

Ohio Brownfields Conference 2016

A Blight to (Bright?) Story:
The Former American National
Can Property in Mount Vernon

April 7, 2016

BURGESS & NIPLE
Engineers ■ Environmental Scientists



Presentation Overview

- **Introductions**

- Bruce Markey, Director, Construction Development, EMS

- **History and Background**

- Tom Mignery, CP, Partner, B&N

- **Assessment and Remediation**

- Scott Dailey, Project Manager/Senior Geologist, B&N
- John Ehrnfelt, Assistant Director, Constructions Services, EMS

- **Future of the Property**

- Scott Dailey

- **Questions?**



History and Background

- **Property is comprised of 44+ acres located along the Kokosing River in Mount Vernon.**
- **The site supported various industrial operations dating back to the 1920s, and was once home to the American National Can Property, which closed in the 1990s.**
- **Pechiney and Rio Tinto committed to work with the City of Mount Vernon to clean up the site.**



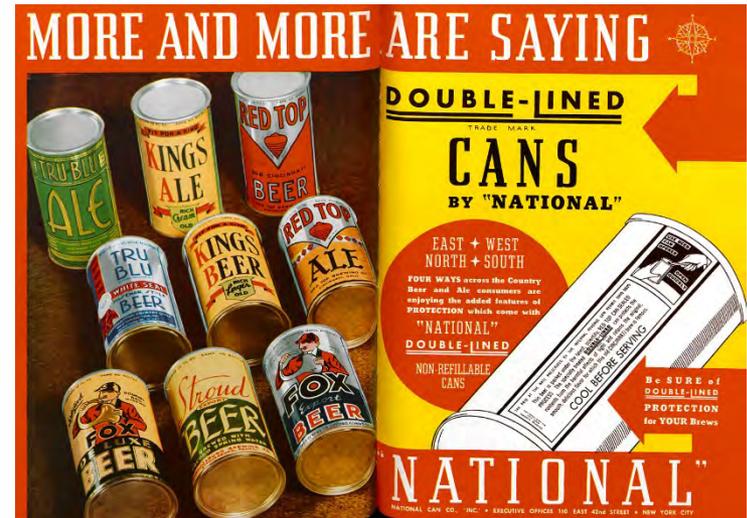
History and Background

THE SHELLMAR FACTORY, C.
1965–66. This State of Ohio photo shows workers leaving the Mount Vernon plastic packaging factory. B.W. Martin and K. Shellaberger moved their operation from Wisconsin in 1935, and by 1939, it had doubled in size. (Photograph courtesy of Sip's Coffee House in downtown Mount Vernon.)



History and Background

- Burgess & Niple (B&N) worked with the City of Mount Vernon to prepare successful COAF Phase II and CORF applications to address the site.
- The City teamed with Environmental Management Specialists, Inc. (EMS) and B&N to treat and dispose of approximately 9,000 cubic yards of hazardous soil as part of remediating the overall site.



