

LOUISVILLE DISTRICT

Public Information

Former Victory Ordnance Plant– Decatur, IL

Valerie Doss

Project Manager

Louisville District

November, 2013



US Army Corps of Engineers
BUILDING STRONG[®]



OVERVIEW

- Property description/history
- Community Involvement
- Proposed Plan
- Public Comment Period



Responsible Agency Officials

U.S. Army Corps of Engineers – Ms. Valerie Doss, Project Manager

Dr. David Brancato, Technical Manager

The U.S. Army Corps of Engineers (USACE), acting on behalf of the Department of Defense (DoD), is responsible for investigating the former Victory Ordnance Plant (VOP) and implementing cleanup actions when required.

Illinois Environmental Protection Agency (ILEPA) -

Mr. Michael Haggitt, P.E.

ILEPA is responsible for technical review of documents and assuring that all work is conducted in accordance with state regulations.

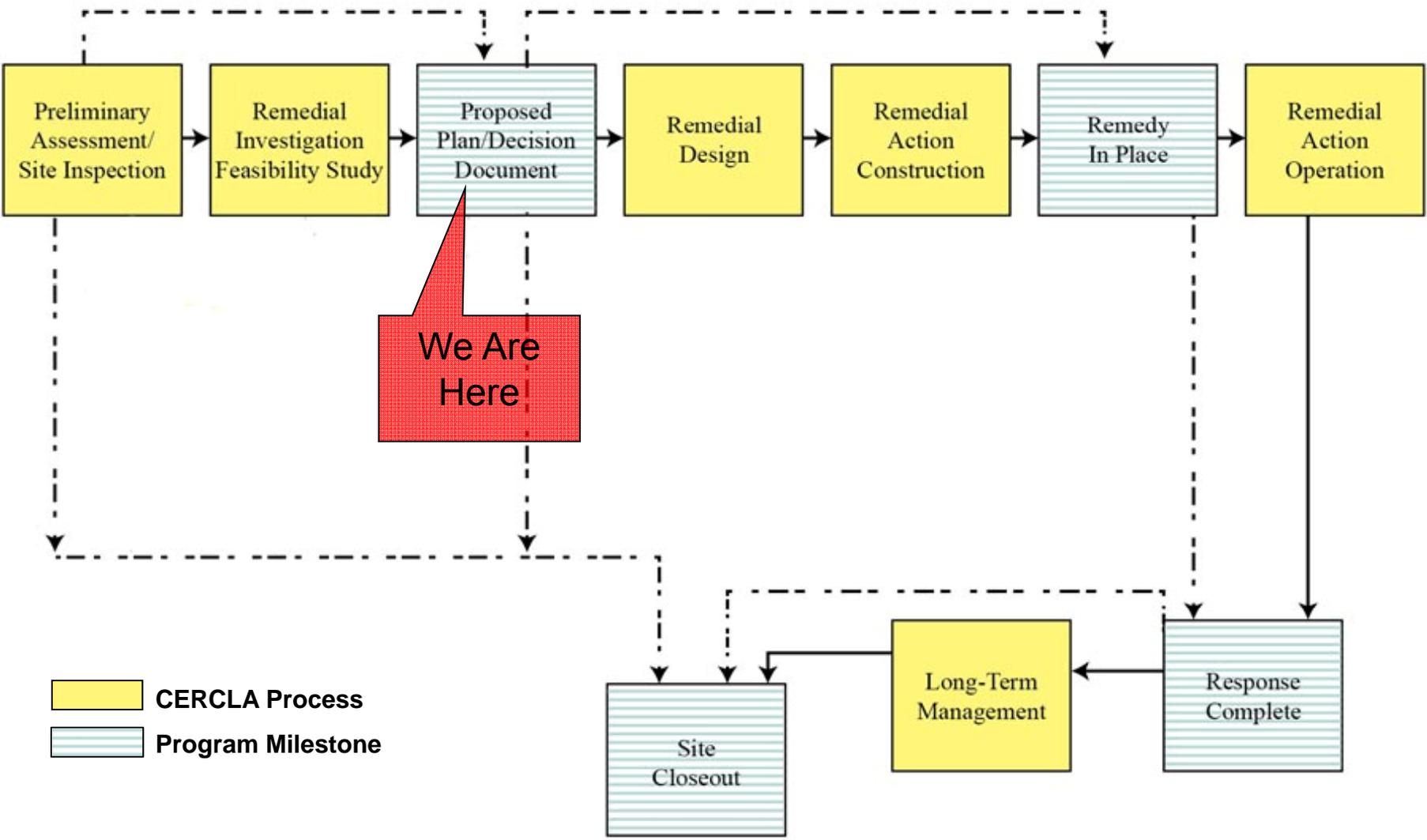


Victory Ordnance Plant

- Formerly Used Defense Site in Decatur, IL
 - ▶ FUDS are part of the Defense Environmental Restoration Program (DERP) and must comply with the DERP statute (law).
 - ▶ The Comprehensive Environmental Response Compensation, and Liability Act (CERCLA) is DoD's preferred framework for environmental restoration.



CERCLA Process



 CERCLA Process
 Program Milestone

Proposed Plan for the former Victory Ordnance Plant-Battery Disposal Area

- The Proposed Plan presents the recommendation for the Battery Disposal Area at former VOP.
- The public is encouraged to participate in the decision making process by providing comments on the Proposed Plan.
- The final recommendation may be modified after review and consideration of public comments.



Property Ownership History

