EPA Compliance Assurance Actions Reduce Lead Exposure in Communities

Exposure to lead in the environment — soil, water, air, and in paint — can cause serious health problems. Those most at risk are children under the age of six, who may suffer severe neurological impacts including learning disabilities, behavioral issues and hearing loss. Lead-based paint is a major cause of childhood lead poisoning. Other typical sources of lead exposure include lead in drinking water, lead in soil from industrial operations, and lead in air emissions from certain commercial sources. See “Effects of Lead on Human Health” below.

The Environmental Protection Agency (EPA or Agency), Office of Enforcement and Compliance Assurance (OECA) and its regulatory partners use multiple legal authorities to prevent or reduce exposure to lead contamination by ensuring compliance with requirements designed to limit the release of lead into the environment. OECA leads and supports a variety of compliance assurance activities conducted by EPA Regions; and by states, tribes, and territories implementing EPA-authorized programs. OECA’s activities are part of the Agency-wide effort to address lead in the environment.

The primary goal of compliance assurance activities is to protect public health and the environment. Therefore, these activities aim to promote compliance with environmental requirements, deter would-be violators, ensure that violators are held accountable for noncompliance and responsible parties are accountable for site cleanups, and promote a level playing field for entities that comply with the requirements.

This 2021 Lead Bulletin covers activities from October 1, 2020 through September 30, 2021.
Lead-based Paint

In the United States, the major source of lead exposure among children is lead-based paint and lead-contaminated dust found in buildings built before 1978. EPA has promulgated lead-based paint rules pursuant to the Toxic Substances Control Act (TSCA) and the Residential Lead-based Paint Hazard Reduction Act. Those rules require lead-safe renovations and abatements, pre-renovation education, and disclosure of information about lead-based paint and lead-based paint hazards, among other things. EPA enforces lead-based paint violations through civil administrative actions, and the U.S. Department of Justice (DOJ) takes judicial actions, civil and criminal, on EPA’s behalf.

In 2021, EPA’s lead-based paint enforcement program highlighted over 100 actions that addressed lead-based paint.

In addition to EPA’s actions, the Agency supports states, tribes, and territories on the implementation and enforcement of EPA-authorized lead-based paint programs. OECA’s TSCA Substances Compliance Monitoring Cooperative Agreement Grants build environmental partnerships with states/tribes/territories to strengthen their ability to address environmental and public health threats from toxic substances such as lead-based paint.

EPA, in partnership with the Associated General Contractors of America (AGC), also provides compliance assistance information about environmental rules, including information on the proper handling of lead-based paint by the construction industry. This information can be found online at the Construction Industry Compliance Assistance Center, and is provided free of charge by the National Center for Manufacturing Sciences and AGC. The Construction Industry Compliance Assistance Center includes information and reminders about training and certification required for firms and renovators under the lead Renovation, Repair, and Painting (RRP) rule.

Highlight of 2021 Lead-based Paint Enforcement Actions

Home Depot Settles TSCA Violations and Pays Record Breaking Civil Penalty —Home Depot U.S.A. Inc. agreed to pay a penalty of $20.75 million for violations of the lead RRP Rule, the highest civil penalty to date under the Toxic Substances Control Act, in the settlement of an action brought by EPA and DOJ joined by the States of Utah, Massachusetts, and Rhode Island. (Full summary on page 6-7)

Lead at Superfund Sites

Lead is one of the most common contaminants found at Superfund sites across the country. The Superfund enforcement program identifies the parties responsible for lead contamination and uses Superfund authority to compel them to clean it up. Cleanups are often complex, generally involve multiple enforcement actions to accomplish, and can take years to complete.
In FY 2021, the Superfund enforcement program entered over a dozen enforcement actions to conduct cleanups at sites with lead contamination in soils, water, demolition debris, tailings piles, etc. These are in addition to the Superfund actions initiated in previous years that are still ongoing to address lead contamination.

