

# Region 3 Lead Forum

How Brownfields  
Resources Can Address  
Lead in Communities  
October 2, 2019

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# Past Property Uses that may be Brownfields ~ Review Draft ~ May 2019 ~

Looking around your community, what kinds of past uses do you see? Many commercial, industrial and even some residential properties may be environmentally contaminated due to past uses at the site. People who live, work, go to school, play or exercise on or near a property may not realize it is a brownfield site! They may not know walking or playing on site can cause potential exposure to contaminants.

Communities can request technical assistance or seek funds from EPA, state or tribal programs to assess properties and determine the history and past uses, the likely presence, sources and extent of possible contamination. By understanding past property uses, communities can better understand health and environmental risks. Listed below are common past uses of brownfields.<sup>1</sup>



Past Property Use	Examples	Possible Contaminants
<b>Housing and Residential Areas</b> 	Single/multifamily homes, apartment buildings and other structures built before 1978; garages, sheds or barns.	Asbestos used in insulation of heating and cooling systems, floor, wall/roofing materials. Lead from lead-based paint and materials in homes, and apartments. Petroleum and fuels stored for use in heating systems.
<b>Gas Stations and Fuel Storage</b> 	Gas station buildings, structures/signs; underground storage tanks and piping; storage areas for oil, fuel, or solvents.	Gasoline, diesel, and heating oil used as in fuels or heating systems. Volatile organic compounds (VOCs) and solvents used for cleaning and repair. Polycyclic aromatic hydrocarbons (PAHs) from asphalts and as a combustion byproduct.
<b>Railroad Facilities</b> 	Railroad lines, rail yards, rail spurs; roundhouse, rail car repair/maintenance facilities; train stations/depots.	Lead from lead-based paint used on older structures, signs, metal equipment, railcar rolling stock, and in repair. Other metals used in railcar repair, railroad ties wood treatment. PAHs from coal and diesel combustion, ash and fill disposal.
<b>Automotive Repair</b> 	Structures and properties associated with automobile, truck and bus body repair; radiator and muffler repair.	Petroleum associated with fuels, spills and past gas or fuel operations and heating systems. PAHs from coal and diesel combustion, asphalt, ash and fill disposal. Lead used in vehicle, structure and sign paint, solder for radiator and car repair.

<b>Dry Cleaners and Industrial Laundry</b> 	Small commercial and larger industrial laundry and dry cleaners.	VOCs or solvents used as degreasers and cleaning agents. Lead from lead-based paint used on older structures. Petroleum used to fuel equipment or associated with past fuel storage, heating or spills.
<b>Manufacturers and Power Generation</b> 	Textile mills, factories and power plants; industrial operation boiler houses and power systems.	Lead from lead-based paint and lead used on structures/equipment. Petroleum and fuel for industry equipment and heating. PAHs as a result of industrial power generation and burning, ash and fill.
<b>Agricultural land and Facilities</b> 	Single family homes, barns, outbuildings and fencing, farm equipment.	Lead from lead-based paint coated structures/equipment. Petroleum and diesel used to power agricultural equipment. Asbestos from older structures and insulation and illegal dumping on agricultural and range lands.
<b>Mines and Mining Operations</b> 	Mines, extraction and processing structures/equipment; tailing and waste spoil areas.	Petroleum and fuel used to power equipment operations. Asbestos from mining and materials use. Lead from mining, processing and lead-based paint on equipment/structures. Other metals from mining, extraction, processing and industry operations.
<b>Public Buildings</b> 	Schools, hospitals, libraries, courthouse, jails, post offices and other governmental or community buildings.	Asbestos from insulation and building materials. Lead-based paint used in public buildings/structures. Petroleum for fleet fuel and heating operations.
<b>Metal Salvage and Recycling</b> 	Metal recycling and scrap metal yards.	Petroleum from fuel and heating systems, tank and piping systems. PAHs from asphalt or combustion. VOCs from solvents and degreasers used in metal cleaning.
<b>Illegal Dumping</b> 	Unregulated solid waste, construction debris, tire and illegal dumping areas	Lead from lead-based paint coated structures and materials. Petroleum used in oil and fuel systems and other metals associated with a range of waste materials such as lighting waste materials.