History and Background



History and Background



History and Background



History and Background



History and Background



History and Background



Assessment

- **Phase II Property Assessment**
 - Soil Borings
 - Groundwater Sampling



Assessment



- **Phase II Property Assessment**
 - Waste Characterization
 - Test Pits

Assessment

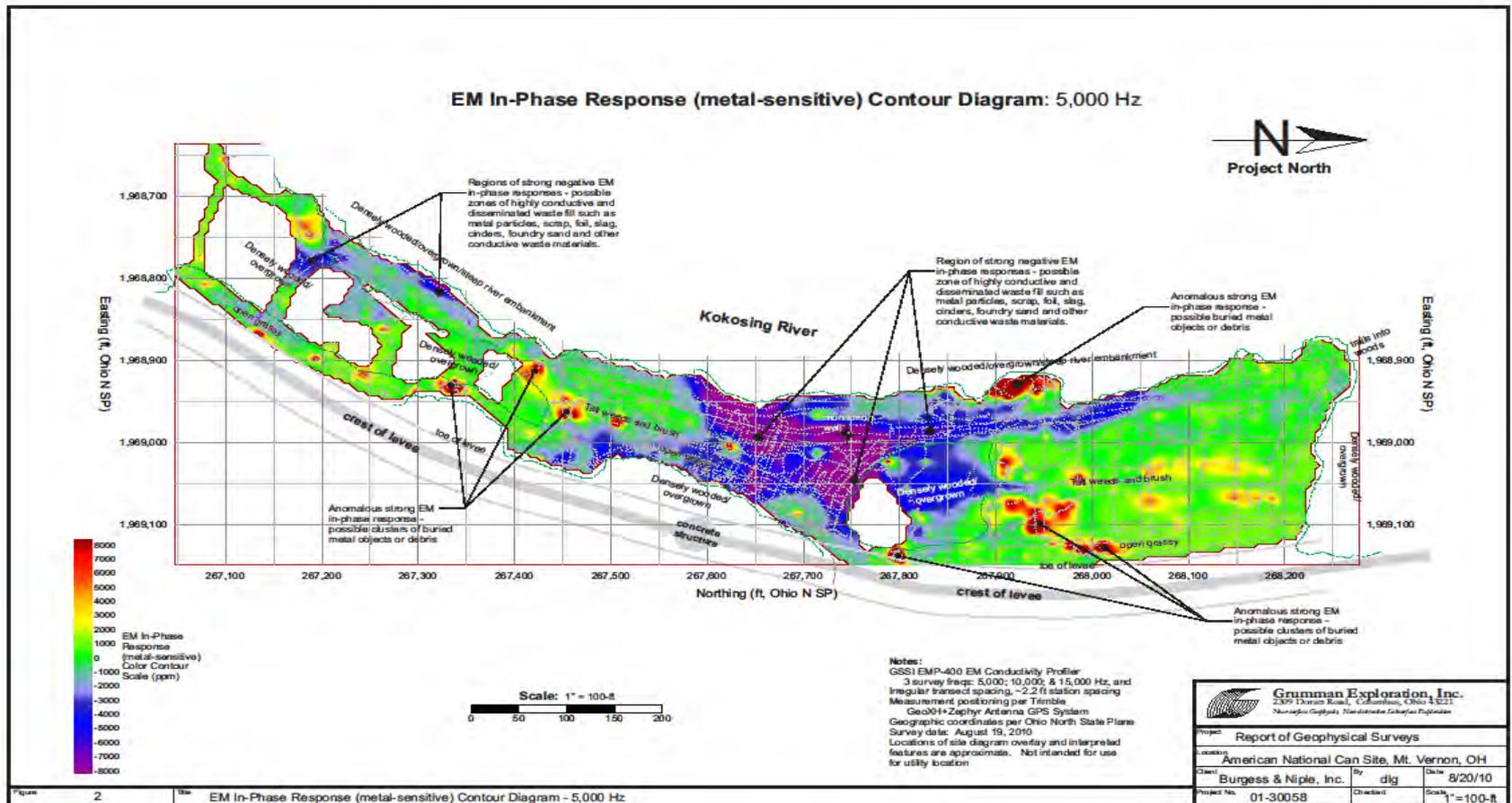


- **Phase II Property Assessment**
 - Solid Waste Assessment
 - Sediment Sampling
 - Surface Water Sampling



Assessment

■ Geophysical Survey



Assessment and Remediation

- **Administrative Tasks/Permits**
 - OAC 3745-27-13 (Rule 13, 2 Permits)
 - Section 404/401 Permits (2 Permits)
 - Indiana Bat Habitat Evaluation
 - Floodplain Considerations
 - Stormwater Pollution Prevention Plan



Assessment and Remediation

- **Administrative Tasks/Permits**
 - Property Transfers
 - Weather Issues
 - In-situ Metals Treatment
 - Budget/Funding



