

Northside Drive Lead Investigation December 12, 2003

Introduction

The Georgia Division of Public Health (GDPH) was asked by the U.S. Environmental Protection Agency (EPA) to review soil-sampling data to determine if lead concentrations measured in soil posed a health hazard to residents living in the Northside Drive Area Lead Investigation (Investigation Area) boundaries. GDPH was also asked to provide health education to residents regarding potential health effects associated with exposure to lead in soil, including ways to reduce and eliminate exposure to lead in soil and other sources, and blood lead level testing for children.

Site Description and History

The area of concern encompasses three neighborhoods northwest of downtown Atlanta, Georgia, approximately centered at the intersection of Mecalvin and Trabert Streets. The Investigation Area is bordered to the east by Interstates I-75/85, and to the north, west, and south by mixed-use urban development.

There are approximately 234 private properties included in the initial assessment boundary. The area is comprised primarily of mid-sized homes and several small businesses. Today, most homes and businesses are renovated and/or maintained by long-time residents, or rented to those attracted to the area's proximity to downtown Atlanta. Most of the homes in all three neighborhoods were built prior to 1978; therefore, it is probable that they contain lead-based paint. They may also contain lead solder for water pipes.

The neighborhoods in the investigation area are adjacent to the former National Smelting and Refining Industries, Incorporated and Atlantic Steel Company sites.

From 1914 until 1981, National Lead Industries, Incorporated owned and operated a smelter facility on Bishop Street. Their operations consisted of lead recovery (i.e., secondary lead smelting) from lead-acid batteries and lead-bearing scrap. National Smelting and Refining, Incorporated purchased the property in 1981, and continued operations until 1984 when it filed for bankruptcy. The site is currently abandoned. There are several structures on site and the site is fenced

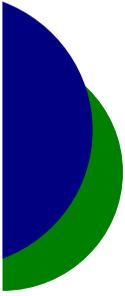
completely around the perimeter; however, at some locations the fence is not secure and access can be achieved. There are numerous physical hazards on site, including manufacturing and other debris.

Atlanta Steel Hoop Company was founded in 1901 and reorganized into Atlantic Steel Company in 1915. Atlantic Steel smelted steel from recycled automobile frames and scrap metal. Steel was reheated in furnaces and rolled into finished products such as steel bar and wire rod. Selected products were also galvanized or coated for durability. The final operation at the site, steel rolling, was ceased in 1998. The former facility was demolished, and the site began redevelopment as Atlantic Station, a large mixed-use development. The site has unlimited access and there are many physical hazards including heavy construction equipment.

Environmental Sampling/Results

In 2001, the U.S. Environmental Protection Agency (EPA) began to investigate the levels of lead in residential yards within an approximate one-mile radius of these facilities. Soil sampling results from the Northside Drive Area Lead Investigation indicate that lead levels found in soil in some yards are above levels considered protective of health and the environment. However, additional sampling needs to be conducted to characterize the full extent of contamination. Most homes in the area have substantial ground cover that would minimize the potential for direct exposure to contaminated soil; however, repeated exposure to lead-contaminated soil and from other sources could result in higher exposures than what is considered safe.

As a result, EPA began excavating contaminated soil from the Investigation Area in November 2003. GDPH coordinated a blood lead testing program for children in the area, and no elevated blood lead levels have been reported. Blood testing will continue to be offered during the remediation phase of the EPA investigation. In addition, GDPH continues to provide health education to residents about lead exposure, including ways to reduce and eliminate exposure to lead in soil and other sources.



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Conclusions

GDPH has determined that this site poses a past and current **public health hazard** to children because evidence exists that exposures to lead-contaminated soil above 400 mg/kg (milligrams per kilogram) have occurred, are occurring, and are likely to occur in the future until remediation is complete. The full extent of lead contamination in soil has not been determined; additional sampling is required to determine the total number of residences affected. Removal of lead-contaminated soil is a prudent public health action and will eliminate a future exposure pathway.

Recommendations

GDPH recommends that:

- All residents with soil lead levels above 400 mg/kg should follow proper guidelines to minimize exposure.

- Additional sampling should be conducted for lead in surface soils on the remaining properties in the Investigation Area.
- EPA will ensure measures are in place to monitor and reduce residents' exposure to contaminated soil during remediation efforts.
- Although limited vegetable garden sampling results do not indicate lead at levels of health concern, residents in the Investigation Area should not consume food from gardens without taking precautions to minimize their potential exposures to lead from plant uptake. This recommendation will remain in effect until soil remediation has been completed.