<sup>1</sup>EPA grant recipients are required to report about brownfield properties and grant funded activities through EPA's Assessment, Cleanup and Redevelopment Exchange System (ACRES). The following information about the history and description of a brownfield property does not reflect all examples of past uses reported at brownfield properties but provides a national snapshot. This data is publicly available at [www.epa.gov/cleanups/cleanups-my-community](http://www.epa.gov/cleanups/cleanups-my-community)

# THE BROWNFIELD PROCESS



## EPA BROWNFIELD GRANTS AND RESOURCES

TARGETED BROWNFIELD ASSESSMENT=**T** ASSESSMENT=**A** CLEANUP=**C** REVOLVING LOAN FUND=**R** MULT-PURPOSE=**M**



# Brownfields & Public Health

## Brownfields lead to disinvestment and deteriorating quality of life for communities

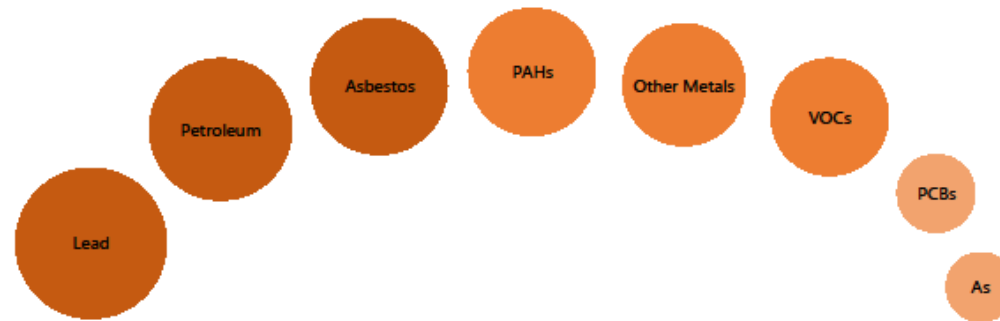
- ▶ Contaminants, pollutants and exposure concerns
- ▶ Safety risks – trespassing, vandalism, derelict structures or foundations, controlled substances, homeless populations
- ▶ Social and Economic – higher crime rates, higher vacancy rates, declining property values, reduce social capital
- ▶ Environmental Justice
- ▶ Sensitive populations

# Environmental Contaminants Often Found at Brownfield Sites ~ May Review Draft ~

Brownfield properties are often overlooked for reuse or redevelopment due to fear of environmental contamination. Understanding the **types of contaminants present** (or potentially present) and **how people may be exposed to those contaminants** will help a community plan cleanup and site reuse options that limit exposure risk.

EPA, states and tribes have programs that can help communities identify properties that are brownfields, determine whether the property is environmentally-contaminated, address contamination when needed and plan for site reuse that will bring new benefits to the community.

Below are the contaminants most commonly reported from brownfields cleaned up using grant funds. Each circle's size reflects how often the contaminant was reported to EPA.<sup>1</sup>



Contaminant	Substance Type	Examples of Past Uses
1. Lead	Metals	Mining, fuel, paint, inks, piping, batteries, ammunition
2. Petroleum	Oil, hydrocarbon compounds	Drill and refining, fuel, chemical and plastic production
3. Asbestos	Fiber in rock	Mining and processing, piping, insulation, fire proofing, brakes
4. Polycyclic aromatic hydrocarbons (PAHs)	Hydrocarbon compounds, combustion byproduct	Coal tar, creosote, soot, fire, industry/ manufacturing byproduct
5. Other metals	Metals	Metal fabrication, plating, mining, industry/ manufacturing
6. Volatile organic compounds (VOCs)	Manmade chemicals	Industry and commercial product solvents, degreasers, paint strippers, dry cleaning
7. Polychlorinated Biphenyls (PCBs)	Manmade chemicals	Heat and electrical transfer fluids, lubricants, paint and caulk
8. Arsenic (As)	Metals	Pesticides, agriculture, manufacturing, wood preservative

# EPA's Brownfields Support

- **Grant Activities (5 types of competitive grants offered):**
  - Brownfields Assessment/Planning (up to \$600K)
  - Brownfields Cleanup (up to \$500K)
  - Multipurpose (up to \$800K)
  - Revolving Loan Fund (up to \$800K)
  - Environmental Workforce Development & Job Training (\$200K)
  
