



## Lendrum Court Soil Testing Results

North Fort Scott  
Neighborhood Information Session  
December 11, 2013

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## Agenda

- Welcome and Introductions
- Overview of Presidio Remediation Program
- DTSC Site Cleanup Process
- Results of Soil Testing at Lendrum Court
- Trust Recommendations for Next Steps
- Questions & Answers

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## Presidio Remediation Program

- Objective: Remediation of former Army Waste Release Sites and cleanup of lead-based paint (LBP) in soil around buildings
- Trust took responsibility for program in 1999
- Regulatory Oversight by:
  - California Department of Toxic Substances Control (DTSC) for waste regulated under CERCLA and LBP in soil
  - State Regional Water Quality Control Board (RWQCB) for Petroleum waste releases
- Waste release sites located throughout the Presidio in residential, commercial, and recreational areas
- Over 800 buildings and structures assessed for LBP

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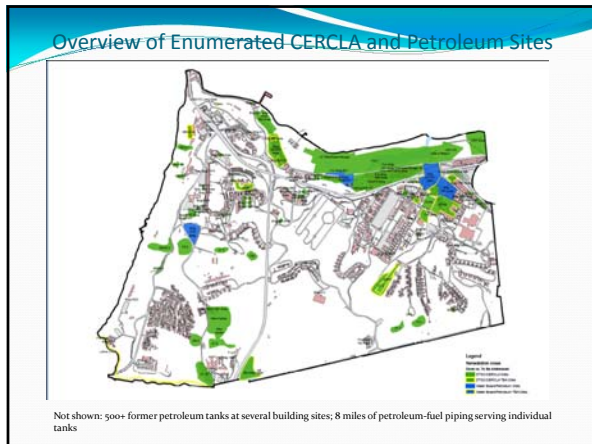
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- ### Site Cleanup Process
- Site Discovery
  - Remedial Investigations to characterize nature and extent of contamination
  - Human Health and Ecological Risk Assessment
  - Feasibility Study to evaluate remedial alternatives
  - Remedial Action Plan or similar document to select remedy
  - California Environmental Quality Act Initial Study to evaluate environmental impacts of remedy
  - Remedial Construction to implement remedy
  - Regulatory Agency certification that remedy was implemented per plan
  - Operation & Maintenance of remediated site

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- ### Lendrum Court Background
- Lendrum Court not previously identified as an Army waste site
  - In response to reports of glass, Trust completed 3 trenches (test pits) at Lendrum Court
  - Debris and ash were encountered 2.5-feet below ground surface in 1 of the 3 test pits
  - Trust sampled and tested the debris/ash layer
    - Polycyclic aromatic hydrocarbons (PAHs) and dioxins and furans (constituents often present in ash) were detected at concentrations above human health screening levels but within regional background
  - Trust notified Army and DTSC of the potential waste release site at Lendrum Court
  - DTSC provided written guidance to conduct further assessment to clarify potential human health risks

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## Research into Site History

- Army Archives Review
  - No data indicating land filling activity or other sources of contamination in Army's records
- Photo Documentation Review
  - 1921 map shows a potential incinerator 150 feet southeast of present day Lendrum Court, not identified on later maps
  - 1936 Doyle Drive constructed through area where potential incinerator was located
  - 1936 – 1970 - Site remains undeveloped
  - 1970 and 1975 - Residential buildings, parking, and landscaping constructed

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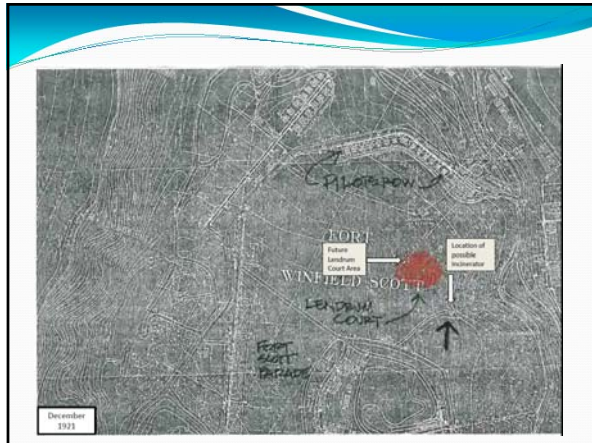
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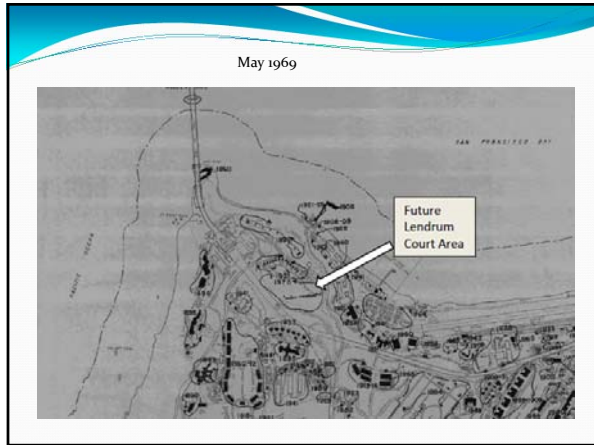
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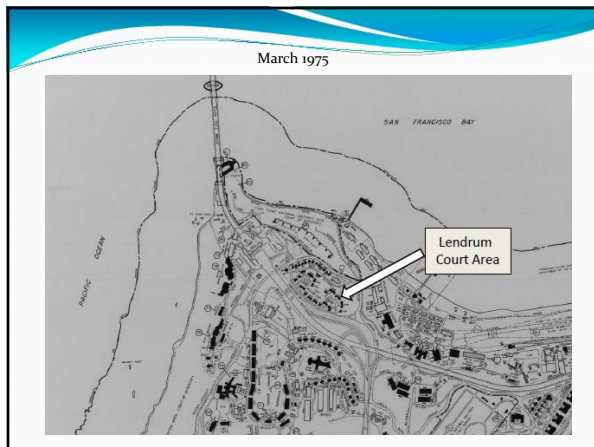
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## June 2013 Field Investigation

