). The Institute confers the Certified Commercial Investment Member (CCIM) designation through an extensive curriculum and experiential requirements. The CCIM designation was established in 1969 and is recognized as the mark of professionalism and knowledge in commercial investment real estate. Membership includes qualified professionals in all disciplines of commercial investment real estate, including brokers, leasing professionals, investment counselors, asset managers, appraisers, corporate real estate executives, property managers, developers, institutional investors, commercial lenders, attorneys, bankers, and other allied professionals. Of the approximately 125,000 commercial real estate practitioners nationwide, 9,000 currently hold the CCIM designation, with an additional 6,000 candidates pursuing the designation. Founded upon the principles of education, networking, and ethical practice, the CCIM Institute, as an affiliate of the 1.2 million-member NATIONAL ASSOCIATION OF REALTORS®, helps shape policy and legislation affecting the industry and safeguards the interests of commercial investment real estate practitioners.

Established in 1948, the **Electronic Security Association (ESA)** is the largest professional trade association in the United States with the purpose of representing, promoting and enhancing the growth and professional development of the electronic life safety, security, and integrated systems industry. ESA's member companies, represent more than 70 percent of the market for intrusion and fire/life safety systems, access control, video surveillance and monitoring, and are a vital component of public safety. Together they employ more than 400,000 industry professionals, and service more than 30 million residential and commercial accounts.

The Independent Electrical Contractors (IEC) is a national trade association for merit shop electrical and systems contractors representing over 3,000 member companies and 56 chapters nation-wide. Over 50 percent of IEC members are small business owners. With over $14 billion in annual sales, our members are a driving force in the electrical and systems contracting industry. IEC serves as the voice of the industry on policies affecting our membership and attempts to further our economy through skilled manpower and the principle of free enterprise. IEC has more than 50 chapter training centers nationwide that provide training to approximately 10,000 apprentices each year. IEC's training program offers participants the knowledge, technical skills, and practical experience necessary to succeed in today's electrical trade.

Institute of Real Estate Management (IREM®) is an international community of real estate managers dedicated to ethical business practices, maximizing the value of investment real estate, and promoting superior management through education and information sharing. An affiliate of the National Association of REALTORS®, IREM is the home for all industry professionals connected to real estate management – and the only organization serving both the multi-family and commercial sectors. We believe that good management matters, and that well-managed

properties pay dividends in terms of value and in the quality of life for residents, tenants and customers. We believe in professional ethics. We believe in the power of knowledge and the importance of sharing it. IREM offers a variety of membership types for professionals of every experience level, from on-site managers to high-level executives. Our credentials, earned by meeting high standards of education, experience, and ethical business practices, include: CERTIFIED PROPERTY MANAGER® (CPM®), ACCREDITED RESIDENTIAL MANAGER® (ARM®), ACCREDITED COMMERCIAL MANAGER (ACoM), or ACCREDITED MANAGEMENT ORGANIZATION® (AMO®). Since 1933, IREM has set the standard for best practices in real estate management. Today, IREM® membership includes more than 18,000 individuals and 560 corporate members.

NAIOP, the Commercial Real Estate Development Association, is the leading organization for developers, owners and related professionals in office, industrial and mixed-use real estate. NAIOP comprises 15,000 members in North America, with over 50 local chapters. NAIOP advances responsible commercial real estate development and advocates for effective public policy.

NAREIT®, the National Association of Real Estate Investment Trusts®, is the worldwide representative voice for REITs and publicly traded real estate companies with an interest in U.S. real estate and capital markets. NAREIT's members are REITs and other businesses throughout the world that own, operate, and finance income-producing real estate, as well as those firms and individuals who advise, study, and service those businesses.

For more than 20 years, the **National Apartment Association (NAA) and the National Multi Housing Council (NMHC)** have partnered on behalf of America's apartment industry. Drawing on the knowledge and policy expertise of staff in Washington, D.C., as well as the advocacy power of 170 NAA state and local affiliated associations, NAA and NMHC provide a single voice for developers, owners and operators of multifamily rental housing. Apartments and their 35 million residents support more than 25 million jobs and contribute $1.1 trillion to the economy.

The National Association of Home Builders (NAHB) is a trade association organized for the purpose of promoting the general commercial, professional, and legislative interests of its membership. NAHB consists of more than 140,000 builder and associate members organized into approximately 800 affiliated state and local associations in all 50 states, the District of Columbia, and Puerto Rico. These members are involved in home building, remodeling, multifamily construction, property management, subcontracting, design, housing finance, building product manufacturing and other aspects of residential and light commercial construction. Founded in 1982, NAHB Remodelers of the National Association of Home Builders represents and serves the interests of more than 24,000 remodeling industry members.

The National Association of REALTORS®, The Voice for Real Estate®, is America’s largest trade association, representing over 1 million members involved in the residential and commercial real estate industries. NAR is strategically poised to work on behalf of America's

property owners providing a facility for professional development, research and exchange of information among its members and to the public and government for the purpose of preserving the free enterprise system, and the right to own, use, and transfer real property.

The National Federation of Independent Business (NFIB) is the nation's leading small business advocacy association, representing members in Washington, D.C., and all 50 state capitals. Founded in 1943 as a nonprofit, nonpartisan organization, NFIB's mission is to promote and protect the right of its members to own, operate, and grow their businesses. NFIB represents about 350,000 independent-business owners who are located throughout the United States.

The National Leased Housing Association (NLHA) is widely recognized as the only national organization serving all major participants--private and public--in the multifamily rental housing field. NLHA is a vital and effective advocate for 450 member organizations, including developers, owners, managers, public housing authorities, state housing finance agencies, local governments, investment bankers, attorneys, accountants, architects, non-profit sponsors and syndicators involved in government related rental housing. This unique coalition is committed to public and private sector interaction as the most pragmatic means of meeting this nation's rental housing needs. Though NLHA's constituencies are many, the goal of the Association is one: the provision and maintenance of decent, affordable rental housing for all Americans, particularly those of low and moderate income.

The National Lumber and Building Material Dealers Association (NLBMDA) represents its members in the national public policy arena and has over 6,000 members operating single or multiple lumber yards and component plants serving homebuilders, subcontractors, general contractors, and consumers in the new construction, repair and remodeling of residential and light commercial structures.

The Plumbing-Heating-Cooling Contractors—National Association is America's premier trade group for the p-h-c professional. PHCC has more than 3,500 open and union shop contractor members who successfully manage businesses in residential service and new construction, commercial and industrial markets.

The Real Estate Roundtable (www.rer.org) brings together leaders of the nation's top publicly-held and privately-owned real estate ownership, development, lending and management firms with the leaders of major national real estate trade associations to jointly address key national policy issues relating to real estate and the overall economy. Collectively, Roundtable members' portfolios contain over 5 billion square feet of office, retail and industrial properties valued at more than $1 trillion; over 1.5 million apartment units; and in excess of 1.3 million hotel rooms. Participating trade associations represent more than 1.5 million people involved in virtually every aspect of the real estate business.

The U.S. Chamber of Commerce (www.uschamber.com) is the world's largest business federation representing the interests of more than 3 million businesses of all sizes, sectors, and

regions, as well as state and local chambers and industry associations. More than 96% of Chamber member companies have fewer than 100 employees, and many of the nation's largest companies are also active members. Besides representing a cross-section of the American business community with respect to the number of employees, major classifications of American business—e.g., manufacturing, retailing, services, construction, wholesalers, and finance—are represented. The Chamber has membership in all 50 states.

Window and Door Manufacturers Association (WDMA) defines the standards of excellence in the residential and commercial window, door and skylight industry and advances these standards among industry members while providing resources, education and professional programs designed to advance industry businesses and provide greater value for their customers.

ATTACHMENT 2

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July 6, 2010

Document Control Office (7407M)
Office of Pollution Prevention and Toxics (OPPT)
Environmental Protection Agency
1200 Pennsylvania Ave., NW.
Washington, DC 20460-0001

Re: Docket ID No. EPA-HQ-OPPT-2010-0173 Comments

Dear Sir or Madam:

These comments are submitted in response to the Advance Notice of Proposed Rulemaking issued by the U.S. Environmental Protection Agency ("EPA") concerning the Renovation, Repair and Painting Program for Commercial and Public Buildings on May 6, 2010. The comments are submitted by a coalition of associations involved in various aspects of commercial real estate, development, and contracting. The coalition members include the following: The Real Estate Roundtable; Associated Builders and Contractors; Associated General Contractors of America; Building Owners and Managers Association International; CCIM Institute; International Council of Shopping Centers; Institute of Real Estate Management; NAIOP, the Commercial Real Estate Development Association; National Association of Home Builders; National Association of Real Estate Investment Trusts; National Association of REALTORS®; National Lumber & Building Material Dealers Association; Painting & Decorating Contractors of America; Plumbing-Heating-Cooling Contractors-National Association; and Window and Door Manufacturers Association (the "Coalition").

The Coalition appreciates the opportunity to submit these comments. The Coalition members look forward to working with the Agency as it moves forward with its rulemaking process for RRP activities in public and commercial buildings.

Sincerely,

Thomas Jackson

Thomas C. Jackson

TCJ:
Enclosure

BAKER BOTTS LLP

Comments Regarding EPA Advanced Notice of Proposed Rulemaking

Lead; Renovation, Repair, and Painting Program for Commercial and Public Buildings

75 Fed. Reg. 24848 (May 6, 2010)

INTRODUCTION

These comments respond to the Advance Notice of Proposed Rulemaking issued by the U.S. Environmental Protection Agency ("EPA") concerning the Renovation, Repair and Painting Program for Commercial and Public Buildings. 75 Fed. Reg. 24848 (May 6, 2010) (the "ANPRM"). The comments are submitted by a coalition of associations involved in various aspects of commercial real estate, development, and contracting. The coalition members include the following: The Real Estate Roundtable; Associated Builders and Contractors; Associated General Contractors of America; Building Owners and Managers Association International; CCIM Institute; International Council of Shopping Centers; Institute of Real Estate Management; NAIOP, the Commercial Real Estate Development Association; National Association of Home Builders; National Association of Real Estate Investment Trusts; National Association of REALTORS®; National Lumber & Building Material Dealers Association; Painting & Decorating Contractors of America; Plumbing-Heating-Cooling Contractors-National Association; and Window and Door Manufacturers Association (the "Coalition").

The Coalition represents the members of the regulated community that will be most affected by any regulations that might be adopted by EPA with respect to renovation, repair and painting ("RRP") activities for commercial buildings. Accordingly, the Coalition members have a substantial interest in the development of these regulations and can offer important insights regarding the commercial real estate and development industries and the potential impacts of any rules that EPA might consider. The Coalition believes that the Agency should proceed carefully in developing any regulations in this area and should consider a variety of issues.

As discussed further below, the Coalition believes that EPA must consider the scope of its authority before proceeding with any regulations. The Toxic Substances Control Act limits the Agency's authority to promulgate regulations that govern RRP activities in commercial and public buildings. Among other things, EPA must complete a congressionally-mandated study of RRP activities in commercial and public buildings and the extent to which they create lead-based paint hazards before it can proceed with any regulations.

In addition, EPA must consider a variety of factors in any rulemaking efforts related to RRP activities in commercial and public buildings. For example, the Agency should take into account the fact that RRP activities in commercial and public buildings may present very different patterns of exposure to lead-based paint hazards than the RRP activities in residential settings on which the Agency has previously focused. In addition, EPA should take into consideration the very limited use of lead-based paint in commercial buildings since 1978. EPA must also consider the potential impacts that the imposition of regulatory requirements may have on other national priorities such as increasing energy efficiency. Indeed, the many questions concerning the extent to which RRP activities in commercial and public buildings actually

present lead-based paint hazards and the potential consequences of any regulations strongly suggest that the Agency should continue to seek the input of key stakeholders such as the Coalition's members as this rulemaking proceeds.

BACKGROUND

In 1992 Congress passed the Residential Lead-Based Paint Reduction Act, commonly referred to as "Title X." Pub. L. 102-550, tit. X (codified in part at 15 U.S.C. §§ 2681-92). Among other things, that title added a new Subchapter IV to the Toxic Substances Control Act, 15 U.S.C. § 2601 *et seq.*, ("TSCA"); as part of that subchapter Congress directed EPA to develop regulations to reduce exposure to lead by enacting requirements for individuals involved in maintenance, remodeling and construction activities in certain types of buildings, including "target housing," commercial buildings, and public buildings constructed before 1978. 15 U.S.C. § 2682. ("Target housing" is defined as "any residential structure built prior to 1978 where a child under six resides or is likely to reside." *See* 42 U.S.C. § 4851b(27).)

Title X obligates EPA to promulgate guidelines for renovation or remodeling activities in target housing, commercial buildings, and public buildings constructed before 1978 that create lead-based paint hazards. To that end, EPA adopted the Renovation, Repair and Painting Rule regulating target housing and certain child-occupied facilities in April 2008. 73 Fed. Reg. 21692 (April 22, 2008) (the "Residential RRP Rule"). The work practice requirements announced in the Residential RRP Rule apply to enterprises engaging in RRP activities in target housing and child-occupied facilities but do not apply to homeowners who conduct RRP activities themselves. *Id.* at 21702. The Residential RRP Rule does not apply to other commercial or public buildings. 75 Fed. Reg. 24851 (May 6, 2010).

After the publication of the Residential RRP Rule, EPA entered into an agreement as part of a litigation settlement with various environmental advocacy groups to address concerns regarding the Residential RRP Rule. *Id.* at 24851. As part of this agreement, EPA committed to commence a rulemaking to address RRP activities in commercial and public buildings. *Id*. Accordingly, EPA published the ANPRM on May 6, 2010. *Id.* at 24848.

In the ANPRM, EPA has requested comments on a variety of issues specific to the regulation of RRP activities in commercial and public buildings. The Coalition submits the following comments regarding the ANPRM. We urge EPA to conduct a comprehensive study regarding RRP activities in commercial and public buildings prior to taking any further regulatory action.

I. EPA Has Limited Authority to Impose Requirements on RRP Activities in Commercial and Public Buildings

There are several grounds on which the rules contemplated in the ANPRM would exceed the statutory authority Congress granted to EPA under Title X. First, the statute gives EPA the authority to issue *guidelines* for work practice standards applicable to RRP activities but does not grant the Agency the authority to impose regulatory *requirements* concerning work practices. In addition, on its face Title X provides that EPA can only regulate RRP activities if they are shown

to create lead-based paint hazards. Finally, the Agency cannot promulgate any regulations governing RRP activities in commercial and public buildings until it completes the type of study mandated by Congress. Each of these issues is discussed further below.

A. EPA Lacks Statutory Authority to Adopt Requirements for RRP Activities in Commercial and Public Buildings and Can Only Issue Guidelines

Based on the statute's text, EPA lacks authority under TSCA to promulgate regulations governing RRP activities because such requirements would almost certainly be part of work practice standards, which can only be the subject of Agency guidelines. The plain language of TSCA Section 402(a)(1) authorizes EPA "to ensure that individuals engaged in [lead-based paint] activities are properly *trained*; that training programs are *accredited*; and that contractors engaged in such activities are *certified*." 15 U.S.C. § 2682(a)(1) (emphasis added). The statute also grants EPA the authority to create standards for "lead-based paint activities," which are defined in the context of commercial buildings, public buildings constructed before 1978, bridges and other structures to include "identification of lead-based paint and materials containing lead-based paint, deleading, removal of lead from bridges, and demolition." 15 U.S.C. § 2682(b)(1). Work involving renovation, repair and painting is not included under the "lead-based paint activities" definition.

In enacting Section 402(c), Congress was careful to distinguish between lead-based paint activities and RRP activities – and that section does not authorize EPA to promulgate regulations affecting the work practice standards for RRP in commercial and public buildings. Instead, EPA is authorized to "promulgate *guidelines* for the conduct" of RRP activities and to require certification of RRP firms that are engaged in activities that create lead-based hazards. 15 U.S.C. § 2682(c)(1) and (3). Although the statute also requires EPA, after undertaking a study, to revise the regulations developed for abatement and other lead-based paint activities to apply to RRP activities, Congress intended that EPA would apply the appropriate certification requirements developed in connection with lead-based paint activities to RRP contractors but that work practice standards would remain the subject of guidelines, not regulations. 15 U.S.C. § 2682(c)(3). *See, e.g., Spears v. U.S.*, 129 S. Ct. 840, 842 (2009) ("'[T]he cocaine Guidelines, *like all other Guidelines*, are advisory only.'" (emphasis added)), (quoting *Kimbrough v. U.S.*, 128 S. Ct. 558, 560 (2007)); *Brock v. Cathedral Bluffs Shale Oil Co., et al.*, 796 F.2d 533, 537 (D.C. Cir. 1986) ("'The critical distinction between a substantive rule and a general statement of policy is the different practical effect that these two types of pronouncements have in subsequent proceedings....A properly adopted substantive rule establishes a standard of conduct which has the force of law….A general statement of policy, on the other hand, does not establish a "binding norm.'"), (quoting *Pacific Gas & Electric Co. v. FPC*, 506 F.2d 33, 38 (D.C. Cir. 1974)).

This plain reading of the statute is supported by the fact that the provision requiring EPA to engage in a study prior to promulgating regulations for RRP activities (Section 402(c)(2)) is entitled "Study of certification" and the provision concerning subsequent promulgation of regulations (Section 402(c)(3)) is headed "Certification determination." *See I.N.S. v. National Center for Immigrants' Rights, Inc.*, 502 U.S. 183 (1991) (section titles can serve as aids to the construction of statutory language where the language is ambiguous); *see also Bell v. Reno*, 218 F.3d 86 (2d Cir. 2000) (the title of a section is an indication of its meaning). In contrast to the

preceding provision concerning guidelines for work practice standards, the focus of Section 402(c)(2) and (3) is the certification of contractors. Therefore, the focus of rulemaking development under Section 402(c)(3) must be on certifications of contractors. Any attempt by EPA to require contractors to comply with work practice standards in public and commercial buildings is beyond EPA's statutory authority.

Based on EPA's statements in the ANPRM, it appears that the Agency is considering implementing regulations similar to the Residential RRP Rule at least for external RRP activities at commercial and public buildings. *See* 75 Fed. Reg. at 24855. Under its statutory authority, EPA can only issue such standards as guidelines and not regulatory requirements.

B. EPA Lacks Authority to Regulate Activities Unless Those Activities Disturb Lead *and* Create a Lead-Based Paint Hazard

The regulations contemplated in the ANPRM also exceed EPA's statutory authority because EPA has not established that the RRP activities it seeks to regulate in commercial and public buildings create any lead-based paint hazards. TSCA Section 402(c)(3) requires EPA to promulgate regulations with respect to RRP activities only where such activities create a lead-based paint hazard. The statute does not provide specific authorization to EPA to regulate RRP activities that disturb lead but do not create a lead-based paint hazard. 15 U.S.C. § 2682(c)(3). Consequently, from that silence EPA lacks authority to regulate RRP activities unless they create a lead-based paint hazard. *See, e.g., In re Haas*, 48 F.3d 1153, 1156 (11th Cir. 1995) (where Congress knows how to say something but chooses not to, its silence is controlling).

In order to regulate RRP activities in commercial and public buildings, EPA would need to show that such activities create a lead-based paint hazard. Without more information than it currently has regarding RRP activities specifically in the commercial and public settings, EPA cannot show that such activities create a lead-based paint hazard. Indeed, EPA acknowledges in the ANPRM that it does not have enough information to conclude that specific RRP activities in commercial and public buildings create a lead-based paint hazard. *See* 75 Fed. Reg. at 24857 and 24859.

Based on statements in the ANPRM, EPA apparently plans to draw upon the findings it made in the Residential RRP Rule to determine that a lead-based paint hazard is also created by RRP activity in commercial and public buildings. *See* 75 Fed. Reg. at 24856 and 24858 ("EPA requests comment on the extent to which [the "Characterization of Dust Lead Levels After Renovation, Repair, and Painting Activities" (the "Dust Study") and the Phase I, Environmental Field Sampling Study (the "Phase I Study")] should inform EPA's determination on lead-based paint hazards created by renovations on the interiors of non-residential buildings.") This reliance, however, is misplaced. There is a lack of evidence to support a conclusion that, even in a residential setting, all RRP activities that disturb lead-based paint create a lead-based paint hazard. Nor is there a reasonable basis for EPA to extrapolate from either the Dust Study or the Phase I Study - both of which were conducted mostly in residential settings - to determine that renovations in commercial and public buildings create lead-based paint hazards.

In any event, as a general matter, most RRP activities either eliminate or reduce the potential for future lead-based paint hazards. For example, the Mercatus Report found that "evidence collected [in EPA's Study] following the passage of the statute has indicated that lead hazards created by renovation and remodeling work are minimal, and RRP work removes chipping and deteriorating paint – two of the leading causes of elevated blood-lead levels." *See* Comments of the Regulatory Studies Program, Mercatus Center, George Mason University at 30 (May 25, 2006) ("*Mercatus Report*").

Other studies reach similar conclusions. A study conducted by the National Association of Home Builders ("NAHB") explained that "when considering lead dust loading on surfaces throughout a single property, results showed that overall all but one of the properties evaluated showed *lower levels of lead dust when R&R contractors completed the work than when they arrived*." NAHB, *Lead-Safe Work Practices Survey Project Report* 2 (Nov. 2006) (the "*NAHB Report*") (emphasis added). Moreover, the Wisconsin Department of Health and Family Services noted that "our experience in Wisconsin is that *professional renovation is rarely the cause of lead poisoning in children*." Wisconsin Department of Health and Family Services, *Comments: Lead; Renovation, Repair, and Painting Program; Proposed Rule* (emphasis added).

In light of these studies, an ample basis exists in the record to conclude that most RRP activities do not create lead-based paint hazards, but rather minimize and even eliminate such hazards. As discussed above, the statute limits EPA's regulatory authority to those activities that actually create a lead-based paint hazard, which means that RRP activities would generally be exempt from EPA's authority under Section 402(c)(3).

Without additional information, such as a study examining different forms of RRP activities exclusively in the context of commercial and public buildings, EPA cannot conclude that any specific RRP activities create a lead-based paint hazard. Furthermore, to the extent that EPA intends to rely on the Dust Study, the Phase I Study, or some other existing study to provide evidence of a lead-based paint hazard created by RRP activities in commercial and public buildings, the evidence does not support such a conclusion.

Moreover, before it can move forward EPA must address the fact that it currently cannot determine whether any RRP activities in commercial and public buildings create lead-paint hazards because it has not yet adopted standards for determining the presence of lead-based paint hazards in commercial and public buildings. The lead-based paint hazard regulations previously adopted by the Agency apply only to target housing and child-occupied facilities. *See* 40 C.F.R. § 745.65. Those standards are based on risks of exposure to young children. EPA has no rational basis to conclude that residential standards that apply where young children may have only minimal exposure are pertinent to commercial settings where young children are not routinely present.

C. EPA Cannot Adopt Regulations Until It Completes the Statute's "Study of Certification" Requirements

In addition to these fundamental limits on its rulemaking activity, and assuming *arguendo* that EPA has authority to issue regulations for RRP activities in commercial and public buildings, any such regulations would be premature because EPA has not satisfied the

prerequisite of conducting a congressionally-mandated study regarding RRP activities. Prior to promulgating any regulations involving RRP activities, EPA is required to conduct a "Study of certification" to determine which of the "various types of renovation and remodeling activities . . . disturb lead and create a lead-based paint hazard on a regular or occasional basis." 15 U.S.C. § 2682(c)(2). Thus, EPA cannot promulgate any regulations affecting RRP activities until after it has satisfied the "Study of certification" requirements. This statutory requirement to conduct a certification study explicitly applies to commercial buildings and public buildings (constructed before 1978). 15 U.S.C. § 2682(c)(2).

EPA has not conducted a study that focuses on RRP activities in commercial buildings and public buildings constructed before 1978, and the potential of such activities to create lead-based paint hazards. EPA has requested comments in the ANPRM regarding the extent on which it should rely on previous studies it has conducted regarding lead-based paint in residential settings. 75 Fed. Reg. at 24856 and 24858. These studies include the 2007 Dust Study and the four-part study conducted by EPA between 1997 and 1999 (the "Study"). EPA cannot rely on such studies as these did not focus on RRP activities in commercial buildings and public buildings constructed before 1978. Although the Dust Study may have included information on renovations at a school building frequently occupied by children, this is too limited of a data set from which to draw any conclusions regarding RRP activities generally in public and commercial buildings. 75 Fed. Reg. at 24856. Until it conducts a study that actually focuses on RRP activities in commercial and public buildings, it is premature for EPA to contemplate any regulations as it does not have the statutory authority to take the type of regulatory action it appears to be contemplating.

Not only do the studies previously conducted by EPA involve irrelevant subject matter, but, as discussed previously, serious doubts exist regarding the methodologies used and the conclusions of the studies. One of the most comprehensive critiques of the Study comes from the Mercatus Center at George Mason University, which conducted a "careful and independent analys[is] employing contemporary economic scholarship to assess [the] rulemaking proposal[] from the perspective of the public interest." *Mercatus Report* at 1. According to the Mercatus Report, the conclusions made in the Study did not match its content. *Id*. at 23. For example, based on a review of EPA's own data, the *Mercatus Report* concluded that:

- Phases I and II of the Study "failed to find a connection between elevated blood-lead levels and workers' exposure to considerable amounts of lead-contaminated dust;" and

- "[T]he Wisconsin [Phase III] study cannot claim that any RRP work increases the risk of elevated blood-lead levels in children."

Id. at 10, 21.

Several members of the peer review panel involved in evaluating the Study also raised concerns about various aspects of the methodologies employed. For example, EPA reported that "[i]n regard to the Wisconsin blood-lead registry, another issue of concern among the reviewers was how representative the registry is of the state population." *See* Phase IV Report at 1.3. However, the Study failed to adequately address these and other concerns. In other words,

contrary to EPA's conclusions, the Agency's own Study failed to show that unregulated RRP activity contributed to increased blood-lead levels in *either* RRP workers or in children residing in homes that were being remodeled.

These concerns regarding the accuracy of the conclusions drawn in EPA's previous studies underscore the need for EPA to conduct a comprehensive study of RRP activities in commercial and public buildings before it seeks to regulate such activities. However, even if there were no doubts regarding the previous studies, EPA cannot promulgate any regulations affecting RRP activities in commercial and public buildings until after it has satisfied the statutory requirement to conduct a study of these specific activities.