- **FREE Technical Assistance (non-competitive):**
  - Brownfields Site Assessments (TBA)
  - Brownfields Project consulting (TAB)
  - Financial Project Planning (CDFA)
  - Community engagement (Groundworks)
  - Brownfields Federal Programs Guide
  - Other technical support

**RFPs for FY20 Funding will be released this week and proposals due in December!**





# How to Apply for Grants

- Annual competition ~ \$70 million awards
- The guidelines for FY20 funding – early October. Applications will be due 12/3.
- FY20=Assessment, RLF and Cleanup. No multi-purpose. No Job Training.
- Submit through [Grants.gov](https://www.grants.gov)
- EPA will host a webinar on how to apply

# Current Brownfields Community Funding – *Where will the next big redevelopment be?*

- ▶ **Lynchburg**
  - ▶ \$300K Assessment grant
- ▶ **Wilmington**
  - ▶ \$300k Assessment grant
  - ▶ Just completed a \$200k planning grant
  - ▶ \$200K Job Training grant (West End)
- ▶ **Baltimore**
  - ▶ Two \$200k Assessment grants
- ▶ **Norfolk**
  - ▶ \$300k Assessment
  - ▶ \$200k Planning grant
- ▶ **Scranton**
  - ▶ \$600k Assessment grant with Lackawanna County
- ▶ **Richmond**
  - ▶ \$600k Assessment grant
- ▶ **Huntington**
  - ▶ \$400k Assessment grant
  - ▶ \$800k RLF grant
  - ▶ \$200k Job Training grant (Coalfields)
  - ▶ \$500k Cleanup grant
  - ▶ \$600k Assessment grant with Reg 2 planning



# Before



# After



Lancaster, PA  
Contaminated site  
Now Roberto Clemente park and  
playground





Before

After

Roanoke, VA  
Crystal Tower Building old hotel now  
Ponce de Leon Apartments

[https://www.epa.gov/sites/production/files/2017-10/documents/epa\\_oblr\\_successstory\\_crystal\\_tower.pdf](https://www.epa.gov/sites/production/files/2017-10/documents/epa_oblr_successstory_crystal_tower.pdf)





# Before



# After



## Canton Crossing Baltimore, MD

[https://www.epa.gov/sites/production/files/2015-11/documents/2\\_canton\\_crossing\\_success\\_story.pdf](https://www.epa.gov/sites/production/files/2015-11/documents/2_canton_crossing_success_story.pdf)

