

KCS SITE-SPECIFIC REAL ESTATE PROJECT TECHNICAL ASSISTANCE (TA) APPLICATION

FOR FISCAL YEAR 2020-2021

APPLICATION / PROFILE COVER PAGE

Complete one Application / Profile for each property for which TA is being requested

1. Name of the Project		
2. Name of Organization Requesting TA		
3. Is this organization a currently designated Main Street of Elm Street Program?		<input type="checkbox"/> YES <input type="checkbox"/> NO
4. Did this organization receive National MainStreet Accreditation in the previous year?		<input type="checkbox"/> YES <input type="checkbox"/> NO
5. If NO to question 3, is this organization a PDC "Recognized" Program ¹ ?		<input type="checkbox"/> YES <input type="checkbox"/> NO
6. If NO to question 5, is this organization a PDC member?		<input type="checkbox"/> YES <input type="checkbox"/> NO
7. Nature of the project for which TA is being requested?		<input type="checkbox"/> New construction or infill on vacant land <input type="checkbox"/> Rehab of an existing structure
Type of TA Being Requested <i>Refer to the KCS "Services Catalogue" in Appendix A for details on these services.</i>		<input type="checkbox"/> Site Feasibility Study <input type="checkbox"/> Developer's Request for Qualifications / Proposals <input type="checkbox"/> Assistance with Professional Services Studies <input type="checkbox"/> Assistance with Project-Specific Market Analysis <input type="checkbox"/> Assistance with Conservatorship Projects <input type="checkbox"/> Assistance with Drug Nuisance Projects <input type="checkbox"/> Blighted Property Inventory <input type="checkbox"/> Blighted Property Prioritization Assistance <input type="checkbox"/> Blighted Property Revitalization Action Plan <input type="checkbox"/> Project Funding Plan <input type="checkbox"/> Assistance with Funding Applications <input type="checkbox"/> Assistance with Zoning Issues
Does the organization have funds in-hand for this project?		<input type="checkbox"/> YES <input type="checkbox"/> NO
If you answered YES to the question above, how much?		\$
Is this project requesting a PREPD ² Loan?		<input type="checkbox"/> YES <input type="checkbox"/> NO
Date this application was completed		
Signature of Organizational Representative		
Date application was received by KCS		

¹ Recognized Programs are those not currently designated by DCED but are attempting to function as designated Main or Elm Street Programs and that pay a slightly higher PDC membership fee in order to be "recognized."

² Patient Real Estate Pre-Development Loan Program

KEYSTONE CORE SERVICES PROPERTY PROFILE:

Complete one Property Profile per property - fill in as much information as possible.

1. LOCAL PARTNER GENERAL INFORMATION	
Date this Profile was completed:	
Name of the person completing the profile:	
Title of the person completing this profile:	
E-mail address of the person completing this profile:	
Phone number of the person completing this profile:	
Name of organization requesting the TA:	
Type of organization requesting the TA:	<input type="checkbox"/> Unit of Government <input type="checkbox"/> Municipal Authority <input type="checkbox"/> 501(c)(3) <input type="checkbox"/> 501(c)(6) <input type="checkbox"/> 501(c)(4) <input type="checkbox"/> Other (Define):
Address of the Local Partner Organization Street #:	
City, Zip Code, County:	
Website address of the Local Partner Organization:	
2. CURRENT PROPERTY OWNER INFORMATION – Skip if requesting assistance for any Blighted Property activities.	
Name of the current property owner:	
Address of the current property owner Street #:	
City, Zip Code, County:	
E-mail address of the current property owner:	
Phone number of the current property owner:	
Is the current property owner aware of the Local Partner Interest in this project?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Uncertain
Is the current property owner interested in participating on this project?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> Uncertain

3. BLIGHTED PROPERTY TECHNICAL ASSISTANCE

If you are requesting assistance with a Blighted Property Inventory or a Blighted Property Revitalization Action Plan, answer the question below and skip to the neighborhood description on Page 4.