II. Policy Considerations Related to EPA's Intention to Propose Regulations for RRP Activities in Commercial and Public Buildings

A. EPA Must Consider a Number of Factors in Developing Potential Regulatory Requirements for RRP Activities in Commercial and Public Buildings

As EPA has acknowledged in the ANPRM by its numerous requests for public comments on a wide range of issues related to RRP activities in commercial and public buildings, there are numerous factors the Agency must consider prior to proposing any regulatory requirements for such activities. These factors range from determining how to develop standards that protect different population groups with different exposure risks to avoiding conflicts with pre-existing regulatory programs already in place. We highlight below a few of the key factors that EPA must consider in any rulemaking process for RRP activities in commercial and public buildings.

1. Issues Presented by Different Sub-Populations

Any lead-based paint hazard standards developed by EPA to govern RRP activities in commercial and public buildings must take into account the potential exposure of different sub-populations to lead-based paint in such settings. These exposure patterns are likely very different from the exposure patterns EPA has previously encountered in target housing and child-occupied facilities. Furthermore, these exposure patterns are likely to vary greatly between different types of commercial and public buildings. For example, one might expect to find young children or pregnant women at a "big-box" commercial retail establishment more frequently than at a manufacturing facility located in an industrial area.

EPA has acknowledged that it does not have the information it needs to understand the exposure risks to different sub-populations. The ANPRM states that although EPA "has developed research-based daily activity patterns for general use in its analyses for children and adults, none of the patterns distinguish activities based on the character or ownership of the buildings where activities occur." 75 Fed. Reg. at 24860. This is exactly the type of information EPA must have before it can attempt to develop regulations governing such settings. Without an understanding of the sub-populations likely to be exposed to lead-based paint in any particular building, EPA cannot determine whether a RRP activity presents a lead-based paint hazard. As discussed previously, EPA lacks authority to regulate RRP activities unless they create a lead-based paint hazard.

Any lead-based paint hazard standards must not only allow for a wide variety in exposure patterns of different sub-populations, they must also account for the different vulnerability levels to the dangers of lead-based paint between such sub-populations. Unless EPA can establish that a single set of lead-based paint hazard standards should apply to protect both young children as well as older children and adults, the Agency will need to consider adopting different work practice standards for commercial buildings, such as office buildings or industrial facilities, where young children are expected to be found only infrequently (if at all). Although the ANPRM states it "does not believe that options considered in this rulemaking should be limited to those buildings or situations where young children are likely to be exposed," EPA also acknowledges that it "continues to believe that it is important to emphasize the deleterious effects of lead exposure on young children, a sub-population that has long been identified as being particularly susceptible to the adverse effects of lead. 75 Fed. Reg. at 24855. Because EPA does not appear to have information suggesting that all RRP activities present the same hazards to all population groups, EPA must determine how to structure any standards to address such differing risks.

In order to better understand both the likelihood of exposure of different sub-populations at specific commercial and public locations, and the need to protect the most vulnerable groups differently from those least susceptible to lead-based paint hazards, EPA should conduct a comprehensive study analyzing RRP activities in different commercial and public buildings. Without this information, it will be impossible for the Agency to craft rational standards to address any potential lead-based paint hazards.

2. Presence of Lead-Based Paint

In evaluating the need for lead-based paint standards in commercial and public buildings, EPA also must consider the fact that, although the use of lead-based paint was not completely banned in all industrial and commercial buildings, the use of such paints has been dramatically limited since the 1978 restriction on the use of lead-based paint in interior and exterior surfaces in housing and other buildings and structures used by consumers. *See* 75 Fed. Reg. at 24856. Industry practice has been to restrict the use of lead-based paints in all but the most industrial of uses dating back to the 1970s. EPA acknowledges that the prevalence of lead-based paint in commercial and public buildings is an important factor in determining whether RRP activities create lead-based paint hazards. 75 Fed. Reg. at 24858. In drafting the 2008 Residential RRP Rule, EPA had access to two national studies evaluating the prevalence of lead-based paint in target housing and daycare centers. *See* 75 Fed. Reg. at 24858. EPA, however, does not have similar information on the prevalence of lead-based paint in commercial and public buildings.

This lack of information in yet another area crucial to EPA's deliberations again highlights the need for EPA to conduct a comprehensive study of the issues related to lead-based paint in public and commercial buildings. Without such a study, it is impossible for EPA to determine how the reduced amount of lead-based paint in use at commercial and public buildings affects whether RRP activities in such settings create hazards. For example, it may be appropriate to limit the applicability of any work practice standards for RRP activities in commercial buildings to commercial structures that were built before 1978 (as Congress has done with target housing and public buildings). Alternatively, EPA may determine that any

application of work practice requirements to RRP activities in commercial buildings built after 1978 should be limited to the types of post-1978 commercial buildings where lead-based paint is more likely to be found, such as industrial facilities as opposed to office buildings or retail facilities.

Moreover, EPA should consider the areas within commercial and public buildings that may be more likely to have lead-based paint and the potential implications of the patterns for human exposure. For example, in office and retail settings the areas occupied by tenants are often renovated when there is a changeover in tenants. As a result, today the areas occupied by tenants are less likely to have any lead-based paint even if the building was constructed prior to 1978. Areas that may be more likely to have some lead-based pain are the "core areas" where the exposure of any individual would be very limited. Therefore renovations in tenant-occupied areas in at least some types of commercial buildings may not require significant regulation because the likelihood that lead-based paint is present is very low. These are the types of issues that EPA must consider carefully in any rulemaking process.

3. Consideration of Different Types of RRP Activities

Similarly, EPA must consider the potentially significant differences between various types of RRP activities that may be conducted in commercial buildings. For example, in office buildings, retail facilities and other types of commercial buildings it is common for RRP activities to be undertaken in connection with a change of occupants, such as when a new business leases a commercial space. However, during these types of renovations the only individuals who would be present in the space being renovated would be the workers undertaking the renovation, who would be subject to existing Occupational Safety and Health Administration ("OSHA") regulations. It may be appropriate to establish standards for such renovations that are different from the standards that might apply in connection with renovations in an occupied building or to exempt such renovations from work practice requirements entirely. EPA must explore the differences in exposure to lead-based paint hazards that may be associated with different types of RRP activities in commercial buildings.

Furthermore, EPA must understand that routine maintenance is an on-going daily practice for commercial buildings. Any study EPA undertakes must examine and distinguish between ordinary operations and maintenance activities, and renovation and remodeling activities. Otherwise, standards for RRP activities could be triggered on virtually a daily basis, at millions of commercial buildings across this country. Neither regulators, workers, nor building owners and managers could contend with the expense and administrative burdens associated with requirements governing RRP activities if they arise continually in the context of on-going building operations and maintenance.

4. Impacts of and on Existing Regulatory Programs

The ANPRM recognizes that extensive OSHA regulations already exist that govern exposure to lead-based paint both in construction activities and general occupational settings. *See* 75 Fed. Reg. at 24858; 29 C.F.R. §§ 1910.1025, 1926.62. The OSHA standards set permissible exposure levels for employees in the workplace. 29 C.F.R. §§ 1910.1025(c),

1926.62(c). It is reasonable to believe that employees are the single largest sub-population that would be affected by exposure to lead-based paint from RRP activities in public and commercial buildings. The ANPRM, however, does not include a discussion of the effectiveness of the OSHA regulations which already address lead-based paint hazards that result from RRP activities in commercial and public buildings. Given the fact that the OSHA regulations may effectively eliminate any lead-based paint hazards, EPA must consider the impacts of the existing OSHA requirements in assessing the need for further guidelines or regulation.

In light of the protections already offered by OSHA regulations to arguably the largest sub-population with the highest levels of exposure to lead-based paint RRP activities in commercial and public buildings, EPA should carefully consider whether it is necessary to impose additional regulations that would serve primarily to create a burdensome two-tiered regulatory structure. Such additional regulations could only be justified by a need to protect the most vulnerable of sub-populations such as young children. However, these sub-populations are generally not encountered in most commercial settings except on a very limited basis and would likely not have enough exposure to RRP activities to benefit from such additional heightened standards.

5. Additional Factors EPA Must Consider

While the issues discussed above highlight the lack of information EPA has regarding RRP activities in commercial and public buildings, they are only a fraction of the unanswered questions related to lead-based paint hazards in these settings. Prior to issuing any regulations related to RRP activities in commercial and public buildings, EPA must consider these issues as well as provide answers to several other questions including the following:

- How should commercial building be defined for purposes of the rule?
- What are the current uses for lead-based paint in commercial buildings? Do the owners or managers of commercial buildings test for the presence of lead-based paint? Under what circumstances?
- What types of renovations are commonly performed in commercial buildings? How frequently are renovations performed in a given building?
- To what extent do routine maintenance activities in commercial buildings involve the disturbance of painted surfaces?
- What steps, if any, are commonly taken in connection with renovations in commercial buildings to restrict access to the area being renovated while the activity is underway?
- What steps, if any, are commonly taken in connection with renovations in commercial buildings to limit the spread of dust beyond the work area?
- How frequently do commercial buildings exist in close proximity to residences?

- How would the imposition of certification, training and work practice requirements affect renovation activities in commercial buildings? How would building owners and managers be affected?

B. EPA's Lack of Information Highlights the Need for Continuing Stakeholder Involvement

The ANPRM contains many direct requests for comments regarding a variety of issues related not only to RRP activities in commercial and public buildings, but also to the characteristics of the buildings themselves and, furthermore, to what exactly constitutes a public or commercial building. *See, e.g.*, 75 Fed. Reg. at 24856. The extensive nature of these questions again demonstrates the need for EPA to conduct a comprehensive study examining RRP activities in commercial and public buildings. It also highlights the need for EPA to continue to involve stakeholders in the regulatory process.

The questions posed by EPA in the ANPRM are not only extensive, they are also highly complex and likely to elicit responses which differ dramatically depending on the respondent. For example, the answer to a question such as "how frequently do children under six years of age visit commercial buildings and how long do such visits typically last?" will vary from respondent to respondent and depend on a wide variety of contributing factors such as what type of party is using the space. The complexity of these issues also strongly suggests the need for continuing stakeholder involvement in EPA's rule development process.

In addition to a need for continuing stakeholder involvement in the development of any eventual regulations, EPA will need to convene a Small Business Advocacy Review Panel ("SBAR") consistent with the requirements of the Regulatory Flexibility Act ("RFA") and should do so early in the process. Under the RFA, EPA must convene a SBAR Panel any time "a rule is promulgated which will have a significant economic impact on a substantial number of small entities." 5 U.S.C. § 609(a). This obligation is triggered by any rulemaking that would result in a significant economic impact on a substantial number of small entities. The regulations contemplated in the ANPRM have the potential to have a significant impact on every small business (as well as every medium and large business) in the country. Accordingly, EPA should initiate planning now for the required SBAR Panel.

C. Regulation of RRP Activities in Commercial and Public Buildings May Conflict With Other National Priorities

The potential regulatory requirements on RRP activities in commercial and public buildings that the ANPRM announces may drastically affect other national priorities. Perhaps the best example of this potential conflict is the programs and financial incentives to increase energy efficiency in the United States and reduce the country's dependence on foreign and carbon-based fuel supplies.

According to the Department of Energy, the commercial buildings sector accounts for 46% of total building energy use in the United States. *See* U.S. Energy Information Administration, *Annual Energy Review 2008*, June 26, 2009 at Table 2.1a, *available at*

http://www.eia.doe.gov/aer/consump.html. The Pew Center on Climate Change recently reported that lack of funds and financing, especially due to the recession and frozen lending market, is the single greatest impediment for capital investments in energy efficiency. *New Pew Center Report Documents Best Practices in Corporate Energy Efficiency*, Mar. 31, 2010, *available at* http://www.pewclimate.org/press-release/corporate-energy-efficiency/03-31-10. In response to such circumstances, there are multiple federal initiatives that are intended to encourage and provide financial incentives for commercial building owners and managers to renovate and remodel their assets to increase energy efficiency. Some examples include:

- President Obama's recent Oval Office address on the BP oil spill in the Gulf of Mexico noted policy proposals for "raising [energy] efficiency standards in our buildings like we did in our cars and trucks." *Obama's First Oval Office* Address, N.Y. Times, June 15, 2010, *available at* http://www.nytimes.com/2010/06/16/us/politics/16obama-text.html. Indeed, the fundamental premise of the White House's "Recovery Through Retrofit" plan is that "[m]aking American homes and buildings more energy efficient presents an unprecedented opportunity for communities throughout the country." Offices of the President and Vice President, Council on Environmental Quality, Middle Class Task Force, *Recovery Through Retrofit*, Oct. 2009, at 1.

- EPA's Energy STAR office has developed established protocols to rate and benchmark efficiency performance of commercial buildings. *See http*://www.energystar.gov/index.cfm?c=business.bus_index.

- The Commercial Building Initiative, an effort of the Building Technologies Program of the U.S. Department of Energy, aims to significantly improve the energy efficiency of new and existing commercial buildings through retrofit projects. *See* http://www1.eere.energy.gov/buildings/commercial_initiative/.

- A suite of federal, state, and local programs has been developed to provide financial incentives like tax benefits, block grants, and rebates to help building owners and managers underwrite the expense of energy efficiency renovations. A listing of such programs is available at http://www.dsireusa.org/incentives/index.cfm?state=us&re=0&EE=1.

- Comprehensive energy and climate proposals introduced in Congress would establish new efficiency requirements for commercial buildings, and also create incentives and financing programs to help the private sector bear the costs of expensive energy renovation projects. *See, e.g.*, S. 1462, American Clean Energy Leadership Act; S. 1733, Clean Energy Jobs and American Power Act; 3464, Practical Energy and Climate Plan Act; S. ___, American Power Act (Kerry-Lieberman discussion draft); H.R. 2454, American Clean Energy and Security Act.

- Numerous other bills pending in Congress propose energy efficiency financing platforms for the commercial buildings sector, ranging from long-term measures

that encourage deep, whole-building retrofits to component-specific incentives to spur upgrades of building envelope, equipment, and materials. *See, e.g.,* S. 949/H.R. 2212, 21st Century Energy Deployment Technology Act; S. 1574, Clean Energy for Homes and Buildings Act; S. 1637/H.R. 4226, Expanding Building Efficiency Incentives Act; S. 1743/H.R. 3715, Expanding the Rehabilitation Tax Credit; S. 3079/H.R. 5476, Building STAR Energy Efficiency Act; H.R. 426, Green Roofing Energy Efficiency Tax Act; H.R. 1778, Retrofit for Energy and Environmental Performance Act; H.R. 2615, Energy Efficient Commercial Roofs Act; H.R. 3659, Building Tax Credit Act; H.R. 3836, Private Financing for Clean Energy Technology; H.R. 4155, Property Assessed Clean Energy Tax Benefit Act; H.R. 4296, Mechanical Insulation Incentives Act; H.R. 4455, Expanding Industrial Energy Efficiency Incentives Act.

These examples demonstrate that the Obama Administration, leaders in Congress, and state and local governments have all emphasized that increased energy efficiency in our public and commercial buildings is a compelling public policy objective. Based on the information provided in the ANPRM, EPA has not sufficiently considered how such energy efficiency initiatives will be impacted by contemplated RRP regulations on lead-based paint in commercial and public buildings.

There is a clear relationship between energy efficiency projects and commercial renovation lead-based paint rules. More than 75 percent of buildings that exist in urban areas today will still be standing in 2030, and these are the exact buildings that will benefit the most from energy retrofit projects in terms of reduced and more efficient energy consumption. *See* http://www.ashrae.org/aboutus/page/2372. But such building rehabilitations are also the same projects that are likely to trigger the potential exterior and interior RRP rules currently contemplated by EPA. These RRP rules could likely impose regulatory costs that are so high they would nullify any financial incentives offered for energy efficiency projects, and thereby discourage building upgrades designed to lower power consumption, reduce greenhouse gas emissions, and create jobs as part of a new energy economy. If EPA proceeds with the RRP rules contemplated in the ANPRM, the Agency should consider financing programs to offset the costs associated with any lead-based paint regulations on RRP activity where it arises in the context of energy efficiency renovations and remodels.

These impacts on national energy efficiency initiatives demonstrate that EPA must have a clear understanding of the costs and benefits of any RRP regulations before they might be imposed - especially during this time of increased awareness of and focus on nationally significant issues such as curtailing our country's energy use and the rebuilding of the national economy. To gain a better understanding of the issues, EPA should conduct a study focused specifically on RRP activities in commercial and public buildings prior to proposing any regulations.

Given the significant inefficiencies in the country's inventory of existing buildings and infrastructure, the government has focused on retrofitting to improve energy efficiencies. The increased demand for energy efficiency retrofits will provide a much-needed boost for the hard-hit construction industry. Seasonally adjusted construction industry employment slipped in June

2010 to the lowest total in fourteen years (since July 1996); while the industry's unemployment rate remained at 20.1 percent. New regulatory hurdles will only add road-blocks in the construction industry's path to economic recovery and the nation's path towards energy efficiency.

These potential conflicts also highlight the need for early, frequent, and substantive coordination and input from the White House, other EPA divisions, sister agencies, and congressional offices to ensure that potential RRP regulations in commercial and public buildings do not subvert significant national priorities such as energy efficiency initiatives.

CONCLUSION

The Coalition appreciates the opportunity to submit these comments. The Coalition members look forward to working with the Agency as it moves forward with its rulemaking process for RRP activities in public and commercial buildings.

Comments of the Real Estate Industry Coalition on EPA's Approach for Developing Lead Dust Hazard Standards for Public and Commercial Buildings

Submitted to

The Science Advisory Board Lead Review Panel

December 6, 2010

Thank you for the opportunity to present these comments regarding EPA's *Approach for Developing Lead Dust Hazard Standards for Public and Commercial Buildings* (Nov. 5, 2010) ("*EPA Approach*"). These comments are submitted on behalf of a coalition of trade associations (the "Coalition") whose members are involved in almost every aspect of commercial real estate development and management.[1] The Coalition represents the members of the regulated community that will be the most affected by any regulations that might be adopted by EPA with respect to renovation, repair and painting activities in public and commercial buildings. The lead hazard standards that are the subject of this Panel's deliberations will play a key role in any future regulations EPA might adopt to address potential lead-based paint issues associated with renovation, repair and maintenance-related activities in a wide variety of public and commercial buildings. Accordingly, the Coalition members have a substantial interest in the Agency's development of lead hazard standards that may be applied to renovation, repair and painting activities in these types of non-residential settings.

The Coalition has not had an opportunity to engage in a detailed technical evaluation of EPA's proposed approach to developing lead hazard standards for public and commercial buildings. However, even a brief review of the Agency's proposed approach has given us cause for concern in a number of areas.

In particular, as EPA itself has noted and a number of the Panel members have previously observed, the development of lead hazard standards for public and commercial buildings is fraught with uncertainty due to the minimal data that are available regarding the prevalence of lead dust in these types of buildings and other factors that are critical to the development of a reasonable standard. For example, EPA acknowledges the "scarcity of data related to dust exposures in public and commercial buildings and other non-residential settings." *EPA Approach* at 32. Likewise, EPA has noted that an extensive literature search "revealed relatively little information concerning typical levels of floor and window sill dust lead in public and commercial buildings." *Id.* at 36.

[1] The members of the Coalition include The Real Estate Roundtable; Associated Builders and Contractors; Associated General Contractors of America; Building Owners and Managers Association International; CCIM Institute; International Council of Shopping Centers; Institute of Real Estate Management; NAIOP, the Commercial Real Estate Development Association; National Association of Home Builders; National Association of Real Estate Investment Trusts; National Association of REALTORS®; National Lumber & Building Material Dealers Association; Painting & Decorating Contractors of America; Plumbing-Heating-Cooling Contractors-National Association; and Window and Door Manufacturers Association.

This lack of data has led EPA to rely heavily on extrapolations from data and models generated in connection with EPA's development of lead dust hazard standards and regulations that apply to residential settings. However, there appears to be little basis for making these assumptions. In fact, EPA acknowledges that:

> the validity of the empirical models in predicting children's blood-lead impacts depends crucially on the assumption that physical and behavioral determinants of exposure are the same (or very similar to) in public and commercial buildings as in residences. There is very little empirical evidence in support of this assumption, which adds to the inherent statistical uncertainty in these models.

Id. at 79.

One example of the Agency's reliance on assumptions grounded on its experience with residential settings is its focus on dust on floors and window sills. While it may be reasonable to assume in a residential setting that the primary source of exposure for young children – who typically spend a great deal of time on the floor – would be floor dust. However, the primary source of exposure for office workers may be far different. EPA itself notes that exposures to lead dust from desks and table tops is likely but due to a lack of data has assumed that its residential exposure conceptual model "capture[s] these contributions." *Id.* at 37.

In light of this paucity of data, the Coalition notes that Congress required EPA to conduct a study to determine which of the "various types of renovation and remodeling activities . . . disturb lead and create a lead-based paint hazard on a regular or occasional basis" before promulgating any regulations concerning renovation, repair and painting activities. 15 U.S.C. § 2682(c)(2). This statutory requirement to conduct a certification study explicitly applies to commercial buildings and to public buildings constructed before 1978. 15 U.S.C. § 2682(c)(2).

To date, EPA has not conducted a study that focuses on activities in commercial buildings and public buildings constructed before 1978 and the potential of such activities to create lead-based paint hazards. EPA has requested comments in its Advanced Notice of Proposed Rulemaking regarding the extent to which it should rely on previous studies it has conducted regarding lead-based paint in residential settings. 75 Fed. Reg. 24848, 24856 and 24858 (May 6, 2010). These studies include the 2007 Characterization of Dust Lead Levels After Renovation, Repair and Painting Activities (the "Dust Study") and the four-part study conducted by EPA between 1997 and 1999.

EPA cannot rely on such studies in undertaking regulatory activities concerning lead dust in public and commercial buildings because these studies did not focus on renovation, repair and painting activities in commercial buildings and public buildings constructed before 1978. Although the Dust Study may have included information on renovations at a school building frequently occupied by children, this is too limited a data set from which to draw any conclusions regarding RRP activities generally in public and commercial buildings. 75 Fed. Reg. at 24856. Indeed, one of EPA's program offices recognizes the varied and heterogeneous composition of the commercial building stock. It has identified 14 unique types of commercial buildings for purposes of energy ratings – and even these represent only about 50% of the

commercial floor space in the United States.[2] Plainly, a dust study conducted at a single school is wholly insufficient as a basis to provide information on lead-paint hazards across the diverse suite of commercial building types.

The Coalition would respectfully suggest that in light of this congressional directive, the Agency should seek to fill some of these glaring data gaps. The panel chair, Dr. Buckley, himself stated in his August 20, 2010 Letter to Administrator Jackson conveying the comments of the panel members on EPA's proposed approach that "[t]he lack of data to support the commercial building approach highlights the need for research and data collection efforts in this area." We agree with this assessment.

The Coalition is also concerned about what appears to be the Agency's predominant focus on risks to young children. While the Coalition members recognize that young children are the principal population of concern, any lead dust hazard standards for public and commercial buildings that are based on exposures in young children may be largely inapplicable to a wide range of public and commercial buildings, such as office buildings and factories, which are visited only infrequently by children.

Finally, the Coalition has concerns about the use of the Leggett model to assess hazards to both children and adults. EPA has noted that the IEUBK model and the central tendency models from the NHANES data and Dixon appear to reflect reality much better than the Leggett model with respect to baseline blood-lead levels in children. *EPA Approach* at 42-43. There is no basis to conclude that the Leggett model is a better predictor of blood-lead levels when it comes to adult exposures to lead dust.

Once again, we appreciate the opportunity to submit these comments and look forward to working with the Agency as it develops lead dust standards and regulations for renovation, repair and painting activities in public and commercial buildings. If you have any questions concerning these comments, please contact Duane Desiderio, Vice-President and Counsel, The Real Estate Roundtable, at 202-639-8400, or counsel to the Coalition, Thomas C. Jackson, Baker Botts L.L.P., at 202-639-7710.

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[2] See http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager. The 14 varied commercial building types that are eligible to receive ratings from EPA's ENERGY STAR office are bank/financial institution; courthouse; data center; hospital; hotel; house of worship; K-12 school; medical office; municipal wastewater treatment plant; office; residence hall/dormitory; retail store; supermarket; and warehouse. But even this list is not exhaustive, and does not encompass other commercial building types like retail malls, restaurants, supermarkets, assisted living facilities, distribution centers, and others such as a wide variety of factories and other types of industrial facilities.

ATTACHMENT 4

INSIDEEPA.COM
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Wednesday, July 14, 2010

EPA Science Advisers Urge Tougher Lead Dust Cleanup Requirements

Posted: July 13, 2010

EPA science advisers are urging agency officials to strengthen their proposed approach for assessing risks and limiting exposure to lead paint dust in private residences -- and suggesting the agency adopt this strengthened approach in new rules for residences and first-time workplace safety rules for commercial buildings, such as offices.

The agency is developing the new rules under a consent decree with environmentalists, but it is already sparking significant opposition from the Navy and some building industry groups who are urging EPA to clarify that some of their facilities or activities will be exempted from future regulatory requirements. Development of the new rules comes as the agency is still struggling to implement its amended 2008 rule governing residences and child care facilities.

At a Science Advisory Board (SAB) panel meeting July 6-7, panelists urged the agency to re-consider its plan to calculate two separate hazard standards to assess risks of lead-based paint dust to protect children and adults in commercial or public buildings. The advisers said there is a wealth of data showing risks to children in residential buildings but insufficient data showing risks in commercial and public buildings.

Panelists raised concerns that not only is there insufficient data concerning lead dust exposures in commercial or public buildings to support a reliable standard, but EPA's planned approach relies on just one harmful endpoint -- increased blood pressure -- to assess health risks associated with lead paint dust, a move the panel says could seriously undercut risk.

As a result, the panel is suggesting that EPA strengthen its hazard standard to protect children under 6 in private residences by considering additional endpoints such as neurological and reproductive harms -- and then apply that standard to commercial buildings.

By ignoring other adverse health data endpoints, "by definition we are vastly underestimating risk," said panel member David Jacobs, a public health professor at the University of Illinois at Chicago.

