Update on EPA Lead Policy

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Urban Lead Forum
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Current EPA Lead Policy

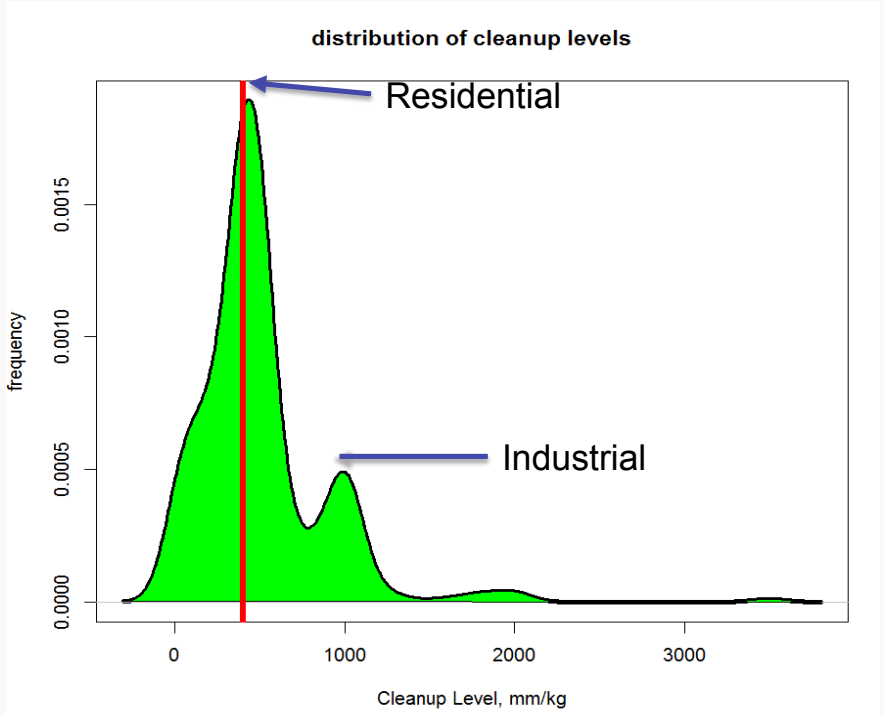
- Soil Screening Level of 400ppm at residential sites
  - Determined based on the IEUBK using default exposure parameters.
  - Indicates the need to conduct a site-specific study of risks.
  - Levels of contamination above the screening level do NOT automatically require action
- In practice, 400ppm has been used as a cleanup level at many sites.
- Many sites set site-specific cleanup levels higher or lower than 400ppm

Cleanup Levels

Median (n 366)	400 mg/kg
Mean	500 mg/kg
Minimum	1.3
Maximum	3,500
< 100 mg/kg	10%
<200 mg/kg	16%
<400 mg/kg	52%

515 sites with no cleanup level for lead

- Cleanup based on other contaminants (444)
- 399 have chemicals with federal PRGs below 100 mg/kg



Lead and Health Effects

- 2013 National Toxicology Program Monograph on Health Effects of Low-level Lead
  - There is no threshold for adverse effects
- EPA's 2013 Integrated Science Assessment
  - Cognitive function decrements in young children with mean blood Pb levels between 2 and 8 µg/dL
- June 2012 Federal Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) to the CDC
  - blood lead "reference value" based on the 97.5th percentile of blood lead levels in U.S. children aged 1-5 years (based on NHANES)

Superfund Lead Sites

- At many sites, Superfund cleanup has resulted in community wide average Pb Lead below 5ug/dL.
  - Typically, a variety of health intervention and Superfund-related activities at residential and non-residential area
- Caveats
  - Are these data representative of the community?
  - Community-wide average is not necessarily equivalent to our human health risk assessment goals.
  - Success coincides with a drop in national BLL as a results of bans on products that contain lead

What is EPA Doing?