Approximately how many properties need to be inventoried and/or have an action plan established for them?

- Less than 10 100-249 250-500 500+ (Approximate Number _____)

If you have already inventoried the properties in the target area, *how many “blighted properties” do you want reviewed with the Blighted Property Prioritization Assistance (MADM)?*

Answer the question below and skip to the neighborhood description on Page 4.

- Less than 10 10-19 20-50 50+ (Approximate Number _____)

4. PROJECT SITE INFORMATION	
Name of site (if applicable):	
Address(es) of the Project Site - Street #	
City, Zip Code:	
Municipality & County:	
Tax Parcel ID Number:	
Census Tract, Block Group and Block Number:	
Are there any tax liens currently on the property?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
Are there any ongoing operations on the property?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
Size of the lot	Acres _____ Square Feet _____
Local zoning classification of the project site	
Percent of the project site that is vacant: <i>More Than</i>	<input type="checkbox"/> 25% <input type="checkbox"/> 50% <input type="checkbox"/> 75% <input type="checkbox"/> 100%
Number of structures on the property:	<input type="checkbox"/> 0 <input type="checkbox"/> 1-5 <input type="checkbox"/> 5+
General condition of the structures:	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Not sure
Age of structure(s) on the site in years	<input type="checkbox"/> < 10 <input type="checkbox"/> 10 to 20 <input type="checkbox"/> >20 <input type="checkbox"/> Not sure
Does the property have historical value?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
Is this property in a certified redevelopment area?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
<i>If you answered YES to the question above, which of the following blighting influences are present on the site?</i>	
<input type="checkbox"/> Unsafe, unsanitary, inadequate or overcrowded conditions	
<input type="checkbox"/> Excessive land coverage of the building(s)	
<input type="checkbox"/> Lack of proper light, air and open space	
<input type="checkbox"/> Defective design and arrangement of the building(s)	
Is this project site on the organization's current five-year plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure

5. Project Site Area Description: Please provide a brief description of the surrounding uses and/or the neighborhood. *Do not exceed the space provided below.*

Please attach a map showing the location of the property (and the Main Street, Elm Street or Keystone Community boundary if applicable), pictures of the site, and if available, site plan, floor plan, and any other report(s) that might be available.

6. ENVIRONMENTAL INFORMATION

This environmental information will help us to estimate both the likelihood and magnitude of environmental contamination of a site, either real or suspected. It is often very difficult and laborious to get site specific environmental data related to potential contamination, so we used the following qualitative metrics to assess the potential level of environmental impact and implications for public health.

Has a Phase I Environmental Site Assessment been performed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure
Has a Phase II Environmental Site Assessment been performed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure
Has the US EPA or PA DEP environmental ever responded on the site?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure
<i>If you answered YES to the question above, please attach a narrative describing the event as Attachment A</i>	
Is there, or has there ever been, any perceived contamination on the site?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure
If you answered YES to the question above, please check any contaminants below that have been identified	
<input type="checkbox"/> Controlled Substances	<input type="checkbox"/> PAHs (Polycyclic Aromatic Hydrocarbons)
<input type="checkbox"/> Asbestos	<input type="checkbox"/> Radioactive materials
<input type="checkbox"/> PCBs - Polychlorinated Biphenyls	
<input type="checkbox"/> VOCs -Volatile Organic Compounds	
<input type="checkbox"/> Lead / Lead-Based Paint	<input type="checkbox"/> Other Metals:
<input type="checkbox"/> Mold	<input type="checkbox"/> Other Contaminants:
<i>See Appendix B for more information on these contaminants</i>	

Identifying and documenting the historical uses of the site can play an important role in estimating the source and type of contamination with the eventual goal to determine an appropriate remediation strategy.