Under the settlement with environmentalists, EPA agreed last October to review the hazard standard in its 2008 lead renovation, repair, and painting (RRP) rule, revise the regulatory requirements in the RRP rule as necessary, and develop first-time work safety practices for renovating commercial and public buildings.

Under the settlement, the agency is required to consult with SAB by Sept. 30, 2011, on its approach for creating a safety standard to address the risks posed by interior renovations to commercial and public buildings that are not frequently occupied by children. As another condition of the settlement, EPA must then use the standard to propose a set of lead dust cleanup safety practices, consult with SAB again, and issue a proposed rulemaking within 18 months of the SAB's final report.

"When we develop the work practices, we need a goal of what is safe, and depending on where we end up, it'll be more prescriptive or less prescriptive [than the current residential standard]," Maria Doa, director of EPA's Office of Pollution Prevention & Toxics, told the SAB panel.

Reassessing Hazard Standards

To implement the settlement, EPA May 6 issued an advance notice of proposed rulemaking (ANPR) that proposed its planned formulas for reassessing the hazard standard in its RRP rule.

The 2008 rule has long been controversial. The agency earlier this year announced that it would delay enforcing provisions requiring contractors to be certified before they conduct lead renovation and repair work. And builders July 8 asked a federal appellate court to overturn amendments crafted by the Obama administration that eliminated a provision allowing homeowners to "opt-out" of its requirements.

In the May 6 ANPR, EPA proposed two separate risk assessments of lead dust: one to determine whether the 2008 rule's standard of 40 micrograms per cubic foot (ug/ft2) for floor dust and 250 ug/ft2 for lead dust on window sills is stringent enough to protect children, and one to serve as the basis for work safety practices in commercial and public building renovations.

Environmentalists had asked the agency to strengthen its residential standards to 10 ug/ft2 or less for floors and 100 ug/ft2 or less for window sills.

The agency's ANPR proposes a new formula for assessing the residential standard using a 1994 biokinetic model to estimate the harmful levels of blood-lead in children under 6, using lowered IQ as an endpoint for the study. And the agency has proposed a separate approach for assessing risk in commercial and public buildings that uses a different biokinetic model to show a link between increased blood pressure in adults and high levels of lead in the blood.

While EPA does not commit to strengthening the 2008 rule's hazard standards, the agency acknowledges in a supporting document accompanying the ANPR that epidemiological data issued since then shows harms at lower levels of exposure.

But the SAB panel raised immediate concerns about EPA's sole reliance on a biokinetic model, the integrated exposure uptake biokinetic (IEUBK) model developed by the agency to assess lead risk at Superfund sites, as the "lynchpin" for estimating the levels of lead in the blood of children exposed to lead-based paint dust to develop the residential standard. Panel members argued the IEUBK model was developed as a research tool, fails to address the cumulative dangers of lead, and lacks the scientific validation it needed to be useful for regulatory functions.

Panel chair Timothy Buckley, an environmental health science professor at the Ohio State University, said during the meeting that the panel would likely advise EPA to adopt an empirical approach based on available epidemiological data and use that in a "side-by-side comparison" with the proposed IEUBK model to develop the standard. "One important recommendation is that EPA spend time looking at one relative to the other," he said.

Several other panelists also suggested strengthening the residential standard by using epidemiological studies to support it, then using that to calculate risk for commercial and public buildings, questioning whether substantial adult exposure data existed to craft a separate standard.

Varying Exposures

The nature of adult exposures is not well-categorized, and some adults may be more sensitive to lead than others, said panel member Michael Kosnett, a clinical professor at the University of Colorado Health Sciences Center.

"There's a lot of suspect data going into this exercise," Joel Pounds, a biologist at Pacific Northwest National Laboratory, said during the meeting.

"You don't have any real data," said Bruce Lanphear, an environmental health professor at Simon Fraser University. Lanphear suggested that since a vast amount of data was available on lead-based paint exposure in children, and the nature of lead exposure in adults has not been well-studied, "practical considerations prompt you to come up with the same [risk value for both residential and commercial buildings]."

The panel also criticized the agency's proposed approach for commercial buildings because it uses only one adverse health effect to show risk, saying EPA needs a variety of different endpoints, such as adverse neurological or reproductive effects. "The most sensitive endpoint we're trying to protect (against) needs to be nailed down," Buckley said during the meeting.

The SAB panel also posed a variety of suggestions aimed at how the regulation pertaining to commercial and public buildings should attempt to address different categories of facilities and strengthen protections for those that may have more frequent visitors who are children, pregnant women, or otherwise vulnerable or those that might have more of a risk of prolonged adult exposure than others.

SAB panel members also discussed "simplifying the approach" to calculating a lead dust standard by narrowing the focus to children ages 3-years-old and younger, rather than ages 6-years-old and younger, which would likely lead to a significantly tighter standard than the wider range. "If we protect those 1-3, we will do an adequate job of protecting those 1-6," Buckley said during the meeting.

Meanwhile, the agency is facing calls from the Navy and many builders to exempt some of their activities from the rule's new requirements.

In their undated comments responding to EPA's notice of proposed rulemaking, the Navy argued the regulations should exempt or separately address industrial facilities because they are already regulated by the Occupational Safety & Health Administration (OSHA) and any new rules EPA proposes might duplicate OSHA's existing standards.

"The Navy, and [Defense Department] in general, have many facilities where lead will already be present and where any additional controls addressing prevention of lead-based paint hazards need to be realistic in the context of where lead is present in an industrial setting, including shipbuilding, and consider the levels of lead already present in such facilities," the comments say.

Similarly, a group representing door manufacturers, the Door & Access Systems Manufacturers Association, International, urged EPA to exempt garage renovations and door replacements from any future requirements. In July 6 comments, the group urged EPA to to exclude hallways, stairways and garages from the rule's requirements, much as the agency had done in its 2008 rule. Similarly, the group argued that door replacement activities, even for garage doors, is not a high-risk activity. "The repair and/or replacement of overhead door systems has never previously been considered to involve the disturbance of paint, beyond a de minimis degree for which no risk to the public, occupants or workers was believed to exist," the group says.

But the National Institute for Occupational Safety & Health (NIOSH), argued in July 1 comments that EPA should strengthen its approach, urging the agency to adopt criteria for classifying buildings to include "women of child-bearing age" instead of just "pregnant women," because the fetus is most susceptible to the harmful effects of lead at the very early stages of pregnancy, often before a woman knows she is pregnant." NIOSH also called for additional research to provide a set of objective data to assess initial exposures of commonly used residential lead-abatement practices, renovation, and remodeling activities involving lead-based paint. -- *Bridget DiCosmo*

Related News: Toxics

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Attachment 5

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CONGRESSIONAL AND
INTERGOVERNMENTAL RELATIONS

MAR 0 7 2013

The Honorable David Vitter
Ranking Member
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20515-6175

Dear Senator Vitter:

On August 2, 2012, EPA received a letter from the Chairman and Ranking Member of the Senate Committee on Environment and Public Works requesting responses to questions for the record following the July 12, 2012, hearing before the Committee entitled, "The Latest Science on Lead's Impacts on Children's Development and Public Health". As the current Ranking Member of the Committee, we are providing responses to these questions to you as an enclosure to this letter.

If you have any further questions, please contact me or your staff may call Laura Gomez in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-5736.

Sincerely,

Arvin Ganesan
Associate Administrator

Enclosure

UNITED STATES SENATE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

"The Latest Science on Lead's Impacts on Children's Development and Public Health"
July 12, 2012

Hearing Questions for the Record

The Honorable Barbara Boxer

QUESTION:

1. Your testimony states that EPA's 2008 decision to lower the Clean Air Act's standard pollution was based on the expanded evidence of health effects, including the impacts of lead on learning children. Could you please go into a little more details about the types of harmful health impacts from lead that EPA considered?

RESPONSE:

Lead has been demonstrated to exert a broad array of adverse effects on multiple organ systems, as the EPA has concluded in previous and ongoing assessments. [1,2] This includes strong evidence of effects on the nervous system, cardiovascular system, effects on immune function, kidney function, reproduction and development, as well as heme (a component of red blood cells) synthesis and red blood cell function. Lead exposure may also cause cancer.

The most substantial evidence is available for effects on the nervous system in children and cardiovascular effects in adults. Prenatal exposure to lead and exposure during childhood have been associated with effects on cognitive function, as measured in IQ tests and other measures of learning and memory. In addition, lead exposure is linked to attention related behavioral problems in children. In adults with potentially longer exposure histories, lead exposure is associated with effects on the cardiovascular system, with the strongest body of evidence for effects on blood pressure (hypertension) and additional evidence indicating a broad array of effects on the cardiovascular system, including cardiovascular mortality.

QUESTION:

2. Your testimony states that EPA's current review of whether to lower the Clean Air Act's standard for lead pollution relies on more than 2,900 scientific studies, and that these studies demonstrate "human exposure to lead involves multiple pathways including hand to mouth contact or inhalation of lead-dust, eating peeling paint chips, drinking water conveyed through lead pipes, and exposure to soil, which can act as a reservoir for deposited lead emissions."

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[1] U.S. EPA (2006) Air quality criteria for lead: Volume I of II (EPA/600/R-05/144aF). Research Triangle Park, NC: U.S. Environmental Protection Agency.

[2] U.S. EPA (2012) Integrated Science Assessment for Lead (EPA/600/R-10/075B) Research Triangle Park, NC: U.S. Environmental Protection Agency

RESPONSE:
Preventing lead pollution is the best way to protect public health and the environment. We have long known that lead persists in the environment and accumulates in the human body. Many of the neurotoxic effects of exposures to lead during childhood appear to be irreversible and may even cause effects that appear later in life. Further, medical interventions, such as chelation, that reduce lead burden in the body present additional health risks and are not shown to reverse the effects of lead on childrens' ability to learn. There is no question that reducing exposure is the best approach. We have seen the impact of removing lead from gasoline in this regard. As a result of the EPA's regulatory efforts to remove lead from on-road motor vehicle gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions to the air today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline.

QUESTION:
3. In general, how would you describe the results of the studies that examine the impacts of even low blood lead levels on children's cognitive development?

RESPONSE:
Our understanding of what constitutes a "low" blood lead level has been evolving as the population mean blood lead (Pb) levels decline. Based on the 2009-2010 National Health and Nutrition Examination Survey (NHANES) data, the median blood Pb level for the U.S. population is 1.1 micrograms per deciliter (μg/dL), with a 95th percentile blood Pb level of 3.3 μg/dL. Among children aged 1-5 years, the median and 95th percentiles are slightly higher at 1.2 μg/dL and 4.0 μg/dL, respectively.

The EPA's previous assessments[3] concluded that the "overall weight of the available evidence provides clear substantiation of neurocognitive decrements being associated in young children with blood-Pb concentrations in the range of 5-10 μg/dL, and possibly somewhat lower". There is remarkable consistency in these findings across numerous studies involving varying study designs, different developmental assessment protocols, and diverse populations. The studies demonstrated impacts of lead on neurocognitive function, and these effects generally appeared to persist into adolescence and young adulthood. Both epidemiologic studies (in children) and 11 toxicological studies, demonstrated neurocognitive deficits in association with blood Pb levels at and below 10 micrograms per deciliter (μg/dL).

The EPA's second draft Integrated Science Assessment for Lead (2012)[4] synthesizes results of recent studies with those reviewed in previous assessments and has concluded that there is a causal relationship between lead exposure and cognitive effects in children. The most well studied effect is IQ. Studies have also demonstrated associations with indices of cognitive function, such as reading and verbal skills, memory, learning, and visuospatial processing. Findings in human studies are supported by extensive

[3] U.S. EPA (2006) Air quality criteria for lead: Volume I of II (EPA/600/R-05/144aF). Research Triangle Park, NC: U.S. Environmental Protection Agency. p. E9

[4] U.S. EPA (2012) Integrated Science Assessment for Lead (Second External Review Draft) (EPA/600/R-10/075B) Research Triangle Park, NC: U.S. Environmental Protection Agency

evidence in animals that early-life lead exposures result in impaired learning and memory, including tests of spatial memory and rule learning and reversal.

QUESTION:

4. EPA's Children's Health Protection Committee recently wrote a letter about the science of lead's impacts on children's health that stated "the harm that lead does to children, pregnant women and breast feeding mothers is even worse than we thought previously, with sufficient evidence now available to conclude that at levels of exposure less than 5 [micrograms of lead per deciliter], a relationship clearly exits linking lead with decreased academic achievement and specific cognitive measures, increased incidence of attention deficit hyperactivity disorder (ADHD) and problem behaviors." Do you agree that the science showing that lead's health effects are far more serious than we previously thought?

RESPONSE:

It is important to note that, in assessments over past decades, the EPA has concluded that lead is associated with serious health effects in many organ systems. We generally agree with the statement above, but would clarify that new evidence indicates that known health effects may occur with lower lead concentrations than previously observed. Several studies included in the 2006 Air Quality Criteria Document for lead found effects on intellectual attainment at average blood lead levels as low as 2-8 ug/dL. More recent studies have expanded upon this evidence, providing further support for serious health effects in populations with average blood lead levels of less than 5 ug/dL. As stated in Dr. Vandenberg's testimony, the EPA's draft Integrated Science Assessment for lead finds that recent studies generally expand upon evidence for effects identified previously, with some studies showing effects with lower lead exposure levels.

QUESTION:

5. EPA's Children's Health Protection Advisory Committee wrote a letter to the Agency stating: "EPA has not updates its dust lead standard, despite reports from its Science Advisory Board (SAB) and well-documented evidence that the existing standards promulgated more than a decade ago do not protect children adequately. A recently published study also shows that even in high risk houses treated 12 years ago in the [Department of Housing and Urban Development] lead hazard control grant program, dust lead levels of 10ug/ft2 on floors and 100ug/ft2 on window sills can be readily obtained and are feasible. These levels are far lower than the current EPA dust lead standards, which are 40ug/ft2 for floors and 250ug/ft2 for window sills".

   On August 10, 2009, EPA received a petition from several public health organizations requesting, among other things, that EPA lower the Agency's dust-lead hazard standards.

   What is the status of any EPA reconsideration of its dust lead standard? What is the time table for the Agency to propose a revision of the standard? Does the Agency have sufficient information to move forward with such a proposal? If not, what specific data does the Agency lack and how would that information affect EPA's ability to propose a revision to the existing regulations?

RESPONSE:

In October 2009, the EPA responded to the petition, agreeing to revisit the current lead-dust hazard standards, but did not commit to a specific rulemaking outcome – including the specific level of the lead-dust hazard standard. The EPA has initiated a number of activities to determine if the current residential lead-dust hazard standards should be modified. These activities include:

- The EPA conducted a review of information found in the open literature and government reports on sampling and chemical analysis technologies for lead in dust and residual lead-dust levels after various lead-based paint activities and cleaning.
- The EPA developed analytical approaches to evaluate the lead-dust hazard standards and had them reviewed by the agency's Science Advisory Board in November 2010. Since receiving the SAB's input in July 2011, the EPA has been actively working to revise the approaches based on SAB recommendations and implementing the approaches to evaluate lead-dust hazard standards. (SAB report: http://yosemite.epa.gov/sab/sabproduct.nsf/0/9c733206a5d6425785257695004f0cb1!OpenDocument&TableRow=2.3#2.)
- In collaboration with the Department of Housing and Urban Development (HUD), the EPA has developed an Information Collection Request (ICR) to collect information from HUD Lead Hazard Control Grantees "as to their ability to achieve clearance at the current level for floors and windowsills, and whether it would be technically feasible to achieve clearance at potentially lower levels". (77 FRN 63321: http://www.gpo.gov/fdsys/search/pagedetails.action?granuleId=2012-25406&packageId=FR-2012-10-16&acCode=FR). The information collection activity and compilation of results are expected to occur in 2013.

These have been important contributions. When completed, the EPA will evaluate all the available information to determine whether the lead-dust hazard standards should be modified.

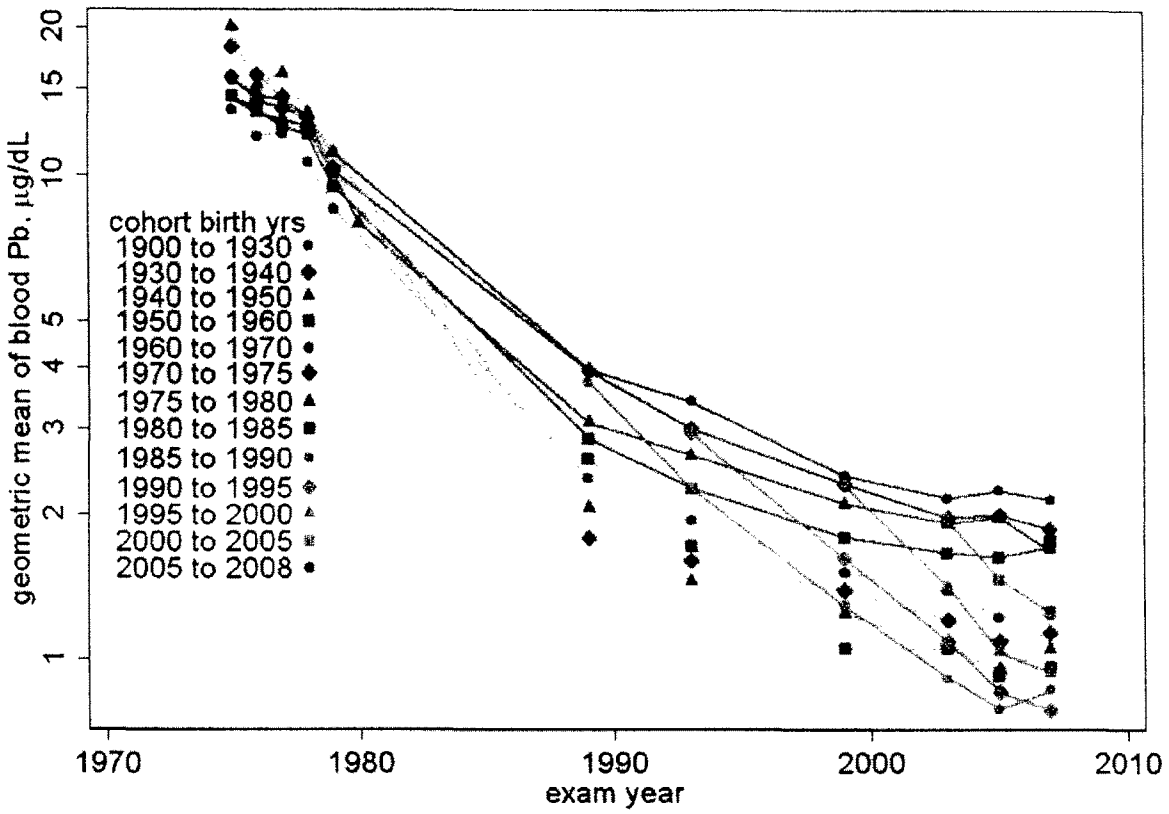
The Honorable James Inhofe

QUESTION:

1. Do you agree that the biggest contributors to the drop in blood lead levels is the removal of lead from gasoline and the removal of lead added to paint? How great was this drop?

RESPONSE:

Data from the National Health and Nutrition Examination Survey show dramatic decreases in blood lead concentrations since the late 1970s, as shown in the figure below (from the second draft Integrated Science Assessment for Lead). We agree that a major contributor to this decline is the reduction of lead in gasoline and paint. There have been important contributions to lead exposure reduction from other actions, such as drinking water regulations, cleanup of lead-contaminated sites, and the elimination of lead solder in U.S. canned food. Having said this, it is important to note that paint that contains lead is still present in many housing units, and is a potential source of exposure even decades after the phase out of paint containing lead.



Source: Adapted from data from the NHANES (NCHS, 2010)
Note: The means of logged blood Pb were weighted to represent national averages. Data were from the publically NHANES II, NHANES III for 1988-1991 and 1992-1994, and the continuous NHANES in 1999-2000, 2003-2004, 2005-2006, 2007-2008. Continuous NHANES data from 2001-2002 and 2009-2010 are not included because there were only 551 blood Pb samples in each of those data sets. The year plotted for exam year was the reported exam year for NHANES II, the middle year of each of the phases of NHANES III, and the second year of each of the continuous NHANES.

Figure 4-17 Blood Pb cohort means versus year of exam. [second draft Integrated Science Assessment for Lead; http://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=235331]

QUESTION:

2. On May 6, 2010 EPA issues an advanced notice of proposed rulemaking to extend the Lead Renovation Repair and Painting rule to commercial buildings. When will the study and report to congress regarding this proposal be finalized? Will EPA ensure that Congress had proper time to review this study before any additional proposals are made?

RESPONSE:

The Lead-based Paint Hazard Reduction Act of 1992, which does not include a reporting requirement, directed the EPA to promulgate regulations addressing renovations that disturb lead-based paint in "public buildings constructed before 1978, and commercial buildings." In response to this statutory directive and a settlement agreement the EPA entered into in 2009, on May 6, 2010, the EPA announced the commencement of proceedings to propose lead-safe work practices and other requirements for renovations on public and commercial buildings.

The EPA has not yet completed further regulatory action on this subject, but has completed extensive studies on renovation activities conducted on a variety of buildings, both residential and public and commercial (http://www.epa.gov/lead/pubs/leadtpbf.htm#Renovation), including:

- Lead Exposure Associated with Renovation and Remodeling Activities, Final Summary Report, January 2000 (EPA 747-S-00-001) [primarily residential buildings, but also includes data on schools, office and industrial buildings]
- Executive Summary - Lead 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, March 1999 (EPA 747-R-99-001) [residential buildings]
- Executive Summary - Lead Exposure Associated with Renovation and Remodeling Activities: Phase III, Wisconsin Childhood Blood-Lead Study, March 1999 (EPA 747-R-99-002) [residential buildings]
- Lead Exposure Associated with Renovation and Remodeling Activities: Summary Report, May 1997 (EPA 747-R-96-005) [primarily residential buildings, but also includes data on schools, office and industrial buildings]
- Lead Exposure Associated with Renovation and Remodeling Activities: Phase II, Worker Characterization and Blood-Lead Study, May 1997 (EPA 747-R-96-006) [residential and commercial buildings]
- Lead Exposure Associated with Renovation and Remodeling Activities: Phase I, Environmental Field Sampling Study, Volume I: Technical Report, May 1997 (EPA 747-R-96-007) [primarily residential buildings, but also includes data on schools, office and industrial buildings]
- Lead Exposure Associated with Renovation and Remodeling Activities: Phase I, Environmental Field Sampling Study, Volume II: Appendices, May 1997 (EPA 747-R-96-008) [primarily residential buildings, but also includes data on schools, office and industrial buildings]
- Draft final report on characterization of dust lead levels after renovation, repair, and painting activities. http://www.epa.gov/lead/pubs/duststudy01-23-07.pdf [primarily residential, but includes data from a school building]

These studies provide a comprehensive picture of lead-dust generation by renovation activities and lead exposure associated with renovation and remodeling activities. The EPA will use these studies, along with any other suitable studies and information identified as the result of a search of the scientific literature (e.g., NIOSH Health Hazard Evaluation Report #99-0113-2853; Department of Health and Human Services, July 2001), to identify lead paint hazards generated by renovation activities on public and commercial buildings. In addition, the EPA anticipates holding a public meeting regarding this rule in 2013.

QUESTION:

3. What is EPA doing to encourage the development of Phase 2 test kits for the Lead Renovation Repair and Painting rule? When will EPA have a test kit available that meets the specifications set forth in the Lead Renovation Repair and Painting Rule?

RESPONSE:

At this time the EPA has not been contacted by any manufacturers seeking recognition of new test kits that may meet both the false negative and false positive test kit performance criteria, and the agency has no plans to sponsor additional testing of kits as was done previously through the agency's Environmental Technology Verification program.

As a reminder, the 2008 Lead-based Paint Renovation Repair and Painting Rule (RRP rule) does not require a certified renovator to use lead test kits. In addition to using a recognized lead test kit they have other options to determine if they need to use the lead-safe work practices. They can also choose to:

- assume that lead is present and therefore use lead-safe work practices;
- collect a paint chip sample and send it to an EPA accredited lead laboratory for analysis of the lead; or
- hire a lead inspector or risk assessor to determine the level of lead in paint through either paint chip sampling and lab analysis or using an X-Ray Fluorescence (XRF) analyzer in the field.

QUESTION:

4. What Public education activities has EPA undertaken to inform the public about hiring lead safe renovators? Are there any additional activities that EPA plans to undertake in the next year or two?

RESPONSE:

The EPA's second phase of outreach will include renewed efforts to educate consumers about the importance of using lead-safe certified renovators for remodeling/repair projects to protect themselves and their families. This phase will also include a focus on the regulated community (renovators, painters, etc) and key influencers (state licensing agencies, major users, etc.).

The EPA plans to capitalize on the outreach conducted during the initial outreach phase by further distributing informational materials through direct (mailing fliers, attending trade shows) and indirect (providing targeted online content and print media) activities. The EPA also plans to discuss and coordinate outreach efforts with new and existing partners in the federal, state, local, and private organizations that focus on children's health protection issues.

In FY13, the EPA will continue certifying firms, accrediting training providers, and encouraging states to become authorized programs. The EPA also plans additional Public Service Announcement (PSA) radio spots, a lead-safe segment on the nationally syndicated home improvement program, Hometime, and a mass postcard mailing to over 500,000 uncertified firms.

QUESTION:

5. What guidance has EPA given regional offices to ensure that the Lead Renovation Repair and Painting Rule is being consistently enforced across the country?

