Economic Benefits of Brownfields Redevelopment-
"(Brown) Diamonds in the Rough"

Presented by:

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Brownfields

• “property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of hazardous substance, pollutant, or contaminant.”

• Excludes higher risk sites listed or proposed for listing on the National Priorities List and sites remediated under the Toxic Substances Control Act of 1976

1 – http://epa.gov/brownfields
Brownfields

Where they come from?

• Changing Markets, Technologies, Regulations, etc.
• Liability Concerns
• Cleanup Costs
• Existing and unknown conditions create obstacles
Brownfields

- U.S. Government Accountability Office estimates there are over 1 million “brownfield” sites nationwide
- Created stagnation in the market, due to liability concerns “Perception of Contamination”
- 1995 Brownfields Grant Program
- 2002 Small Business Liability Relief and Brownfields Revitalization Act
- 2018 Brownfields Utilization, Investment and Local Development (BUILD) Act
Pennsylvania Toolbox

• Land Banking

Brownfields

Land Bank Authority

LANCASTER COUNTY
SUPPORTED BY THE LANCASTER COUNTY
REDEVELOPMENT AUTHORITY

FOR SALE
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ERIE COUNTY
LAND BANK

Lackawanna County

Commissioners
Jerry Notarianni • Debi Domenick, Esq. • Chris Chermak

AMO ENVIRONMENTAL DECISIONS
Environmental Risk & Remediation Consultants
Brownfields

Pennsylvania Toolbox

State Grants
- Department of Community and Economic Development (DCED)
- Department of Conservation and Natural Resources (DCNR)
Brownfields

Pennsylvania Toolbox

PADEP Voluntary Cleanup Program (Act 2)
- Voluntary Program
- Remediator Selects Standard
- Liability Relief with Approval of Final Report
- Liability Protection Moves Forward
Brownfields

Pennsylvania Toolbox

Act 3 – The Economic Development Agency, Fiduciary and Lender Environmental Liability Protection Act

- Liability protection for sites taken over eminent domain
- Process to take title for accessing grant funding
Brownfields

U.S. EPA Brownfields Grants Program

- Assessment
- Cleanup
- Revolving Loan Fund
- Multipurpose
EPA Region III Territory
Types of Grant Funding

- Assessment
- Revolving Loan Fund
- Cleanup
- Multi-purpose
- Environmental Workforce Development and Job Training Grants
- Targeted Brownfield Assessments
Assessment Grant Competition

- Provide funding to plan, inventory, and assess brownfields contaminated with hazardous substances, pollutants, contaminates and petroleum products, conduct community involvement, and cleanup/redevelopment planning.

- Who is eligible?
  - State, local, and tribal governments
  - General purpose units of local governments
  - Regional councils or redevelopment agencies
  - Non-Profits
Assessment Grant Competition

- Community Wide Assessments
  - $300,000 maximum total grant for Hazardous/Petroleum funding

- Site-Specific Assessments
  - $200,000 total funding maximum for Hazardous/Petroleum funding per site
  - Waiver up to $350,000
    - Contamination
    - Size
    - Ownership status
Assessment Grant Competition

- Coalition Assessment
  - $600,000 total funding for Hazardous/Petroleum funding per site
  - Partner with communities that have limited capacity to manage their own brownfields cooperative agreement
Assessment Grant Competition

- Planning Activities
  - Site Reuse Assessment
  - Market Evaluation
  - Market Analysis
  - Infrastructure Evaluation
  - Land Use Assessment
  - Site Design/Reuse Vision
  - Redevelopment Planning
  - Expression of Interest Process
  - Development of an Area-Wide Plan
Cleanup Grant Competition

- Provide funding for remediation of brownfields contaminated with hazardous substances, pollutants, contaminants and petroleum products.

- Who is eligible?
  Applicants must own the property at time of proposal submission
  - State, local, and tribal governments
  - General purpose units of local governments
  - Regional councils or redevelopment agencies
  - Non-profit organizations
Cleanup
Grant
Competition

$500,000 maximum per grant proposal

One proposal per applicant

One site or multiple sites allowed per proposal

Request only the funds required to remediate

Floodplain projects should describe projected and appropriate reuse as well as partner involvement

Cost share waiver

- Non-Profits
- Tribes
- Local governments < 50k population
Revolving Loan Fund (RLF) Grants

- Provide funding to capitalize a revolving loan fund that provides loans and subgrants to carry out cleanup of brownfield sites contaminated with hazardous substances, pollutants, contaminants and petroleum products.

