



Update on Chromium Activities to Jersey City Community

NJDEP

Division of Science, Research &
Technology

February 15, 2006

Tonight's Meeting

- **Discuss issues raised at Dec. meeting**
 - Present DSRT responses
 - Describe planned research studies 15 minutes
- **Present overview of planned exposure study** 30 minutes
- **Questions, comments, concerns from audience** 90 minutes



Recap of December meeting: Information Requests

- List of capped sites in Hudson County
- List of all COPR sites in Hudson County
- Status of remediation at sites:
www.state.nj.us/dep/srp/siteinfo/chrome/update32.htm
- Reports of completed studies

www.state.nj.us/dep/dsr/chromium/

NJDEP - Chromium Workgroup - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.state.nj.us/dep/dsr/chromium/

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Division of Science, Research & Technology

NJDEP CHROMIUM WORKGROUP

Public Meeting

Status of Chromium Exposure Study

New Jersey Department of Environmental Protection invites you to attend a
Community Information Session
280 Grove Street
Jersey City Hall, Jersey City, New Jersey
Council Chambers

Wednesday, February 15, 2006
7-9 p.m.

Representatives from NJ Department of Environmental Protection, the NJ Department of Health and Senior Services and the Environmental and Occupational Health Sciences Institute (EOHSI) are planning to conduct an exposure study to assess the exposure and risks to Hudson County residents living near chromium waste sites. Your continued input will help in the design of this investigation.

Presentations, with an opportunity for questions from the community, will be made by:

- Dr. Paul Liroy, Associate Director of EOHSI and professor at Environmental & Community Medical at UMDNJ RWJ Medical School

Historical Chromium Documents

- [Chromium Medical Surveillance Project - Summary of Final Technical Report \(October 1994\)](#)
- [Chromium Medical Surveillance Project - Technical Report \(October 1994\) \(62.3 mb - 134 pages\)](#)
- [Chromium Medical Surveillance Project - Appendices \(October 1994\) \(50.7 mb - 96 pages\)](#)
- [Environmental Health Perspectives Volume 92, 1994](#) - This is a link to the Environmental Health Perspectives (EHP, a monthly journal of peer-reviewed research and news). The articles published in this volume were given at a seminar on February 2-3, 1990 entitled "The Chromium Problem:

Chromium Workgroup Documents

- [Memorandum to Commissioner Campbell criticizing the Chromium Workgroup Report with responses from the Workgroup Chair](#)
- [Report for Public Comment and Response to Peer Review Comments](#)
- [Workgroup Charge](#)
- [Memos Establishing Workgroup](#)

Subgroups

- [Analytical Chemistry](#)
- [Environmental Chemistry](#)
- [Risk Assessment](#)
- [Air & Dust Transport](#)

i-MapNJ DEP Map - Microsoft Internet Explorer

i-MapNJ DEP new jersey department of environmental protection **nidep**

data descriptions help

zoom in zoom out full extent last extent pan identify measure select set origin clear selection print

Data Layers

refresh map

AutoRefresh Map

Visible Active

- Chromate Sites**
- Known Contaminated Sites List (2001)**
- Public Community Water Supply Wells**
- Place Names**
- Municipalities**
- Counties**
- Congressional Districts**
- Legislative Districts**
- CAFRA Boundary**
- Highlands**
- Pinelands Boundary**
- Open Space (State)**
- Roads (NJDOT)**
- Roads (Tele Atlas)** ⓘ
- Category One Waters** ⓘ
- Surface Water Quality Standards**
- Streams**
- Water Bodies**
- Landscape Project (Bald Eagle Foraging)**
- Landscape Project (Beach)**
- Landscape Project (Emergent Wetlands)**
- Landscape Project (Forest)**
- Landscape Project (Forest)**
- Landscape Project (Forest)**

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Query

Find location of interest

Legend

- ★ Chromate Sites
- Counties
- New Jersey

Scale: 1:580,148 Map: 618517.2467, 676668.0565 -- Image: 319, 383

Local intranet



Recap of December meeting: Action Items Identified by Community

- **Issues raised by community**
 - Track students/teachers from Whitney School
 - Concern about Garfield and Carteret Avenues and Society Hill
 - ICO follow-up sampling?
 - Track chromium transport from sites, especially capped sites



DSRT Response

- **Issue raised:** Track students from Whitney School
- **Response:** Internal project to track students from this study and survey them on current health status.
- **Assistance needed:** Where are the students/teachers now?



DSRT Response

- **Issue Raised:** Are lung cancers elevated in Hudson County near COPR sites?
- **Response:** DHSS to examine cancer registry to determine if lung cancer incidence is elevated.
- **Assistance needed:** Community input to determine geography (i.e., census tract).

DSRT Response

- **Issue Raised:** ICO follow-up sampling?
- **Response:** Providing technical assistance and analytical support to ICO efforts.
- **Assistance:** Continued collaboration.

DSRT Response

- **Issue Raised:** Concern about Garfield and Carteret Avenues and Society Hill
- **Response:** Site visit for possible inclusion in future exposure studies.

DSRT Response

- **Issue Raised:**
Track chromium transport from sites, especially capped sites.
- **Response:**
Exposure study in residences near capped sites.





Sites Visit



- Tour of sites
- February 8, 2006
- Candidate locations for study



Sites Visit



Additional Research Planned

- **Analytical methods**

- **Soil:** *Evaluation of Three Analytical Techniques for Hexavalent Chromium*

- **Air:** *Development and Optimization of a Sampling and Analytical Method to Measure Hexavalent Chromium in Ambient Air*

- **Particle Size Study:** *Evaluation of Chromium Concentrations on soil particles by particle size*

- **Recycling:** *Conversion of Chromium Ore Processing Residue to Chrome Steel*

Chromium Exposure Study



- **Significant concern that has not been addressed to date is transport from capped (“remediated”) sites to residences.**
- **Commitment made to conduct an exposure study to address this concern specifically.**

Phased Exposure Study: Dr. Paul Lioy



- EOHSI researcher
- National expert in exposure studies
- Particular expertise with dust/wipe sampling
- Experience with COPR sites