RESPONSE:

To ensure consistent enforcement across the country, EPA Headquarters provided the Regional offices with numerous guidance documents relating to enforcement of the Lead-based Paint Renovation Repair and Painting (RRP) Rule and the resolution of enforcement actions. These include:

- Two memos issued by Cynthia Giles, the Assistant Administrator for the Office of Enforcement and Compliance Assurance, in 2010 providing implementation guidance to the EPARegions for the Lead-based Paint RRP Rule. Specifically, these memos explained the agency's decision to not pursue enforcement of certain, date-specific, firm certification and training requirement violations. Please refer to the linked memos for more detailed description.
  http://www.epa.gov/lead/pubs/owens20100420.pdf
  http://www.epa.gov/lead/pubs/giles_RRP_memo.pdf

- National Program Managers (NPM) Guidance which identifies national areas of focus, program-specific guidance and operational measures in accordance with the EPA's Strategic Plan and Annual Plan and Budget. The annual NPM Guidance serves as a national framework for EPA Regions to use as they establish individual work plans and work-sharing strategies with the states, tribes, and other implementation partners.
  http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100F6FG.PDF

- Lead-based Paint Consolidated Enforcement Response and Penalty Policy (LBP Consolidated ERPP), which sets forth guidance for case teams to use in determining an appropriate enforcement response and penalty amount. This policy ensures consistent, fair and equitable treatment of the regulated community, predictable enforcement responses, and comparable penalty assessments for comparable violations, with flexibility to allow for consideration of the individual facts and circumstances of a particular case.
  http://www.epa.gov/enforcement/documents/policies/leadbasedpaint-consolidatederpp0810.pdf

In addition to these guidance documents, EPA Headquarters works closely with Regional case teams on case development issues and hosts monthly conference calls with the Regional offices to discuss Lead RRP compliance monitoring and enforcement issues. The agency has also developed a Question and Answer document to provide guidance to the regulated community on frequently asked questions regarding implementation of the RRP Rule. This document, available on the EPA's website, also helps ensure that Regions are applying the RRP Rule consistently across the country. See http://www.epa.gov/lead/pubs/rrp-faq.pdf

ATTACHMENT 6

United States Senate
WASHINGTON, DC 20510
February 13, 2013

The Honorable Lisa P. Jackson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Mr. James Jones
Acting Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
1201 Pennsylvania Avenue NW, Room 3130
Washington, DC 20460

Dear Administrator Jackson and Acting Assistant Administrator Jones:

On December 31, 2012, Environmental Protection Agency (EPA) published a notice in the Federal Register ("Notice") announcing a public hearing on June 26, 2013, and requesting information on renovation, repair, and painting activities on and in public and commercial buildings.[1] EPA is currently in the process of determining whether these activities create lead-based paint hazards and, if any do, the Agency will develop certification, training, and work practice requirements under the Toxic Substances Control Act (TSCA). While we certainly support the goal of reducing lead exposures – particularly to children – we have some concerns with EPA's process and the possibility for this current undertaking to achieve the Agency's objective.

This current undertaking is pursuant to an amended lawsuit settlement agreement between EPA and litigants from environmental organizations in which EPA agreed to hold a public hearing and commence rulemaking to address renovations in public and commercial buildings (other than child-occupied facilities which are already covered under existing regulations) to the extent such renovations create lead-based paint hazards ("Public & Commercial LRRP Rule").[2] As the Agency prepares for the upcoming public hearing their Notice requests information concerning:

(1) The manufacture, sale, and uses of lead-based paint after 1978;
(2) The use of lead-based paint in and on public and commercial buildings;
(3) The frequency and extent of renovations on public and commercial buildings;
(4) Work practices used in renovation of public and commercial buildings; and
(5) Dust generation and transportation from exterior and interior renovations of public and commercial buildings.

As EPA moves forward in this process, we want to ensure that the process is fair, orderly, efficient, and places a shared responsibility on both the public and private sectors to gather the information requested. With these objectives in mind, please substantively reply to each of the following questions.

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[1] "Lead; Renovation, Repair and Painting Program for Public and Commercial Buildings; Request for Information and Advance Notice of Public Meeting," 77 Fed. Reg. 76,996 (Dec. 31, 2012).
[2] "Amendment to Settlement Agreement Regarding Petitions for Review of EPA's *Lead; Renovation, Repair and Painting Program,*" ¶ 4 (signed by U.S. Dep't of Justice on Sept. 7, 2012).

Development of a TSCA Section 403 Rule to Identify Potential Lead Hazards in Public and Commercial Buildings:

Before it may promulgate a Public & Commercial LRRP Rule to regulate renovation and remodeling activities, EPA must develop a TSCA Section 403 rule to identify "dangerous levels of lead" specifically in those buildings. However, EPA can address renovations in public and commercial buildings through rulemaking only "to the extent such renovations create lead-based paint hazards."[3]

The sole 403 hazard rule that EPA has issued to date concerns pre-1978 target housing. As that hazard rule states: "[I]t is ... important to emphasize that this rule only applies to pre-1978 target housing and certain child-occupied facilities, and that these standards were not intended to identify potential hazards in other settings."[4] EPA then spent more than seven years after the rule was finalized deciding how to regulate renovation activities in residences.[5] However, EPA has yet to propose a 403 hazard rule for public and commercial structures. Nonetheless, the amended litigation settlement agreement signed by DOJ on September 7, 2012, sets forth a timeline for EPA to promulgate proposed and final rules to regulate renovation activities in public and commercial buildings – even though the required basic and foundational finding of any "hazard" has not yet been identified for those structures.

1. In the amended litigation settlement agreement, EPA has identified dates by which it will convene a Small Business Advocacy Review Panel, issue any proposed rule, and issue any final rule, but only with regard to a Public & Commercial LRRP Rule. What are the dates by which EPA will take action for each of these events with regard to developing a TSCA Section 403 hazard rule to identify any "dangerous levels of lead" in public and commercial buildings?

2. What is the chronology by which EPA plans to issue any proposed and final TSCA Section 403 rules for public and commercial buildings, as relative to issuance of proposed and final Public & Commercial Building LRRP Rules? In other words, does EPA plan to issue a public and commercial 403 hazard rule before, concurrently, or after any Public & Commercial LRRP Rule?

3. Does EPA believe it is appropriate to issue proposed and final Public & Commercial LRRP Rules before or concurrently with issuance of proposed and final Section 403 hazard rule for those structures?

As explained above, EPA waited to issue a final Residential LRRP Rule more than seven years after it first identified lead-based paint hazards in target housing under TSCA section 403. In the public and commercial buildings context, does EPA believe that it is appropriate to begin working on a rule prior to the identification of a hazard? If so, how can the Agency be sure steps taken in the rule will prevent any potential hazards if they have not yet been identified? How do you justify the difference in the time periods described above for the Residential LRRP rule (including the issuance of a Section 403 Rule) and the Public & Commercial LRRP Rule?

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[3] 77 Fed. Reg. at 76,997, col. 2 (Dec. 31, 2012).
[4] "Lead; Identification of Dangerous Levels of Lead [in Pre-1978 Target Housing]," 66 Fed. Reg. 1206, 1211, col. 3. (Jan. 5, 2001) (emphasis added).
[5] Final LRRP Rule for Pre-1978 Target Housing, 73 Fed. Reg. 21,692 (April 22, 2008).

EPA's Efforts to Gather Information from Federal and Other Government Building Owners and Managers:

Any Public & Commercial LRRP Rule would have a major impact on federal and other government-owned buildings. To this end, the General Services Administration (GSA) is the nation's largest public real estate organization and provides workspace in commercial buildings for more than 1 million federal workers through its Public Buildings Services (PBS). PBS's commercial real estate portfolio covers over 8,100 leases in excess of 171 million square feet and 1,500 government-owned buildings across the nation.[6] Likewise, the infrastructure of the Department of Defense (DoD) encompasses several hundred thousand buildings at more than 5,000 different locations or sites.[7] The footprint of the Veterans Administration (VA) is marked by 5,500 buildings and 1,600 leases totaling approximately 142 million square feet, with an average age approaching 60 years.[8] Also, the Architect of the Capitol (AOC) is responsible for the U.S. Congress and Supreme Court and maintaining their 17.4 million square feet of buildings on Capitol Hill.[9]

1. Please provide the list EPA has developed of inter-agency staff contacts at GSA, DoD, VA, AOC and other affected agencies that manage federal buildings who may assist in providing or gathering information requested by the Notice. If no such list exists, please describe whether and by when EPA plans to develop a contact list of federal agency staff who may assist with information collection.

2. Please describe any communication and contact EPA has had with facilities and leasing management staff from GSA, DoD, VA, AOC and other federal agencies to determine if any of the information requested by the Notice already exists. If EPA has had no such contact, please describe whether and by when EPA plans to meet or communicate with federal agency staff to determine what, if any, information requested by the Notice already exists.

3. What plans, procedures, or methods does EPA employ to gather information requested in the Notice that does not already exist, specifically through federal inter-agency coordination? Will EPA develop and implement such plans for federal inter-agency coordination? If so, by what date?

4. Has EPA coordinated with staff at GSA, DoD, VA, AOC and other agencies that may be affected by a future rule to determine the resources – including costs –these agencies would have to commit to comply? Please describe any such communications between EPA and federal agency staff with specificity and describe whether and by when EPA plans to meet or communicate with federal agency staff to determine what burdens would be imposed on them as a result of this potential rule.

5. The National Association of State Facilities Administrators (NASFA) is a non-profit organization of state government officials, and, according to its bylaws, NASFA's

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[6] An inventory of GSA properties is at http://www.gsa.gov/portal/content/100783.
[7] See http://www.defense.gov/about/dod101.aspx.
[8] See slide 6 at http://www.acec.org/advocacy/committees/pdf/annconv2011_va.pdf (presentation of Robert L. Neary, Jr., Acting Director, VA Office of Construction and Facilities Management, to American Council of Engineering Companies) (March 31, 2011)
[9] See http://aoc.gov/about-aoc/responsibilities-architect.

objectives include efforts "[t]o gather, analyze and distribute information, including data on state facilities policies and practices, legislation, new programs, and other items of interest to the States."[10] Has EPA conducted any outreach specifically to engage managers of state and municipal buildings to assist in gathering information requested by the Notice, such as coordination with organizations like NASFA? Please describe such outreach with specificity or whether and by when EPA will develop and implement such plans to coordinate with NASFA and other similar entities. If EPA has conducted any outreach, please also detail any response from the organizations.

6. The National Institute of Building Sciences (NIBS) was authorized by Congress in 1974 to "serve as an interface between government and the private sector ... [NIBS's] public interest mission is to serve the Nation by supporting advances in building science and technology to improve the built environment." Further, NIBS "has provided the opportunity for free and open discussion of issues and problems ... between government and the private sector construction industries. The Institute brings together representatives of regulatory agencies, legislators and representatives of the private sector to open working sessions that seek a consensus solution to problems of mutual concern."[11]

   Has EPA developed a contact list of, or communicated in any way with, officials or staff at NIBS for assistance in gathering information requested by the Notice? Please provide such contact list and describe such communications with specificity. If EPA has not done this, by when EPA will develop a contact list and implement a communications plan with NIBS?

7. In the December 31, 2012, Notice, EPA states that it has "already gathered and reviewed" information relevant to development of a Public & Commercial Buildings LRRP Rule.[12]

   7.a) To what extent is information already in EPA's possession responses to the requests in items (1) – (5) of the Notice?

   7.b) Has this information been made available to the public? If not, why? If yes, how may the public most easily gain access it?

   7.c) Has EPA provided this "already gathered and reviewed" information to any federal, state, or local government agencies to assist in collecting additional information requested in the Notice?

   7. d) Why has this information not been made available to the relevant Subcommittee of the Senate Environment and Public Works Committee?

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[10] See http://www.nasfa.net/displaycommon.cfm?an=1&subarticlenbr=1. NASFA's website provides contact information for its Reference and Resource Committee which functions "to gather and update baseline data to quantify the scale and scope of the assets and property for which our members are responsible," with regard to "building design, construction, operations, and maintenance areas, along with ... property management and capital budgeting capacities." See http://www.nasfa.net/associations/4146/files/Cmte%20Descriptions%20for%20FY13.pdf.

[11] See http://www.nibs.org/?page=about.

[12] 77 Fed. Reg. at 76,997, col. 3.

EPA's Efforts to Gather Information with Regard to Information on Manufacture and Uses of Lead-Based Paint:

With regard to items (1) and (2) requested in the Notice, certain federal agencies and organizations may assist in providing or gathering information available regarding the manufacture, sale, and use of lead-based paint both after 1978, and in and on public and commercial buildings.

1. The Departments of Labor, Commerce, and Health and Human Services, and the National Institutes of Health, Centers for Disease Control and Prevention, and Consumer Products Safety Commission, are among federal entities that may already have information regarding items (1) and (2). Has EPA developed a contact list of, or communicated in any way with, federal agencies that may assist in providing or gathering information regarding these Notice items? Please provide the contact list and describe such communications with specificity or describe whether and by when EPA will develop a contact list and implement a plan for federal inter-agency communications.

2. Has EPA developed a contact list of, or communicated in any way with, state and local public health and consumer product agencies that may assist in providing or gathering information in Notice items (1) and (2)? Please provide the list and describe such communications with specificity or describe whether and by when EPA will develop a contact list and implement a communications plan with state and local agencies.

3. Has EPA developed a contact list of, or communicated in any way with paint manufacturers and their associated trade organizations (such as the American Coatings Association, www.paint.org) that may assist in providing or gathering information regarding Notice items (1) and (2)? Please provide such contact list and describe such communications with specificity or describe whether and by when EPA will develop a contact list and implement a communications plan with paint manufacturers.

Thank you for your consideration of this matter. Please provide your thorough response by February 28, 2013.

Sincerely,

James M. Inhofe
United States Senator

David Vitter
United States Senator

Deb Fischer
United States Senator

Mike Crapo
United States Senator

United States Senate
WASHINGTON, DC 20510

ATTACHMENT 7

March 28, 2013

Mr. Henry L. Green, President
National Institute of Building Sciences (NIBS)
1090 Vermont Ave., N.W., Suite 700
Washington, D.C. 20005-4950

Dear Mr. Green:

We write with regard to a notice published by the Environmental Protection Agency (EPA) in the Federal Register on December 31, 2012 ("Notice"). The Notice requests information concerning:

(1) The manufacture, sale, and uses of lead-based paint after 1978.
(2) The use of lead-based paint in and on public and commercial buildings.
(3) The frequency and extent of renovations on public and commercial buildings.
(4) Work practices used in renovation of public and commercial buildings.
(5) Dust generation and transportation from exterior and interior renovations of public and commercial buildings.

Comments are due to EPA on April 1, and a public hearing is scheduled for June 26, 2013.

Given your institute's role as a Congressionally chartered source of advice for both the private and public sector regarding building science and technology, we strongly encourage your participation in EPA's comment and public hearing process. While we all support robust protections from the dangers of lead, we believe that NIBS is ideally suited to provide critical information to assist in developing better-targeted and more cost-effective regulation.

The Institute's public interest mission is to serve the nation by supporting advances in building science and technology to improve the built environment. As it is authorized by Congress, we believe NIBS can be a fair broker of information so all stakeholders in the government and private sectors can gain an understanding of the nature and extent of any potential lead-based paint hazards that may exist in the nation's stock of public and commercial buildings.

Please let us know, as is feasible and practicable within NIBS's current resources, whether and how the Institute can assist by participating in the June public hearing and in providing the information requested by EPA's notice in the coming months. We look forward to your response indicating NIBS's ability to participate in EPA's process by April 28, 2013.

Sincerely,

Angus King
United States Senator

Joe Manchin
United States Senator

Mark Begich
United States Senator

ATTACHMENT 8

From: Duane Desiderio
Sent: Monday, November 26, 2012 9:46 AM
To: 'Price.Michelle@epamail.epa.gov'
Subject: Follow-Up from Nov. 5 Meeting Regarding Commercial & Public Buildings LRRP Rule

Michelle –

I hope you had a great Thanksgiving weekend.

On behalf of the real estate, contracting, and building supply Coalition tracking development of the Commercial LRRP Rule, we wanted to thank you and other EPA staff on your team for meeting with us on November 5. We hope to continue the open dialogue as EPA considers development of a Commercial & Public Buildings LRRP Rule.

As we discussed at the meeting, and as set forth in the amendment to the recent litigation settlement agreement dated 09-12-12, we expect that by the end of this calendar year EPA will announce a public hearing to be held by July 31, 2013. That announcement will express EPA's interest in gathering information on a variety of items, as set forth in the revised settlement agreement and listed in the email chain below. As EPA moves forward to announce the meeting we believe it would benefit the imminent information gathering effort if EPA could clarify the following points as soon as possible:

(1) **Efforts to Gather Commercial & Public Buildings LRRP Information in Federal Buildings:** Our Coalition members do not think it will be an easy or inexpensive effort to gather the technical information that EPA will request when it announces the public hearing. Because a potential Commercial & Public Buildings LRRP Rule will affect public as well as private buildings, we hope to get a better sense of any effort that EPA will undertake -- in conjunction with the General Services Administration and other federal agencies – to gain a better understanding of lead-paint, hazard, and renovation information as it exists regarding the federal commercial buildings stock. On behalf of the Coalition, we again suggest a joint meeting between EPA, GSA and our Coalition members so private and public building stakeholders can discuss how to share in the responsibility to gather information that may be pertinent in the development of the Commercial & Public Buildings LRRP Rule. We would be happy to arrange such a meeting with GSA's Public Buildings Service in the coming month. Please let us know if EPA would like our assistance in setting it up.

(2) **Consideration of a TSCA Section 403 Rule to Identify Potential lead Hazards in Public and Commercial Buildings:** At our Nov. 5 meeting, we also discussed whether EPA plans to develop a TSCA Section 403 rule to identify "dangerous levels of lead" specifically in public and commercial buildings. As the preamble to the current 403 hazard rule states: "[I]t is ... important to emphasize that this rule only applies to pre-1978 target housing and certain child-occupied facilities, and that these standards were not intended to identify potential hazards in other settings." 66 Fed. Reg. p. 1211, col. 3. In light of this statement, it is an important point for Coalition members to get EPA's perspective on whether we should expect development of a 403 rule to cover the commercial and public buildings stock. If EPA plans to develop a 403 rule for public and commercial buildings, our Coalition would request some timeframe by which EPA expects to propose, and then finalize such a rule – and whether such a 403 rule would be issued before proposing and finalizing any Commercial & Public Buildings LRRP Rule.

Thank you again for meeting with us. We look forward to hearing from EPA on the issues we pose above.

Best regards on behalf of the Commercial LRRP Coalition,

Duane

Duane J. Desiderio
Vice President and Counsel

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From: Duane Desiderio
Sent: Wednesday, October 03, 2012 9:46 AM
To: 'cleland-hamnett.wendy@epa.gov'
Cc: 'Eileen Lee'; 'Mittelholzer, Michael'; 'Russell Riggs'
Subject: Request to Meet With Real Estate Stakeholders Regarding Development of Commercial Building LRRP Rule

Dear Ms. Cleland-Hamnett:

Our organizations are part of a coalition of real estate, contracting, and building supply stakeholders tracking the development of a "Lead; Renovation Repair and Painting" rule as it may apply to public and commercial buildings ("Commercial LRRP Rule"). A recent amendment to a litigation settlement agreement between EPA and the Sierra Club (attached) provided new deadlines regarding the development of a Commercial LRRP Rule.

Paragraph 3 of this agreement states that EPA plans to hold a public meeting by July 31, 2013, to discuss information that the agency may consider in developing a proposed Commercial LRRP Rule. It will announce this meeting by December 31, 2012; the announcement will request information including but not limited to the following:

(a) Information concerning the manufacture, sale, and uses of lead-based paint after 1978.
(b) Information concerning the use of lead-based paint in and on public and commercial buildings.
(c) Information concerning the frequency and extent of renovations on public and commercial buildings.
(d) Information concerning work practices used in renovation of public and commercial buildings.
(e) Information concerning dust generation and transportation from exterior renovations of public and commercial buildings.

Our groups are considering the types of information reflected in paragraphs (a)-(e) above. So we may be of most assistance to EPA, we have the following initial questions for your clarification. **We would like to meet with pertinent EPA staff to discuss our request for clarification. We also ask EPA to provide answers to our questions, and any supporting information, before the announcement expected by December 31, 2012:**

- **Information Gathered by EPA Thus Far:**
  - ✓ Does EPA have any information to date with regard to items (a)-(e) above, which is unique to

public and commercial buildings (as opposed to residential buildings)?

- ✓ If EPA does have this information, we ask that you make it available as part of the December 31 announcement, so our coalition has the opportunity to review it as we develop comments for next year's public hearing.

- **1978 Date:** Item (a) focuses on uses of lead-based paint after 1978. Paragraph (2) of the settlement agreement further provides that EPA will propose a Commercial LRRP Rule "applicable to renovation activities in pre-1978 buildings" if it concludes that such activities in pre-1978 buildings create a lead-based paint hazard.
  - ✓ We request EPA to clarify the significance of the 1978 date in the context of developing a Commercial LRRP Rule.
  - ✓ At this juncture, does EPA intend to cover ***only*** pre-1978 buildings within the scope of a Commercial LRRP Rule?
  - ✓ Does EPA assume it may regulate ***pre***-1978 buildings within a Commercial LRRP Rule, but is requesting information in Item (a) to determine if it has a basis to also regulate ***post***-1978 buildings?
  - ✓ Assume a public or commercial building was constructed *before* 1978, but has been "renovated" *after* 1978. How would this affect the scope of any Commercial LRRP Rule?

- **Definition of "Renovation":** Items (c), (d) and (e) above request information regarding "renovations" of public and commercial buildings. As EPA's website (http://www.epa.gov/lead/pubs/renovation.htm) explains, the current LRRP rule for pre-1978 housing "generally does not apply to minor maintenance or repair activities where less than six square feet of lead-based paint is disturbed in a room or where less than 20 square feet of lead-based paint is disturbed on the exterior, but this does not include window replacement, demolition, or prohibited practices."
  - ✓ To guide our organizations in supplying information to EPA, should we use the same 6 interior/20 exterior square feet thresholds to also define "renovation" in public and commercial buildings?
  - ✓ Does EPA have a definition of ordinary and regular maintenance activities in commercial and public buildings, that we should distinguish from "renovation" activities for purposes of Items (c), (d), and (e)?

- **Adult Health Issues:** The focus of EPA's residential LRRP program has been to address health effects of children under six (see http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf). Yet, paragraph 8 of the settlement agreement references "existing analytical work" that EPA has developed concerning "adult health benefits" from avoided lead exposure.
  - ✓ Will EPA make this "existing" analytical work on adult health benefits available when it announces the public hearing to be held on July 31, 2013?
  - ✓ Given the new references to adult health effects, how is EPA defining "adults" in this context? Does it include any individual over the age of six, with no demographic, gender or other restriction?
  - ✓ At this juncture, does EPA have *any* information that links renovation and remodeling activities in public and commercial buildings to health effects of children under six?
  - ✓ For purposes of developing a proposed Commercial LRRP Rule, is EPA placing more emphasis on linking renovation activities to adult health effects, or to child health effects?

Thank you for consideration of our request to clarify the settlement agreement. We look forward to discussing these points in person, and will be in touch shortly to determine when we may be able to meet.

Sincerely,
Duane Desiderio, The Real Estate Roundtable
Eileen Lee, National Multi Housing Council
Michael Mittelholzer, National Association of Home Builders
Russell Riggs, National Association of REALTORS®

Duane J. Desiderio
Vice President and Counsel

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ATTACHMENT 9

U.S. PAINT INDUSTRY DATA BASE

September 1992

Prepared for:

THE NATIONAL PAINT AND COATINGS ASSOCIATION, INC.
Washington, D.C.

Prepared by:

SRI International
Menlo Park, California

Eleanor Connolly
Eric Linak
Robin Holmes
Rosemary Bradley
Lynn Fujise
Mary Peters

Table 34
ESTIMATED CONSUMPTION OF PIGMENTS IN PAINTS AND COATINGS
(Millions of Pounds)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
olors											
itanium dioxide	760	712	788	840	865	895	930	945	950	940	892
hrome	70	67	70	71	63r	58r	59r	54	52	48	46
on oxide[r]	117	104	117	122	126	128	126	124	121	115	110
arbon black[r]	20	18	19	20	21	21	22	23	23	22	21
ther colored inorganic	10	8	10	11	11	11	11	10	10	10	9
hthalocyanine	4	3	4	4	4	4	4	4	4	5	5
ther organic	15	15	16	17	17	18	18	19	19	20	21
luminum[r]	25	22	24	24	24	24	23	23	23	23	22
illers											
alcium carbonate	458	438	481	524	577	598	614	623	629	623	610
alc[r]	322	280	290	300	312	310	320	320	320	310	295
lay	368	349	404	440	444	460	475	488	490	500	467
ilica	152	158	172	178	182	192	200	205	203	203	195
arytes	70	63	72	74	74	72	70	70	68	66	64
epheline syenite and feldspar	73	69	74	76	77	79	81	90	100	100	94
ther extenders and fillers[a]	45	48	52	56	58	59	65	70	73	74	70
ther											
inc oxide[r]	28	22	24	19	20	27	25	15	15	15	11
inc dust	71	50	50	50	52	50	47	45	43	42	40
ead (corrosion inhibiting)	17	15	16	14	12	11	11	9	8	7	6
uprous oxide	8	7	6	7	7	7	7	6	6	6	6
ther[b]	13	12	15	16	19	20	20	21	21	22	22
otals[c]	2,646	2,460	2,704	2,863	2,965	3,044	3,128	3,164	3,178	3,151	3,006
ercent Change	+0.3	-7.0	+9.9	+5.9	+3.5	+2.7	+2.8	+1.1	+0.4	-0.8	-4.6

= revised.

Includes aluminum hydrate, mica, synthetic calcium and sodium aluminum silicates, glass microspheres, and other extenders and fillers.

Includes nonchromate, nonlead anticorrosion pigments (e.g. barium metaboratic, borosilicates, zinc phosphate, zinc phosphooxide, molybdenum white); plastic pigments; and specialty types (e.g., fluorescent, gold bronze, pearlescent).

Totals may not add due to rounding.

ource: SRI International

Chrome

Description

Chrome pigments in this report include lead chromate salts (chrome yellow, chrome orange and molybdate orange), chromium oxides (including hydrated chromium oxide), chrome greens (blends of chrome yellow and ferricyanide or ferrocyanide—iron blue—pigment), zinc chromate (commonly called zinc yellow), strontium chromate and normal lead silico-chromate. Excluded is basic lead silico-chromate which is covered under Lead (Corrosion Inhibiting) Pigments. These metal chromate salts are all prepared by mixing solutions or suspensions of a compound of the desired metal with a solution of sodium chromate or bichromate.

The lead chromate salts, chromium oxides and chrome greens are all used primarily for color. Zinc and strontium chromate are used for their corrosion inhibiting properties.

Salient Statistics

Published data for chrome pigments are reported on the following pages (millions of pounds). Data are not available for chrome greens, strontium chromate or normal lead silico-chromate.