- Who is eligible?
  - State, local, and tribal governments
  - General purpose units of local governments
  - Regional councils or redevelopment agencies

- Funding:
  - Up to $800,000
  - Requires a 20% cost share
  - Award ~10 RLFs biennially
  - Provide supplemental funding annually to existing high performing RLFs
RLF Applicants may not request a waiver of the 20% cost share requirement.

Subgrants will be limited to $350,000 (previously $200,000)

50% or more for loans, remainder for eligible costs and subgrants

Distribution
- Project Description/Revitalization Plan 25%
- Community Need/Engagement 20%
- Tasks, Costs, Measuring Success 40%
- Programmatic Capability 15%
Environmental Workforce Development and Job Training (EWDJT) Program

Up to $200,000 for nonprofit and other organizations to recruit, train, and place predominantly low-income and minority, un-employed and under-employed people living in areas affected by solid/hazardous waste.

Residents learn the skills needed to secure full-time, sustainable employment in environmental fields such as:

- hazardous and solid waste management
- assessment and cleanup activities
- lead paint, asbestos and mold remediation
- energy audits and renewable energy
  - emergency response
- integrated pest management
- storm water management
What Are TBAs

Targeted Brownfield Assessments

- TBAs performed by USEPA Region 3 at the request of an eligible entity to assess a single site that may be contaminated.

- Subject to a Regional review process which includes a brief application
- Submission of letter requesting assistance through a TBA answering Region 3 criteria
- Signed access form by EPA and the TBA recipient/owner
- TBAs are NOT subject to a National competition but rather evaluated by Region 3 personnel
- Not a grant
- No monetary cap
- No proposal submittal needed

The North 16th Street site in Philadelphia, PA under construction for Habitat for Humanity housing

Drums found at Former Mingo Lime and Lumber site in Williamson, WV

Hinton Ice House in Hinton, WV which will be part of the Rail Yard District Revitalization Plan
### Brownfields Information

#### At-A-Glance

Since 1997 the total dollars awarded in PA: $78,707,136

<table>
<thead>
<tr>
<th>Brownfields Grant Types</th>
<th>Number of Grants</th>
<th>Total Funds</th>
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<tbody>
<tr>
<td>Assessment</td>
<td>118</td>
<td>$35,746,000</td>
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<tr>
<td>Area Wide Planning</td>
<td>5</td>
<td>$950,000</td>
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<tr>
<td>Cleanup</td>
<td>38</td>
<td>$8,000,000</td>
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<tr>
<td>Job Training</td>
<td>13</td>
<td>$2,356,142</td>
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<tr>
<td>Revolving Loan Funding</td>
<td>30</td>
<td>$21,050,000</td>
</tr>
</tbody>
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#### Results of Funding

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Total number of communities funded:</td>
<td>78</td>
</tr>
<tr>
<td>Total number of community grants awarded:</td>
<td>204</td>
</tr>
<tr>
<td>Total number of grant assessments completed:</td>
<td>921</td>
</tr>
<tr>
<td>Total number of Targeted Brownfield Assessments (TBA) *:</td>
<td>63</td>
</tr>
<tr>
<td>Total number of grant cleanups completed:</td>
<td>75</td>
</tr>
</tbody>
</table>

Total amount of Brownfields 128(e) grant dollars to PADERP to support their programs since 2002: $10,504,994

*Targeted Brownfield Assessments are assessments conducted using either EPA contract resources or funds given to the-state to conduct assessments.

- Dollars Leveraged: $1,245,052,425
- Jobs Leveraged: 4,866
- Acres/Properties Ready for Reuse: 1843.36/024
Outreach Activities and Events

- **Debriefing** - unsuccessful applicants not awarded. Encourage them to reapply.

- **Brownfields 101/Brownfields Basics** - for communities that are unfamiliar with Brownfields as a concept.

- **Grant writing workshops** - for communities ready to apply for EPA Brownfields funding.