- Evaluating our current Lead Policy
- Evaluating the IEUBK Model; updating input parameters
- Coordinating across EPA Programs and the Federal Government
- Lead TRW Working on Technical Guidance and Tools
  - "Guidance for Sample Collection for *In Vitro* Bioaccessibility for Lead (Pb) in Soil"
  - *In vitro* assay for lead
  - IEUBK Model Training Video
  - DRAFT Residential Sites Handbook for Regional Review
  - DRAFT Blood Lead Survey Guidance
  - DRAFT Acute Exposure Scenarios Guidance
  - DRAFT Sieving Recommendation

EPA Lead Policy Development

- Science clear that detrimental effects occur below 10ug/dL
- EPA has had some success in reducing average blood lead levels below 5 µg/dL under the current policy
- Use of site-specific information should become more routine
- Importance of background, especially in urban areas
- Need to prioritize sites with greatest risk
- Five years reviews conducted according to existing guidance

Urban Lead

Implications for Superfund Cleanups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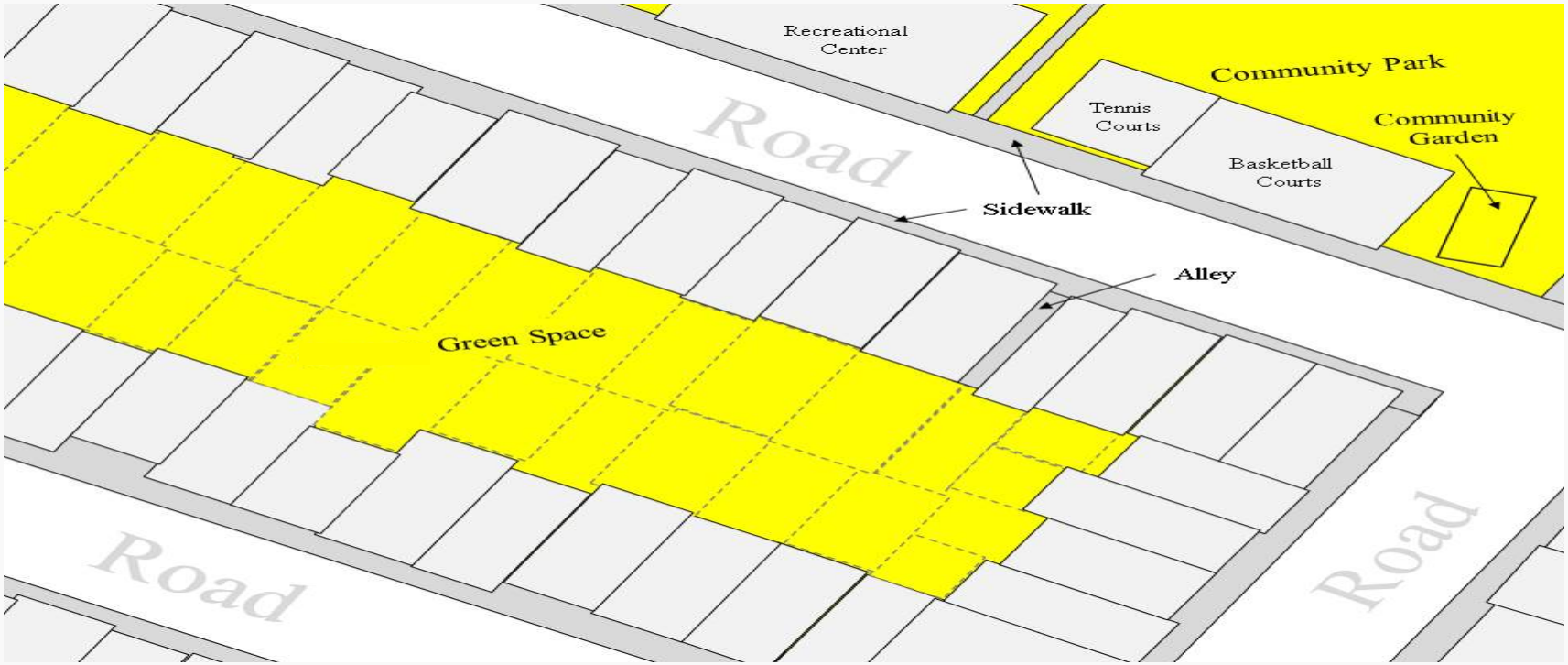
Recreational Center
Community Park
Tennis Courts
Basketball Courts
Community Garden
Road
Sidewalk
Alley
Green Space
Road
Road

Discussion topics

- What is background for urban areas and how is it determined?
- Methods for source attribution
- Cost effective response actions to address elevated levels of contamination
- Demonstrating effectiveness of remediation in an urban setting
- Addressing recontamination after remediation in urban areas.