Exports of all pigments containing chromium (including mixtures) have been reported as, 5.2, 4.3, 5.1, 4.0, 3.9, 5.0, 7.1, 7.1, 5.0, 5.8 and 4.3 million pounds for the years 1981 - 1991, respectively. Over half of the reported exports in 1991 are believed to be chromium oxide.

Product	Year	Production	Imports	Apparent Consumption[a]
Chrome yellow and orange	1981	56.1	2.7	58.8
	1982	40.8	2.8	43.6
	1983	43.1	3.9	47.0
	1984	46.8	5.1	51.9
	1985	41.4	6.4	47.8
	1986	39.1	4.3	43.4
	1987	43.7	7.4	51.1
	1988r	46.9	8.8	55.7
	1989r	33.9	8.1	42.0
	1990	32.5	8.0	40.5
	1991	--	7.6	--
Molybdate orange	1981	20.3	1.1	21.4
	1982	13.3	0.9	14.2
	1983	12.9	1.5	14.4
	1984	14.8	2.0	16.8
	1985	12.3	2.2	14.5
	1986	12.1	1.7	13.8
	1987	13.1	2.4	15.5
	1988	10.0	2.5	12.5
	1989	9.5	2.3	11.8
	1990	--	2.0	--
	1991	5[e]	1.8	--

Product	Year	Production	Imports	Apparent Consumption[a]
Chromium oxide	1981	10.6	5.0	15.6
	1982	8.6	3.3	11.9
	1983	10.4	4.0	14.4
	1984	16.5	4.0	20.5
	1985	--b	3.0	--
	1986	--b	5.7	--
	1987	--b	5.3	--
	1988	18.0	3.6c	21.6
	1989	18.3	3.7c	22.0
	1990	--	7.7	--
	1991	--	8.8	--
Zinc chromate	1981	--b	3.4	--
	1982	--b	3.0	--
	1983	--b	2.8	--
	1984	--b	2.4	--
	1985	4.4	3.5	7.9
	1986	3.9	2.8	6.7
	1987	2.8	2.7	5.5
	1988	--	2.4	--
	1989	--	1.2	--
	1990	--	0.9	--
	1991	--	0.7	--

r = revised

e = estimated

a. Assumes no stock changes.
b. Some or all data withheld to avoid disclosing individual company operations.
c. There was an apparent net import of 3.6 and 3.7 million pounds of chromium oxide in 1988 and 1989, respectively.

Sources: Current Industrial Reports, M28A, U.S. Department of Commerce, Bureau of the Census; U.S. Imports for Consumption, IM146 and IM 145, U.S. Department of Commerce, Bureau of Census; Molybdenum Annual Report 1990 U.S. Department of the Interior, Bureau of Mines; Chromium Annual Report 1990 U.S. Department of the Interior, Bureau of Mines

The domestic availability (production plus imports) of chrome green, strontium chromate, and normal lead silico-chromate are believed to be only a few million pounds per year.

Consumption

Chrome yellow and orange, molybdate orange and chromium oxides have significant markets outside of the paint industry in plastics, inks, elastomers, paper and other areas. However, other chrome pigments (e.g., zinc chromate) are used mainly in paints and coatings. Estimated consumption of chrome pigments in paints and coatings in recent years is as follows (millions of pounds):

Year	Chrome Yellow and Orange	Molybdate Orange	Zinc Chromate	Chromium Oxide	Others[a]	Total
1981	38	10	10	7	5	70
1982	37	8	10	7	5	67
1983	40	9	8	8	5	70
1984	41	9	9	7	5	71
1985	35	7	9	7	5	63
1986	30	7	9	7	5	58
1987	32	7	9	6	5	59
1988	28	6	9	6	5	54
1989	26	6	9	6	5	52
1990	24	5	8	6	5	48
1991	22	5	8	6	5	46

a. Includes chrome green, strontium chromate, and normal lead silico-chromate.

Lead chromate-based pigments are prohibited from use in architectural consumer paints; however, other chrome pigments are used to a limited extent (chromium oxides in exterior paints and a small amount of zinc chromate in primers). The bulk of chrome pigments is used in special purpose coatings and product finishes-OEM. The major market for chrome yellow is traffic paints. Molybdate orange is used primarily in machinery and equipment finishes, and zinc chromate and strontium chromate are used almost solely in metal primers. Normal lead silico-chromate is used only as an inexpensive substitute for chrome yellow in traffic paints.

Regulations* affecting the production and use of pigments based on hexavalent chromium have caused a decline in consumption, as chrome pigments have been dropped by a number of end users, particularly in the automotive and machinery and equipment industries. Demand for chrome yellow in traffic paints has remained fairly steady. However, as of March 1992, there were 8 states that prohibited the use lead, chrome and cadmium in traffic paints purchased by state agencies, and similar legislation is pending in other states. Suppliers are continuing efforts to develop suitable alternates based on organic yellows or blends..

Iron Oxide

Description

Iron oxide pigments for use in paints and coatings are classified as either natural or synthetic. Natural iron oxide pigments are minerals mined from natural ores of both domestic and foreign origin. The common names of the principal natural iron oxide pigments are ochers, siennas and umbers. These minerals are used as is (raw) or calcined (burnt) to yield a range of yellow, red and brown colors. Since these pigments are mixtures of iron oxide and other minerals (containing 15-75% iron oxide depending on the product), color uniformity and control can be a problem with their use. Red natural iron oxides comprise approximately 50% of all natural iron oxides produced. Most natural iron oxide pigments are used primarily for color

* OSHA regulations limit the 8-10-hour time-weighted average chrome pigments dust levels in the workplace to 50 micrograms per cubic meter of air; regulations may be more restrictive in the future.

Zinc Dust

Description

Zinc dust pigments are metallic zinc powders made primarily from scrap and residue zinc metals. The pigments are used exclusively for their anticorrosive action in paint and coating primers for iron and steel. The anticorrosive action of the zinc dust primer is due to the fact that the zinc metal is anodic in relation to iron or steel so that when both metals are in contact with water, the (more anodic) zinc will go into solution or corrode instead of the (less anodic) iron or steel. Paints or primers containing large quantities of zinc dust are commonly called zinc-rich paints.

Salient Statistics

The following data for zinc dust pigments are in millions of pounds:

Year	Production	Imports	Exports	Apparent Consumption
1981	82	18	11	89
1982	50	13	4	59
1983	74	14	4	84
1984	78	17	6	89
1985	68	19	4	83
1986	59	16	3	72
1987	63	15	4	74
1988	53	17	5	65
1989	55	16	18	53
1990	53	19	19	53
1991	na	34	na	na

Source: Minerals Yearbook, Mineral Industry Surveys and Zinc Annual Report 1990, U.S. Department of Interior, Bureau of Mines

Consumption

Paints and coatings have accounted for 70-75% of zinc dust consumption in recent years. The remaining 25-30% is consumed in chemicals (e.g., zinc hydrosulfide, a bleaching agent). Consumption of zinc dust pigments in paints and coatings is estimated at 42 million pounds in 1990 and 40 million pounds in 1991, down from the peak level of around 75 million pounds per year in 1977. Most of the zinc dust currently used in paints and coatings is for marine and high performance maintenance applications. Demand has declined significantly from the late 1970s, when zine dust was used in zinc-rich primers for the automotive industry.

Lead (Corrosion Inhibiting)

Description

Corrosion-inhibiting lead pigments in this study refer to the following items:

- Lead oxides (red lead and litharge)

- Basic lead silico-chromate
- Dibasic lead phosphite and other specialty lead pigments
- Basic lead carbonate, silicate, and sulfate (white lead).

Lead-containing chromate pigments are excluded here but covered under Chrome Pigments.

Lead oxide pigments for paints refer primarily to red lead, although litharge is used as a precursor to lead pigments and also a very small amount is used directly as a paint additive. Most red lead pigments used in the paint industry have a 95-98% red lead content. Red lead pigments are made from litharge.

Basic lead silico-chromate is a silica-cored pigment made from chromic acid solution, lead monoxide, and finely ground silica. The lead oxide content is about 47% and the silica content also about 47%, with chromic oxide accounting for about 6% dry weight.

Other specialty corrosion-inhibiting lead pigments include such items as dibasic lead phosphite, lead salicylate, di- and tribasic lead phosphosilicate, and flake metallic lead.

Salient Statistics

Published data for lead chemicals are shown as follows (millions of pounds):

	Production			Imports		
Year	Litharge	Red Lead	Basic Lead[a] Carbonate	Litharge	Red Lead	Basic Lead[b] Carbonate
1981	103	32	2.2	24	2.2	0.4
1982	115	29	2.9	22	1.5	0.2
1983	132	33	2.4	25	1.9	0.7
1984	132	24	2.6	28	2.1	1.0
1985	187	29	1.1	22	1.6	0.7
1986	161		1.1	24	1.2	1.2
1987	174		na	31	1.5	1.4
1988	185		na	24	1.8	0.5
1989	147	26	na	22	1.2	0.4
1990	161	29	na	24	0.5	0.2

a. The U.S. Bureau of Mines ceased reporting production data after 1986. Production is estimated at less than 0.7 million pounds in 1990.
b. Includes lead carbonate and basic lead sulfate.

Source: Minerals Yearbook and Lead Annual Report, U.S. Department of Interior, Bureau of Mines

Published data are not available for basic lead silico-chromate and other lead pigments.

Consumption

Litharge is mainly produced and consumed captively for the manufacture of lead-acid storage latteries; the largest non-battery application is ceramics. Some litharge is used as a precursor to other lead pigments but only a very small quantity is used directly in paints and coatings (about 2-3%).

The major use for red lead is in paints where it aids in preventing rust on steel sufaces. However, consumption is minimal -- probably less than 3 million pounds in 1991. Red lead is also used in storage batteries, ceramic glazes, ballistic modifiers for high-energy propellants, lubricants and radiation-shielding foam.

Basic lead carbonate (white lead) is no longer widely used in paints and coatings because of its toxicity and consequent replacement by TiO_2. However, it is still used in some anti-corrosion applications (e.g. bridges, water towers) where a white pigment (versus red lead) is desired. It is also used in ceramic glazes, temperature sensitive inks and lubricants.

Estimated consumption of corrosion-inhibiting lead pigments in paints and coatings is outlined below (millions of pounds).

Year	Red Lead	Basic Lead Silico-Chromate	Others[a]	Totals
1981	9	7	1	17
1982	8	6	1	15
1983	7	8	1	16
1984	7	7	--	14
1985	6	6	--	12
1986	6	7	--	11
1987	6	7	--	11
1988	--	--	--	9
1989	--	--	--	8
1990	--	--	--	7
1991	--	--	--	6

a. Includes the white leads and specialty lead pigments.

Throughout the 1970s and early 1980s, lead-based pigments were used to a relatively limited extent in a variety of product finishes. In recent years, however, there has been a concerted effort to develop alternatives because of toxicity problems, and consumption of lead-based pigments in coatings has dropped from 27 million pounds in 1973 to 20 million pounds in 1979 and down to 6 million pounds in 1991. They are now used mainly in high-performance anti-corrosion coatings and marine paints.

Cuprous Oxide

Description

Cuprous oxide or red copper oxide can be prepared by the oxidation of finely divided copper metal or by the addition of a base to cuprous chloride. It is used as a pigment almost solely for its fungicidal properties.

Technical Bulletin: Inspecting for Lead-Based Paint on Painted Metal Doors and Frames

The question has arisen as to whether it is necessary to abate lead-based paint on metal (steel) doors and frames if the finish paint is intact and the lead is only in the factory-applied primer. Doors and door frames are considered chewable surfaces and, under current HUD regulations, must be abated in multifamily housing subject to an application for mortgage insurance if they contain lead-based paint.

For the purposes of this technical bulletin, paints on metal door frames and doors are categorized as: factory-applied primers and field- applied finish paint. (Generally, primers are preparatory applications to protect the base metal and improve the bond with finish paint.)

If it can be determined clearly that hazardous levels of lead on metal doors and frames reside only in the primers, and that the primers were factory-applied and are in sound condition, then the primers themselves need not be abated (removed). However, finish coats of paint that cumulatively contain lead of one milligram per square centimeter (1.0 mg/cm^2) or greater, will have to be treated as lead hazards. (The alternative standard of equal to, or greater than 0.5 percent by weight may be used.) If laboratory analyses of samples of the field-applied finishes are negative, the metal doors and frames will not have to be abated but will have to be monitored to assure that the primer does not become defective.

HUD understands that factory-applied primers are applied in an environment and in a manner that is appropriate for the particular primer, and that the resulting bond between the primer and the base metal makes the primer's complete separation from the base metal difficult, if not impossible. If the primer is removed exposing the base metal during the course of collecting a sample of the field-applied finish paint using conventional hand-scraping techniques, then the assumption of a permanent bond is not justified and the entire sample shall be analyzed for presence of lead. Any damage to the primer resulting from sample collection shall be repaired immediately in a manner that restores the integrity of the primer coat. For the metal doors and frames under consideration, primers shall be intact, and doors shall be operating properly (free from impact or abrasion between moving parts that will damage any surfaces).

If this exception for factory applied primers is used, inspectors shall advise property owners/building managers of the importance of continued monitoring of the paint surfaces to assure that subsequent surface deterioration or other factors do not result in exposing defective lead-based paint surfaces (the

primers). Under this exception, it is expected that property owners/building managers shall commit to a plan for ongoing monitoring of the condition of the painted surfaces. The subsequent appearance of rust shall indicate a failure of the paint and primer and the component must be abated.

Comments

1. Since it may require only a very small amount of leaded primer to contaminate a sample of a non-leaded finish coat to the 0.5% level, care should be exercised in removing the finish coatings. (Leaded primers may be on the order of 50% or more lead.)

2. Although unlikely, adhesion of the primer could be a problem. A simple "x" cut or cross-hatch test may be advisable. If adhesion is poor, the paint will tend to flake away from a cut. An adhesion test should also give an indication of the number of coats, color of finish versus primer (which would be orange if it was pigmented with red lead, or yellow if it was pigmented with lead chromate), and thickness of the layers. Any damage resulting from an adhesion test should be repaired immediately in a manner that restores the integrity of the primer and finish coats to prevent subsequent deterioration.

3. The applicability of this Technical Bulletin is limited to metal doors and frames (sometimes called bucks). These components generally arrive from the manufacturer ready to install without the need for further fabrication that might compromise the integrity and effectiveness of the factory-applied primers. Other light-gage (with a thickness of less than 16 gauge) ferrous metal components requiring on-site fabrication such as cutting-and-fitting during installation generally require on-site application of primers, at least at exposed material at construction joints and are not candidates for this exception.

4. Although new metal doors and frames manufactured in the U.S. for residential use should not have primers containing lead, there have been reports of lead on some imported doors and frames. If new doors and frames are to be installed, the owner should make sure that they are lead-free.

February 24, 1994

ATTACHMENT 11

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

VIA OVERNIGHT MAIL (FEDEX) AND CERTIFIED MAIL/RETURN RECEIPT REQUESTED

17th Street Revocable Trust
c/o New 4775 Huron L.L.C., Trustee
471 H St. N.W.
Washington, D.C. 20001,

John R. Redmond
7312 Brookstone Court
Potomac, Maryland 20854-4837, and

New 4775 Huron L.L.C.
Attn.: John R. Redmond, Managing Member
471 H St. N.W.
Washington, D.C. 20001

Re: In the Matter of: 17th Street Revocable Trust, et al.
RCRA Section 7003 Unilateral Administrative Order
Property: 3220 17th Street, N.W.
Washington, D.C. 20010-2135

Dear Mr. Redmond:

Please find enclosed a Unilateral Administrative Order ("UAO") issued by the United States Environmental Protection Agency - Region III ("EPA") pursuant to Section 7003 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6973, to the 17th Street Revocable Trust, John R. Redmond of Potomac, Maryland, as Managing Member of the New 4775 Huron L.L.C. and a former Trustee of the 17th Street Revocable Trust, and the New 4775 Huron L.L.C., a current Trustee of the 17th Street Revocable Trust (collectively the "Respondents") concerning the building located at 3220 17th Street, N.W., Washington, D.C. ("Property"). EPA has made a determination that conditions at the Property involving lead-based paint wastes may present an imminent and substantial endangerment to human health and the environment. As a result, EPA is ordering Respondents to perform the Work required by the UAO and attached Statement of Work and to complete such Work in the manner and time frame established by the UAO and Statement of Work.

The UAO becomes effective **Wednesday, July 12, 2000.**

Respondents are required to notify EPA in writing of their intent to comply with the UAO by **Wednesday, July 12, 2000.** Failure to provide EPA with timely notice of your intent to

comply with the UAO may result in the filing of a civil judicial action in U.S. District Court to enforce the UAO.

Please be advised that significant penalties can be imposed for failure to comply with the UAO. RCRA Section 7003(b), 42 U.S.C. § 6973(b), provides that failure to comply with a UAO may render a person subject to civil penalties of up to $5,500.00 per day per violation.

If you wish to discuss the UAO or request a conference to meet with EPA concerning this matter, please to contact the EPA attorney assigned to represent the Agency in this matter:

Joseph J. Lisa III, Esq.
Assistant Regional Counsel (3RC30)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Mr. Lisa can be reached by telephone at (215) 814-2479. However, please be advised, that a request for a conference will not suspend or delay the effective date of the UAO or the schedule for the completion of Work to be performed under the UAO and the Statement of Work.

Additionally, please find enclosed a copy of the U.S. EPA Small Business Resources Information Sheet. This enclosure provides information on contacting the EPA Small Business Ombudsman to comment on federal enforcement and compliance activities and also provides information on compliance assistance. As noted in the enclosure, any decision to participate in such program or to seek compliance assistance does not relieve you of your obligation to respond and comply with the UAO in a timely manner or with regard to any EPA request or other enforcement action, create any rights or defenses under law, and will not affect EPA's decision to pursue the aforementioned action. To preserve your legal rights, you must comply with all rules governing RCRA Section 7003 and the terms and conditions of the enclosed UAO. The Ombudsman and fairness boards do not participate in the resolution of EPA's enforcement actions or actions concerning issuance and implementation of a UAO issued under RCRA Section 7003. By enclosing the aforementioned Information Sheet, EPA has not made a determination as to whether or not the Respondents are covered by any resources available under EPA's Small Business Program or the Small Business Regulatory Enforcement Fairness Act.

Sincerely,

Bradley M. Campbell
Regional Administrator
U.S. EPA - Region III

enclosure
cc: Joseph J. Lisa III (3RC30)
Jeff Zimmerman, Esq. (Attorney for Respondents)
Caroline Burnett (Attorney for District of Columbia)

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

IN THE MATTER OF:	:	
	:	UNILATERAL
17th STREET REVOCABLE TRUST	:	ADMINISTRATIVE ORDER
471 H St., N.W.	:	
Washington, D.C. 20001,	:	
	:	
JOHN R. REDMOND, former Trustee of the 17th STREET REVOCABLE TRUST and Managing Member of the NEW 4775 HURON, L.L.C.	:	
7312 Brookstone Ct.	:	
Potomac, Maryland 20854-4837, and	:	U.S. EPA Docket No.:
	:	RCRA-3-2000-0001TH
NEW 4775 HURON, L.L.C., Trustee of the 17th STREET REVOCABLE TRUST	:	
471 H. St., N.W.	:	
Washington, D.C. 20001,	:	
	:	
Respondents.	:	
	:	Proceeding under Section
3220 17th St., N.W.	:	7003 of the Resource
Washington, D.C. 20010-2135,	:	Conservation and Recovery
	:	Act, as amended, 42 U.S.C.
Property.	:	§ 6973.

ADMINISTRATIVE RECORD

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13 - Unit # 303 - April 17, 2000;
14 - Unit # 309 - April 24, 2000;

15 - Unit # 310 - April 17, 2000;

16 - Unit # 316 - April 17, 2000;

17 - Unit # 318 - April 17, 2000;

18 - Unit # 406 - May 3, 2000;

19 - Unit # 408 - May 8, 2000; and

20 - Unit # 410 - May 8, 2000;

5- Housing Deficiency Notices: Government of the District of Columbia - Department of Consumer and Regulatory Affairs (Housing Regulation Administration - Housing Inspection Division)

1 - September 23, 1997 - Issued Re: Unit # 417 - 3220 17th Street, N.W. Washington, D.C. - Lead-Based Paint Violations (DCMR Title 14 Sections 707.3, 707.1 and 701.3); including, inspection report and complaint form;

2 - March 13, 1996 - Issued Re: Unit # 305 - 3220 17th Street, N.W. Washington, D.C. - Lead-Based Paint Violations (DCMR Title 14 Sections 707.3, 707.1 and 701.3) including, inspection report and complaint form;

3 - June 23, 1994 - Issued Re: Unit # 101 - 3220 17th Street, N.W. Washington, D.C. - Lead-Based Paint Violations (DCMR Title 14 Sections 707.3 and 707.1) including, inspection report and complaint form;

4 - July 1, 1993 - Issued Re: Unit # 405 - 3220 17th Street, N.W. Washington, D.C. - Lead-Based Paint Violations (DCMR Title 14

Sections 707.3, 707.1 and 701.3) including, inspection report and complaint form;

5 - June 17, 1991 - Issued Re: Unit # 201 - 3220 17th Street, N.W. Washington, D.C. - Lead-Based Paint Violations (DCMR Title 14 Sections 707.3, 707.1 and 701.3) including, inspection report and complaint form;

6 - May 16, 1990 - Issued Re: Unit # 204 - 3220 17th Street, N.W. Washington, D.C. - Lead-Based Paint Violations (DCMR Title 14 Sections 707.3 and 701.3) including, inspection report and complaint form;

6- Inspection Reports/Complaint Forms - Government of the District of Columbia - Department of Consumer and Regulatory Affairs (Housing and Environmental Regulation Administration - Housing Regulation Enforcement Division)

1 - July 21, 1994 - Complaint Date - (Unit # 304);

2 - April 24, 1997 - Complaint Date - (Unit # 305);

3 - September, 1990 - Inspection Report Date (Preparatory School for Early Learning - Child Care Center - 3220 17th St., N.W.);

4 - January 28, 1998 - Notice re: two lead poisoned children in Property

G - Property Ownership Information - 3220 17th St., N.W., Washington, D.C.

H- ToxFAQ Sheet for Lead - CAS # 7439-92-1 (April, 1993 - Agency for Toxic Substances and Disease Registry - U.S. Department of Health and Human Services (Public Health Service));

I - "Risk Anaylsis to Support Standards for Lead in Paint, Dust and Soil - Volumes I and II)" - U.S. EPA (June 1998);

J - "Lead; Identification of Dangerous Levels of Lead" - U.S. EPA Proposed Rule (40 C.F.R. Part 745), 63 Fed. Reg. 30301 (June 3, 1998);

K - "Guidance on Identification of Lead-Based Hazards" - U.S. EPA Guidance, 60 Fed. Reg. 47247 (September 11, 1995);

L - "Protect Your Family From Lead in Your Home" - EPA Pamphlet (April, 1999);

M - "Lead in Your Home: A Parent's Reference Guide" - EPA Guide (May, 1999);

N - U.S. EPA Region III Delegations;

O - Site Maps, Demographic and Environmental Justice Information;

P - "Eliminating Childhood Lead Poisoning: A Federal Strategy Targeting Lead-Based Paint Hazards" (February, 2000);

Q - District of Columbia "Lead Based Paint Abatement and Control Act of 1996";

R - "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" - U.S. Department of Housing and Urban Development (June, 1995).

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

IN THE MATTER OF:	:	
	:	UNILATERAL
17th STREET REVOCABLE TRUST	:	ADMINISTRATIVE ORDER
471 H St., N.W.	:	
Washington, D.C. 20001,	:	
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JOHN R. REDMOND, former Trustee of the 17th STREET REVOCABLE TRUST and Managing Member of the NEW 4775 HURON, L.L.C.	:	
7312 Brookstone Ct.	:	
Potomac, Maryland 20854-4837, and	:	U.S. EPA Docket No.:
	:	RCRA-3-2000-0001TH
NEW 4775 HURON, L.L.C., Trustee of the 17th STREET REVOCABLE TRUST	:	
471 H. St., N.W.	:	
Washington, D.C. 20001,	:	
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Respondents.	:	
	:	Proceeding under Section
3220 17th St., N.W.	:	7003 of the Resource
Washington, D.C. 20010-2135,	:	Conservation and Recovery
	:	Act, as amended, 42 U.S.C.
Property.	:	§ 6973.

DETERMINATION OF IMMINENT AND SUBSTANTIAL ENDANGERMENT UNDER RCRA SECTION 7003, 42 U.S.C. § 6973

Section 7003(a) of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6973(a), provides that, upon receipt of evidence that the past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment, the Administrator of the United States Environmental Protection Agency ("EPA") may bring suit on behalf of the United States in the appropriate district court against any person who has contributed or who is contributing to such handling, storage, treatment, transportation or disposal to restrain such person from such handling, storage, treatment, transportation, or disposal, to order such person to take such other action as may be necessary, or both. The Administrator shall provide notice to the affected State of such suit. The Administrator may also, after notice to the affected State, take other action including, but not limited to, issuing such orders as may be necessary to protect public health and the environment.

The authority of the Administrator under RCRA Section 7003(a), 42 U.S.C. § 6973(a), has been delegated to the Regional Administrators of EPA. In U.S. EPA Region III, the authority under RCRA Section 7003(a), 42 U.S.C. § 6973(a), including, but not limited to, the authority to make a determination that the handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present any imminent and substantial endangerment to health or the environment, has been further delegated to, *inter alia*, the Director of the Waste and Chemicals Management Division. (*See* U.S. EPA Region III Delegation 8-22-A (September 1, 1998)).

Based upon review and consideration of the Administrative Record compiled concerning the above-captioned matter, it is hereby determined that the handling, storage, treatment, transportation and/or disposal of solid waste (i.e., lead-based paint waste) at the property located at 3220 17th Street, N.W. in Washington, D.C., may present an imminent and substantial endangerment to health and/or the environment.

This determination is made in support of the issuance by U.S. EPA - Region III of a Unilateral Administrative Order under RCRA Section 7003(a), 42 U.S.C. § 6973(a), in the above-captioned matter.