Superfund enforcement actions have compelled the removal of lead contaminated soils in thousands of residential yards, as well as in fields, roadsides, playgrounds, flood plains, waterways and industrial sites.

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**Highlights of 2021 Superfund Lead Enforcement Actions**

**Nonprofit enters cleanup agreement at Westside Lead Superfund Site** — EPA entered into an agreement with the nonprofit Westside Future Fund, Inc. (WFF) for WFF to perform a removal action at the Westside Lead Superfund Site in Atlanta, Georgia. The removal will address lead-contaminated soil on 16 residential properties in two communities with environmental justice concerns at a cost of approximately $1 million. (Full summary on page 7-8)

**Parties agree to conduct study at Depue/New Jersey Zinc/Mobil Chemical Superfund Site** — EPA entered an agreement with TCI Pacific Communications, LLC (TCI) and ExxonMobil Oil Corporation to perform a remedial investigation/feasibility study at the DePue/New Jersey Zinc/Mobil Chemical Superfund Site in DePue, Illinois to address lead and other chemicals. (Full summary on page 8)

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**Lead in Hazardous Wastes**

The Resource Conservation and Recovery Act (RCRA) has both prevention (“base” program) and clean-up (corrective action program) components. The RCRA base program works to prevent lead contamination through requiring the careful management of wastes containing lead. The management of most facilities that treat, store, or dispose of hazardous wastes, including hazardous wastes that exceed the regulatory limit for lead, requires obtaining and complying with a permit. The RCRA corrective action program addresses the clean-up of lead contamination at RCRA-regulated facilities. RCRA corrective action obligations may be implemented through permits, administrative orders, and consent decrees. Since 1984, EPA has issued hundreds of corrective action orders to facilities that treat, store or dispose of hazardous wastes, many of which address lead contamination. In some cases (e.g., at some smelters and refineries), lead was the primary contaminant or risk-driver addressed by the order. Similar to Superfund cleanups, corrective action at RCRA facilities can be complex and take several years to complete. EPA and the states work together to implement hazardous waste management and

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**Highlights of 2021 RCRA Lead Enforcement Actions**

**Removal of lead waste at abandoned US Technology Corporation Site** — Ten respondents entered into an agreement under RCRA to remove over five million pounds of hazardous waste containing lead and other pollutants. (Full summary on page 8-9)

**Former Sioux City Council Member Pleads Guilty to Environmental Crimes** — Aaron Rochester pled guilty to illegally storing and transporting hazardous waste, including lead-containing material, as owner and operator of Recycletronics. (Full summary on page 9)
cleanup programs. EPA maintains independent enforcement authority for RCRA programs even in states authorized to implement their own hazardous waste management and corrective action programs.

Lead in Drinking Water

Lead contamination in drinking water presents unique challenges. Lead often leaches into water from supply line pipes or on-premise plumbing as the water moves through distribution systems. EPA estimates drinking water can make up to 20 percent or more of a person’s total exposure to lead. Sensitive subpopulations may face higher risks. For example, infants who consume mostly formula mixed with water can receive 40 to 60 percent of their exposure to lead from drinking water, if it is contaminated.

EPA promulgated the first Lead and Copper Rule (LCR or Rule) in 1991 to protect public health by reducing lead in drinking water; this rule is currently being revised to enhance protections. Because lead contamination of drinking water often results from corrosion of the plumbing materials, the LCR requires water systems to control the corrosivity of the water they serve. The Rule also requires systems to collect tap water samples from sites served by the system that are more likely to have plumbing materials containing lead. If more than 10 percent of tap water samples exceed the lead action level of 15 parts per billion, then water system owners are required to take additional actions. While the long-term LCR revisions and the lead-free rulemaking are underway, EPA continues to work with states, territories, and tribes to help address lead in drinking water.

