

U.S. EPA
Hegeler Zinc Superfund Site
Hegeler, Illinois



U.S. EPA
Remedial Project Manager: Colleen Moynihan
May 28, 2009

Presentation Outline

- ❑ Site History
- ❑ Superfund Cleanup Process (Superfund 101)
- ❑ Hegeler Zinc Cleanup Process
- ❑ Residential Soil Sampling (Access Agreements)
- ❑ New Developments
- ❑ Next Steps



Hegeler Zinc Team

- ❑ Colleen Moynihan, EPA Project Manager
- ❑ Virginia Narsete, EPA Community Involvement Coordinator
- ❑ Doyle Wilson, Illinois EPA
- ❑ Kolby Riggle, Vermilion County Health Department

- ❑ U.S. Fish and Wildlife
- ❑ Illinois Department of Natural Resources

- ❑ Rebecca Frey, U.S. EPA Superfund Section Chief
- ❑ Milt Clark, U.S. EPA Environmental Health Specialist
- ❑ John Bing-Canar, U.S. EPA FIELDS Group



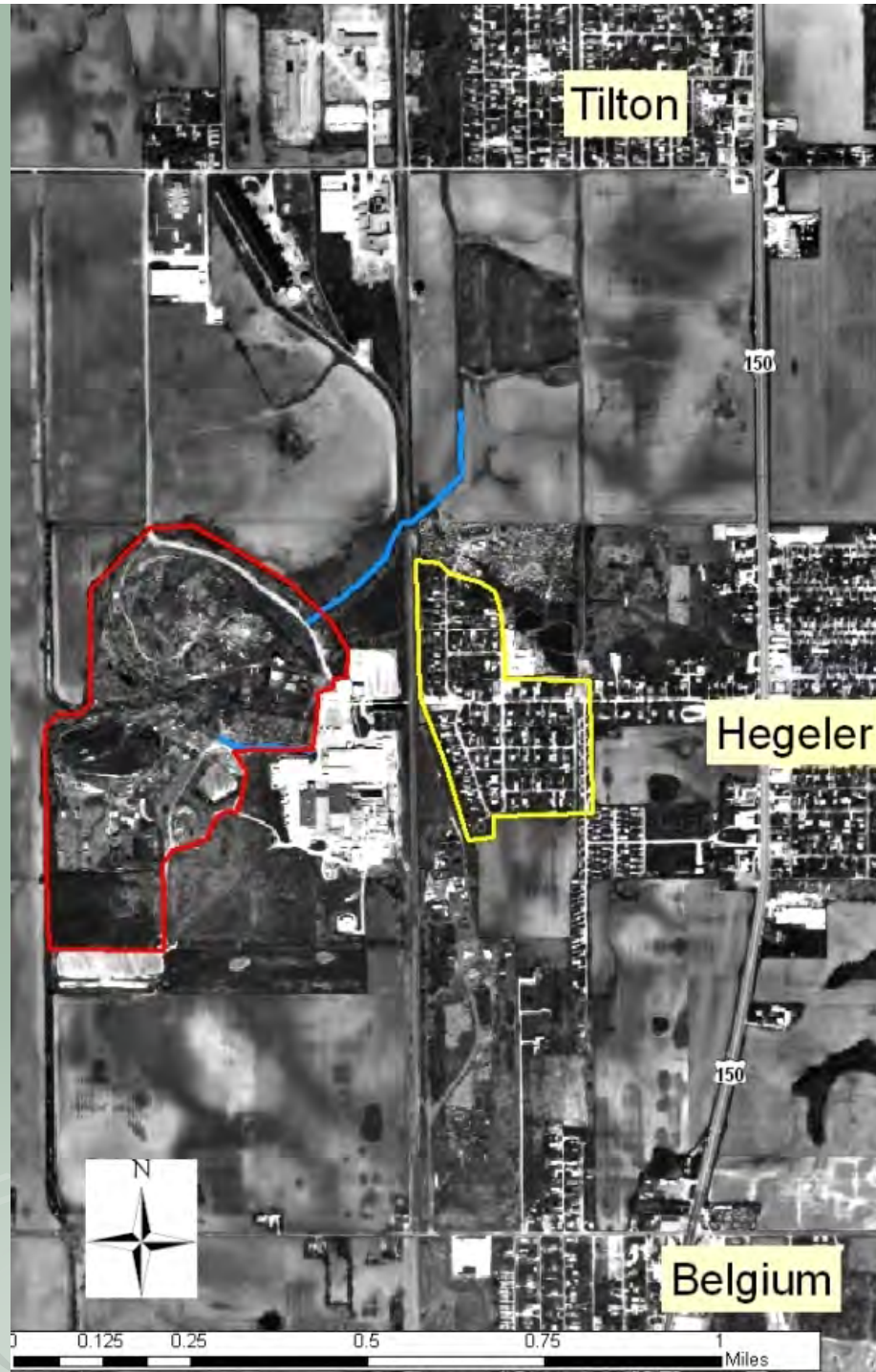
Hegeler Zinc



circa 1940



Site Location



Site History

Hegeler Brothers 1907- 1954

- ❑ 1907 to 1947: Zinc Smelting
- ❑ 1924: Production of Sheet Zinc
- ❑ 1937: Sulfuric Acid Production

Defense Plant Corporation

- ❑ 1942: Cadmium Process
- ❑ 1954: Dissolved and deeded operation to National Distillers and Chemical Corporation. (Millennium Petrochemicals)

Peterson Filling and Packing

- ❑ 1955: Rolling mill operations purchased (eastern portion of facility); utilized buildings for filling containers

Illinois Fireworks Company

- ❑ 1956: Purchased remaining National Distillers property



Current Site Conditions

- ❑ In 2002, 6ft chain-link fence and locked gate.
- ❑ Numerous small buildings, sheds, and tractor-trailers remain throughout the property.
- ❑ Ponds are located within the southern portion of the property.
- ❑ Waterway flows through the property and discharges to the north.