- The former VOP is an approximate 237-acre site located in Decatur, Illinois.
- DoD activities began at the site property in 1943 when the VOP was built.
- The Caterpillar Military Engine Company managed an operation for manufacturing and assembling radial diesel engines for M-4 tanks and power trains for Caterpillar D-7 tractors.
 - ▶ The tractors were stored in the northeast corner of the property.
 - ▶ The plant manufactured tank engines that included clutches and transmissions, but did not produce ammunition or explosives.
 - ▶ Prior to production of power trains, 150 jet engines were manufactured at VOP.
 - ▶ Caterpillar Military Engine Company operation ended in 1945 when the property was determined to be surplus and designated for disposal by the General Services Administration (GSA).



Property Ownership History

- In 1946, with the exception of 26.17 acres, the property was returned to the DoD from the GSA for the establishment of the Decatur Signal Depot (DSD).
- In 1947, the remainder of the VOP property (26.17 acres) was sold to General Electric (GE). GE operations consisted of:
 - ▶ custom molding of plastics by both injection and compression and assembly of phonographs and related components.



Property Ownership History

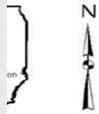
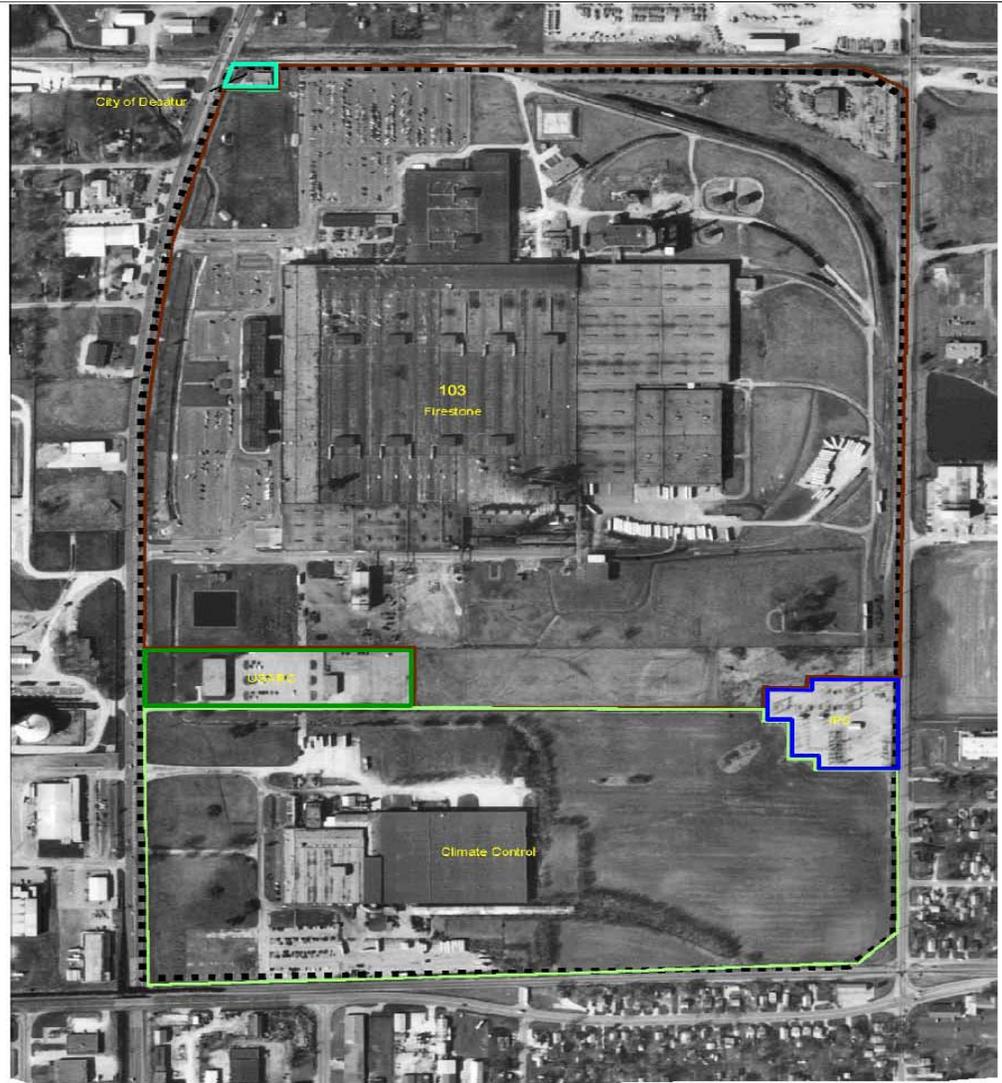
- DSD was declared excess real property in July 1961 and was sold as four separate parcels:
 - ▶ Parcel 1 was sold to Firestone Tire and Rubber Company, later acquired by Bridgestone-Firestone North America Tire: operated from February 1963 until December 2001. In fall of 2003, Weiss Realty bought the BFNT. According to Macon County Recorder's Office, Parcel 1 was again sold on 2 May 2005 to Katmandu Associates.