- 15 trenches dug around residential buildings, targeting areas with glass and debris at ground surface
- Subsurface layers encountered
  - Overburden soil – 0.5 to 2.5 feet below ground surface, no debris
  - Debris – 3 inches to 5 feet thick below overburden soil; glass fragments, melted glass, ash, bottles, ceramics, terra cotta, and other miscellaneous items
  - Bottom fill soil and native soil below debris, no debris
- 37 soil samples collected from the three earth layers

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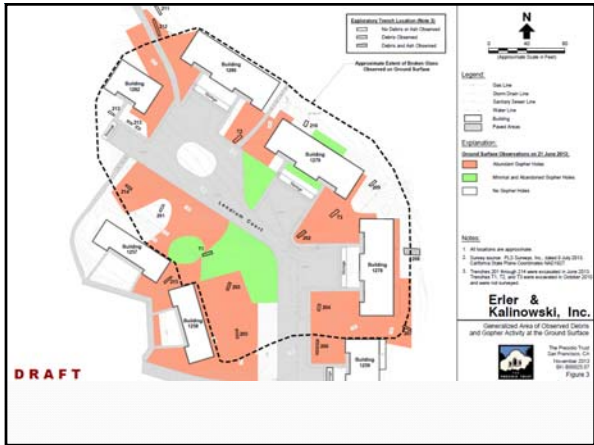
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## Results of Soil Sampling

- PAHs and dioxins and furans detected above soil screening levels for human health, but concentrations within expected urban ambient (background) range
- Metals detected in debris layer and overburden soil above soil screening levels for human health
- Metals also detected above soil screening levels for protection of ecological species

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## Human Health Screening Risk Evaluation

- Screening-level evaluation of risk to represent “reasonable maximum exposure” conditions
- Assumes residents and landscape/maintenance workers could be exposed to contaminants in soil via incidental ingestion and dermal contact at high soil contact rates
- Lead is primary contaminant of concern in soil
  - Detected above residential soil screening level of 80 mg/kg in 13 of 16 trenches, and worker level of 320 mg/kg in 9 of 16 trenches
  - Present in debris layer and overburden where debris brought to the surface by gophers

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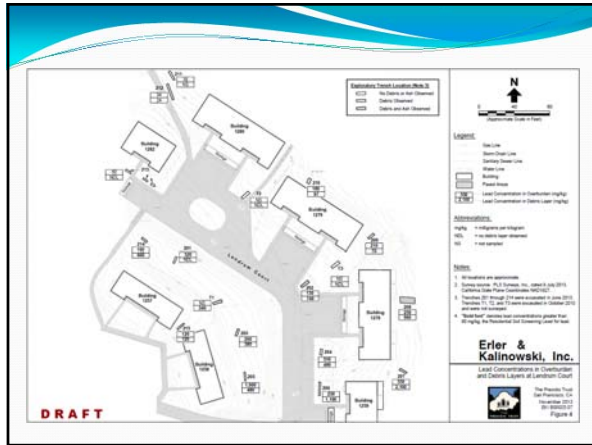
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## Soil Screening Levels for Lead

- Soil screening level using DTSC LeadSpread Model
  - Assumes reasonable maximum exposure to soil (e.g., child eats 100 mg of soil 7 days per week for unlimited duration)
  - Assumes unrestricted residential land use with no restrictions on subsurface soil contact by child

Recent Changes to LeadSpread Model by DTSC:	LeadSpread Model 7	New (2011) LeadSpread Model 8
Target threshold blood-lead concentration in child	10 µg lead / dL blood	1 µg lead / dL blood
Soil screening level	400 mg/kg (ppm)	80 mg/kg (ppm)

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### Trust's Recommended Next Steps

- Complete additional investigations to determine extent of debris and site boundaries
  - To include broader area of playground, Armistead Road, and Ramsel Court to confirm site is limited to Lendrum Court
- Evaluate site-specific human health risks for residents and workers
- Develop remedial alternatives to mitigate human health and conduct site cleanup under DTSC oversight
- Continue neighborhood meetings to provide updates and solicit input

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### Project Contacts

- Remediation Related
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  - Lori Koch, DTSC Presidio Project Manager
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- Housing Related
  - Ann Ostrander, Presidio Trust Associate Director of Residential Asset Management
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### Questions and Answers

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