



PUBLIC HEALTH ASSESSMENT

Chemicals of Concern and Health Messages



ABOUT THE LCP CHEMICALS SITE:

- The site was used for manufacturing operations, petroleum refining, and power generation
 - 133 acres of dry land soils
 - 670 acres of tidal marshlands

PUBLIC HEALTH ASSESSMENT - OVERALL CONCLUSIONS

- About 30 acres pose health concerns if developed for residential use
- About 5 acres pose health concerns if developed for commercial/ industrial use
- Chemicals found at levels of concern are PCBs, Mercury, Lead, and PAHs



POLYCHLORINATED BIPHENYLS

Affected Half-Acre Grids
Residential: 41
Commercial/Industrial: 6



Polychlorinated biphenyls (PCBs) are mixtures of compounds that have been used as coolants and lubricants in electrical equipment. PCBs are no longer manufactured in the United States and do not occur naturally in soil.

PCBs CAN POSE THE FOLLOWING HEALTH CONCERNS FOR CHILDREN, ADULTS, AND WORKERS:

- Significant cancer risk
- Small changes in the immune system
- Damage to nails, gums, and eyelid

ADDITIONAL HARMFUL EFFECTS TO CHILDREN:

- Damage to developing nervous systems
- Problems with learning and performance for children who intentionally eat soil

POLYCYCLIC AROMATIC HYDROCARBONS

Affected Half-Acre Grids
Residential: 6
Commercial/Industrial: 2

Polycyclic aromatic hydrocarbons (PAHs) are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances. Some PAHs are also used in medicines or to make dyes, plastics, and pesticides.

CHILDREN, ADULTS AND WORKERS EXPOSED TO PAHs FOR LONG PERIODS HAVE AN INCREASED CANCER RISK.



MERCURY

Affected Half-Acre Grids
Residential: 10
Commercial/ Industrial: 4



Mercury is a naturally occurring metal in soil at very low levels. It can get into soil from manufacturing plants that use mercury and from incinerators and industries that burn mercury-containing fuels.

IF PREGNANT WOMEN COME IN CONTACT WITH MERCURY, THEIR DEVELOPING FETUSES AFTER BIRTH COULD EXPERIENCE:

- Problems with language, attention and memory
- Problems with visual/spatial and muscle functions

WORKERS WHO COME IN PROLONGED CONTACT WITH MERCURY COULD EXPERIENCE:

- Diminished sensitivity to pain and touch
- Decreased fine motor performance
- Impaired vision, and impaired hearing

LEAD

Affected Half-Acre Grids
Residential: 33



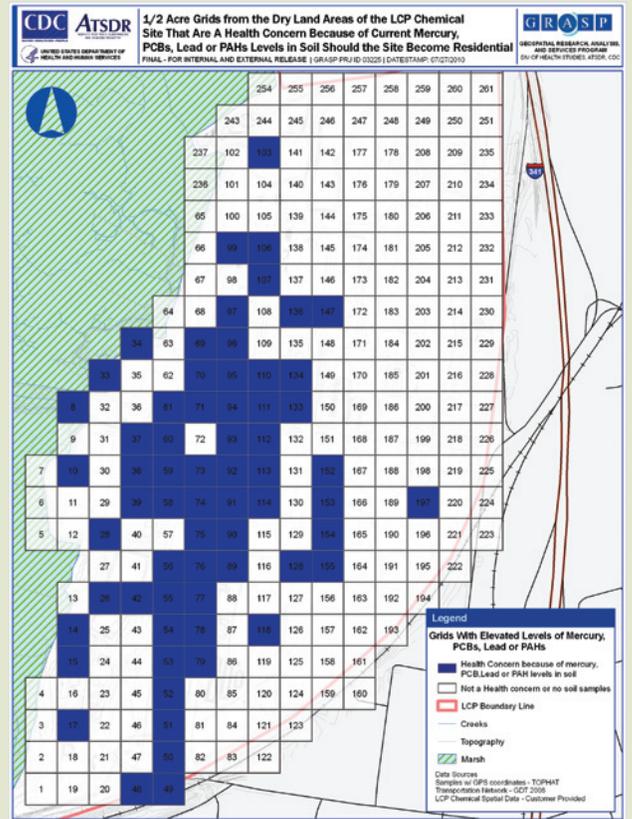
Lead is a naturally occurring metal in soil at low levels. It can get into the environment from mining, manufacturing, and burning fossil fuels. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays.