Property Ownership History

- Parcel 2 was sold by quitclaim deed to GE in 1962.
 - GE transferred a portion of the property to Illinois Power Company in 1963. IPC constructed a transformer substation on the property. IPC is now called Ameren IP. Season-All Industries bought the remaining property from GE in 1978. Season-All Industries built custom aluminum storm windows, storm doors, and replacement windows. It also extruded, heat treated, and painted aluminum that was used in the assembly process. Climate Control purchased the Season-All property in 1993. Climate Control makes compressors for air conditioning units and conducts some machining of metals.
- Parcel 3 Illinois Power Company purchased 3.5 acres from GE on August 30, 1963. Currently,
 - ▶ Ameren IP operates the substation that was owned by IPC. This area is located in between Katmandu Associates and Climate Control.
- Parcel 4 was sold to the City of Decatur on 7 March 1962 as a site for a firehouse.





- Legend
- AmerentIP
 - City of Decatur
 - Climate Control
 - Katmandu Associates
 - USARC
 - VOP Boundary

1, 2008 4:15:05 p.m.
 :\\16170158\200\fig 2-2.dwg

CURRENT OWNERS FORMER VICTORY ORDNANCE PLANT DECATUR, ILLINOIS			
DRN. BY: DPG	DATE: 02/15/07	PROJECT NO. 16170158	FIG. NO. 2-2
CHK'D. BY: ACY	REVISION: 0		





Community Outreach

- To date, the landowner, Katmandu, Inc, the lessee, Caterpillar Inc., and the employees of Caterpillar have been the community involvement at the former VOP, as well as an informational web page established at <http://bit.ly/FormerVOP>.

Community Involvement

- Public notice in August 2013 advertising Administrative Record at the Decatur public library
- Community Research Survey-September 2012
- Fact sheet mailed to community-June 2012
- Public notices to two local newspapers advertising public meeting and proposed plan comment period – August 2013



Community Survey

- A community survey was conducted in September 2012.
 - ▶ Surveys mailed to 500 residents.
 - ▶ Responses received from 23 residents.
 - ▶ Based on the responses the Community Action Plan was completed in January 2013 and submitted to the Administrative Record.
 - ▶ Resident concerns summarized on next slide.