Drinking Water National Compliance Initiative

EPA has developed and is implementing a National Compliance Initiative (NCI) for FY20-23 entitled Reducing Noncompliance with Drinking Water Standards at Community Water Systems. The NCI will help EPA address lead and other drinking water contaminants. There are two broad goals under this NCI: (1) ensure clean and safe water by improving compliance at community water systems regulated under the Safe Drinking Water Act; and (2) develop a sustainable drinking water compliance assurance and enforcement program in every EPA Region to help ensure clean and safe water for all Americans. As part of the NCI, in close coordination with states and tribes, EPA regional partners have conducted inspections at a number of community water systems and, as appropriate, taken enforcement to address problems that were found at these regulated systems.

Highlight of 2021 Safe Drinking Water Enforcement Actions

**EPA issues Emergency Order to Clarksburg Water Board** — Because of lead levels detected in drinking water, EPA issued a Safe Drinking Water Act (SDWA) order (under Sec. 1431 of the Act) to the Clarksburg Water Board in Clarksburg, WV, directing the Public Water System (PWS) to identify homes and businesses with lead services lines, provide an alternative source of drinking water or filter for all impacted customers, continue lead service line replacements, and to provide Lead Public Education to all residents. (Full summary on page 9)
Lead in Air Emissions

Air emissions that contain lead, and chemicals that contribute to the deterioration of lead in paint, present risks of lead exposure to the public and to children in particular. Enforcement concerning lead in the air is conducted under the Clean Air Act (CAA), which regulates stationary and mobile sources that emit air pollution. The act requires major stationary sources, such as manufacturers, processors, refiners, and utilities, to obtain operating permits, install pollution control equipment, and meet specific emissions limitations.

The major sources of lead emissions to the air today are ore and metals processing and leaded aviation gasoline. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers.

EPA is working with states to investigate stationary sources potentially out of compliance with applicable lead emission laws due to excess lead emissions in areas designated as nonattainment or as having ambient air lead concentrations exceeding the 2008 National Ambient Air Quality Standards (known as NAAQS). The focus is on areas in overburdened communities and sources which may be adversely impacting children’s health.

**Highlight of 2021 Air Enforcement Actions**

**American Zinc Recycling Corp. (AZR) settles multiple violations** — American Zinc Recycling Corp. (AZR) settled a federal-state lawsuit citing violations of air, water, and hazardous waste environmental laws at its facility in Palmerton, Pennsylvania, delivering environmental and public health benefits, including reduced lead dust exposure, for residents as far as three miles away. (Full summary on page 9-10)

Lead at Federal Facilities

Federal facilities (e.g., buildings and lands owned or operated by the federal government) comprise one of the largest and most diverse sectors in the nation, have a significant environmental footprint, and can play a large role in reducing exposure to lead from lead-based paint, water, soil, and air emissions at their facilities and in neighboring communities. EPA works with federal facilities to reduce lead risks and hold federal agencies accountable to the same standard of environmental compliance as other members of the regulated community.

Through regular outreach to the Department of Defense and civilian federal agencies, EPA provides compliance assistance information and collaborates with federal agencies to identify how to improve compliance with lead-related environmental regulations to address children’s health. EPA encourages federal agencies to take steps to reduce and abate lead exposure, including working with private entities on federal property that may be contracted to perform work or operate and maintain federal housing to ensure that those private entities take steps to reduce and abate lead exposure and comply with federal lead requirements.

Lead in Indian Country
Federally recognized Indian tribes are eligible, but not required, to administer, with EPA approval, the permitting, compliance monitoring, and enforcement components of several Agency programs that are directly related to reducing exposure to lead from lead-based paint, water, soils, and air emissions from facilities located in Indian country. Tribes implementing lead-related programs include: the Navajo Nation, which has authority for the SDWA’s public water system program; and the Cherokee Nation, Boise Forte Band of the Minnesota Chippewa Tribe, Lower Sioux Indian Community, and Upper Sioux Community, which have authority for TSCA’s lead-based paint abatement program. In almost all other parts of Indian country, EPA is responsible for lead-related program implementation including inspection and enforcement activities and works with tribes to reduce lead risks and ensure compliance.

