

AGENDA

- Introduction-Melissa Dimas
- History/Background- Joe Cosentino
- EPA's Removal Program- Joe Cosentino
- Plan of Action- Joe Cosentino
- Risk Assessor- Michael Sivak
- Q & A

History/Background

■ EPA's involvement in Site:

- October 2002 – New Jersey Department of Environmental Protection (**NJDEP**) refers the site to U. S. Environmental Protection Agency (**EPA**) for **Removal Action Consideration**.
- October 2002 – Site is initially assigned to the Response and Prevention Branch (RPB).
- EPA's Response and Prevention Branch collects samples from Garfield Fire House #3, the results are negative.

History (cont'd)

- June 2003 – Site assigned to Removal Action Branch.
- November 2004 – The Marzitelli Senior Living Center at 225 Midland Avenue is sampled. Air, residue and water samples were collected. No chromium, total or hexavalent was detected in any of the living areas sampled.
- September 2006 - Upon compiling all sampling data and depicting it on an area map, EPA requested Agency for Toxic Substances and Disease Registry (ATSDR) and New Jersey Department of Health and Senior Services (NJDHSS) assistance to evaluate the potential exposure pathways from the contaminated groundwater to the community surrounding the site.

History (cont'd)

- September 2007 – A Letter Health Consultation was received from NJDHSS, the letter recommended delineation and monitoring of the chromium groundwater plume and an investigation of groundwater seepage into basements. Upon completion ASTDR and NJDHSS will re-evaluate the exposure pathways and determine if a public health hazard exists.

History (cont'd)

- March 2008 – Money (\$190,000) to perform the required groundwater assessment was requested and obligated to the site.

EPA's Removal Program

■ Definition of a removal

- Definition of a removal action – the cleanup or removal of released hazardous substances from the environment, such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of a hazardous substances, the disposal of removed material , or the taking of such other action as may be necessary to prevent , minimize, or mitigate damage to the public health or welfare or the environment, which may otherwise result from a release or threat of release.

Removal Program

■ EPA's Response Authority

- Whenever any hazardous waste is released or there is a *substantial threat* of such a release into the environment, or there is a release or a substantial threat of release into the environment of any pollutant or contaminant which may present an *imminent and substantial danger* to the public health or welfare, the President (delegated to EPA/On-Scene Coordinator (OSC)) is authorized to act, consistent with the national contingency plan (NCP)... deems necessary to protect the public health or welfare or the environment.