Community Concerns

1. Batteries Leaking Acid
2. Health Hazards that Can Impact Residents
3. Soil Contamination
4. “You Tell Us”



Answers

1. No acids have ever leaked from the battery disposal
 - ▶ Confirmed by soil and water pH measurements.
2. There was no release of contaminated soil
 - ▶ No contaminant in soil has impacted human health or the environment at or off site.
3. There was localized soil contamination
 - ▶ Soil type retained soil/battery mass
4. Solid battery disintegration would cause the following metals Cadmium, Nickel, Mercury, Lead, Zinc; and graphite to increase in soil
 - ▶ Localized to Northeast portion of the property



CERCLA

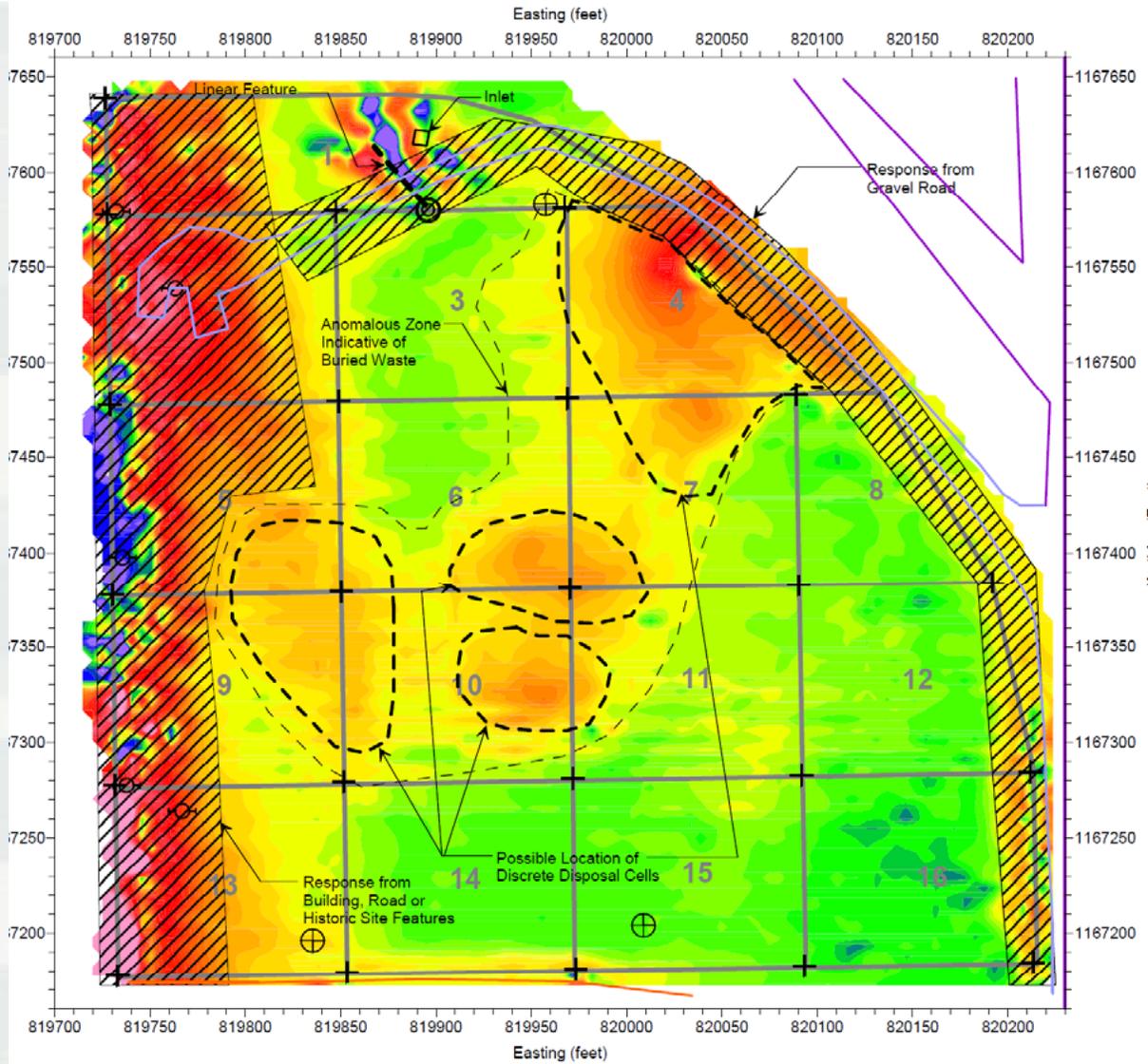
- Preliminary Assessment July 2008
 - ▶ 13 areas of potential environ concern
 - ▶ With exception of the Battery Disposal Area
 - Areas have been or may have been impacted by post DoD owners
- Site Inspections 1987 (USACE)
 - ▶ Groundwater sampling - detected Chromium, Iron, Manganese, and Zinc.
 - ▶ Iron and manganese - exceeded State of Illinois Water Quality Standards in all samples (EEI 1988).
 - ▶ Metals concentrations in the soil samples - below or near the detection limits.
 - ▶ Analyses indicate soils were not contaminated by any of the metals under investigation. (EEI 1988)