CHILDREN'S BLOOD LEAD LEVELS COULD INCREASE WHEN SOIL LEVELS ARE HIGH, RESULTING IN THE FOLLOWING HARMFUL EFFECTS:

- Small decreases in IQ
- An increase in attention deficit hyperactivity disorder (ADHD)
- Reduced attention span, lack of concentration
- Decreased fine muscle skills
- Withdrawn behavior
- Decreased height
- Small delays in puberty
- Small changes in kidney

HALF ACRE GRIDS

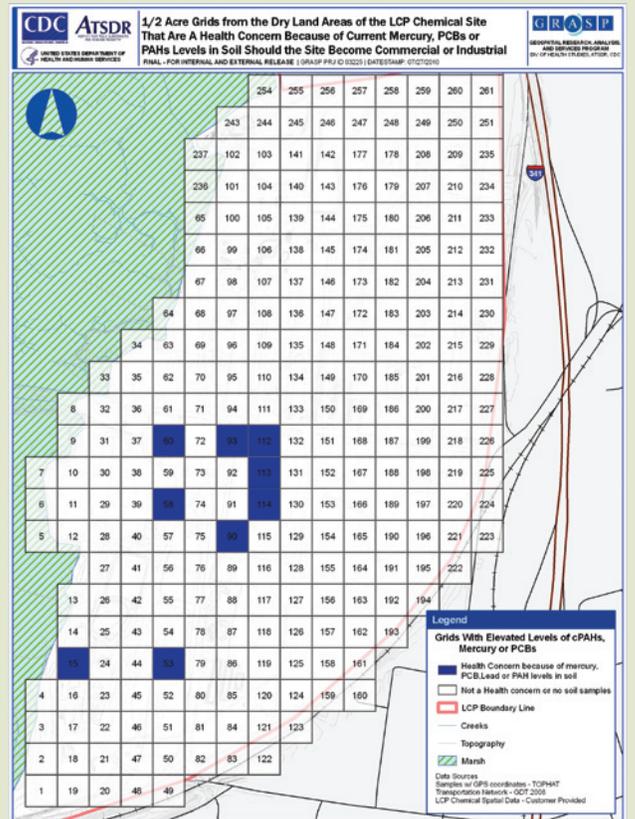
WITH HEALTH CONCERNS FOR RESIDENTIAL USES



MAP AUTHOR: EFOMO WOGHIREN
 PROJECTION: GA State Plane East Zone,
 NAD 83, Feet

HALF ACRE GRIDS

WITH HEALTH CONCERNS FOR COMMERCIAL OR INDUSTRIAL USES

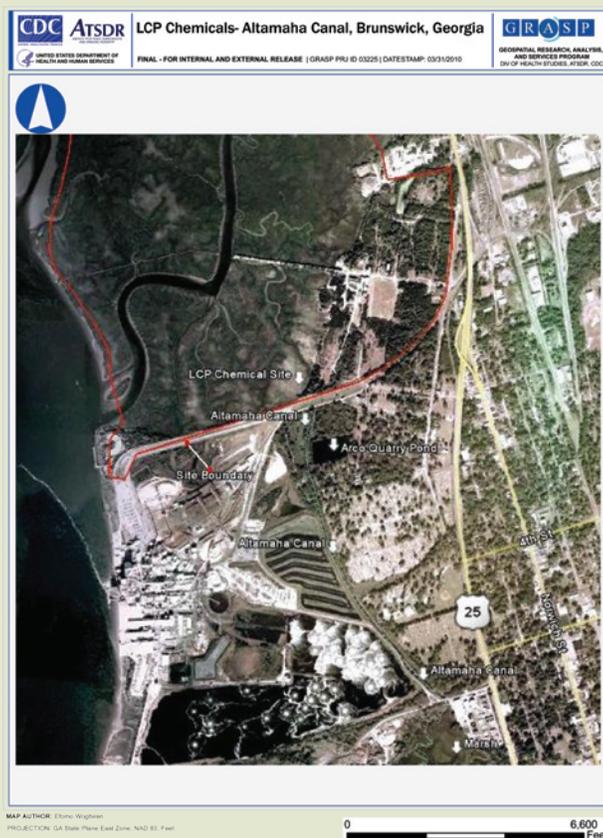


MAP AUTHOR: EFOMO WOGHIREN
 PROJECTION: GA State Plane East Zone,
 NAD 83, Feet



PUBLIC HEALTH ASSESSMENT FOR THE LCP CHEMICALS SITE

Environmental Messages



CONCLUSION 1

It is unknown if off-site portions of the Altamaha Canal are contaminated with PCBs and mercury.

RECOMMENDATION