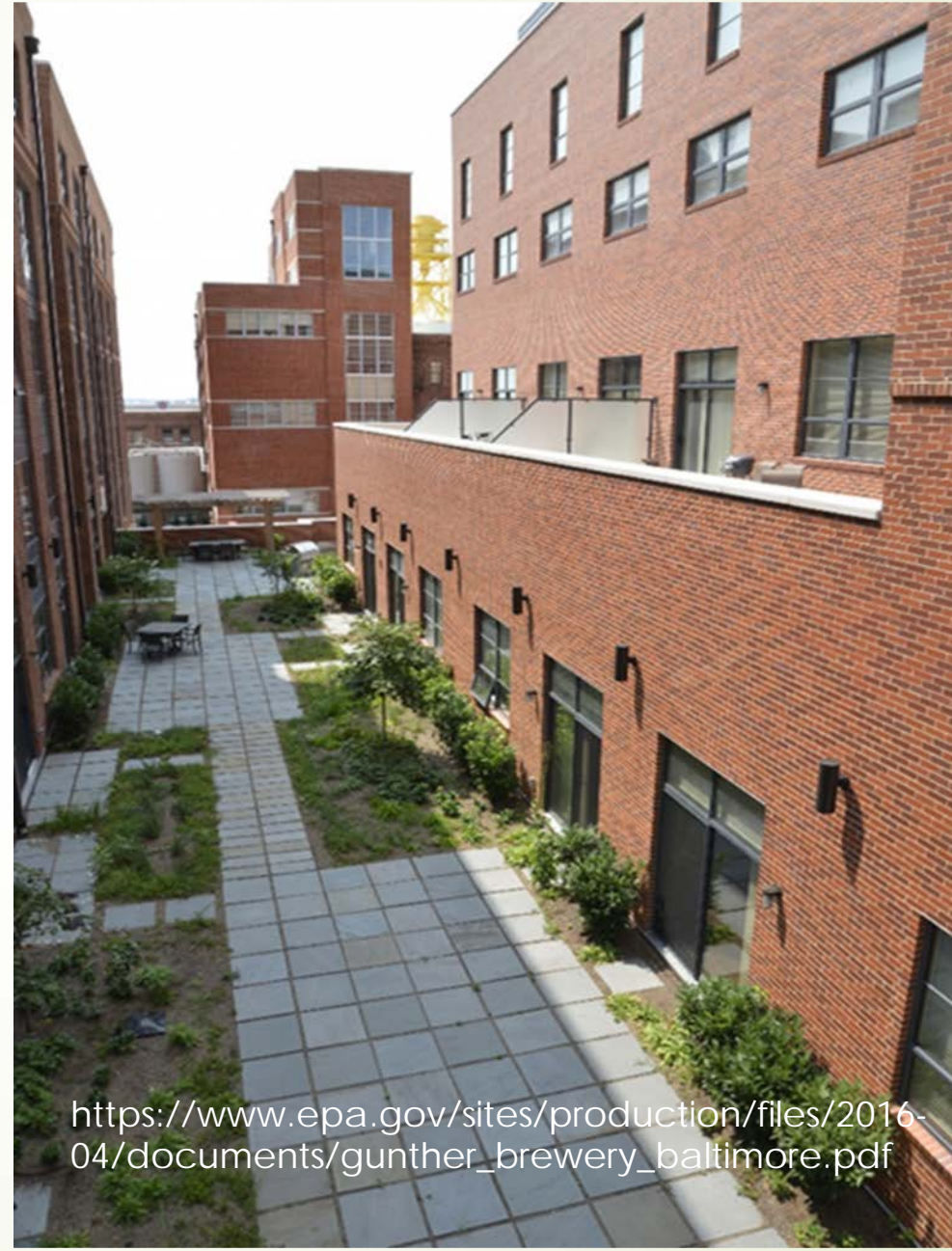


# Before



Gunther Brewery  
Baltimore, MD

# After



[https://www.epa.gov/sites/production/files/2016-04/documents/gunther\\_brewery\\_baltimore.pdf](https://www.epa.gov/sites/production/files/2016-04/documents/gunther_brewery_baltimore.pdf)





## Stone Brewery, Richmond, VA

[https://www.epa.gov/sites/production/files/2019-09/documents/cheers\\_to\\_a\\_revitalized\\_neighborhood.pdf](https://www.epa.gov/sites/production/files/2019-09/documents/cheers_to_a_revitalized_neighborhood.pdf)





Before

Former Hi-Tech Gas  
Station  
Now Community  
Parking Area and  
Greenspace  
Wilmington, DE

After

<https://www.epa.gov/sites/production/files/2015-11/documents/de-wilmington.pdf>





[https://www.epa.gov/sites/production/files/2019-03/documents/brownfields\\_to\\_brewery.pdf](https://www.epa.gov/sites/production/files/2019-03/documents/brownfields_to_brewery.pdf)

Wilmington, DE – Harper Thiel electroplater becomes Wilmington Brew Works and restaurant.