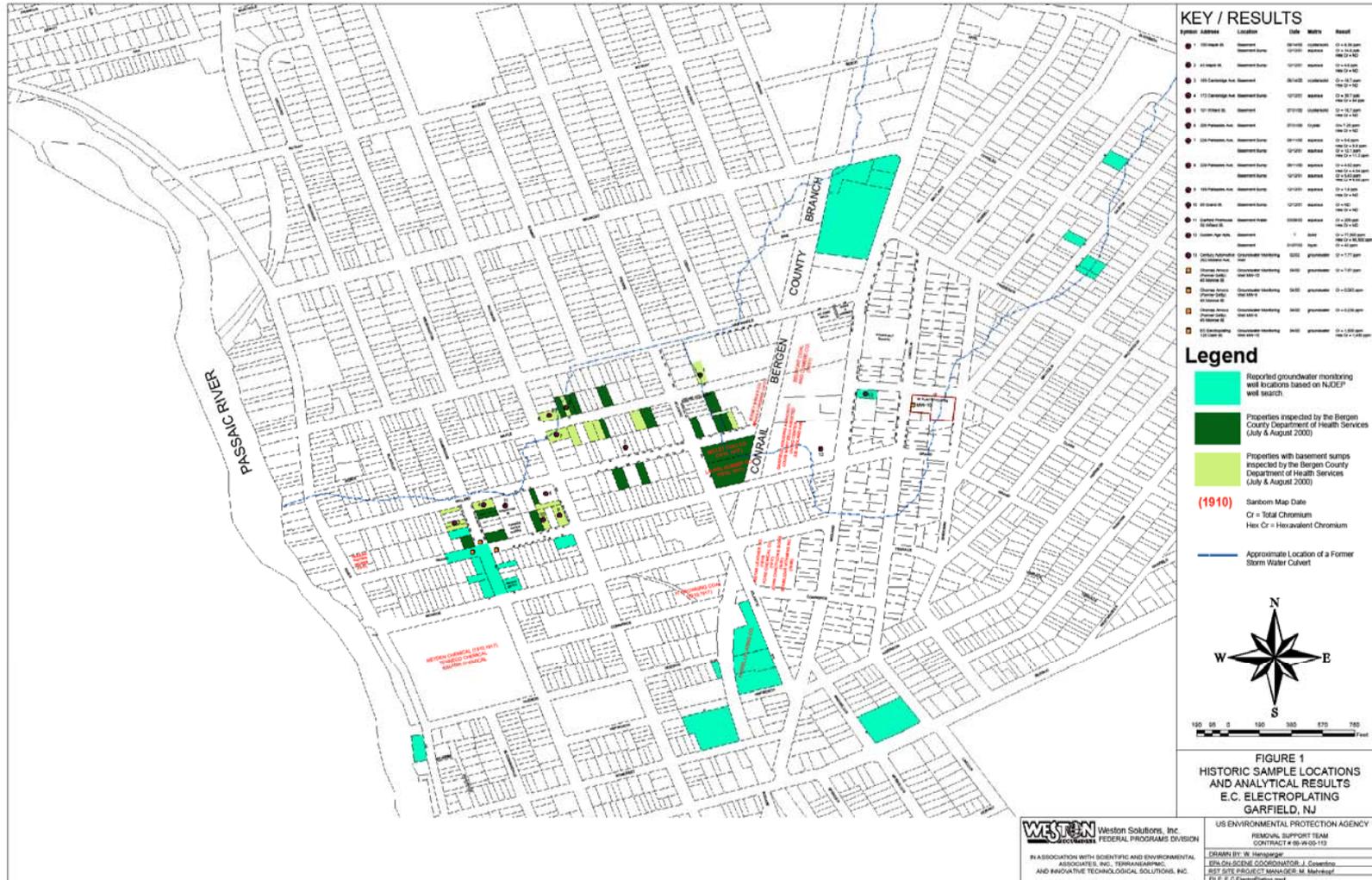
Removal Criteria

- The criteria for conducting a removal action are cited in **the Code of Federal Regulation, Section 300.415** and are listed below:
- There is a potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants
- There is an actual or potential contamination of drinking water supplies or sensitive ecosystems.
- Hazardous substances or pollutants or contaminants exist in drums that may pose a threat of release.