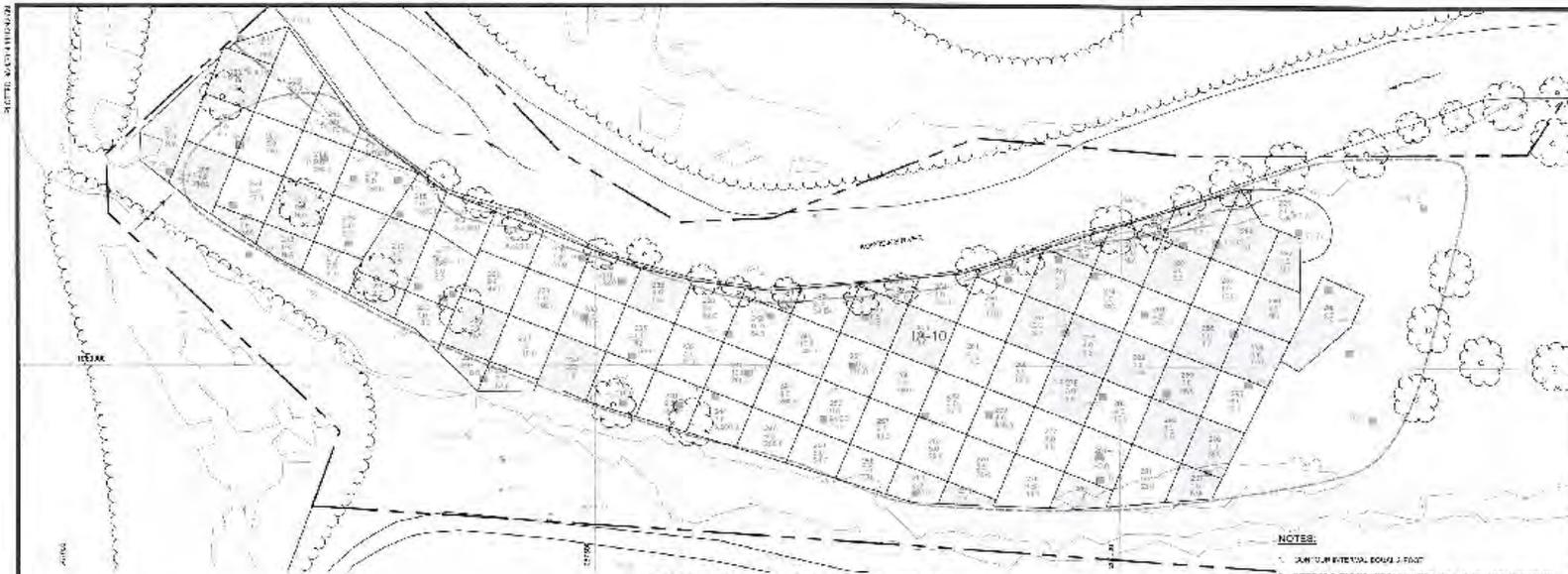
Cost Analysis

- **16 different cost scenarios were developed and analyzed.**
- **Four main categories were:**
 - Treatment and removal of all waste
 - Treatment and removal of all waste, with the exception of limited deep areas
 - Treatment and removal of the top four feet of waste
 - Treatment and removal of the top two feet of waste
- **Each of the four main categories were further analyzed under various conditions.**
 - Targeted removal of hot spots as hazardous waste
 - Aggressive and conservative treatment dosage rates

Cost Analysis

- **B&N led communication with the client and assessment of cost scenarios.**
- **Determination was made to treat all waste to non-hazardous concentrations and remove the top two feet of waste.**

Cost Analysis



WASTE CHARACTERIZATION AND SOIL SAMPLING RESULTS IA-10 PERFORMED JANUARY 2014

- NOTES:**
1. QUANTIFY EXISTING SOIL TO GO
 2. PRIOR TO CLEANING AND EXCAVATION, ALL SOILS AND WASTE SHALL BE CHARACTERIZED TO THE EXTENT OF AN ASBESTOS ANALYSIS OF 30 LBS. RANDOMLY SELECTED FROM THE EXISTING WASTE.
 3. BASED ON THE ANALYSIS, SOILS TO BE EXCAVATED SHALL BE TREATED AS PER THE FOLLOWING TABLE FOR TREATMENT AND DISPOSAL.
- ASBESTOS ANALYSIS OF 30 LBS. RANDOMLY SELECTED FROM THE EXISTING WASTE.