IEPA

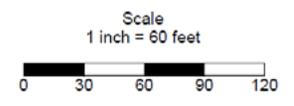
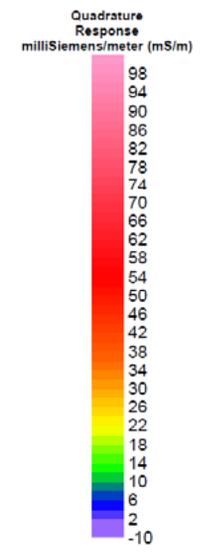
- **IEPA (May 1993; Released March 2004) CERCLA Screening Site Inspection Report**
 - ▶ **Soil:** Three soil samples were taken during the Screening Site Inspection of Bridgestone/Firestone. None of the soil samples taken on or off-site contained concentrations of any of the target compounds significantly above background. (IEPA May 1993, Released March 2004)
 - ▶ **Groundwater:** The analytical results of the three groundwater samples were compared to the groundwater quality standards put out by the Illinois Pollution Control Board. Based on this comparison, the groundwater was found to be not contaminated as no volatiles, semi-volatiles or pesticides were detected and all of the inorganics concentrations detected were below the groundwater quality standards for Class I water.
 - ▶ **Sediment/Surface Water:** Water was observed discharging from the east side of Bridgestone's main manufacturing building into a drainage way (referred to as "middle drainage way). This water was black and small, black, rubbery balls were observed in and along the drainage way.





Legend

- Fire Hydrant/Valve
- Well
- 12" Culvert
- Grid Corner
- Grid Number
- Paved Road
- Gravel Road
- Northern Rail
- Grid Line



GEOPHYSICAL RESULTS EM-31 QUADRATURE RESPONSE FORMER VICTORY ORDNANCE PLANT DECATUR, ILLINOIS			
DRN. BY: MRG	DATE: 10/2007	PROJECT NO. 16170158	FIG. NO. 5-2
CHKD. BY: LJK	REVISION: 1		



CERCLA

▪ Site Inspection (USACE-LRL 2008)

- ▶ A geophysical survey was performed on 16, approx. 0.25 acre quadrants of the entire 3.7-acre area of the BDA.
 - geophysical data directed investigation to (Grids 4, 6, 7, 10, and 11)
- ▶ Subsurface soil sampling identified five metals across these 4 areas:
 - Cadmium, chromium, lead, magnesium and zinc
 - Soils did not have an acid pH
- ▶ Synthetic Precipitate Leachate Procedure is performed to determine whether these five metals would impact water;
 - No impact to groundwater
- ▶ No COPCs were discovered in the groundwater during this SI indicating that any potential site contamination is not partitioning to groundwater or migrating off site.



CERCLA

- **Remedial Investigation (USACE 2010)**
 - ▶ **Two additional areas were added for subsurface investigation**
 - **Grids 11 and 16**
 - ▶ **The investigation showed more of the same**
 - **Aluminum, arsenic, cadmium, cobalt, mercury, manganese, thallium, vanadium, zinc**
 - ▶ **Only one area, Grid 4, had metals co-located that would represent disintegrated batteries**
 - **Soils remained neutral to slightly basic**



CERCLA

- **Remedial Investigation (USACE 2010)**

- ▶ GW samples were collected from the three newly installed monitoring wells.

- ▶ Groundwater impacts were initially evaluated by the Tiered Approach to Corrective Action (TACO) Soil Component of the Groundwater Ingestion Pathway.