Several brick and concrete buildings, intact and partially demolished, remain at the property.



Slag pile:
approximately 6-acre,
55-foot high



OTHER EXAMPLES OF SUPERFUND SITES

Sampling the contents of drums.

Submitted by Marc Callaghan, EPA
Columbia American Plating
Portland, Oregon



The cleanup of this former woolen mill town.

By Barbara Vesely, Weston Solutions, Inc.
Eastland Woolen Mill
Corinna, Maine



Superfund Program

- ❑ Typically remedial sites have contamination of more than one environmental medium- soil, surface water, or groundwater.
 - ❑ Long-term action to achieve a permanent remedy
-
- ❑ **The Superfund Trust Fund:** In 1980s the money came mainly from taxes on the chemical and petroleum industries.
 - ❑ The Trust Fund was used primarily- no potentially responsible parties, prps can not pay.
 - ❑ The tax ended in 1995, today money for the Superfund Program appropriated by Congress



National Priorities List (NPL)

Remedial Investigation (RI)
(Nature and extent)

Feasibility Study (FS)
(Potential cleanup options)

Selection of Remedy
(Public Involvement)

Remedial Design (RD)
(Technical plans for chosen remedy)

Remedial Action (RA)
(Construction)

Operation & Maintenance (O&M)
(remedy continues to be effective)

Hegeler Zinc Cleanup Progress

National Priorities List (NPL)

April 2005

Remedial Investigation (RI)

April 18, 2007

Feasibility Study (FS)

estimated completion by 2011

Selection of Remedy

Remedial Design (RD)

Remedial Action (RA)

Operation & Maintenance (O&M)

Hegeler Zinc (RI)

RI results

- ❑ No immediate health threats.
- ❑ On-site contamination: metals; arsenic, cadmium, zinc, lead.
- ❑ Contamination traveled off-site.

Recommendations

- ❑ Supplemental Remedial Investigation.
- ❑ Ecological Risk Assessment.
- ❑ Additional residential soil sampling.



Hegeler Zinc (RI)

Residential Soil Sampling



- ❑ History of Site- slag used on roadways.
- ❑ Air/ Windblown Deposition.
- ❑ Lead soil sample result exceeded the screening level-of 400 ppm; value that protects majority of children.



2007 Residential Soil Sampling

- ❑ 77 residential & 30 empty lot were sampled
- ❑ Sampled for lead and other metals
- ❑ Front yard or back yard



2007 Results

- ❑ Range from 57 ppm to 500 + ppm
- ❑ Five properties above 400 ppm
- ❑ Range 400-500 ppm does not pose an immediate acute health risk.



- ❑ Health officials believe the risks to residents living near the site are low enough that **no** immediate action is required.



2007 Results

- ❑ Children exposed to lead by hand and mouth ingestion.
 - ❑ Practice common sense health and good house keeping practices.
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For more information about preventing exposure to lead in your yard and home call.

Kolby Riggle
Director of Environmental Health,
Vermilion County Health Department
217-431-2662.



2009 Residential Soil Sampling

- ❑ Sampling for Arsenic, other contaminants and lead
- ❑ Samples from the front yard and back yard

- ❑ Focus: Residential area east of the site
- ❑ Goal: Sample 100% Hegeler neighborhood
- ❑ Need Signed Access Agreements

- ❑ Summer or Fall Sampling
- ❑ No cost to residents



New Developments

- ❑ Search for Potentially Responsible Parties (PRPs)
- ❑ Negotiated Agreements to continue Site investigation and studies
- ❑ Divided Site into Operable Units (OUs)
- ❑ PRP Bankruptcy



Potentially Responsible Party Search PRPs

- ❑ PRPs- legal responsibility, pay for cleanup
- ❑ In 2007, EPA started negotiating an agreement with PRPs
- ❑ Millennium Petrochemical, KIK Custom Products, General Services Administration (GSA)-federal PRP, Site Owner



2 Administrative Orders Negotiated (not yet finalized)

Administrative Orders- set the framework for the completion of the cleanup

OUs- Operable Units

Millennium Petrochemical: OU₁ & OU₃

- ❑ Supplemental RI and Feasibility Study (FS)

KIK Custom Products: OU₂

- ❑ Ecological Risk Assessment & Feasibility Study (FS)



Operable Unit 1(OU1)

Operable Unit 2 (OU2)

Operable Unit 3 (OU3)



Millennium Files for Bankruptcy

On January 6, 2009, the Lyondell Bassel companies, including MPI, filed with the United States Bankruptcy Court



❑ Millennium will no longer pay for cleanup

Next Steps

Funding

- ❑ Superfund Program (OU₁ & OU₃)
- ❑ KIK to complete supplemental (RI) and (FS)
- ❑ EPA to filing claim in Millennium bankruptcy

Site Activities

- ❑ EPA in your neighborhood: 2009 Residential Soil Sampling
- ❑ Viable PRP (KIK) OU₂: Sampling waterways outside of fence line this summer



Hegeler Neighborhood Soil Sampling

- ❑ Stay around to sign an access agreement



❑ For more information go to

<http://www.epa.gov/Region5/sites/hegelerzinc/index.htm>

❑ Repository- Danville Public Library & Westville Public Library

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Questions?