_____
Date

_____
Bradley M. Campbell
Regional Administrator
U.S. EPA - Region III

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
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Potomac, Maryland 20854-4837, and	:	U.S. EPA Docket No.:
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ENVIRONMENTAL PROTECTION AGENCY
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Washington, D.C. 20010-2135,	:	Conservation and Recovery
	:	Act, as amended, 42 U.S.C.
Property.	:	§ 6973.

I. EFFECTIVE DATE

This Unilateral Administrative Order ("Order") shall become effective at 5:00 P.M. (E.S.T.) Wednesday, July 12, 2000.

II. JURISDICTION, NOTICE TO THE STATE AND GENERAL PROVISIONS

1. This Order is issued pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency ("EPA" or the "Agency") by Section 7003 of the Resource Conservation and Recovery Act of 1976, as amended by, *inter alia*, the Hazardous and Solid Waste Amendments of 1984 (collectively referred to hereinafter as "RCRA"), 42 U.S.C. § 6973. The authority vested in the Administrator by RCRA Section 7003, 42 U.S.C. § 6973, has been delegated to the Regional Administrators of EPA by EPA Delegation No. 8-22-B dated March 20, 1985. Within EPA - Region III this authority was further delegated to, *inter alia*, the Director of the Waste and Chemicals Management Division, by EPA Region III Delegation No. 8-22-B dated September 1, 1998.

B. RCRA Section 7003(a), 42 U.S.C. § 6973(a), authorizes the Administrator, upon receipt of evidence that the past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment, either to bring suit on behalf of the United States in the appropriate district court against any person who has contributed or is contributing to such handling, storage, treatment, transportation or disposal, seeking an order from the court to restrain such person from such handling, storage, treatment, transportation, or disposal, to take such action as may be necessary, or both. Additionally, the Administrator is authorized, after notice to the affected state, to take other action, including, but not limited to, issuing such orders as may be necessary to protect public health and the environment.

3. This Order addresses the 77-unit multi-family residential building located at 3220 17th Street, N.W., in Washington, D.C. 20010-2135 (the "Property"). This Order requires the 17th Street Revocable Trust, of 471 H. St., N.W., Washington, D.C. 20001, the Property's owner, John R. Redmond of 7312 Brookstone Court, Potomac, MD, 20854-4837, a former Trustee of the 17th Street Revocable Trust and current Managing Member of the New 4775 Huron, L.L.C., and the New 4775 Huron, L.L.C. of 471 H St., N.W., Washington, D.C. 20001, a current Trustee of the 17th Street Revocable Trust (collectively referred to as the "Respondents"), to eliminate the imminent and substantial endangerment arising from lead-based paint waste at the Property. These lead-based paint wastes are solid wastes which may present an imminent and substantial endangerment to the health of the residents of the Property (especially children under the age of six), visitors to the Property, workers performing maintenance in the Property who are exposed to the lead-based paint wastes, and the families and children of such workers who may be exposed to such lead-based paint wastes brought home on the clothes of such

workers, and such lead-based paint wastes are constantly arising from deteriorating lead-based paint on surfaces in the Property. Respondents have contributed to and are currently contributing to the past or present handling, storage, treatment and/or disposal of such solid wastes by allowing such lead-based paint wastes, arising from the deterioration of lead-based painted surfaces and lack of maintenance of the Property, to accumulate in the Property, and by failing to eliminate the presence of lead-based paint wastes at the Property.

4. EPA has given the District of Columbia notice of the issuance of this Order in accordance with RCRA Section 7003(a), 42 U.S.C. § 6973(a), and is coordinating this action with the District of Columbia's Department of Health ("DCDOH").

III. PARTIES BOUND

5. This order applies to and is binding upon Respondents and Respondents' agents, successors and assigns. Any change in ownership of the Property or legal status of Respondents, including, but not limited to, any transfer of assets of real or personal property by Respondents, shall in no way alter Respondents' responsibilities under this Order.

2. Respondents shall provide, within seven (7) calendar days of the effective date of this Order or date of such retention, whichever is later, a copy of this Order to all representatives, contractors, subcontractors, laboratories and consultants retained to conduct or monitor any portion of the work to be performed pursuant to this Order, and shall condition all contracts with the aforementioned on compliance with the terms and conditions of this Order. It shall not be a defense to any violation of this Order that a representative, contractor, subcontractor, laboratory or consultant committing a violation of this Order was not informed of the requirements of this Order. Irrespective of the use of representatives, contractors, subcontractors, laboratories and/or consultants to perform some or all of the work to be performed pursuant to this Order, Respondents shall be responsible for any noncompliance with this Order.

IV. DEFINITIONS

Unless otherwise expressly provided herein, terms used in this Order shall have the meaning assigned to them under RCRA. However, whenever the terms listed below are used in this Order or in the appendices to this Order, attached hereto and incorporated herein, the following definitions shall apply:

1. "RCRA" shall mean the Resource Conservation and Recovery Act of 1976, *as amended*, 42 U.S.C. §§ 6901 *et seq.*

C. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" or "Business day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Order, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

3. "Lead-Based Paint" shall mean paint or other surface coatings that contain lead equal to or in excess of 1.0 mg/cm^2 or more than 0.5% by weight.

4. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

5. "DCDOH" shall mean the District of Columbia Department of Health.

6. "Order" shall mean this Unilateral Administrative Order and all attachments hereto. In the event of conflict between this Order and any attachment, the terms and conditions of this Order shall control.

7. "Paragraph" shall mean a portion of this Order identified by an arabic numeral or an upper case letter.

8. "Parties" shall mean the EPA and the Respondents.

9. "Lead-Based Paint Waste" shall mean dust that contains lead, and detached lead-based paint chips or flakes.

10. "Section" shall mean a portion of this Order identified by a roman numeral.

11. "Solid Waste" shall mean any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under 33 U.S.C. § 1342, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 *et seq.* *See* RCRA Section 1004(27), 42 U.S.C. § 6930(27).

12. The "Property" shall mean the 77-unit multi-family residential building located at 3220 17th Street, N.W., Washington, D.C., 20010-2135, including, but not limited to, all residential units, interior common areas and interior maintenance/mechanical areas of the building.

13. "Statement of Work" or "SOW" shall mean the statement describing the Work to be implemented at the Property, as set forth in Attachment II to this Order, and any and all substitutions, modifications or revisions made to such document in accordance with this Order.

14. "United States" shall mean the United States of America.

15. "Work" shall mean all tasks and activities Respondents are required to perform under this Order and the attachments hereto, except for the record retention and preservation requirements of this Order.

V. FINDINGS OF FACT

In support of the issuance of this Order and based upon the information in the Administrative Record of this Order, EPA makes the following Findings of Fact:

16. Lead, a naturally-occurring metal, is a powerful toxicant with no known beneficial purpose in the human body. Virtually all parts of the human body can be damaged from exposure to lead.

17. Lead has been classified as a probable human carcinogen by the United States Environmental Protection Agency and a possible human carcinogen by the International Agency for Research on Cancer.

18. Lead primarily enters the body either through ingestion (i.e., eating lead chips, flakes and/or dust containing lead) or inhalation (i.e., breathing lead particles in air). Once lead has entered the human body it is distributed by the blood stream to mineralizing tissue (e.g., bone and teeth) and soft tissues (e.g., kidney, bone marrow, liver and brain). The overall impact of lead being introduced into the human body is to disturb the development and functioning of many organ systems, particularly the central nervous system. Once in the body, lead bio-accumulates resulting in an elevated total body burden (i.e., amount of lead in the body), and is stored in the bones for decades. The lead is then released into the blood stream when the body normally releases calcium, such as during pregnancy and the onset of old age.

19. In adults, chronic exposure to low levels of lead may cause memory and concentration problems, hypertension, cardiovascular disease, and damage to the male reproductive system. Exposure to lead before or during pregnancy can alter fetal development and cause miscarriages.

20. While potentially harmful to individuals of all ages, lead exposure is especially harmful to children, especially those under the age of six. Children's heightened risk level is due not only to children's normal hand-to-mouth behavior which increase their exposure to lead by ingestion, but also children's increased physiological ability to absorb lead into their bodies. Furthermore, the rapidly developing nature of infant's and children's central nervous systems make children most at risk of permanent harm from exposure to lead. Exposure to lead in children can cause learning disabilities, reduced intelligence, behavioral problems, growth impairment, permanent hearing and visual impairment, and other damage to the brain and nervous system. As little as one lead paint chip the size of a dime can poison a child.

21. Currently, deteriorated lead-based paint is considered the most significant high-dose source of lead exposure for pre-school children.

22. Although the use of lead-based paint in residential dwellings was banned in 1978 by the U.S. Consumer Product Safety Commission, lead-based paint continues to exist in a significant percentage of pre-1978 housing. The likelihood, extent and concentration of lead-based paint in a building in many instances can be correlated with the age the building.

23. The risk of exposure to lead from lead-based paint is higher when the paint is in a deteriorated state (i.e., chipping, peeling or flaking) or is found on accessible, chewable, impact or friction surfaces. Normal wear of lead-based paint (especially lead-based paint on windows, doors and other impact or friction surfaces) can result in the generation of fine lead dust particles. Dust containing lead is thought to be a major pathway by which people, especially young children, are exposed to lead. Additionally, normal wear of lead-based paint can result in the generation of lead-based paint chips and flakes. Young children are especially susceptible to lead poisoning from exposure to lead as they may ingest lead-based paint chips and flakes or come into contact with dust that contains lead. Overall, the potential for deteriorating or disturbed lead-based paint to contaminate a household makes lead-based paint the greatest source of public health concern regarding lead exposure.

24. The most common screening and diagnostic measure of a body's level of absorption of lead (i.e., body-lead burden) is blood-lead concentration measured in micrograms of lead per deciliter of blood (μg/dl).

25. Human characterization studies, which investigate the association between elevated blood-lead concentrations and elevated levels of lead in a child's residential environment, have demonstrated that elevated blood-lead concentrations are associated with elevated lead levels in dust and deteriorated paint in a surrounding environment.

26. Adverse health effects have been documented at blood-lead concentrations as low as 10 µg/dl. In some instances, children with blood-lead concentrations at or above 10 µg/dl may require more frequent rescreening and may require environmental or medical interventions. The Center for Disease Control and Prevention recommended, as part of its Statement on Preventing Childhood Lead Poisoning, community-wide intervention activities for communities with a number of children with blood-lead concentrations equal to or greater than 10 µg/dl. Higher levels of blood-lead poisoning are typically associated with more pronounced health effects observed in a broader range of a child's body systems. As a result, medical and environmental interventions are recommended for children with blood-lead concentrations equal to or above 20 µg/dl. Furthermore, environmental investigation (i.e., a home inspection) and remediation of residential dwelling units are recommended in situations involving children with persistent blood lead levels of 15-19 µg/dl. In a notice of proposed rulemaking pursuant to the Toxic Substances Control Act ("TSAC"), 15 U.S.C. § 2681 *et seq.*, EPA notes that studies indicate numerous adverse health effects have been related to blood-lead concentrations down to levels of at least 10-15 µg/dl. It also states that the collective impact of effects on young children with blood-lead concentrations as low as 10 µg/dl are clearly adverse. 63 Fed. Reg. 30302, 30316 (June 3, 1998).

12. Excessive exposure to lead affects children across all socio-economic strata in all regions of the country. Children in poor inner-city families, however, tend to be disproportionately affected because lead-based paint wastes are more prevalent in the older housing found in urban areas and such housing stock tends to be typically less well maintained.

13. Maintenance workers who disturb lead-based paint during ordinary maintenance practices, such as dry scraping or sanding lead paint without proper precautions, are at risk from lead poisoning, as are their children from dust containing lead that is transported home on their work clothes.

14. Lead poisoning can be prevented. Intervention studies, which investigate the impact on children's blood-lead concentrations of reducing childhood lead exposure, indicate that reductions in blood-lead concentrations have occurred following interventions aimed at lead in paint and dust. Such intervention activities

can include, *inter alia*, the use of interim control measures to temporarily control lead levels in a dwelling in the short term, long term abatement measures designed to permanently remove or encapsulate sources of lead exposure in a dwelling, and post-abatement cleaning and clearance evaluation to remove dust containing lead from a dwelling that may have been generated as a result of abatement activities.

15. In the aforementioned TSCA notice of proposed rulemaking, EPA discusses the connection between adverse health effects and lead-based paint, and identifies a lead-based paint hazard that "would result in adverse human health effects" as "dust that contains lead equal to or exceeding 50 μg/ft2 on uncarpeted floors or 250 μg/ft2 on interior window sills based on wipe samples."

16. The U.S. Department of Housing and Urban Development has established new, more stringent interim levels for lead dust in residential interiors which take effect in September of 2000. In discussing these standards, HUD acknowledges the relationship between dust that contains lead in houses and elevated blood lead levels in children. Its analysis indicates that if floor dust in a house contains 100 μg/ft2 of lead, then nearly 10% of children in such a house may have blood lead levels equal to or greater than 15 μg/dl, and 28% may have a blood lead level greater than or equal to 10 μg/dl. 64 Fed. Reg. 50140 (Sept. 15, 1999). HUD's current standards establish clearance standards concerning concentrations of lead in dust in a residential interior. The dust clearance standards listed in Table I, below, establish the maximum amount of lead that may be present in dust after lead abatement activity is performed. With the exception of having a more stringent definition of "lead-based paint", the District of Columbia has adopted the HUD current interim dust clearance standards.

Table 1:

	Lead Exposure Limits

Dust Clearance Levels	Floors -- 100µg/ft2 Interior Window Sills -500µg/ft2 Window Wells/Troughs - 800µg/ft2
Paint	1.0mg/cm2 or 5,000 ppm - Federal def'n of Lead-Based Paint 0.7mg/cm2 or 0.5% by wt - District def'n of Lead-Based Paint
Soil	400 ppm

The federal guideline for lead-based paint chips is 0.5% lead by weight.

17. Respondent, the 17th Street Revocable Trust, of 471 H. St., N.W., Washington, D.C., is a trust.

18. Respondent, John R. Redmond, an individual currently residing at 7312 Brookstone Ct. in Potomac, Maryland, is a former Trustee of the 17th Street Revocable Trust and is the current Managing Member of the New 4775 Huron, L.L.C.. Respondent, the New 4775 Huron, L.L.C. is a current trustee of the 17th Street Revocable Trust.

19. Since at least July of 1995, Respondent, the 17th Street Revocable Trust, has owned the 77-unit multi-family residential building located at 3220 17th Street, N.W., in Washington, D.C. (the "Property"). The aforesaid building, otherwise known as "The Argyle", was built in 1914 and includes a YMCA childcare center located on the ground floor. The Respondents, at all times relevant to this Order, have been ultimately responsible for and have contributed to the maintenance, or lack thereof, of the Property, including, but not limited to, lack of maintenance of painting (including, lead-based paint) and lack of cleanup of lead-based paint wastes in the residential units, interior common areas and interior maintenance/mechanical areas of the Property.

20. Upon receipt of information concerning a child with a blood-lead level equal to or greater than 20 µg/dl or equal to or greater than 15µg/dl on more than two occasions during any six month period of time, the District of Columbia typically conducts a lead-based paint inspection of the child's primary residence, including any common areas where the child may be exposed to lead-based paint. Typically, the District receives reports concerning children with elevated blood-lead levels from pediatricians who have performed blood tests on the children. If the District identifies in the primary residence of the child the presence of lead-based paint in a quantity that presents a hazard to the health of the child or any visitor to the residence under the

age of eight, the District issues a Housing Deficiency Notice ordering abatement of the lead-based paint.

A. Since 1990, the District of Columbia has received information concerning at least five instances of lead poisoned children who reside in the Property, including two children with blood-lead levels greater than 20 µg/dl. In response, the District conducted lead-based paint inspections of the residential units of these children in the Property and determined that the presence of lead-based paint and lead-based paint waste in these units presented a hazard to the health of children in the units or any visitor to the residence under the age of eight, and that abatement action was required. As a result, the District issued the following Housing Deficiency Notices concerning lead-based paint violations at the Property:

1. On May 16, 1990, the District of Columbia Department of Consumer and Regulatory Affairs ("DCRA") issued a Housing Deficiency Notice concerning lead-based paint violations in Unit 204 of the Property. The Notice made a finding that lead-based paint was present in the unit in a quantity constituting a hazard to the health of one or more of the unit's inhabitants, or a visitor, under the age of eight.

2. On June 17, 1991, DCRA issued a Housing Deficiency Notice concerning lead-based paint violations in Unit #201 of the Property. The Notice lists three lead-based paint violations, each of which included a finding that lead-based paint was present in the unit in a quantity constituting a hazard to the health of one or more of the unit's inhabitants, or a visitor, under the age of eight.

3. On July 1, 1993, DCRA issued a Housing Deficiency Notice concerning lead-based paint violations in Unit #405 of the Property. The Notice lists one lead paint violation, including a finding that lead-based paint was present in the unit in a quantity that constituted a lead hazard to one or more of the unit's inhabitants, or a visitor, under the age of eight.

4. On June 23, 1994, DCRA issued a Housing Deficiency Notice concerning lead-based paint violations in Unit #101 of the Property. The Notice listed five lead-based paint violations, including a finding that lead-based paint was present in quantities constituting a hazard to the health of one or more of the inhabitants, or a visitor, under the age of eight.

5. On March 13, 1996, DCRA issued a Housing Deficiency Notice concerning lead-based paint violations in Unit #305 of the Property. The Notice lists three separate lead-based paint violations, each of which included finding that

lead-based paint was present in a quantity that constituted a hazard to the health of one or more inhabitants, or a visitor, under the age of eight.

6. On September 23, 1997, DCRA issued a Housing Deficiency Notice concerning lead-based paint violations in Unit #417 of the Property. The Notice lists two lead-based paint violations, including finding that lead-based paint was present in quantities to constitute a hazard to the health of one or more of the inhabitants, or a visitor, under the age of eight.

5. In addition to the six Housing Deficiency Notices listed above, the District of Columbia, in 1997, also received information concerning a lead-poisoned child again in Unit #305 of the Property. However, despite repeated attempts, the District was unable to make contact with the resident in this unit to schedule an inspection of the unit. This case was closed by the District on June 17, 1997. The Upper Cardoza Health Clinic also provided information to the United States concerning two additional children who resided in the Property, and who were identified with blood-lead levels above 20 ug/dl. The test dates were November and December of 1997.

23. Between March 17, 2000 and May 8, 2000, Donald F. Wallace, a certified lead-based paint risk assessor, of Wallace & Prior Environmental Services, located at Suite 201, 301 North Front Street, Baltimore, Maryland, conducted lead-based paint inspections (lead-based paint survey and modified risk assessment) of the Property. Wallace & Prior Environmental Services was under contract with the District of Columbia which was responding to reports of lead-poisoned children living in the Property. The inspections, which utilized the HUD/District of Columbia dust clearance standards, revealed the presence of extremely high levels of lead-based paint and lead-based paint waste in residential units and an interior common area of the Property. The following is a summary of the findings from the inspections:

1. Unit #101 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least twelve (12) painted surfaces in the unit, including on two windows and a closet door casing and support shelf in the living room, and on a window in the kitchen of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit including, but not limited to, in a window well (also known as a window trough) in the living room (74,289 $\mu g/ft^2$), in a window well of the kitchen (398,494 $\mu g/ft^2$) and on a window sill (also known as a window stool) in the kitchen (2,816 $\mu g/ft^2$).

2. Unit #108 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least fifteen (15) painted surfaces in the unit, including, on a window in the living room, on a window, door and wall in one bedroom, on a window in a second bedroom, and on a door in the bathroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead-based paint chip analysis confirmed the presence of lead-based paint chips (i.e. lead-based paint waste) in the unit, including, but not limited to, in a window well (27.61% lead by weight) in a bedroom of the unit.

3. Unit #111 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least thirteen (13) painted surfaces in the unit, including, on a closet door in the living room, on a window in the kitchen, on a wall and window in the bedroom, and on a door in the bathroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling, and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (13,276 µg/ft^2) in the kitchen of the unit.

4. Unit #117 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least nine (9) painted surfaces in the unit, including, on a window in the living room, on a window in the bedroom, on a window in the bathroom and on a window in the kitchen of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (595,900 µg/ft^2) in the living room and in a window well (74,810 µg/ft^2) in the bathroom. Additionally, lead-based paint chip analysis revealed the presence of lead-based paint chips (i.e., lead-based paint waste) in a window well (17.69 % lead by weight) in the bedroom and in a window well in the kitchen (25.87 % lead by weight) of the unit.

5. Unit #121 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least six (6) painted surfaces in the unit, including, on a window in the living room/bedroom, on a window in the kitchen, and on the ceiling in the bathroom/closet of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling, and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but

not limited to, in a window well (233,744 μg/ft^2) in the living room/bedroom and in a window well (19,246 μg/ft^2) in the kitchen.

6. Unit #204 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least twelve (12) painted surfaces in this unit, including, on a window in the bedroom, on a window in a second bedroom, on a window in the bathroom, on a window in the kitchen, and on the floor of an interior common area of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead-based paint chip analysis revealed the presence of lead-based paint chips (i.e., lead-based paint waste) in the unit, including, but not limited to, on a window sill in the kitchen (1.09% lead by weight) of the unit.

7. Unit #205 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least four (4) painted surfaces in this unit, including on a window in the living room, on a window in a bedroom, on a window in the kitchen, and on a window in the bathroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (59,547.94 μg/ft^2) in the living room, in a window well (121,746 μg/ft^2) in a bedroom, in a window well (1,356,261 μg/ft^2) in the kitchen, and in a window well (1,094,297 μg/ft^2) and on the floor (293 μg/ft^2) in the bathroom of the unit. Lead-based paint chip analysis confirmed the presence of lead-based paint chips (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window jamb in the bathroom (15.61% lead by weight) of the unit.

8. Unit #214 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least seventeen (17) painted surfaces in this unit, including on a window in the kitchen, on a window in the living room, on walls and a door in one bedroom, and on a window in the second bedroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (684,250 μg/ft^2) in the kitchen, in a window well (83,556 μg/ft^2) in the living room, and in a window well (691,700 μg/ft^2) and on a window sill (1,101 μg/ft^2) in a bedroom of the unit.

9. Unit #216 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least nine (9) painted surfaces in the unit, including on a window in the living room/bedroom and on a window in the kitchen of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (438,367 µg/ft^2) in the living room/bedroom and in a window well (416,404 µg/ft^2) in the kitchen of the unit.

10. Unit #219 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least ten (10) painted surfaces in the unit, including on a window in the kitchen and a window in the living room/bedroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (3,781 µg/ft^2) and on a window sill (640 µg/ft^2) in the kitchen and in a window well (13,287 µg/ft^2) and on a window sill (4,446 µg/ft^2) in the living room/bedroom of the unit.

11. Unit #220 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least five (5) painted surfaces in the unit, including on a window in the kitchen and on a window in the living room/bedroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (114,320 µg/ft^2) in the living room/bedroom of the unit.

12. Unit #221 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least ten (10) painted surfaces in the unit, including on a window in a bedroom, on a window in a second bedroom and on a window in the kitchen of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (103,002 µg/ft^2) in a bedroom, in a window well (79,729 µg/ft^2) and on a window sill (2,167 µg/ft^2) in a second bedroom, and in a window well (4,041 µg/ft^2) in the kitchen of the unit.

13. Unit #303 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least twelve (12) painted surfaces, including on a door and window in the living room/bedroom, and on a window in the kitchen of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (6,839 µg/ft^2) in the kitchen of the unit.

14. Unit #309 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least fourteen (14) painted surfaces in the unit, including on walls and a window in the kitchen, and on walls, a window and a closet door in a living room/bedroom of the unit. Lead -based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well (704,332 µg/ft^2) and on the floor (194 µg/ft^2) of the kitchen, and in a window well (57,833 µg/ft^2) and on a window sill (1,409 µg/ft^2) in the living room/bedroom of the unit.

15. Unit #310 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least ten (10) painted surfaces in the unit, including on a closet door and ceiling in the living room, on a wall in a bedroom, on a wall and window in the kitchen, and on a door in the bathroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead-based paint chip analysis confirmed the presence of lead-based paint chips (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well in the kitchen (14.69% lead by weight) of the unit.

16. Unit #316 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least ten (10) painted surfaces in the unit, including lead-based paint on a window in a bedroom and on a window in the kitchen of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well in the living room of the unit (4,934,400 µg/ft^2).

17. Unit #318 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least nine (9) painted surfaces in the unit, including lead-based paint on windows in two (2) bedrooms, the

bathroom and kitchen of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well in Bedroom #2 (117,619 $\mu g/ft^2$) and in a window well in the kitchen (103,465 $\mu g/ft^2$). Lead-based paint chip analysis confirmed the presence of lead-based paint chips (i.e., lead-based paint waste) in the unit, including, but not limited to, on a sash (1.01% lead by weight) and in a window well (29.31 % lead by weight) in the bathroom of the unit.

18. Unit #406 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least twelve (12) painted surfaces in the unit, including lead-based paint on a window and wall in the kitchen and on a window, closet support shelf and wall in the living room/bedroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well in the kitchen (29,395 $\mu g/ft^2$) and in a window well in the living room/bedroom (94,654 $\mu g/ft^2$) of the unit.

19. Unit #406 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least thirty (30) painted surfaces in the unit, including lead-based paint on a window and wall in the kitchen, on a wall, door and window in the living room, on a wall and window in a bedroom and on a wall, window and closet door casing in the second bedroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well in the kitchen (210,627 $\mu g/ft^2$), in a window well in living room (528,608 $\mu g/ft^2$), and in a window well in a bedroom (414,832 $\mu g/ft^2$) of the unit. Lead-based paint chip analysis confirmed the presence of lead-based paint chips (i.e., lead-based paint waste) in the unit, including, but not limited to, on a sash (9.27% lead by weight) in the living room of the unit.

20. Unit #410 – Levels of lead-based paint exceeding District of Columbia standards (0.7 mg/cm^2) were identified on at least twenty-three (23) painted surfaces in the unit, including lead-based paint on a wall and window in the kitchen, on a wall and closet door casing in the living room/bedroom, on a wall, window, baseboard and door in a bedroom, and on a door and casing in the bathroom of the unit. Lead-based paint in a poor/deteriorated condition (i.e., chipping, peeling and/or flaking) was observed in the unit. Lead dust

wipe analysis confirmed the presence of dust containing lead (i.e., lead-based paint waste) in the unit, including, but not limited to, in a window well in the kitchen (358,345 $\mu g/ft^2$) of the unit.