More information on tribes with authorized programs is available at https://www.epa.gov/tribal/tribes-approved-treatment-state-tas. Information on EPA’s responsibilities and activities in Indian Country is available at https://www.epa.gov/tribal/direct-implementation-indian-country.

Effects of Lead on Human Health

Lead is a naturally occurring element that can be harmful to humans, particularly children, when ingested or inhaled. Lead can be found in all parts of our environment — air, soil, water, sediments, and in lead-based paint.

Lead exposure affects the nervous system and can cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Children six years old and younger are most at risk. If not detected early, children with high levels of lead in their bodies can suffer from:

- Damage to the brain and nervous system
- Behavior and learning problems, such as hyperactivity
- Slowed growth
- Hearing problems
- Headaches
- Anemia

In rare cases, acute lead poisoning from ingestion of lead can lead to seizures, coma, and even death.

Lead can accumulate in our bodies over time, where it is stored in bones along with calcium. During pregnancy, lead is released from bones as maternal calcium is used to help form the bones of the fetus. This is particularly true if a woman does not have enough dietary calcium. Lead can also easily be circulated from the mother’s blood stream through the placenta to the fetus, resulting in serious and developmental problems including:

- Miscarriages
- Premature births or low birth weight
- Brain damage, decreased mental abilities, and learning difficulties
- Reduced growth in young children
Lead exposure affects the nervous system and can cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death.

2021 Enforcement Action Highlights

Lead-based Paint

Home Depot Settles TSCA Violations and Pays Record Breaking Civil Penalty

In December 2020, Home Depot U.S.A. Inc. agreed to pay a penalty of $20.75 million, the highest civil penalty to date under the Toxic Substances Control Act, in settlement of an action brought by EPA and DOJ, joined by the States of Utah, Massachusetts, and Rhode Island.

EPA discovered alleged violations of EPA’s lead RRP Rule and state equivalent rules when investigating customer complaints about Home Depot renovations that were conducted within EPA Regions headquartered in Boston, Chicago, and San Francisco. EPA assessed compliance in 30 communities nationwide and found hundreds of instances where Home Depot subcontracted work to firms that in some cases were not certified by EPA or an EPA-authorized state RRP program; and did not use lead-safe work practices, perform required post-renovation cleaning, provide EPA-required lead hazard pamphlets to occupants, or maintain records of compliance with the law. In its investigation, EPA used its EJSCREEN tool to focus compliance assessment in communities overburdened by exposure to lead-based paint. When large national renovation firms like Home Depot do not comply with the law when performing renovations in communities with environmental justice concerns, they may exacerbate the disproportionate impact that lead poisoning has on neighborhoods already overburdened by lead hazards.

Under the settlement, Home Depot will implement a company-wide program to ensure that the contractors it hires to perform work for its customers comply with the RRP Rule. The Rule applies to renovations of most homes and child-occupied facilities built before 1978. Home Depot will also conduct thousands of on-site inspections of work performed by its contractors to ensure they comply with lead-safe work practices. Home Depot must also investigate and respond to customer complaints. In instances where the contractor did not comply with lead safe work practices, Home Depot will perform an inspection for dust lead hazards and, if they are found, provide a specialized cleaning. EPA will monitor Home Depot’s responses to customer complaints. In addition to the requirements related to its renovations, Home Depot will provide important information about following lead-safe work practices to its professional and do-it-yourself customers in its stores, on its website, on YouTube, and in workshops. Learn more about the Home Depot settlement at https://www.justice.gov/opa/pr/home-depot-pay-20750000-penalty-nationwide-failure-follow-rules-conducting-renovations

Lead at Superfund Sites

Nonprofit enters cleanup agreement at Westside Lead Superfund Site
In December 2020, EPA entered into an agreement with the nonprofit Westside Future Fund, Inc. (WFF) for WFF to perform a removal action at the Westside Lead Superfund Site in Atlanta, Fulton County, Georgia. Under the agreement, WFF planned to clean up lead contamination at 16 residential properties in two communities with environmental justice concerns adjacent to Atlanta’s downtown business district. To date, WFF has expanded their cleanup work to 25 properties. WFF is a 501(c)(3) charitable organization whose mission includes preserving and expanding affordable housing in the two communities. The removal work entails include excavating, hauling away, and backfilling lead-contaminated soil from the residential properties at a cost of over $1 million.