- Leaching of metals does not appear to be a significant threat to groundwater



Slide 22

H8

Same comment as last 2 slides. Simplify. The 4th and 5th bullets are too in the weeds.

H2PA9KCB, 8/1/2013

Human Health Risk Assessment

- The potential human receptors identified for the BDA included the following:
 - ▶ Current outdoor commercial/industrial workers
 - ▶ Future Outdoor commercial/industrial workers
 - ▶ Future Indoor commercial/industrial workers (limited to indoor dust)
 - ▶ Future Construction workers (to support construction/development)
 - ▶ Future Child and Adult Residents (Informational only)



HHRA Results

- ***Risk is an upper level certainty of an incremental increase to your background risk***
 - ***National Contingency Plan (NCP)
40CFR300.430(e)(2)(i)(A)(2-5) accepts incremental risk
between one-in-ten thousand to one-in-one million***

- ***For surface soil at Battery Disposal Area***
 - ▶ ***The child (8yrs old) would have an incremental increase to cancer at a level slightly greater than one in 10,000***
 - ▶ ***Remaining receptors including older child have risk in the acceptable NCP risk range***



HHRA Results

- ***Subsurface Soil***

- ▶ To properly estimate risks to Future Construction Workers, the site was segregated into grids.
- ▶ Only one COC, manganese, was found for the Future Construction Worker, and only in Grid 4.
- ▶ Manganese in Grid 4 demonstrated an HI of 6, after accounting for background concentrations.



HHRA Results

- **Groundwater**
 - ▶ The following COPCs detected in groundwater contributed very minimal risk and hazard relative to soil:
 - aluminum
 - arsenic
 - cobalt
 - manganese
 - vanadium
 - The groundwater results from the SI and RI demonstrate that any potential contaminants are not migrating from the BDA. No PAHs were identified in groundwater samples and only one metal, manganese, exceeded the Illinois groundwater quality standard.



Ecological Risk Assessment

- Industrial habitats lend themselves to terrestrial species such as house mice, rabbits, opossums, raccoons, squirrels, ground squirrels, garter snakes, robins, sparrows, starlings and other common songbirds, crows and an occasional hawk or similar raptor. These species are common and generally considered pest species (URS, 2008).
- No ecological receptors, however, were observed during the RI field activities.
- According to the Illinois Natural Heritage Database the Upland Sandpiper, Bewick's Wren, Wild Hyacinth are listed as endangered in Macon County, Illinois. None of these species has been observed at the BDA of the former VOP.
- A Screening Level Ecological Risk Assessment was performed to evaluate ecological risks at the site. Since exposure pathways were shown not to be complete, and there are no ecological habitats affected by the site, risk to ecological receptors is negligible and no further evaluation is warranted.



ADDITIONAL RI ACTIVITIES

- During the RI field activities performed in 2009, five test pits were excavated within the Battery Disposal Area of the former VOP.
- Of the five test pits, only Grid 4, located in the northeastern portion of the site, exhibited any remnants of old buried batteries.
- Per discussions with Illinois EPA in May 2012, additional characterization of the Battery Disposal Area was performed in August 2012, including the excavation of six additional test pits.
- The trenching revealed evidence of the burial of a significant amount of batteries in Grid 4.



