United States
Environmental Protection
Agency

EPA to Begin Testing for Lead Contamination in Yards

USS Lead
East Chicago, Indiana

December 2009

Informational meetings

EPA will hold an informational meeting to explain the residential testing process and answer your questions. Please plan to attend.

Thursday, Dec. 17
6 to 7:30 p.m.
East Chicago Public Library
2401 E. Columbus Drive
East Chicago, Ind.

If you need special accommodations to attend this meeting, contact Janet Pope at least one week before the meeting at 312-353-0628.

Access agreements

This fact sheet includes an access agreement for you to sign so EPA can test your yard for lead contamination at no cost to you. EPA will accept the agreements either by mail or at the meeting Dec. 17.

Documents on file

An information repository is a file for public review containing documents related to the project and the Superfund program. The USS Lead site information repository is located in the:

East Chicago Public Library
2401 E. Columbus Drive

On the Web

Fact sheets are also available at: www.epa.gov/Region5/sites/usslead.

Recursos adicionales

Esta hoja está disponible en español y puede serle proporciona a petición. Póngase en contacto con Tatiana Papakos at 312-201-7433 para obtener una copia.

Soil at some East Chicago homes could be contaminated with lead from a former lead refinery. U.S. Environmental Protection Agency plans to gather more information this winter by collecting soil samples from residential yards in neighborhoods near the former U.S. Smelter and Lead Refinery Inc. facility, commonly known as USS Lead.

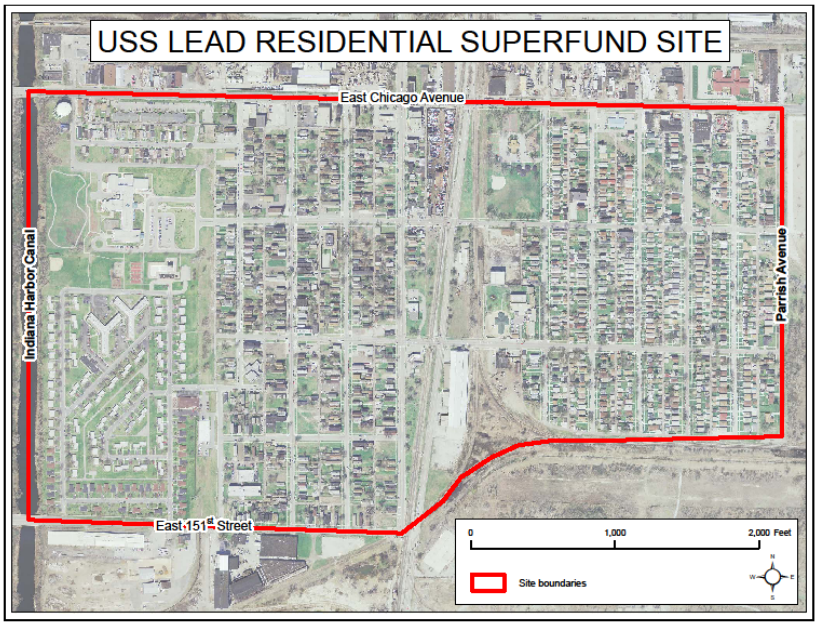
Samples will be taken from yards in an area between East Chicago Avenue and 151st Street, and between the Indiana Harbor Canal and Parrish Avenue (see map below). EPA will hold an informational meeting to explain this process to area residents (see box, left).

Summary of investigation

EPA will oversee a soil investigation in East Chicago to determine the extent of lead contamination in residential yards. The study, which EPA calls a "remedial investigation," will identify the extent and levels of lead in soil in the vicinity of the former USS Lead facility.

The company operated on a 79-acre property at 5300 Kennedy Ave. from 1906 until 1985. It recovered lead from scrap metal and automobile batteries. USS Lead produced lead waste as part of its smelting process. Some of this waste was emitted into the air, while some was stored in large piles within the facility.

Most of the former USS Lead plant area has been cleaned up. If there is lead contamination in your neighborhood, it may have come from USS Lead or other industries that have operated in the area. With this study, EPA is trying to determine areas that may need to be cleaned up.



Permission needed for samples

If you live in the area described on Page 1, EPA needs your permission to take soil samples from your yard. An agreement form is included with this fact sheet for your convenience. Please complete the form, sign it and return it to EPA. EPA representatives will also be going door-to-door seeking permission from property owners. Many residents have already given permission to sample their property.

EPA will select homes to sample based on spacing, and may not necessarily take samples at all homes where access has been granted in the initial phase of sampling. If your property is selected for sampling, EPA will contact you for your permission.

EPA technicians will take samples from both the front and back yards to find out if there is any danger to you from lead in the soil. **These tests are done at no cost to you** and all the work is done outside your home.

Investigation details

EPA will collect soil samples from residential properties in two phases beginning in December. Approximately 940 residences are located within the study area and 110 of these residences will be sampled in the first phase of the investigation. In addition, one school and four parks in the study area will also be sampled.

The first phase will include sampling in the residential area on a widely spaced sampling grid to further determine the lateral and vertical extent of lead-contaminated soil at residences, schools, parks, vacant lots and other areas where children may come into contact with contaminated soil. The second phase of the investigation will be based on the results of the first phase and will identify individual residences that need to be cleaned up. EPA is planning for the second phase to start in the spring of 2010.