From the 1880s to mid-20th century, heavy industries operated near the site, and EPA’s investigation indicates that lead-containing slag from those operations may have been used as fill material in the communities and caused or contributed to the present-day lead contamination in soil. EPA is now conducting a cleanup to abate the threat posed by the lead from historic fill material in residential soil and continues to sample properties in a study area comprising more than 2000 properties. More information about the site is available on the Westside Lead Superfund Site profile webpage at https://cumulis.epa.gov/supercpad/CurSites/csitinfo.cfm?id=0407160.

Parties agree to conduct study at Depue/New Jersey Zinc/Mobil Chemical Superfund Site

In November 2020, EPA and TCI Pacific Communications, LLC (TCI) and ExxonMobil Oil Corporation entered an agreement for the companies to perform a remedial investigation/feasibility study (RI/FS) for most of the DePue/New Jersey Zinc/Mobil Chemical Superfund Site in DePue, Illinois. An RI/FS, performed before a cleanup plan is developed, assesses the nature of contamination and risk to human health and the environment at a site, and considers alternative cleanup actions to address the contamination. The contaminants of concern, found primarily in soil at the site, are lead, arsenic, cadmium, and manganese, released at the site from approximately 1903 to 1989 through various manufacturing processes. EPA has prioritized cleanup of residential properties at the site.

After approximately 25 years of Illinois leading the response effort, the DePue site was transferred to EPA on October 16, 2019. On January 23, 2020, EPA issued an order to TCI to clean up residential properties at the site at an estimated cost of $13 million. TCI is currently performing the cleanup work required by the order.

Under the agreement, in addition to completing an RI/FS for most of the site, the companies will pay EPA’s costs of overseeing the RI/FS work and provide financial assurance for the required work. The value of the settlement agreement is $600,000. Learn more about enforcement actions at the site at https://www.epa.gov/enforcement/enforcement-actions-2020-address-public-and-residential-property-soil-cleanup-illinois. More information on the site is available on the Depue/New Jersey Zinc/Mobil Chemical Superfund site profile webpage at https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0500396.

Lead in Hazardous Wastes
Removal of lead waste at abandoned US Technology Corporation site

In July 2021, EPA settled with ten respondents to address the removal of over five million pounds of hazardous waste containing lead and other pollutants from the US Technology facility in Fort, Smith Arkansas. The facility sits on the banks of the Arkansas River, less than half a mile from a residential community with environmental justice concerns. Since 2016, waste at the facility was never recycled but continued to be illegally stored without the permit required under RCRA. The owner of US Technology was sentenced to prison in late 2019 after pleading guilty to felony violations of hazardous waste requirements in separate federal prosecutions in Missouri and Kentucky. EPA identified parties responsible for 84 percent of the total amount of waste on site (about 6,854,400 pounds of material) and confirmed through testing that the waste was hazardous waste for lead and other hazardous metals.

RCRA requires a generator of hazardous waste to be responsible for its waste from "cradle to grave," and to ensure that its waste is recycled or disposed as required by RCRA. The settlement alleged respondents failed to ship hazardous waste to a permitted treatment, storage, and/or disposal facility. The ten respondents will remove their allocated share of the waste plus a percentage of the orphan share at this abandoned/inactive facility. This effort will cost the respondents over $1 million, and almost 80 percent of the waste removal will be completed by the end of September 2021. EPA continues to work with other parties to remove the remainder of the waste. Learn more about the RCRA settlement to clean up the US Technology Corporation site at https://www.epa.gov/newsreleases/epa-settlement-addresses-alleged-hazardous-waste-violations-us-technology-site-fort.