- **Brownfields 201** - resources for redevelopment beyond EPA grants. Mostly used at state conferences.

- **Brownfields specialty topics** - for communities with EPA grants that want to make implementation of their projects more effective.

- **State Brownfield conferences** - PA, VA, WV annual conferences and all grantees meeting.
Please feel free to call or email me with any questions.

Stephanie Branche,
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215-814-5556
Brownfields
“The numbers…”

US EPA Brownfields Program Accomplishments, as of 10/1/2019

- 30,794 - properties assessed
- 1,921 – properties cleaned up
- 155,760 – jobs leveraged
- $29B – dollars leveraged
- 7,741 – properties made ready for reuse
- 87,578 – acres made ready for anticipated reuse

2 - https://www.epa.gov/brownfields/brownfields-program-accomplishments-and-benefits
Brownfields
General Benefits

**EPA Data**

- Reduction in miles traveled, 32-57%³
- Reduction in stormwater, 47-62%³
- Property Values Increase, 5-15.2% within 1.29 miles³
- Additional Tax Revenue, $29-$97 million annually³

Brownfields
General Costs

- Vacant properties lowers values within 500 ft by 2.1%\textsuperscript{4}
- Foreclosed and vacant lowers values by 6.1%\textsuperscript{4}
- Environmental Justice
- Health Benefits
- Environmental Benefits

\textsuperscript{4} S. Whitaker and T. Fitzpatrick, The Impact of Vacant, Tax-Delinquent and Foreclosed Property on Sales Prices of Neighboring Homes, Federal Reserve bank of Cleveland (Oct. 2011)
Brownfields
Additional Outcomes

Environmental Justice

• Hazardous sites are more likely to be situated in poor and/or minority areas\(^4\).
• Shuttered sites are less likely to be cleaned up\(^5\).
• Leading to inherent Environmental Justice Issues

\(^4\) – Ringquist 2005; Campbell et al. 2010
\(^5\) – Bullard 2001; Bonorris 2004
Brownfields
Additional Outcomes

Health/Environmental Benefits

90% of known brownfields negatively affect the environmental quality of the communities in which they are located, and may pose health risks to local populations\(^6\).

Common contaminants post-industrial cities: lead, zinc, arsenic, copper, cadmium, chromium, PAH’s, and dioxins\(^7\)

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\(^6\) Eckerd & Keeler, 2012
\(^7\) EPA Region 4
Brownfields
Additional Outcomes

Recreational Benefits

- Creating / Preserving Open Space
- Allentown - Jackson Street Park
- Scranton - Pocket Park
- Philadelphia – Schuylkill River Trail
Case Studies
Taylor Borough, PA

- Lackawanna County, PA
- 5.2 sq. miles (3,200 acres)
- Population 6,263
- Historically Coal Mining Town
- Taylor Colliery
- Subsurface and Surface Strip Mining
- Impacts to Adjacent Properties
- 206 Homes and Businesses Demolished
- Approximately 300 acres idle (approximately 10% of available land)
Case Studies
Taylor Borough, PA

- 2004 – Planning Started
- 2006 – US EPA Brownfields Assessment Grant $350,000
- 2009 – PADEP Bureau of Abandoned Mine Land Reclamation $1.2 million
- 2010 – DCED Industrial Sites Reuse Program $125,000
- 2010 – US EPA Brownfields Cleanup Grant $200,000
- 2010 – US EPA Brownfields Assessment Grant $200,000
Case Studies
Taylor Borough, PA

Economic Benefits
Property value increase of 10% within 1.29 miles
$30 million
Annual Impacts to Local Economy 10 new homes
Real Estate and Local Income Tax
$53,000 annually
Case Study
Norristown, PA

Humane Fire Engine Company 1854-2012
Vacant from 2012
EPA Brownfields Assessment Grant 2015
Site purchased in 2014
Environmental Concerns Impacted
Redevelopment
Phase I ESA Identified RECs
Phase II ESA Completed
Five Saints Distillery Opened 2016
Case Study
Norristown, PA
Case Study
Norristown, PA

- Opened in 2016
- Five new full-time jobs
- Driving Economic Development
- Restaurant Opening Soon
- New Tax Revenue
Case Studies
Norristown, PA