10. Lead-based paint wastes, including dust containing lead and detached lead-based paint chips and flakes, are currently present in residential units of the Property. The aforementioned lead-based paint inspections of twenty (20) residential units in the Property revealed levels of dust containing lead that significantly exceed the levels established in the interim dust clearance standards established by HUD and adopted by the District of Columbia, and the levels that EPA stated "would result in adverse human health effects" in the proposed notice of TSCA rulemaking. In many instances, the lead-dust wipe analysis and lead chip analysis readings by the Wallace & Prior inspections revealed levels of dust containing lead and lead-based paint chips that are more than 100 times greater than the applicable HUD interim standards. Thus, whatever the debate may be as to what final federal standards may be appropriate, the levels in this case clearly far exceeded any levels that would be considered hazardous under any standard being considered by the federal government.

25. Dust that contains lead, and detached lead-based paint chips or flakes in the Property are refuse and discarded materials.

26. The dust containing lead and detached lead-based paint chips and flakes (i.e., lead-based paint waste) at the levels currently present at the Property may present an imminent and substantial endangerment to human health and the environment because they cause elevated blood lead levels associated with adverse human health effects, many of them neurological, such as altered synthesis of heme, reduced vitamin D hormone synthesis, alterations of brain electrical activity, altered nerve conduction, delays in cognitive and sensory-motor development, decreased stature or growth, reduced weight at birth, and increased blood pressure. These adverse effects present a substantial risk to the health of the tenants of the property, especially children under the age of six, maintenance workers at the Property and their family members, and visitors to the Property.

27. Respondents, either directly or indirectly through contractors or employees, are currently and, at all times relevant to this Order, have been responsible for the maintenance of the Property, including, but not limited to, the maintenance of the residential units and common areas of the property, maintenance of paint and lead-based paint in the residential units and common areas of the Property, and clean-up or, lack thereof, of lead-based paint waste in the residential units and common areas of the Property.

VI. CONCLUSION OF LAW AND DETERMINATIONS

Based upon the Findings of Fact set forth above and EPA's review of the information in the Administrative Record for this Order, EPA makes the following Conclusions of Law and Determinations:

A. Respondents are "persons" within the meaning of that term as defined by RCRA Section 1004(15), 42 U.S.C. § 6903(15).

2. The lead-based paint waste in the Property, as identified in the Findings of Facts Section of this Order, above, is "solid waste" within the meaning of that term as used in RCRA Section 7003, 42 U.S.C. § 6973, and as defined in RCRA Section 1004(27), 42 U.S.C. § 6930(27) .

C. The "solid waste" referred to in Paragraph B of this Section, above, has been and/or is currently being handled, stored, treated and/or disposed of at the Property.

D. Based on the information described above, EPA has determined that there may be an imminent and substantial endangerment to human health and the environment arising from the past or present handling, storage, treatment or disposal of lead-based paint waste (i.e., "solid waste") at and/or from the Property.

E. Respondents are persons who have contributed to and are contributing to the handling, storage, treatment and/or disposal of such "solid waste" at the Property which may present an imminent and substantial endangerment to human health and the environment.

F. The actions required by this Order are necessary to protect human health and the environment.

VII. WORK TO BE PERFORMED

Based upon the foregoing Findings of Fact, Conclusions of Law and Determinations, and the Administrative Record of this Order, EPA hereby orders that Respondents comply with the following provisions, including, but not limited to, requirements set forth in all attachments to this Order, documents incorporated by reference into this Order, and schedules and deadlines in this Order, attached to this Order, or incorporated by reference into this Order, and perform the following work:

1. Statement of Work: Respondents are ordered to perform the Work Tasks and comply with the Work Schedule set forth in the "Statement of Work" ("SOW"), attached to this Order as Attachment II.

2. Work Performance Testing: With regard to all Work performed by Respondents in compliance with this Order, Respondents shall conduct performance testing, and collect and maintain data pursuant to the requirements of the SOW.

3. Work Progress Reports: Respondents shall submit, by the tenth (10^{th}) day of each calender month following the effective date of this Order until completion of the Work Tasks required by this Order, a written Work Progress Report to EPA concerning Work Tasks undertaken pursuant to this Order, unless otherwise directed in writing by the EPA Project Coordinator. These Work Progress Reports shall contain the following information:

    1. By Task, a description of the Work conducted pursuant to this Order during the reporting period and an estimate of the percentage of the Work completed;

    2. A description of all Work scheduled for completion during the reporting period which were not completed along with a statement indicating the reasons such Work were not completed and an anticipated completion date;

    3. Copies of all data, monitoring, sampling and test results, and other laboratory deliverables received by Respondents, if any, pursuant to the SOW during the reporting period, and for which Respondents have completed quality assurance validation. All such monitoring data shall be submitted in electronic format as comma delimited Lotus or Excel spreadsheet; and

    4. A description of the activities (i.e., Work) that are scheduled for the following reporting period.

4. Submissions Requiring EPA Approval

    1. After review of any plan, report, schedule, or other item that is required to be submitted for approval pursuant to this Order, EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission with modifications; (c) disapprove, in whole or in part, the submission, directing the Respondents to resubmit the document after modification to address EPA's comments; or (d) any combination of the above.

2. In the event of approval or approval with modifications by EPA of a submission by Respondents, Respondents shall proceed to take any action required by such submissions, as approved by EPA. In the event Respondents receive a notice of disapproval of a required submission, Respondents shall correct the noticed deficiencies and resubmit the corrected version within ten (10) days of receipt of EPA's notice of disapproval, unless such deadline is extended in writing by EPA. Notwithstanding the receipt of a notice of disapproval, Respondents shall, at the direction of EPA, proceed to take any action required by any non-deficient portion of a submission.

3. All items required to be submitted to EPA under this Order shall, upon approval by EPA, be incorporated into this Order as if fully set forth at length herein and shall be enforceable under this Order. In the event EPA approves a portion of an item required to be submitted to EPA under this Order, the approved portion shall be incorporated into this Order as if fully set forth at length herein and shall be enforceable under this Order.

5. Inspections:

1. Pre-Final Inspection: Upon completion of the Work Tasks as required by Paragraph A, above, Respondents shall contact the EPA Project Coordinator for the purpose of scheduling and conducting a Pre-Final Inspection of the Property with EPA to confirm that all Work Tasks as required by this Order have been completed in accordance with this Order.

2. Pre-Final Inspection Report: Within thirty (30) calendar days of the Pre-Final inspection, Respondents shall submit to EPA a Pre-Final Inspection Report that will identify all unfinished tasks required by the SOW, outline the actions necessary to complete the Work set forth in the SOW, and propose a schedule to complete these actions.

3. Final Inspection: Upon completion of any outstanding Work Tasks as set forth in the Pre-Final Inspection Report, Respondents shall notify the EPA Project Coordinator for the purpose of scheduling a Final Inspection of the Property. The Final Inspection shall consist, *inter alia*, of a walk-through inspection by EPA and Respondents of the Property and shall utilize the Pre-Final Inspection Report as a checklist to confirm that the Work Tasks listed as being incomplete in the Pre-Final Inspection Report have been completed in accordance with the requirements of this Order.

6. Off-Site Shipments

All hazardous substances, hazardous wastes, solid wastes, pollutants and/or contaminants transported from the Property pursuant to this Order for treatment, storage, or disposal off-site shall be treated, stored, or disposed of at a facility licensed to accept and treat, dispose or handle such wastes, and shall be managed in accordance with all applicable federal, state and local laws and regulations.

7. Sampling and Data

Respondents shall submit to EPA the results of all sampling and/or tests or other data generate by, or on behalf of Respondents in accordance with the requirements of this Order. At the request of EPA, Respondents shall provide or allow EPA or its authorized representatives to take split or duplicate samples of all samples collected by Respondents pursuant to this Order. Nothing in this Order shall limit or otherwise affect EPA's authority to collect samples pursuant to applicable law, including, but not limited to, RCRA and CERCLA.

8. Quality Assurance

In order to provide quality assurance and maintain quality control throughout all samples collection and analysis activities, Respondents shall use EPA-approved quality assurance, quality control, and chain-of-custody procedures. In addition, Respondents shall:

1. Ensure that each laboratory used by Respondents for analyses performs such analyses according to the EPA methods included in "Test Methods for Evaluating Solid Waste" (SW-846, November 1986), as amended, or other methods deemed satisfactory to EPA. If methods other than EPA methods are to be used, Respondents shall submit all protocols to be used for analyses to EPA for approval at least thirty (30) calendar days prior to the commencement of analyses and shall obtain EPA approval prior to the use of such protocols;

2. Ensure that each laboratory used by Respondents for analyses participates in a quality assurance/quality control program equivalent to that which is followed by EPA. As part of such a program, and upon request by EPA, each laboratory shall perform analyses of samples provided by EPA to demonstrate the quality of analytical data; and

3. Ensure that EPA personnel and/or EPA authorized representatives are allowed reasonable access to the laboratory and personnel utilized by Respondents for analyses performed pursuant to this Order.

VIII. NOTICE OF INTENT TO COMPLY

Respondents shall notify EPA in writing by the effective date of this Order, by 5:00 P.M. (E.S.T.) Wednesday, July 12, 2000, of Respondents' intent to comply with this Order. Respondents' failure to provide such notification within this time period shall be deemed a violation of this Order.

IX. DESIGNATION OF PROJECT COORDINATOR

A. Respondents' Project Coordinator - Within ten (10) calendar days after the effective date of this Order, Respondents shall designate a Project Coordinator who shall be responsible for the performance of all work and actions required to be taken pursuant to this Order. Respondents shall submit the designated Project Coordinator's name, address, telephone number, and qualifications to EPA. To the greatest extent possible, the Project Coordinator shall be present on-site or readily available during all work at the Property. EPA retains the right to disapprove of any Project Coordinator named by the Respondents. If EPA disapproves of a Project Coordinator designated by Respondents, Respondents shall notify EPA, within ten (10) calendar days of receipt of EPA's disapproval, of the name, address and qualifications of another Project Coordinator. Receipt by Respondents' Project Coordinator of any notice, document or communication from EPA relating to this Order shall constitute receipt by Respondents. Respondent shall have the ability to change its Project Coordinator by notifying EPA's Project Coordinator, twenty (20) calendar days prior to the proposed change of Project Coordinator, of the reason for Respondents' need to change its Project Coordinator and name and address of the proposed replacement Project Coordinator. Respondents must obtain EPA's approval of a replacement Project Coordinator prior to changing its Project Coordinator.

B. EPA's Project Coordinator - EPA has designated Grant Dufficy of U.S. EPA Region III, as its Project Coordinator. The EPA's Project Coordinator shall be EPA's primary designated representative concerning the Property. Respondents shall direct all communications and submissions required by this Order to the Project Coordinator at the following address:

Grant Dufficy
RCRA Compliance and Enforcement Branch
U.S. EPA Region III
Mail Code (3WC31)
1650 Arch Street
Philadelphia, PA 19103-2029
Phone: (215) 814-3455.

EPA shall have the right to change its designated Project Coordinator. EPA shall notify the Respondents two (2) days before such a change is made. Notification may initially be made orally, but shall be followed promptly by written notice.

X. AUTHORITY OF THE EPA'S PROJECT COORDINATOR

EPA's Project Coordinator shall be responsible for overseeing the proper and complete implementation of this Order. The Project Coordinator shall have the authority to halt, conduct, or direct any action required by this Order at the Property. Absence of the EPA Project Coordinator from the Property shall not be cause for stoppage of work unless specifically directed by the EPA Project Coordinator.

XI. SITE ACCESS

A. EPA and/or its authorized representatives shall have authority to enter and freely move about the Property at all reasonable times for any purpose consistent with this Order, including, among other things to: interview Respondents, Respondents' contractors or any other person performing work delineated by this Order on behalf of Respondents; inspect and copy records, operating logs, sampling and monitoring data, contracts, and other documents relevant to the implementation of this Order; photograph, videotape and or record using any media or means, the Property and any and all work being performed at the Property pursuant to this Order; and review and/or conduct such tests, sampling, work or monitoring as EPA may deem necessary and to verify data and information submitted by Respondents to EPA pursuant to this Order. EPA shall be solely responsible for assuring compliance by its personnel and consultants with EPA's health and safety requirements during inspections.

2. Nothing in this Order shall limit or be interpreted as limiting or affecting EPA's right of entry or inspection authority under federal law, including but not limited to, RCRA or the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§ 9601 *et seq.*

3. To the extent that work required by this Order or any approved Work Plan prepared pursuant hereto must be done on property not owned or controlled by Respondents, Respondents shall use their best efforts to obtain site access agreements from the present owner(s) and/or lessee(s) of such property, as appropriate, within ten (10) calendar days of receipt of EPA approval of any Work Plan prepared pursuant to this Order. The term "best efforts" as used in this paragraph shall include at a minimum, but shall not be limited to, a certified letter from Respondents to the present owner(s) and/or lessee(s) of such property requesting access agreements to permit Respondents, EPA, and its authorized representatives to access such property and the payment of reasonable sums of money in consideration of access. "Reasonable sums of money" means the fair market value of the right of access necessary to implement the requirements of this Order. In the event that agreement for access is not obtained within ten (10) calendar days after receipt of EPA approval of any Work Plan prepared pursuant to this Order which requires work on property which is not owned or controlled by Respondents, Respondents shall notify EPA in writing within three (3) calendar days after

failure to obtain such agreements regarding both the efforts undertaken to obtain access and the failure to obtain such agreements.

XII. RECORD RETENTION AND PRESERVATION

A. Respondents shall preserve, during the pendency of this Order and for a minimum of at least three (3) years after its termination, all documents and records in its custody, control or possession and in the custody, control or possession of its employees, agents, assigns, contractors, subcontractors or consultants, which in any manner relate to this Order or to the performance of work under this Order. At the end of this three (3) year period and at least thirty (30) calendar days before any document or record is destroyed, Respondents shall notify and make available to EPA such documents and records, or shall provide the originals or accurate, true and complete copies of such documents and records to EPA. Respondents shall not destroy any document or record to which EPA has requested access for inspection or copying until EPA has obtained such access or copies or withdrawn its request for such access or copies.

B. Respondents may assert a business confidentiality claim pursuant to 40 C.F.R. Part 2, Subpart B, with respect to part or all of any information submitted to EPA pursuant to this Order. Analytical and other data shall not be claimed as confidential by the Respondents. If no such claim accompanies the information when it is received by EPA, EPA may make it available to the public without further notice to Respondents.

3. Nothing in this Order shall in any way limit or be interpreted as limiting EPA's authority under RCRA Section 3007, 42 U.S.C. § 6927, or any other access or information gathering authority available to EPA.

XIII. ENFORCEMENT: PENALTIES FOR NONCOMPLIANCE

1. Violation of any provision of this Order may subject Respondents to civil penalties of up to five thousand five hundred dollars ($5,500.00) per violation per day, as provided in RCRA Section 7003(b), 42 U.S.C. § 6973(b), as amended by the Debt Collection Improvement Act of 1996. (*See also* 40 C.F.R. Part 19).

2. Should Respondents violate this Order or any portion thereof, EPA may seek judicial enforcement of this Order in accordance with RCRA Section 7003(b), 42 U.S.C. § 6973(b).

XIV. RESERVATION OF RIGHTS

1. Except as specifically provided in this Order, nothing herein shall limit the power and authority of the United States or the EPA to take, direct, or order any and all actions necessary to protect health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, hazardous waste or solid waste on, at, or from the Property. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring the Respondents in the future to perform additional activities pursuant to RCRA or any other available legal authority.

2. EPA expressly reserves all of its statutory and regulatory powers, authorities, rights and remedies, both legal and equitable, that may pertain to Respondents' failure to comply with any applicable laws and regulations and with any of the requirements of this Order, including the right to disapprove work performed by Respondents pursuant to this Order, to require Respondents to correct or perform again any work disapproved by EPA and to request that Respondents perform tasks in addition to those provided in the Scope of Work, Work Plans and this Order.

3. EPA reserves the right to take any enforcement action against Respondents pursuant to any available legal authority to seek injunctive relief, monetary penalties, and/or punitive damages for any violations of law or this Order.

4. Compliance with the terms of this Order shall not resolve any claims the United States, including the U.S. Department of Housing and Urban Development ("HUD") or EPA, may have for violations of Section 1018 of the Residential Lead-Based Paint Hazard Reduction Act of 1992, 42 U.S.C. 4852d.

5. Compliance by Respondents with the terms and conditions of this Order shall not relieve the Respondents of their obligations to comply with RCRA or any other applicable federal, state, or local laws and regulations.

6. This Order is not intended to be, nor shall it be construed as a permit. This Order does not relieve the Respondents of any obligation to obtain and comply with any local, state or federal permit or approval.

7. EPA reserves the right to perform any portion of the work requested herein or any additional site characterization, feasibility study, and/or response/corrective actions it deems necessary to protect health or welfare or the environment. EPA may exercise its authority under RCRA, CERCLA or any other authority to undertake or require performance of response actions at any time. EPA reserves the right to seek reimbursement from Respondents for costs incurred by the United States in connection with any such response actions. Notwithstanding compliance with the terms of this Order, Respondents are not released from liability, if any, for the costs of any such response actions taken by EPA.

XV. NOTICE OF NON-LIABILITY OF UNITED STATES AND EPA

8. By issuance of this Order, the United States and EPA assume no liability for injuries or damages to any persons or any property resulting from any acts or omissions of Respondents. Neither the United States nor EPA shall be liable for any claim or cause of action arising from or on account of any act, or the omission by Respondents, their officers, directors, employees, agents, successors, representatives, assigns, contractors or consultants in carrying out the activities required by this Order.

2. Neither the United States nor EPA shall be deemed a party to any contract entered into by the Respondents or their directors, officers, employees, agents, successors, representatives, assigns, contractors or consultants in carrying out any actions or performing any work pursuant to this Order.

XVI. OTHER CLAIMS

Nothing in this Order shall constitute or be construed as constituting a satisfaction of or release from any claim, cause of action or demand in law or equity against the Respondents or any person, firm, partnership, corporation of other entity not a party to this Order, for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituent, hazardous substance, hazardous waste, solid waste, pollutant or contaminant found at, taken to, or taken from the Property, or for any liability that may arise under any federal, state or local law, regulation, or requirement, or under any federal or state common law.

XVII. OTHER APPLICABLE LAWS

1. All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable federal, state and/or local laws and regulations.

2. Respondents shall obtain or require its authorized representatives to obtain all permits and approvals, required under federal, state and/or local laws and regulations, that are necessary to comply with the terms and conditions of this Order.

XVIII. MODIFICATIONS

1. This Order may be modified or amended by the EPA Region III Regional Administrator. Such modifications or amendments shall be effective on the date they are signed by the Regional Administrator or such other date as set by the Regional Administrator. However,

modifications or amendments to any Work Plan or schedule (including the attached Statement of Work) may be made and approved in writing by EPA's Project Coordinator.

2. Respondents must, in writing, seek permission from EPA to make any change to any Work Plan or schedule (including the attached Statement of Work) by submitting a written request to EPA's Project Coordinator outlining the proposed modification and the basis or rationale for such a modification. No modification may be made by Respondents unless first approved in writing by EPA.

3. Any reports, plans, specifications, schedules, other submissions and/or attachments required by this Order or concerning any modification to the terms and conditions of this Order are, upon written approval by EPA, incorporated into this Order. Any non-compliance by Respondents with such modified and/or EPA-approved reports, plans, specifications, schedules, attachments and/or documents shall be considered a violation of this Order and shall subject Respondents to a possible enforcement action under applicable law.

4. No informal advice, guidance, suggestion, or comments by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by the Respondents shall relieve or be construed as relieving the Respondents of their obligations to obtain written approval from EPA, if and when required by this order, and to comply with all requirements of this Order unless formally modified by EPA.

XIX. NOTICE OF COMPLETION

The provisions of this Order shall be deemed satisfied by Respondents upon Respondents' receipt of a written Notice of Completion from EPA that Respondents have demonstrated, to the satisfaction of EPA, that the terms of this Order, including any additional tasks determined by EPA to be required pursuant to this Order, have been satisfactorily completed. This notice, however, shall not terminate Respondents' obligations to comply with any continuing obligations under this Order, including the record retention requirements of Section XI of this Order (Record Retention and Preservation) and any monitoring of the Property, or to comply with any applicable federal, state or local laws and requirements. If EPA determines that the work performed by Respondents has not been completed in accordance with this Order's terms and conditions, EPA shall notify Respondents, provide a list of the deficiencies, and require Respondents to correct such deficiencies within a specified time period. The Respondents shall correct the deficiencies in accordance with this Order's terms and conditions. Failure by Respondents to timely correct any deficiencies noted by EPA shall be a violation of this Order.

XX. NOTIFICATION/SUBMISSIONS

1. Unless otherwise specified, reports, correspondence, approvals, disapprovals, notices or other submissions relating to or required under this Order shall be in writing and shall be hand-

delivered, sent certified mail return receipt requested, or sent by Overnight Mail Commercial Delivery Service as follows:

1. One original and two (2) copies to the attention of:

   Grant Dufficy
   RCRA Enforcement and Compliance Branch
   MailCode 3WC31
   U.S. EPA - Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029.

2. Any notice, report, certification, data presentation, or other document submitted by Respondents pursuant to this Order which discusses, describes, demonstrates, supports any findings, or makes any representation concerning Respondents' compliance or non-compliance with any requirement of this Order shall be certified by Respondents or a duly authorized representative of Respondents. A person is a "duly authorized representative" only if: (1) the authorization is made in writing; (2) the authorization specifies either an individual or position having responsibility for overall operation of the regulated facility or activity (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and (3) the written authorization is submitted to the Project Coordinator designated by EPA pursuant to this Order.

3. The certification required by Paragraph B, above, shall be in the following form:

   > I certify that the information contained in or accompanying this [type of submission] is true, accurate and complete. With regard to [the/those identified portion(s)] of this [type of submission] for which I cannot personally verify [its/their] accuracy, I certify under penalty of law that this [type of submission] and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, or the immediate supervisor of such persons, the information submitted is, the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.
   >
   > Signature: _____

Name: _____

Title: _____

XXI. PUBLIC ACCESS TO ADMINISTRATIVE RECORD

The Administrative Record supporting the issuance of this Order and any written decisions or determinations made by EPA pursuant to this Order will be available for public review on Mondays through Fridays, from 9:00 a.m. to 4:30 p.m., at the following locations:

United States Environmental Protection Agency
Region III (3WC31)
1650 Arch Street
Philadelphia, PA 19103-2029; and

United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20004.

To arrange to view the Administrative Record concerning this Order contact EPA's Project Coordinator, Grant Dufficy, at telephone number: (215) 814-3455.

XXII. OPPORTUNITY TO CONFER

4. Prior to the effective date of this Order, Respondents may request a conference with EPA. Any such conference shall be held by seven (7) calendar days after the effective date of this Order unless extended by agreement of the parties. At any conference held pursuant to the request, Respondents may appear in person or be represented by an attorney or other representative.

2. If a conference is held, Respondents may present any information, arguments or comments regarding this Order. Regardless of whether a conference is held, Respondents may submit any information, arguments or comments in writing to EPA within seven (7) days of the effective date of this Order. This conference is not an evidentiary hearing, does not constitute a proceeding to challenge this Order, and does not give Respondent a right to seek review of this Order. Requests for a conference, or any written submittal made pursuant to this Paragraph, shall be sent to the attention of:

Joseph J. Lisa III, Esq.
Assistant Regional Counsel

U.S. EPA Region III (3RC30)
1650 Arch Street
Philadelphia, PA 19103-2029
Telephone: (215) 814-2479.

3. A request for a conference with EPA shall not suspend or delay the schedules for completion of Work to be performed pursuant to this Order or the attached Statement of Work, or suspend or delay any timetable or deadline for a submission or performance of an activity under this Order. However, EPA may, at its discretion, suspend or delay any schedule or deadline for the performance of any activity under this Order in writing.

XXIII. SEVERABILITY

If any provision or authority of this Order or the application of this Order to any party or circumstance is held by any judicial or administrative authority to be invalid, the application of such provision to other parties or circumstances and the remainder of this Order shall not be affected thereby and shall remain in full force and effect.

IT IS SO ORDERED:

BY: _____ DATE: _____

Bradley M. Campbell
Regional Administrator
U.S. Environmental Protection Agency
Region III

Attachment I

Map of Location of Site:

Attachment II

Statement of Work:

Attachment III

Administrative Record: Table of Contents

Attachment IV

U.S. EPA Small Business Resources Information Sheet

CERTIFICATE OF SERVICE

I, the undersign, certify that on the date provide below, the original and one copy of the attached Unilateral Administrative Order and all attachments in the above-captioned action was hand-delivered to and filed with the Regional Hearing Clerk, U.S. EPA Region III (3RC00), 1650 Arch Street, Philadelphia, PA, 19103-2029, and that true and correct copies were served on the following persons by overnight mail (FedEX) and certified mail/return receipt requested:

17th Street Revocable Trust
c/o New 4775 Huron L.L.C., Trustee
471 H. St., N.W.
Washington, D.C. 20001;

John R. Redmond
7312 Brookstone Court
Potomac, Maryland 20854-4837;

New 4775 Huron, L.L.C.
Attn: John R. Redmond, Managing Member
471 H. St., N.W.
Washington, D.C. 20001; and

Jeff Zimmerman, Esq.
Foley and Lardner
Washington Harbour
3000 K Street, N.W.

_____
Date

_____
Joseph J. Lisa III
Assistant Regional Counsel
U.S. EPA Region III

Attachment II

STATEMENT OF WORK

I. PURPOSE

The purpose of this Statement of Work ("SOW") concerning the property located at 3220 17th Street, N.W. in Washington, D.C. ("Property"), is to define the tasks, standards, guidelines and schedule which shall be followed by Respondents, 17th Street Revocable Trust, John R. Redmond, a former Trustee of the 17th Street Revocable Trust and current Managing Member of the New 4775 Huron, L.L.C., and the New 4775 Huron, L.L.C., a current trustee of the 17th Street Revocable Trust, in complying with the requirements of the Unilateral Administrative Order ("Order") issued by EPA to Respondents pursuant to the Resource Conservation and Recovery Act ("Act") Section 7003, 42 U.S.C. §6973, in the matter of U.S. EPA Docket No. RCRA-3-2000-0001TH. Respondents shall perform, within the time periods specified in the this SOW and the accompanying Order, all of the Work described in this SOW, including, but not limited to: (1) immediately initiating interim control measures to control levels of lead-based paint waste (i.e., lead-based paint chips and flakes, and dust containing lead) in the Property and minimizing the exposure of tenants in the Property, especially children, to lead-based paint waste; and (2) permanently abating the presence of lead-based paint waste and deteriorating lead-based paint in the Property.