Former Sioux City Council Member Pleads Guilty to Environmental Crimes

In March 2021, Aaron Rochester pled guilty to illegally storing and transporting hazardous waste, including lead-containing material, as the owner and operator of Recycletronics. Rochester admitted that beginning on or about June 2015 through about January 2017, as owner and operator of Recycletronics, he knowingly and unlawfully stored and transported hazardous waste, namely cathode ray tubes (CRTs) and leaded glass from televisions and computers at various facilities in and around Sioux City, Iowa. CRTs are the glass video display components of some electronic devices (usually older televisions or computer monitors). Due to the presence of lead located in the funnel glass, CRTs marked for disposal are considered hazardous waste under RCRA. Rochester faces a possible maximum sentence of five years’ imprisonment, a maximum fine of up to $50,000 for each day of the violation, and three years of supervised release following any imprisonment. Learn more about the conviction of Aaron Rochester at https://www.justice.gov/usao-ndia/pr/former-sioux-city-council-member-pleads-guilty-environmental-crimes

Lead in Drinking Water

EPA issues Emergency Order to Clarksburg Water Board

In July 2021, EPA issued a Safe Drinking Water Act (SDWA) Sec. 1431 emergency order to the Clarksburg Water Board in Clarksburg, WV, directing the public water system (PWS) to identify homes and businesses with lead services lines, provide an alternative source of drinking water
or filter for all impacted customers, and continue lead service line replacements. The 1431 emergency order also required the Water Board to provide Lead Public Education to all residents. The Clarksburg water system serves approximately 17,686 persons and has 7,913 service connections. In addition, the system provides water to other public water systems that serve an additional 38,225 persons.

EPA worked in coordination with the West Virginia Department of Health and Human Resources (WVDHHR) to determine that conditions at the Clarksburg PWS may present and imminent and substantial endangerment and this action was necessary to protect the health of persons. Personnel in WVDHHR’s Bureau for Public Health’s Childhood Lead Poisoning Prevention Program identified the issue of lead service lines during environmental lead assessments conducted at the homes of children diagnosed with elevated blood lead levels. Drinking water sampling in several homes confirmed lead levels were above EPA’s drinking water Action Level. Learn more at https://www.epa.gov/newsreleases/epa-orders-clarksburg-identify-homes-businesses-lead-service-lines

Lead in Air Emissions

American Zinc Recycling Corp. (AZR) settles multiple violations

In February 2021, American Zinc Recycling Corp. (AZR) settled a federal-state lawsuit citing violations of air, water and hazardous waste environmental laws at its facility in Palmerton, Pennsylvania. Alleged violations at the facility, which has been operating for over 100 years, included Clean Air Act violations of lead, carbon dioxide, particulate matter, nitrogen oxide, and fugitive dust emission limits. At EPA’s request, the U.S. Agency for Toxic Substances and Disease Registry (ATSDR) evaluated nearby residents’ exposure to lead in the air. The evaluation identified a public health concern regarding airborne lead within three miles of the facility. The settlements will deliver environmental and public health benefits, including reduction of an estimated 47 million pounds of electric arc furnace dust over three years, protecting residents as far as three miles away. The settlement also included a $3.3 million penalty and an estimated $4.3 million investment by AZR to implement measures to comply with federal and state environmental laws. Learn more at https://www.epa.gov/newsreleases/us-pennsylvania-settlement-reduce-hazardous-pollution-american-zinc-recycling-facility

For more information about lead poisoning prevention go to epa.gov/lead

This compilation of EPA activities that address lead violations and reduce lead exposures is provided as a courtesy and strictly for informational purposes. This information is not intended, and cannot be relied upon, to create any rights, substantive or procedural, enforceable by any party in litigation with the United States or third parties. EPA may modify or change this document at any time without public notice.