Economic Benefits
Property value increase of 10% within 1.29 miles
$192 million

Annual Impacts to Local Economy
Real Estate and Local Income Tax
$15,000 annually
Case Study
Norristown, PA

Former Beer Distribution Warehouse from late 1800’s - 2013
Crazy Aaron Opened 2017
Over 125 new jobs
Opens Retail Store 2018
New Tax Revenue
Case Studies
Norristown, PA

Economic Benefits
Property value increase of 10% within 1.29 miles
$192 million
Annual Impacts to Local Economy 125 new jobs
Real Estate and Local Income Tax
$396,519 annually
Case Study
Lower Gwynedd, PA

- 26-acre former chemical plant
- Manufactured metal treatment, herbicides, and pesticides
- Metal Treatment Products 1914-2003
- Agricultural Chemicals 1938-1980
- Inactive with tenants 2012-2015
- Environmental Impacts in soil and groundwater
Case Study
Lower Gwynedd, PA
Case Study
Lower Gwynedd, PA
## Case Study
### Lower Gwynedd, PA

<table>
<thead>
<tr>
<th>Redevelopment Plan</th>
<th>Brownfield Benefits</th>
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<tbody>
<tr>
<td>• Remediate/Control</td>
<td>• Location</td>
</tr>
<tr>
<td>Environmental Impacts</td>
<td>• Infrastructure</td>
</tr>
<tr>
<td>• Redevelop Campus</td>
<td>• Demographics</td>
</tr>
<tr>
<td>• Manage Risk</td>
<td>• Zoning</td>
</tr>
<tr>
<td>• Attract Tenants</td>
<td></td>
</tr>
</tbody>
</table>
Case Study
Lower Gwynedd, PA

Redevelopment Time Frame

• Environmental Investigation / Remediation
• Ambler Yards Redevelopment 2015
• Cleanup Complete 2016
• Ambler Yards Leased Out 2019
Case Study
Lower Gwynedd, PA

Ambler Yards – Uncommon Space

- Vintage Structures
- Flex Space
- Retail Space
- Fully Leased
Case Study
Lower Gwynedd, PA

Ambler Yards – The Numbers

- Over 500 employees
- Approximately $90,000 annual revenue to Lower Gwynedd
- Approximately $210,000 annual revenue to Wissahickon School District
- Approximately $40,000 annual revenue to Montgomery County
Background

- Philadelphia Industrial Development Corporation
  - Philadelphia’s public-private economic development corporation
  - Mission – Spur investment, growth & development that creates new jobs, revitalizes neighborhoods & drives growth to every corner of Philadelphia
US EPA Brownfields Grant

- US EPA Brownfields Community-Wide Assessment Grant 2015
- Focused on Lower Schuylkill
- Assessed numerous sites to facilitate transactions
- One site key to Schuylkill Banks Trail
US EPA Brownfields Grant

- Schuylkill Banks recreational trail
- One the City’s most popular amenities
- 16 miles of riverfront and greenway
- Returning riverfront access to the public
US EPA Brownfields Grant

- Land was Purchased from CSX
- Environmental Assessment was Needed
- EPA Funding Critical Component
US EPA Brownfields Grant

- Operated from 1800’s – 1940
- Phase I and Phase II completed
- Impacts identified as part of due diligence
- No impacts identified on Parcel 2
US EPA Brownfields Grant

- Impacts included
  - PAHs
  - Metals
- Exceedances to direct contact and soil to groundwater standards
- Additional CSX protocols
- Timing crucial to closing the deal
US EPA Brownfields Grant

Achieving Act 2 Closure
Site-Specific Approach

- Developed Conceptual Site Model
  - Source
  - Exposure Media
  - Exposure Routes
  - Receptors
- Risk calculations acceptable
- Site Specific Closure
- No Excavation
- Shaved months off time-frame
- Cost saving approximately $100k
Case Studies
Philadelphia, PA

Economic Benefits
Property value increase of 10% within 1.29 miles
$5 million

Recreational Benefits
Green Space
Habitat
Green Corridor
Crime Reduction
US EPA Brownfields Grant
Brownfields
General Benefits

**EPA Data**

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