EXCAVATION CODE	AREA CODE	DEPTH CODE	GRID NUMBER	EXCAVATION SIZE	TOTAL WASTE (CUBIC YARDS)	ASBESTOS (PPM)	SOIL TYPE	EXCAVATION CODE	TOTAL WASTE (CUBIC YARDS)	ASBESTOS (PPM)	SOIL TYPE	EXCAVATION CODE	TOTAL WASTE (CUBIC YARDS)	ASBESTOS (PPM)	SOIL TYPE	EXCAVATION CODE	TOTAL WASTE (CUBIC YARDS)	ASBESTOS (PPM)	SOIL TYPE
101	20	50	77-2	20	3.2	NA	NA	101	20	50	77-2	20	3.2	NA	NA	101	20	50	77-2
102	60	50	78	20	3.9	NA	NA	102	60	50	78	20	3.9	NA	NA	102	60	50	78
103	20	10	1,0,10,10,10,10	20	1.0	NA	NA	103	20	10	1,0,10,10,10,10	20	1.0	NA	NA	103	20	10	1,0,10,10,10,10
104	50	5	10,10,10,10,10,10	20	8.3	NA	NA	104	50	5	10,10,10,10,10,10	20	8.3	NA	NA	104	50	5	10,10,10,10,10,10
105	10	50	10,10,10,10,10,10	20	1.0	NA	NA	105	10	50	10,10,10,10,10,10	20	1.0	NA	NA	105	10	50	10,10,10,10,10,10
106	10	5	4	20	5.3	NA	NA	106	10	5	4	20	5.3	NA	NA	106	10	5	4
107	50	10	1,10,10,10,10,10	20	1.0	NA	NA	107	50	10	1,10,10,10,10,10	20	1.0	NA	NA	107	50	10	1,10,10,10,10,10
108	20	10	10,10,10,10,10,10	20	5.3	NA	NA	108	20	10	10,10,10,10,10,10	20	5.3	NA	NA	108	20	10	10,10,10,10,10,10
109	10	10	10,10,10,10,10,10	20	5.3	NA	NA	109	10	10	10,10,10,10,10,10	20	5.3	NA	NA	109	10	10	10,10,10,10,10,10
110	10	10	10,10,10,10,10,10	20	5.3	NA	NA	110	10	10	10,10,10,10,10,10	20	5.3	NA	NA	110	10	10	10,10,10,10,10,10
111	10	10	10,10,10,10,10,10	20	5.3	NA	NA	111	10	10	10,10,10,10,10,10	20	5.3	NA	NA	111	10	10	10,10,10,10,10,10
112	10	10	10,10,10,10,10,10	20	5.3	NA	NA	112	10	10	10,10,10,10,10,10	20	5.3	NA	NA	112	10	10	10,10,10,10,10,10
113	10	10	10,10,10,10,10,10	20	5.3	NA	NA	113	10	10	10,10,10,10,10,10	20	5.3	NA	NA	113	10	10	10,10,10,10,10,10
114	10	10	10,10,10,10,10,10	20	5.3	NA	NA	114	10	10	10,10,10,10,10,10	20	5.3	NA	NA	114	10	10	10,10,10,10,10,10
115	10	10	10,10,10,10,10,10	20	5.3	NA	NA	115	10	10	10,10,10,10,10,10	20	5.3	NA	NA	115	10	10	10,10,10,10,10,10
116	10	10	10,10,10,10,10,10	20	5.3	NA	NA	116	10	10	10,10,10,10,10,10	20	5.3	NA	NA	116	10	10	10,10,10,10,10,10
117	10	10	10,10,10,10,10,10	20	5.3	NA	NA	117	10	10	10,10,10,10,10,10	20	5.3	NA	NA	117	10	10	10,10,10,10,10,10
118	10	10	10,10,10,10,10,10	20	5.3	NA	NA	118	10	10	10,10,10,10,10,10	20	5.3	NA	NA	118	10	10	10,10,10,10,10,10
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120	10	10	10,10,10,10,10,10	20	5.3	NA	NA	120	10	10	10,10,10,10,10,10	20	5.3	NA	NA	120	10	10	10,10,10,10,10,10
121	10	10	10,10,10,10,10,10	20	5.3	NA	NA	121	10	10	10,10,10,10,10,10	20	5.3	NA	NA	121	10	10	10,10,10,10,10,10
122	10	10	10,10,10,10,10,10	20	5.3	NA	NA	122	10	10	10,10,10,10,10,10	20	5.3	NA	NA	122	10	10	10,10,10,10,10,10
123	10	10	10,10,10,10,10,10	20	5.3	NA	NA	123	10	10	10,10,10,10,10,10	20	5.3	NA	NA	123	10	10	10,10,10,10,10,10
124	10	10	10,10,10,10,10,10	20	5.3	NA	NA	124	10	10	10,10,10,10,10,10	20	5.3	NA	NA	124	10	10	10,10,10,10,10,10
125	10	10	10,10,10,10,10,10	20	5.3	NA	NA	125	10	10	10,10,10,10,10,10	20	5.3	NA	NA	125	10	10	10,10,10,10,10,10