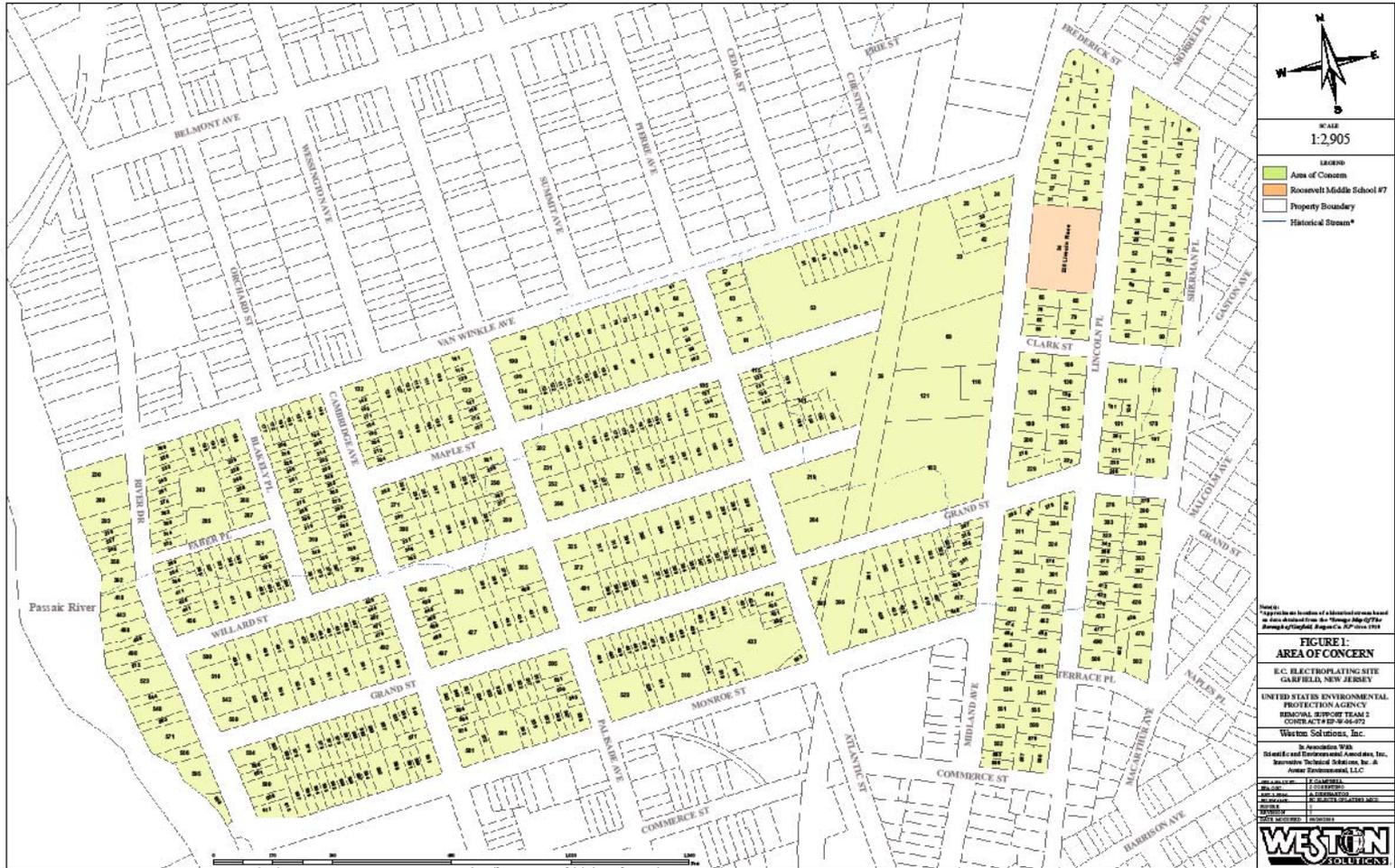
Removal Criteria

- High levels of hazardous substances or pollutants or contaminants exist in soils largely at or near the surface, that may migrate.
- Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.
- There is no other appropriate federal or state response mechanisms available to respond to the situation at the Site and can not be addressed with their resources.

How the study area was determined.



Study Area



Plan of Action

- **What EPA is doing in Garfield.**
 - Home Survey-Questionnaire
 - Visual inspection
 - Access agreement
 - Sampling
 - Time length before receiving results
 - Met with Mayor **Frank J. Calandriello**
 - Next Steps-Removal Action, if needed

Chromium: In the Environment

- Chromium exists in several forms
 - Trivalent Chromium
 - Occurs naturally
 - More common form
 - Hexavalent Chromium
 - Not commonly found
 - Often converted to Trivalent Chromium

Chromium: Health Effects

■ Trivalent Chromium

- Essential dietary nutrient
- Used for the metabolism of sugars
- Found naturally in foods

■ Hexavalent

- Much more toxic
- Ingesting large amounts over long periods may cause upset stomachs, ulcers, and liver and kidney damage
- Some people are very sensitive; skin contact may cause rashes or skin ulcers (allergic contact dermatitis)

Results

■ Samples in Lunchroom

- 2 Samples collected from the Brown Bag Lunchroom
- All results for hexavalent chromium are below EPA's screening level

■ Samples in Boiler Room

- 3 Samples collected from Boiler Room
- All results for hexavalent chromium are below EPA's screening level

Thank you.

www.epa.gov/region2/superfund/npl/garfield