



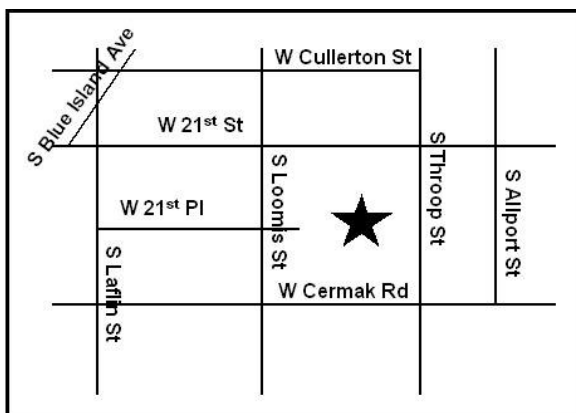
# H. Kramer and Company

## On-site and Off-site Soil Sampling Chicago, Illinois

In June 2005, the Illinois Environmental Protection Agency (Illinois EPA) conducted a site investigation in the area of the H. Kramer and Company facility.

### Where is the H. Kramer facility located?

The H. Kramer and Company facility is located at 1345 West 21<sup>st</sup> Street in Chicago, Illinois. The facility is bordered to the north by 21<sup>st</sup> Street, to the east by Throop Street, to the south by an alley north of Cermack Road and to the west by Loomis Street.



### What does the H. Kramer facility produce?

The H. Kramer facility has operated at its current location since the 1920's. The facility receives scrap metal from various sources. These materials are processed into brass and bronze ingots that are sold to various markets.

### What were the results of the soil samples taken at the H. Kramer facility, the rights-of-way and properties near the facility?

In June 2005, staff from the Illinois EPA conducted soil sampling for metals, including lead, at six (6)

residential properties, four (4) off site locations and six (6) locations at the facility. Soil samples were initially analyzed with an X-Ray Fluorescence (XRF) device. Some samples were then analyzed in a laboratory for confirmation of contaminant levels found in the field.

The lead levels observed on-site at H. Kramer ranged from 1,250 parts per million to 65,000 parts per million. Lead levels found off-site ranged from 120 parts per million to 2,500 parts per million. The U.S. Environmental Protection Agency (USEPA) and the Illinois Department of Public Health consider lead contaminated soils to be a potential health risk if levels are above 400 parts per million in bare soil in children's play areas or 1,200 parts per million for bare soil in the rest of the yard.

### What has caused "elevated" lead levels in the neighborhood surrounding the H. Kramer facility?

Like other urban areas in the United States, lead-contaminated soils in vicinity of H. Kramer are due to decades of lead releases from multiple sources, including: (1) residue from lead-based paint caused by deterioration, scraping, or sanding; (2) fall out from the past use of leaded gasoline; and (3) past and current industrial emissions. In general, lead contamination levels on residential properties are usually highest near the drip line of the house or near old garages and are caused primarily by the deterioration or removal of lead-based paints.

### How can lead affect my health?

Individuals can be exposed to lead by breathing contaminated dust, by swallowing contaminated soil and by eating food that has been grown in



contaminated soil. The most common route of exposure is breathing or eating lead paint residue inside homes.

Studies have shown that exposure to elevated levels of lead in soil can increase blood lead levels in children. Exposure to lead greater than 400 parts per million in bare areas of soil or in children's play areas may pose a health hazard.

The presence of lead in soil greater than 400 parts per million does not mean that individuals have been exposed to the lead. Activities that increase exposure to lead in soil include playing, digging, gardening, or otherwise contacting and disturbing the contaminated soil.

Children, particularly those age six years and younger, are most likely to have the greatest exposure to lead in soil and are most susceptible to the health effects of lead due to their developing nervous system. Health effects associated with lead exposure in children include reduced IQ and slower mental development. Testing your children's blood for lead is the only way to determine their lead exposure.

#### **How can I reduce or prevent my family's exposure to lead in the soil?**

##### **1) Practice good hygiene habits.**

Wash children's hands and faces frequently, especially before eating and bed time. Keep their fingernails clean and short. Adults should wash their hands before feeding their children, smoking, eating or drinking. Discourage children from placing fingers and non-food items in their mouths. Frequently clean toys or objects that children put in their mouths. Thoroughly wash garden vegetables before eating them.

##### **2) Practice good housekeeping techniques.**

Remove your shoes upon entering your home to prevent tracking contaminated soil inside. Store outdoor shoes at entryways. Vacuum your carpeting, rugs and upholstery often. Regular vacuuming will keep dust from accumulating.

##### **3) Create barriers to contaminated soil.**

Bare soils can be covered by grass, mulch, plastic, concrete or through other landscaping techniques. Turning over the soil or excavating and disposing of contaminated soil will reduce exposure. The area

should be kept moist while working with the soil to reduce dust formation. Do not disturb contaminated soil on windy days or when children or pregnant women are present. Keep windows closed on windy days, at least on the windward side of the house. This will help to keep dust from being blown inside. Fences, bushes and grass help reduce the dispersion of contaminated soil. Plant gardens in raised beds constructed using clean soil.

#### **4) Don't let children play or dig in contaminated soil.**

Build a sandbox with a bottom and fill it with clean sand to provide children with a safe play area. Play areas can also be lined with mulch, shredded rubber, or other materials suitable for play areas.

#### **How can I find out if my child has been exposed to lead?**

All children in Chicago aged 6 years or younger are required to get blood lead tests. Lead tests are part of regular well-child care and your physician should offer lead testing. *The Chicago Department of Public Health offers free blood lead testing. Call 312-747-LEAD for more information.* Testing your child is the only way to determine their lead exposure. All results are confidential.

#### **What will the Illinois EPA do next?**

The Illinois EPA has asked H. Kramer and Company to cleanup the contaminated soils on its property and certain adjacent properties. H. Kramer indicated the company would enroll in Illinois EPA's voluntary Site Remediation Program (SRP) where agreed work will be performed under agency oversight. In addition, USEPA cited H. Kramer for clean-air violations in July 2005. The citations allege that H. Kramer violated the opacity requirements in its permit and that H. Kramer failed to follow USEPA procedures before installing new furnaces. USEPA and H. Kramer are attempting to reach a negotiated settlement on these matters.

#### **How can I learn more about this site?**

For questions or comments about the soil sampling or future Illinois EPA activities, please contact:

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