Sediment and fish samples should be collected from the Altamaha Canal to determine if contaminants have impacted the canal.

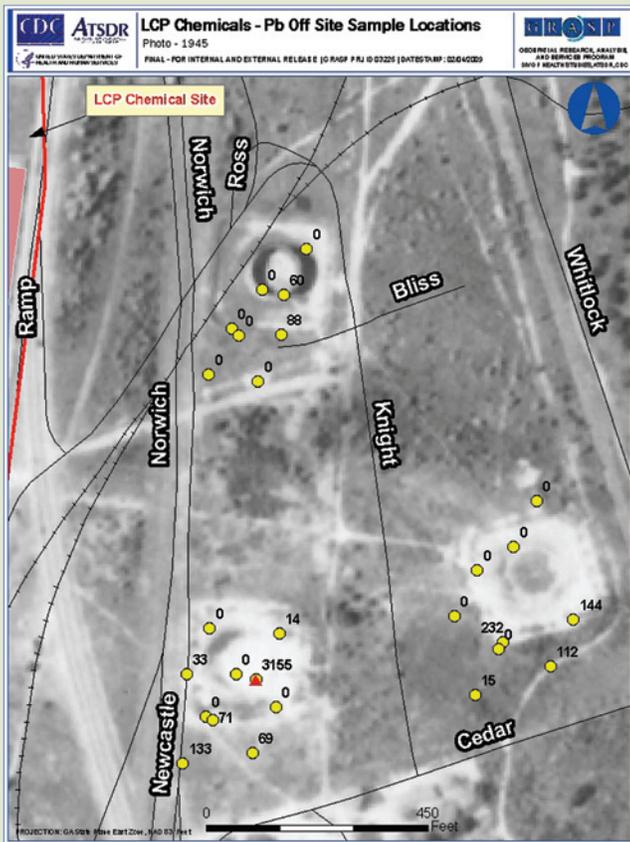


CONCLUSION 2

It is unknown if the pond in the northern portion of the site is contaminated.

RECOMMENDATION

Sediment and fish samples should be collected from the on-site pond.



CONCLUSION 3

Off-site soils, including soils in the Arco neighborhood, were sampled for contamination.

No significant contamination was found in the Arco neighborhood or other off-site areas.

Waste from industrial processes (clinker waste) was found at a residential home on Clairmont Lane.

RECOMMENDATION

The clinker waste that was found in a back yard on Clairmont Lane should be investigated.



CONCLUSION 4

PCB and mercury contamination remain in the marsh area near the site.

RECOMMENDATION

Monitoring of fish and shellfish in the Turtle River and in the marsh near the LCP Chemicals Site should continue.