# BENEFITS OF BROWNFIELDS REVITALIZATION

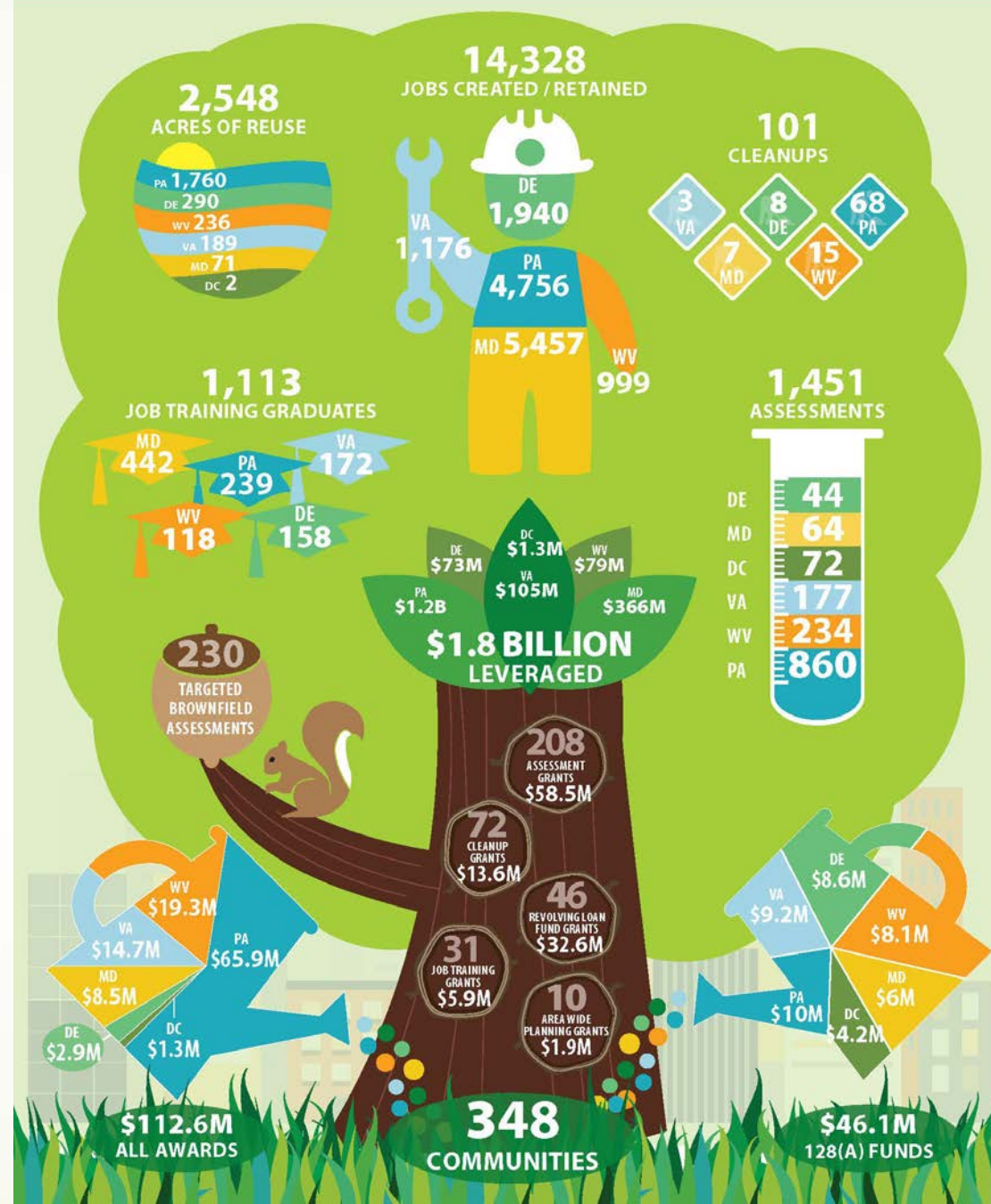
- Provides places for business growth and job creation
- Removes blight and improves community health and appearance
- Restores/enhances the local tax base
- Utilizes existing infrastructure
- Protects the region's environment and reduces urban sprawl





# Region 3 Brownfields Program Snapshot (2018)

- Over 2,200 sites assessed or cleaned up
- Over \$121 Million awarded to close to 375 community entities
- Annually, manage 80-100 open grants valued at \$30M-\$40M
- Thousands of Jobs created
- Billions leveraged.



# How we can help



- ▶ Check our website for tools and resources on all types of BF reuse options
- ▶ Workshops for communities
  - ▶ Brownfields Basics (101)
  - ▶ Grant writing – how to write a successful proposal
  - ▶ Brownfields 201 – leveraging resources
- ▶ Targeted Brownfields Assessments
- ▶ Brownfields state liaisons
- ▶ Brownfields mailing list (stay in the know)
  - ▶ Monthly email blast on funding, training, resources and tools
- ▶ New Jersey Institute of Technology - <http://www.njit.edu/tab/>

**Check out *EPA's Brownfields Federal Program Guide***

<https://www.epa.gov/brownfields>