II. WORK TO BE PERFORMED

All Work performed by Respondents shall be performed in compliance and accordance with the terms and conditions of the Order, this SOW, RCRA, the work performance standards for lead-based paint abatement required by the District of Columbia and the current version of the U.S. Department of Housing and Urban Development's ("HUD") "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing" ("HUD Guidelines"). Additionally, Respondents shall comply with all applicable federal, state and local laws and requirements in performing any and all work required by the Order and this SOW, and ensure that any Work-Plans designed by Respondents and their performance of the Work required herein meet or exceed the performance standards, specifications and applicable requirements set forth below.

The Work required to be performed under the Order shall consist of the following five tasks:

TASK I: Interim Controls;

TASK II: Inspection and Risk Assessment;
TASK III: Work-Plan Design and Approval;

TASK IV: Permanent Abatement and Cleaning Activities;

TASK V: Clearance Testing, Performance Standards and Record-Keeping.

In performing the Work Tasks as designated in the SOW and required by the accompanying Order, Respondents shall comply with the schedule and specified time periods designated in this SOW and the accompanying Consent Order.

TASK I: Interim Controls

1. Within ten (10) working days of the effective date of the Order, Respondents shall notify EPA, in writing, of the identity (i.e., name, address and telephone number) of the D.C. certified lead-abatement contractor retained by Respondents to perform the Interim Controls work described in Task I, Paragraph B, of this SOW.

2. Within forty (40) working days of the effective date of the Order, Respondents shall, in each of the seventy-seven (77) residential units and all interior common and maintenance areas of the Property:

   1.) Stabilize all deteriorated painted surfaces by wet scraping all loose, chipping or flaking paint, priming and repainting all scraped surfaces with lead-free paint to produce a smooth, sealed surface. (Respondents shall dispose of all material resulting from this stabilization process in accordance with applicable federal, state and local laws and requirements);

   2.) Vacuum all surfaces, including window sills, window wells and floors (including carpets), as well as all corners and cracks in trim and between floor boards, with a High Efficiency Particulate Air "HEPA" filter vacuum cleaner;

   3.) Clean all horizontal surfaces, all surfaces adjacent to window or door openings (including, but not limited to, window casings, jambs, and frames, and door casings, jambs and frames) and all surfaces containing visible dust with a Trisodium Phosphate ("TSP") solution or equivalent solution/material as appropriate. (Respondents shall dispose of all used TSP-solution or cleaning solution/material in accordance with applicable federal, state and local laws and requirements); and

   4.) Vacuum again, after cleaning with TSP or equivalent solution/material, all

surfaces, including window sills, window wells and floors (including carpets), as well as all corners and cracks in trim and between floor boards, with a High Efficiency Particulate Air "HEPA" filter vacuum cleaner.

3. Within forty (40) working days of the effective date of this Order, Respondents shall distribute to all tenants residing in the Property copies of both the English and Spanish versions of EPA's pamphlet "Protect Your Family From Lead in Your Home" .

TASK II: Inspection and Risk Assessment

1. Within ten (10) working days of the effective date of the Order, Respondents shall notify EPA, in writing, of the identity (i.e., name, address and telephone number) of the D.C. certified lead-based paint inspector and risk assessor retained by Respondents to perform the work described in Task II, Paragraphs B and C of this Order.

2. Within forty (40) working days of EPA's receipt of Respondents' notification concerning the identity of the D.C. certified lead-based paint inspector and risk assessor retained to perform the work described in Task II of this Order, Respondents shall have their lead inspector/risk assessor perform and complete lead-based paint inspections and risk assessments consistent with HUD Guidelines in all residential units, interior common and maintenance areas of the Property not previously inspected by the District of Columbia through its contractor Wallace & Prior Environmental Services, Inc., during the timer period April, 2000 through May, 2000, and which are included in the Administrative Record concerning issuance of the accompanying Order and this SOW, or; b) utilize the Multi-Family Housing Protocols for inspections/risk assessments of random residential units of the Property, either on a unit or component (e.g., all windows, etc.) basis and as provided by the HUD Guidelines.

3. Within forty (40) working days of EPA's receipt of Respondents' notification concerning the identity of the D.C. certified lead-based paint inspector and risk assessor retained to perform the work described in Task II of this Order, Respondents shall provide to EPA copies of all test results, analyses, reports and documents generated as a result of the inspections and risk assessments, as specified above, and/or a written statement of Respondents' implementation of the HUD Multi-Family Housing Protocols for inspections/risk assessments utilized on either a unit or component basis at the Property.

TASK III: Work-Plan

1. Within sixty-four (64) working days of the effective date of the Order,

Respondents shall submit to EPA for approval a detailed Work-Plan which specifies the measures Respondents shall take to permanently abate all lead-based paint waste and deteriorating lead-based paint, as defined in the HUD Guidelines, in the Property (including, but not limited to, all seventy-seven (77) residential units, and interior common and maintenance areas) and to clean all areas in which abatement activities have taken plan. The Work Plan shall be based upon the findings from Respondent's utilization of the HUD Multi-Family Housing Protocols for inspections and risk assessments or performance of lead-based paint inspections and risk assessments undertaken pursuant to TASK II of this SOW, and as provided by the HUD Guidelines. Additionally, the Work-Plan shall identify (i.e., name, address and telephone number) the D.C. certified lead-based paint abatement contractor retained by Respondents to perform the permanent abatement work as set forth in the Work Plan.

2. Respondents' Work-Plan shall be consistent with the HUD Guidelines, all applicable District of Columbia laws and requirements and all work performance standards for lead abatement activities required by the District of Columbia, and, at a minimum, shall provide for the following:

   1.) For all impact and friction surfaces/components presently containing or containing prior to the implementation of the Interim Controls as required by this SOW and the accompanying Order deteriorating lead-based paint, the removal and replacement of the surface/component to eliminate the deteriorating lead-based paint;

   2.) For all non-impact and non-friction surfaces/components presently containing or containing prior to the implementation of the Interim Controls as required by this SOW and the accompanying Order deteriorating lead-based paint, the replacement and removal of the surface/component to eliminate the deteriorating lead-based paint, or the encapsulation of the surface/component;

   3.) General cleaning after the performance of abatement work to eliminate lead-based paint waste in the Property (i.e., including the procedure of first HEPA vacuuming, then wet washing and then HEPA vacuuming again all surfaces, including, but not limited to, floors, doors and door casings, and windows and window casings); and

   4.) Specific measures that Respondents will undertake to protect the health and security of the tenants of the Property and to minimize the inconvenience to the tenants of the Property as a result of the performance of the work required by the Order and this SOW.

3. After review, EPA shall either approve or disapprove Respondents' proposed

Work-Plan in accordance with requirements and procedure set forth in the Order.

TASK IV: Permanent Abatement and Cleaning Activities

Within two hundred and fifty (250) working days after the receipt of approval by EPA of the Work-Plan submitted by Respondents pursuant to TASK III of this SOW, Respondents shall implement the approved Work-Plan and have the Work required thereunder performed and completed by the lead-based paint abatement contractor retained by Respondents. All Work set forth and required by the Work-Plan shall be completed in accordance with the terms and schedules set forth therein and the requirements of the Order. All materials/wastes generated as a result of permanent abatement activities conducted at the Property as required under the EPA approved Work Plan, this SOW and the Order shall be disposed of by Respondents in accordance with all applicable federal, state and local laws and requirements. The Work-Plan as approved by EPA shall be incorporated by reference into, as if fully set forth at length, and shall become part of the Order.

TASK V: Clearance Testing, Performance Standards and Record-Keeping

1. Within twenty (20) working days after receipt of approval by EPA of the Work-Plan submitted by Respondents pursuant to TASK III of this SOW, Respondents shall notify EPA, in writing, of the identity (i.e., name, address and telephone number) of the D.C. certified inspector technician or risk assessor retained by Respondents to perform clearance testing of the residential units, interior common areas and interior maintenance areas of the Property. The D.C. certified inspector technician or risk assessor retained by Respondents to perform such clearance testing shall be independent from the D.C. certified lead-based paint abatement contractor performing the permanent abatement work at the Property as described under the aforementioned EPA approved Work Plan.

2. Performance Standards - Clearance testing shall be consistent with applicable HUD Guidelines and shall utilize the following Clearance/Performance Standards:

    1.) On floors - levels of dust containing lead shall not exceed 100 micrograms of lead per square foot;

    2.) On window sills - levels of dust containing lead shall not exceed 500 micrograms of lead per square foot;

    3.) In window wells - levels of dust containing lead shall not exceed 800 micrograms of lead per square foot;

    4.) All visible dust and detached lead-based paint chips and flakes in the Property shall be collected, removed from the Property and disposed of in accordance with all applicable federal, state and local laws and requirements.

2. Clearance Testing - Within twenty (20) working days of the completion of all Work required by the EPA approved Work Plan, as provided in TASK IV, above, Respondents shall perform and complete dust clearance testing in all residential units, interior common areas and interior maintenance areas of the Property.

3. Within ten (10) working days of the completion of the dust clearance testing as required herein, Respondents shall submit to the EPA Project Coordinator a written summary of the results of the clearance testing and copies of any and all test results, analyses, reports and other documents generated from the clearance testing. Based upon EPA's review of the results of the testing, additional work may be required to be performed by Respondents under the Order.

4. Record-keeping: Respondents shall maintain at the Property for a period of three (3) years, commencing from effective date of the Order, copies of any and all documents relating to the Work performed under the Order of this SOW, including, but not limited to: copies of contracts with lead abatement contractors; contracts with lead inspection, risk assessment, clearance testing contractors; testing results, analyses and reports; receipts; and the Work Log referred to below. All documents shall be made readily available to representatives of the EPA or the District of Columbia government. Prior to the disposal or destruction of any documents referred to herein, Respondents shall provide twenty (20) calendar days notice in writing to the EPA. Respondent shall not dispose of or destroy any such documents if notified in writing by EPA.

5. Work Log - An operation and maintenance log shall be kept concerning all Work performed pursuant to this SOW and the Order to show compliance with the requirements thereunder.

III. TENANT PROTECTION

During performance of any and all Work by Respondents pursuant to this SOW and the accompanying Order, Respondents shall comply with all applicable federal, state and local laws and requirements, and shall take all reasonable steps to minimize any risk posed to human health and the environment, protect the health, safety and welfare of the Tenants, minimize the exposure of the tenants of the Property to lead, minimize the inconvenience to tenants of the Property, protect the personal articles of the tenants from damage and ensure the security of the Tenants during the performance of all Work required by this SOW and the accompanying Order.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1160
BOSTON, MASSACHUSETTS 02114-2023

September 4, 2001

Group I Management and M275, LLC
Mr. Paul Carrigg
P.O. Box 6068
Fall River, Massachusetts 02724

Re: Order to Group I Management and M275, LLC of Fall River, Massachusetts, Requiring Cleanup, Testing, Analysis and Reporting Under Section 7003 of the Resource Conservation and Recovery Act: Docket Number RCRA-01-2001-0072

Dear Mr. Carrigg:

Thank you for agreeing on August 30, 2001, to remediate the potential and actual imminent and substantial threat to human health from lead-based paint dust at your property at 275 Martine Street, Fall River, Massachusetts (hereafter the "facility"). We appreciate the commitment that you expressed during the discussion to meet the cleanup requirements through work at the facility.

As you know, EPA has decided that the work will proceed more smoothly at the facility if conducted under an enforceable mechanism. Thus, with this letter, EPA is ordering cleanup, testing, analysis and reporting pursuant to Section 7003(a) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6973(a).

Pursuant to Section 7003 of RCRA, once EPA determines that past or present handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment, the Administrator may bring suit on behalf of the United States in the appropriate district court against any person (including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility) who has contributed or who is contributing to such handling, storage treatment, transportation or disposal, to restrain such person from such handling, storage, treatment, transportation or disposal, to order such person to take such other actions as may be necessary or both. Further, the Administrator may also, after notice to the affected State, take other action under this section including, but not limited to, issuing such orders as may be necessary to protect public health and the environment.

This Order applies to and binds Group I Management and M275, LLC, and their officers,

employees, trustees, agents, successors, and assigns (collectively referred to in this Order as "Group I Management"). No change in ownership, name or corporate status shall alter the obligations to comply with this Order. Group Management I must give notice of this Order to any successors in interest prior to transfer of the facility or its operations and to all contractors, subcontractors, laboratories and consultants retained to help implement this Order. Group I must ensure that all such contractors, subcontractors, laboratories and consultants comply with the terms of this Order.

EPA has given the Commonwealth of Massachusetts notice of the issuance of this Order in accordance with RCRA Section 7003(a), 42 U.S.C. § 6973(a). EPA has provided notice to the City of Fall River, Massachusetts of this action pursuant to Section 7003(c) of RCRA, 42 U.S.C. § 6973(c).

I. LEGAL BASIS FOR ISSUING ORDER UNDER RCRA SECTION 7003

This section outlines the conclusions of law that support EPA's determination that it has jurisdiction and a factual basis to issue an Order pursuant to RCRA Section 7003 to Group I Management. The legal conclusions are based on the facts contained in Attachment I to this Order and to the administrative record compiled by EPA. The record is available for review at EPA's regional office, which is located at 1 Congress Street, Suite 1100, Boston, MA 02114-2023.

EPA has determined that :

A. Group I Management and M275, LLC are "persons" within the meaning of that term as defined by RCRA Section 1004(15), 42 U.S.C. Section 6903(15).

B. The lead dust at the facility, as identified in Attachment I hereto, constitutes a "solid waste" as that term is defined in Section 1004 (27) of RCRA, 42 U.S.C. Section 6903 (27).

C. The solid waste referred to in paragraph B. above has been and/or is currently being handled, stored, treated, or disposed of at the facility;

D. Based on the information described in Attachment I hereto, EPA has determined that present conditions at the facility may present an imminent and substantial endangerment to health and the environment within the meaning of section 7003(a) of RCRA, 42 U.S.C. Section 6973(a) arising from the past or present handling, storage, treatment or disposal of lead dust (i.e., "solid waste") at the facility;

E. Group I Management has been and is currently contributing to the handling and/or storage, treatment and/or disposal of such solid waste at the facility which may present an imminent and substantial endangerment to human health and the environment;

F. The actions required by this Order are consistent with RCRA, and are necessary to protect health and/or the environment;

II WORK REQUIRED UNDER THIS ORDER

A. Respondent shall **abate the conditions described above by September 7, 2001. by taking, at a minimum, the following steps:**

1. hire a licenced lead-abatement contractor experienced in lead-abatement in multi-use facilities;
2. abate the lead at the facility, beginning with the dance studio on the second floor, including lead dust on floors, walls, ceilings, window sills, furniture and other objects; lead contaminated debris; and equipment and all other objects contaminated with lead dust consistent with all applicable federal, state and local laws, regulations, and policies; all lead dust must meet the standard of 40 ug/ft2, except for interior window sills and window troughs for which the standard is 250 ug/ft2 and 400 ug/ft2, respectively;
3. prevent access to the building by any children under the age of 6 and pregnant women until the lead-abatement contractor has submitted a written certification that the abatement has been completed and that all applicable standards have been met;
4. provide an alternative ingress and egress to avoid the impacted areas;
5. provide site access to state and federal officials;
6. hire a licensed, certified risk assessor to conduct sampling at the facility following the abatement, and provide all sampling results to EPA; and
7. provide (by FAX addressed to Marian Magoon (617-918-1809)) written updates to EPA at key stages of the work.

B. By September 5, 2001, Respondent shall post signs written in English, Portuguese, and Spanish at appropriate entrances to the Facility, advising that EPA has determined that the facility contains solid and/or hazardous wastes that may present an imminent and substantial endangerment to human health and the environment. These signs shall be maintained until Group I Management has complied with this Order as determined by EPA.

C. Off-Site Shipments. All hazardous wastes and constituents removed off-site pursuant to this Order for treatment, storage, or disposal shall be treated, stored, or disposed of at a licensed or permitted RCRA facility.

D. Compliance With Other Laws. Respondent shall perform all actions required pursuant to this Order in accordance with all applicable local, state and federal laws and regulations.

E. Final Report. Within seven (7) days after completion of all actions required under this Order, Group I Management shall submit to EPA a final report certifying that the facility has been cleaned of lead dust and meets the standards described in paragraph A. above ("Final Report"). The Final Report shall include a list of quantities and types of materials removed off-site or handled on-site, a list of the ultimate destination of those materials, a presentation of the analytical results of all sampling and analyses performed, and copies of all documentation generated during the Work (e.g., manifests, invoices, bills, contracts and permits). The Final Report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

> Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the Final Report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

F. If EPA determines that the Work has not been completed in accordance with this Order, EPA will notify Group I Management, provide a list of the deficiencies, and require that Group I Management take any additional actions necessary to correct such deficiencies. Group I Management shall implement any additional actions specified by EPA according to the schedule set forth in EPA's notice. Group I Management shall then submit a modified Final Report in accordance with the EPA notice. Failure by Group I Management to take the additional actions required by EPA shall be a violation of this Order.

III. INCORPORATION OF DOCUMENTS INTO THIS ORDER

All attachments to this Order are deemed incorporated into, and made an enforceable part of this Order. Upon interim approval by EPA, all submissions made under this Order shall be deemed incorporated into and made an enforceable part of this Order. Thus, the term "Order" refers to this Order, the attachments to this Order, and all submissions made pursuant to this Order.

IV. MODIFICATIONS

If warranted by conditions at the facility, the designated EPA inspector, after obtaining concurrence from his/her direct supervisor, may agree in writing to modify the deadlines or substantive performance requirements required by this Order.

V. CREATION OF DANGER; EMERGENCY RESPONSE

Upon the occurrence of any incident or discovery of any condition that causes or threatens a release of hazardous waste from the facility or endangerment to human health or the environment, Group I Management must notify immediately Marian Magoon, Office of Environmental Stewardship, at (617) 918-1848, or in the event of her unavailability notify the Regional Duty officer of the Emergency Planning and Response Branch, EPA Region I at (617) 918-1261. Please note that nothing in this Order limits the authority of EPA to take or order all action necessary to protect public health, welfare or the environment or prevent, abate or minimize an actual or threatened release of hazardous substances, hazardous wastes, or solid wastes, at or from the facility.

VI. COMMUNITY RELATIONS

Group I Management shall participate to the extent determined appropriate by EPA in any community relations plan developed by EPA. Respondent shall also cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Respondent shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Facility.

VII. POTENTIAL CONSEQUENCE OF FAILURE TO COMPLY

In the event that Group I Management fails or refuses to comply with any requirement of this Order, Section 7003(b) of RCRA, 42 U.S.C. Section 6973(b), authorizes EPA to commence a civil action in the U.S. District Court to require compliance and to assess a civil penalty not to exceed $5,500 for each day during which failure or refusal occurs.[1]

We look forward to your continued cooperation in satisfying the requirements of this Order and encourage you to call the following EPA staff members with any questions: Andrea Simpson, Esq. At (617) 918-1738 (for legal issues), or Marian Magoon at (617) 918-1848 (for technical issues).

VIII. RESERVATION OF RIGHTS BY EPA

EPA reserves all rights against Group I Management and all other persons to take any further civil, criminal, or administrative enforcement action pursuant to any available legal authority (including Section 7003(b) of RCRA, 42 U.S.C. Section 6973(b)), and including the right to seek injunctive relief; the recovery of money expended or to be expended (plus interest); monetary

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[1]RCRA Section 7003(b) specifies that the penalty amount is $5,000, but the Debt Collection Improvement Act of 1996 (DCIA), 31 U.S.C. Section 3701, 40 C.F.R., authorizes EPA to add an inflation adjustment or ten percent to the penalty for violations occurring on or after January 31, 1997. Thus, together, RCRA and the DCIA authorize a maximum civil penalty of $5,500 per day for non-compliance with the requirements of this Order.

penalties, criminal sanctions; and/or punitive damages regarding: (i) any violation of this Order; or (ii) any actual or potential threat to human health or welfare or the environment, or any release or threat of release of hazardous substances on, at, in, or near the facility. Nothing in this Order shall preclude EPA from taking any additional enforcement actions, including modification of this Order or issuance of additional Orders, and/or additional actions as EPA may deem necessary, or from requiring Respondent in the future to perform additional activities pursuant to RCRA, or any other applicable law.

EPA further expressly reserves the right both to disapprove work performed by Group I Management or its contractors and to request or order Group I Management to perform tasks in addition to those detailed in this Order. In addition, EPA reserves all rights it may have to undertake response actions at any time and to perform any and all portions of the work activities which Group I Management has failed or refused to perform properly or promptly, and to seek reimbursement from Group I Management for its costs, or seek any other appropriate relief.

Notwithstanding any other provision of this Order, EPA shall retain all of its information gathering, entry, inspection, and enforcement authorities and rights under any applicable law, regulation, or permit.

Sincerely,

Sam Silverman
Acting Director
Office of Environmental Stewardship

Ann Pontius, OECA

ATTACHMENT 1

STATEMENT OF FACTS

In support of the issuance of this Order and based upon the information in the Administrative Record of this Order, EPA makes the following Finding of Facts:.

1. Mr. Paul Carrigg, a principal with Group I Management, attested that M275, LLC owns the property located at 275 Martine Street, in Fall River, Massachusetts.

2. Renovation work was initiated by the owners, and D&D Sandblasting of Somerset, MA was hired to do the work.

3. On or about August 29, 2001, EPA-New England Lead (Pb) enforcement inspector, Marian Magoon, received a telephone call from Ernie Kelly with the Massachusetts Division of Occupational Safety. He reported that staff in his New Bedford Office had received a complaint the day before (August 28, 2001), regarding renovation work at a commercial building, located at 275 Martine Street, in Fall River, Massachusetts. The owners, Group I Management, hired D&D Sandblasting on or about August 21, 2001. to sandblast paint from the first floor of the three floor converted mill. During the course of the sandblasting, several tenants in the building observed dust coming through the floors and out of the windows. One tenant also observed that D&D disposed of approximately fifty pounds of the debris in a trash dumpster, which was subsequently hauled away in a BFI truck. Following the sandblasting a tenant hired ProScience Analytical Services to test the debris for lead. The sampling results show the presence of lead in the debris (See Exhibit #1).

4. On August 29, 2001, EPA inspector Marian Magoon interviewed tenants of the facility and determined that additional sampling would be required. On August 30, 2001, Ms. Magoon returned with EPA inspectors Wayne Toland and Paul Carroll, after having received permission from Mr. Paul Carrigg to access the facility. While at the facility, they too observed dust throughout the interior of the building. Further, the inspectors were made aware that tenants in the building include a dance school that would begin classes on September 5, 2001, a computer repair store, furniture refinisher, a silk screening studio, an appliance repair facility, a storage facility, and a recording studio. The dance instructor is pregnant and most of the students are children.

5. The EPA inspectors conducted sampling in the building. Initial sample results taken by EPA inspectors are as follows:

> Bucket of sand and paint debris on the exterior of the building. 1230 ppm lead and 868 ppm lead;
> Interior floor sample: 1290 ppm lead;
> Second Floor (the same floor as the dance school): 2790 ppm lead;

6. During the course of the sampling on August 30, 2001, Ms. Magoon advised Mr. Carrigg that he would have to hire a certified lead abatement contractor to remediate the entire building. Deborah Brown, Chief, Toxics, Pesticides, and Federal Programs Manager also spoke with Mr Carrigg on August 30 and 31, 2001, and September 4, 2001, about the condition of the facility, the need to advise the tenants about the debris, and the need to formalize a cleanup agreement between EPA and himself.

7. The building is located in an industrial area although the University of Massachusetts Dartmouth is constructing a new building adjacent to the facility. Ms. Magoon observed workers outside the building.

8. Lead, a naturally-occurring metal, is a powerful toxicant with no known beneficial purpose in the human body. Virtually all parts of the human body can be damaged from exposure to lead.

9. Lead has been classified as a probable human carcinogen by the United States Environmental Protection Agency and a possible human carcinogen by the International Agency for Research on Cancer.

10. In adults, chronic exposure to low levels of lead may cause memory and concentration problems, hypertension, cardiovascular disease, and damage to the male reproductive system. Exposure to lead before or during pregnancy can alter fetal development and cause miscarriages.

11. While potentially harmful to individuals of all ages, lead exposure is especially harmful to children, especially those under the age of six. Childrens' heightened risk level is due not only to childrens' normal hand-to-mouth behavior which increases their exposure to lead by ingestion, but also children's increased physiological ability to ingest lead into their bodies. Furthermore, the rapidly developing nature of infants' and childrens' central nervous systems makes children most at risk of permanent harm from exposure to lead. Exposure to lead in children can cause learning disabilities, reduced intelligence, behavioral problems, growth impairment, permanent hearing and visual impairment, and other damage to the brain and nervous system.

12. Dust containing lead is thought to be a major pathway by which people, especially young children, are exposed to lead. Young children are especially susceptible to lead poisoning from coming into contact with dust that contains lead.

13. EPA has established the following residential lead standards[1]:

Dust Hazard:
Floors: 40 ug/ft2
Interior Window Sills: 250 ug/ft2

Dust Clearance:
uncarpeted floors: 40 ug/ft2

[1]40 C.F.R. Part 745; 66 Fed. Reg. 1212, (January 5, 2001)

interior window sills: 250 ug/ft2
window troughs: 400 ug/ft2

Soil Lead Hazard:
play area: 400 ppm
average on bare soil: 1200 ppm

14. The dust containing lead at levels currently present at the facility may present an imminent and substantial endangerment to human health and the environment because it causes elevated blood lead levels associated with adverse human health effects. These adverse effects present a substantial risk to the health of children who may enter the facility and tenants of the facility.

15. Group I Management, either directly, or indirectly, through contractors or employees, is currently and, at all times relevant to this Order, has been responsible for the maintenance of the facility.