The samples collected will be analyzed in the field using a field screening device that can detect metal concentrations. Some of the samples will then be sent to a laboratory for confirmation analysis.

Site history

The U.S Smelter and Lead Refinery Inc. formerly recovered lead from scrap metal and old automobile batteries. Two primary waste materials were generated as a result of the smelting operations – blast-furnace slag and lead-containing dust emitted by the blast furnace stack.

Blast-furnace slag was stockpiled south of the plant building and spread once a year over an adjoining 21-acre wetland. The lead-containing dust was originally trapped in bag filters. Lead particles have been found downwind of the plant, however, which suggests that all of the lead-containing dust was not contained by the bag filters.

In the 1980s, several state and federal enforcement actions were taken against the company. In September 1985, Indiana State Board of Health found USS Lead in violation of state law because lead particles were found downwind of the plant.

Previous site investigations

Since 1993, EPA's Resource Conservation and Recovery Act, or RCRA, corrective action program has overseen the cleanup and management of lead-contaminated soil within the boundaries of the former USS Lead facility and in limited off-site areas. The cleanup of the facility addressed some of the most heavily contaminated soil and sediment located within the facility. The cleanup included a 2-acre section of the on-site wetlands, where wetland soil and sediment were contaminated with lead at concentrations in excess of 10,000 parts per million.

The residential area north of the plant includes about 1,000 homes, a few parks, schools and public buildings, and has been sampled several times by different entities. The residential area itself has been sampled many times by different groups – EPA in 1985, Entact in 1999, EPA/IDEM in 2002, EPA RCRA in 2003 and EPA in 2006.

In 2003, EPA sampled soil in the residential area north of USS Lead as a part of the RCRA corrective action investigation. Results showed some residential yards to have high levels of lead contamination. Most of the yards with the highest lead sampling results were in the southern region of the residential area. In 2004, EPA's RCRA corrective action program referred USS Lead to the federal Superfund program for cleanup of the residential yards and wetland portions of the facility.

In April 2006, EPA Superfund re-sampled the residential yards at 14 properties. The analysis of those samples confirmed that the yards for at least 12 homes had lead contamination levels above 1,200 parts per million, which is the regulatory level used in the evaluation of residential yards with lead contamination. In 2008, the Superfund removal program removed soil from 13 of the 14 yards with elevated lead levels.

What is lead and why is it dangerous?

Lead is a naturally occurring heavy metal. It is commonly found at low levels in soil. Low levels of lead can be found in cities in air, water, food and dust because of the widespread use of lead in man-made products. The federal government regulates the amount of lead in the air, water and soil.

Lead is highly toxic and can cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Children 6 years old and younger are most at-risk because their bodies are growing quickly and the effects of the lead can cause problems. Children often have higher levels of exposure because they play in dirt and may put dirty hands in their mouths. Also, children who lack proper nutrition may absorb more lead and suffer more harmful effects.

Technical assistance grants

The technical assistance grant program provides up to $50,000 to community groups to hire technical advisors so citizens can better understand and interpret Superfund site-related technical information. Groups must represent the entire community, hire reputable advisors to review and interpret technical information in lay terms, and use their grant money to inform everyone rather than only group members.

For further information, contact Janet Pope (see back page for contact information).

What should I do to reduce exposure to lead?

You should take steps to protect children from lead-contaminated soil. Pregnant women should seek prenatal care to protect their developing infants. You can limit children's exposure to dirt in the following ways:

- Cover areas of exposed dirt with grass, flowers, mulch or concrete.
- Wash down very dusty areas with a hose.
- Discourage children from playing in the dirt, gravel or ground covers, such as sidewalks and driveways.
- Supervise young children to prevent them from eating dirt.
- Wash children's hands often, especially before they eat and before nap time and bed time.
- Clean or remove your shoes before entering your home to avoid tracking in lead from soil.
- Make sure children eat nutritious, low-fat meals high in iron and calcium, such as spinach and dairy products. Children with good diets absorb less lead.

To prevent ingestion of lead-contaminated dust, you should:

- Place a door mat at the door.
- Vacuum carpets and drapes.
- Dust with an oiled cloth.
- Mop floors often.
- Wipe your feet before entering your home.
- Keep windows closed as much as possible to reduce dirt in the home.
- Replace furnace filters often.

Call the National Lead Information Center at 800-424-LEAD (5323) to learn more about how to protect children from lead poisoning and for other information on lead hazards, or visit www.epa.gov/lead.

Want to learn more?

These EPA representatives are available to discuss the residential yard sampling with you:

Michael Berkoff
Remedial Project Manager
312-353-8983
berkoff.michael@epa.gov

Janet Pope
Community Involvement Coordinator
312-353-0628
pope.janet@epa.gov

You may call Region 5 toll-free at 800-621-8431, weekdays from 8:30 a.m. to 4:30 p.m.

Technicians taking soil samples for lead

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United States
Environmental Protection
Agency

Region 5
Superfund Division (SI-7J)
77 W. Jackson Blvd.
Chicago, IL 60604-3590

Return Address Requested

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