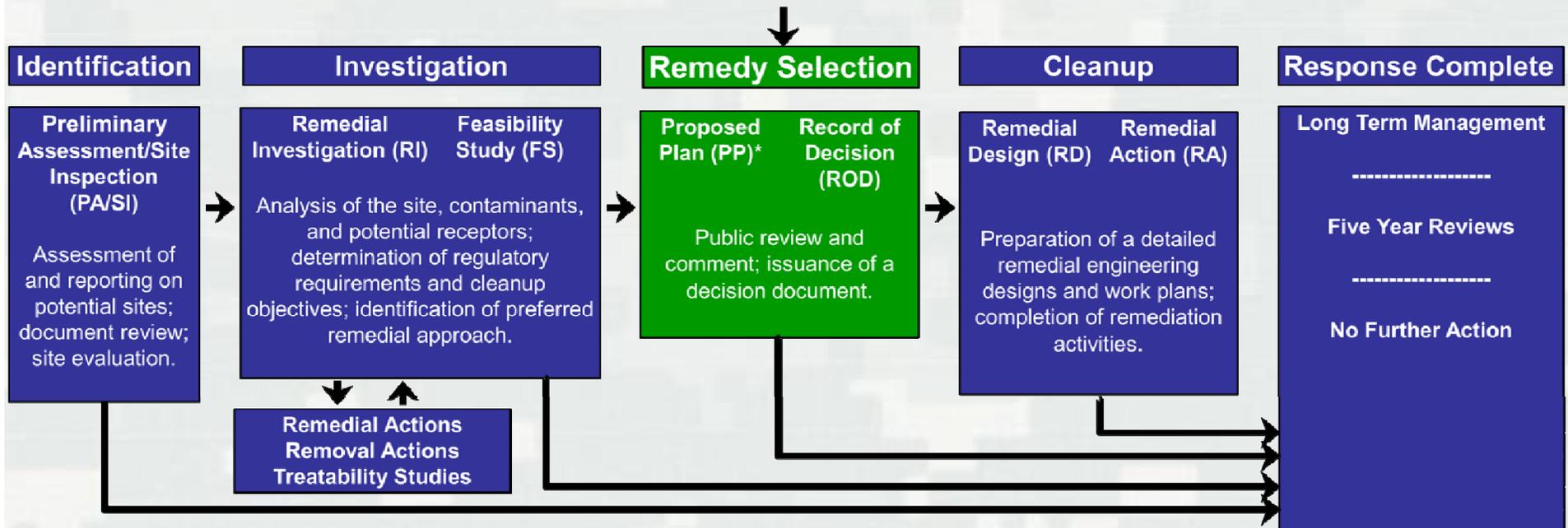
Time Critical Removal Action

- The property owner wanted to grade the whole 3.7 acre area for placement of a concrete pad.
 - ▶ The concrete pad had to be in place by December 2012.
- Approximately 537.27 tons of soil were excavated from Grid 4 and subsequently disposed of at Veolia ES Valley View Landfill.
 - ▶ Fifty-three (53) drums of battery mass material were removed from the site and sent to Battery Solutions, Inc. by Conway Trucking.
- Confirmation sample results were compared to the Illinois Pollution Control Board's Tier 1 Soil Remediation Objectives for Industrial/Commercial Properties.



The CERCLA Process

***Current status**



Proposed Plan Preferred Alternative

- **No Further Action**

- **Reasons**

- ▶ Remaining unacceptable risks are primarily for residential receptors.
- ▶ This property is presently zoned for industrial use, and there is no likely change expected for future use of the property by Katmandu, Inc.; therefore, per OSWER Directive 9355-0.30, the most reasonable exposure scenario does not exhibit risks at unacceptable levels.
- ▶ There is a concrete pad covering the entire 3.7-acre BDA site, thereby removing any complete exposure pathways relative to soil exposure.
- ▶ With regard to consideration of any land use controls (LUCs), there is no DoD site related constituent to the construction worker or future indoor commercial/industrial worker that exceeds a carcinogenic risk at 1E-06 or noncancer risk of 1, removing further consideration of a Land Use Control.



Public Comment Period and Public Meeting

30-day public comment period: November 20, 2013 through December 20, 2013.

- Written comments must be postmarked no later than December 20, 2013 and sent to the address below:

Dr. David Brancato
US Army Corps of Engineers, Louisville District
P.O. Box 59
Rm. 351
Louisville, KY 40201
David.J.Brancato@usace.army.mil



The Decision Document and Responsiveness Summary

- Comments received during the public comment period will be documented in the project record.
- Public comments will be reviewed by the U.S. Army Corps of Engineers, and the ILEPA and will be considered in the selection of the final remedy.
- After comments are evaluated, the selected remedy will be published in the Record of Decision. Comments and responses will be documented in the Responsiveness Summary as part of the Decision Document



The Administrative Record Project Documents

The proposed plan and other former Victory Ordnance Plant – Battery Disposal Area documents included in the Administrative Record are available at the following location:

DECATUR PUBLIC LIBRARY

130 N. Franklin St.
Decatur, IL 62523

Monday-Thursday
9:00 am - 9:00 pm
Friday & Saturday
9:00 am - 5:30 pm
Sunday
1:00 pm - 5:00 pm
September – May

There are also several documents available on the site website:
<http://bit.ly/Formervop>