BURGESS & NIPLE
 2000 WESTERN AVENUE
 COLUMBUS, OHIO 43229

CITY OF MOUNT VERNON
 FORMER AMERICAN NATIONAL BANK
 SITE DEMOLITION
 SEPTEMBER 2014

NO.	DESCRIPTION	REVISIONS

DATE: JUNE 2014
 DRAWN BY: JED
 CHECKED BY: JED
 SCALE: NOTED
 FIGURE 04A
 SHEET 04A 18

Remediation

- **Site clearing**
- **In-situ soil treatment**
- **Excavation and off-site disposal**
- **Bank restoration**
- **Placement of soil cap**
- **Topsoil placement and landscaping**

Remediation



Remediation



Remediation



Remediation



Remediation



Remediation



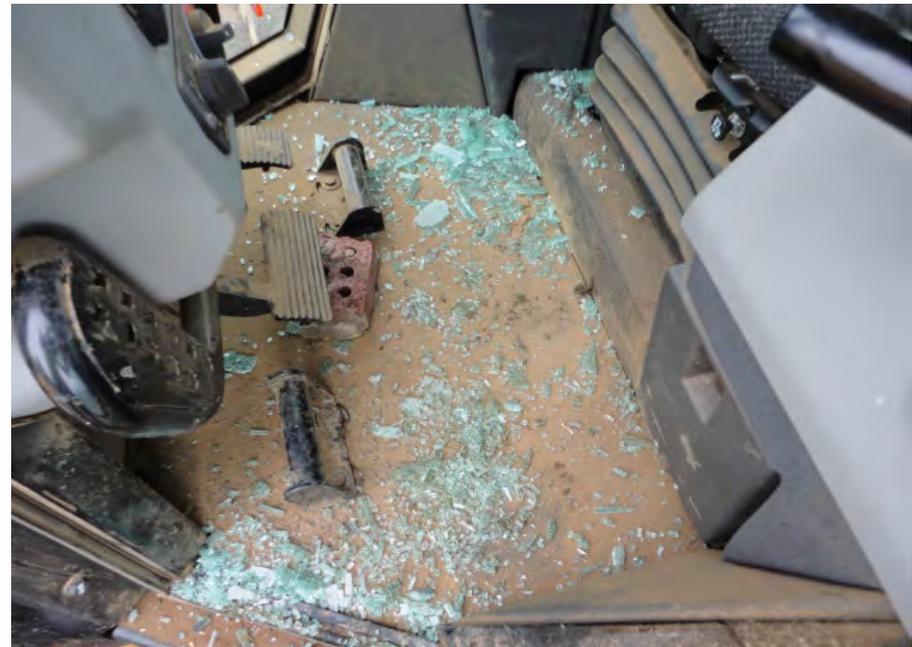
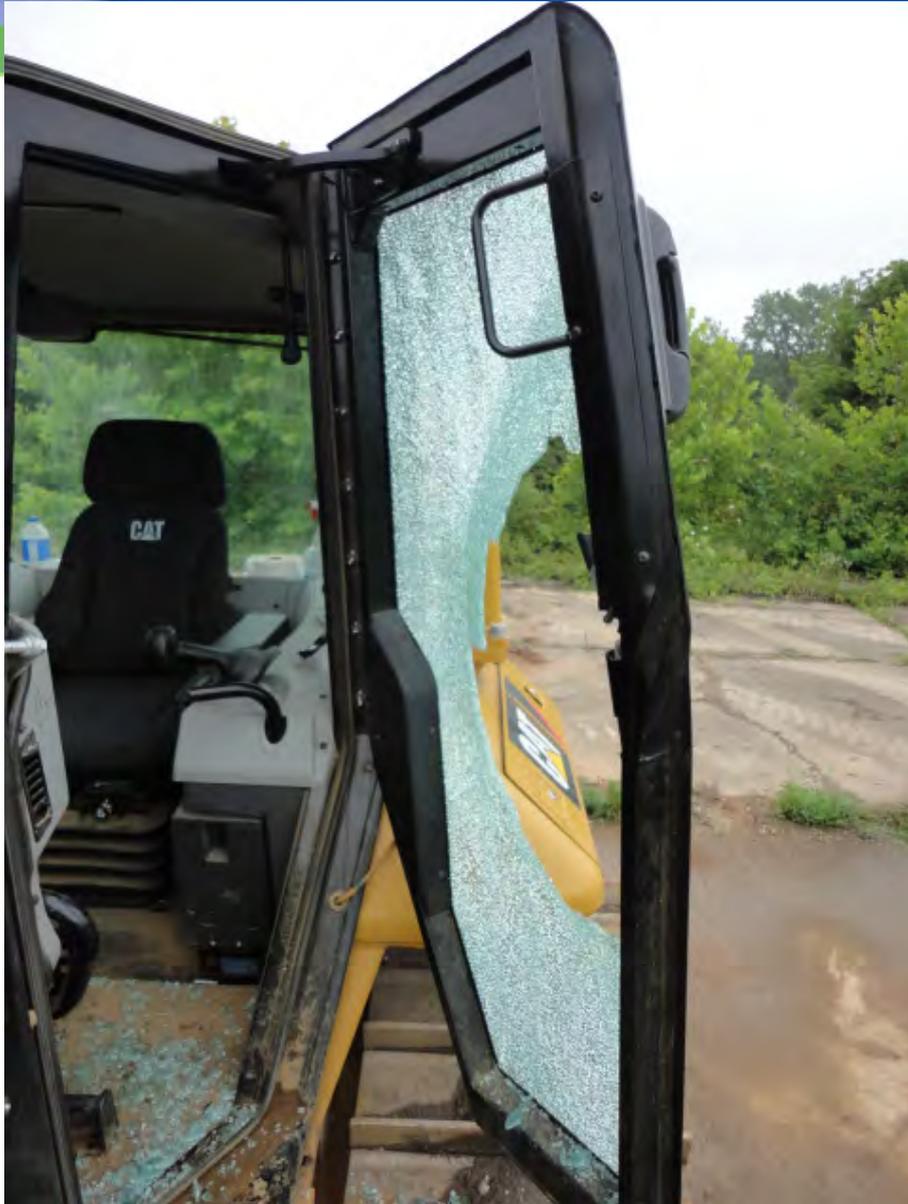
Remediation



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Future of the Property



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Questions?