Please check the types of activities that the site has been used for:	
<input type="checkbox"/> Industrial – What type of industry?	
<input type="checkbox"/> Commercial - What type of commercial?	
<input type="checkbox"/> Residential	
<input type="checkbox"/> Green Space	
<input type="checkbox"/> Other Land Use Activity – Please specify	

Is the previous/current owner a documented polluter?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
Is the site currently vacant or underutilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
How long has the site been vacant ³ ? (in years)	<input type="checkbox"/> 0 <input type="checkbox"/> 1-5 <input type="checkbox"/> 6-10 <input type="checkbox"/> > 10
How long has the site been underutilized ⁴ ? (in years)	<input type="checkbox"/> 0 <input type="checkbox"/> 1-5 <input type="checkbox"/> 6-10 <input type="checkbox"/> > 10

³ Vacant means 100% of the site has no building on the site NOR business operations currently apparent

⁴ Underutilized means that more than 50% of the building or lot has no building on the site NOR business operations currently apparent

The locations referred to in the following series of questions are all centers of human activity and/or important resources for the community. The distance that contamination lies away from these locations may dictate the urgency of remediation.

Please give the shortest distances (in miles) to each as accurately as possible.					
Nearest Schools:	<input type="checkbox"/> 0 – 2	<input type="checkbox"/> 3 – 5	<input type="checkbox"/> 6 – 8	<input type="checkbox"/> 9 – 11	<input type="checkbox"/> 12+
Public Recreation Areas:	<input type="checkbox"/> 0 – 2	<input type="checkbox"/> 3 – 5	<input type="checkbox"/> 6 – 8	<input type="checkbox"/> 9 – 11	<input type="checkbox"/> 12+
Properties with High Market Value:	<input type="checkbox"/> 0 – 2	<input type="checkbox"/> 3 – 5	<input type="checkbox"/> 6 – 8	<input type="checkbox"/> 9 – 11	<input type="checkbox"/> 12+
Residential Neighborhoods:	<input type="checkbox"/> 0 – 2	<input type="checkbox"/> 3 – 5	<input type="checkbox"/> 6 – 8	<input type="checkbox"/> 9 – 11	<input type="checkbox"/> 12+
Closest Water Source (river, lake, etc.)	<input type="checkbox"/> 0 – 2	<input type="checkbox"/> 3 – 5	<input type="checkbox"/> 6 – 8	<input type="checkbox"/> 9 – 11	<input type="checkbox"/> 12+

7. LOCAL DEMOGRAPHICS

As defined by the EPA, environmental justice “will be achieved when everyone, regardless of race, color, national origin or income, enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.” Redeveloping brownfields may be a step towards achieving environmental justice.

- A. In Pennsylvania, the statewide average unemployment rate in December of 2019 is 4.5%. Describe the unemployment rate in census tract where your project is located relative to:
- The rest of the municipality: Lower About the Same Higher
- The rest of your county: Lower About the Same Higher
- The rest of Pennsylvania: Lower About the Same Higher
- B. The percentage of Pennsylvanian residents, 25 years of age and older, with at least a high school diploma 2014-2018) is 90.2%. Describe the % of people with a high school diploma in the census tract where your project is located relative to:
- The rest of the municipality: Lower About the Same Higher
 - The rest of your county: Lower About the Same Higher
 - The rest of Pennsylvania: Lower About the Same Higher
- C. In Pennsylvania, the statewide percent of people identified as non-white is 18.2%. Describe the percentage of non-white people in the census tract where your project is located relative to:
- The rest of the municipality: Lower About the Same Higher
 - The rest of your county: Lower About the Same Higher
 - The rest of Pennsylvania: Lower About the Same Higher
- D. In Pennsylvania, the statewide percent of persons below the poverty line is 12.2%. Describe the percentage of residents below the poverty level in the census tract where your project is located relative to:
- The rest of the municipality: Lower About the Same Higher
 - The rest of your county: Lower About the Same Higher
 - The rest of Pennsylvania: Lower About the Same Higher

E. In Pennsylvania, the statewide percent of rental units is 31.0 %. Describe the percentage of rental units in the census tract where your project is located relative to:

- The rest of the municipality: Lower About the Same Higher
- The rest of your county: Lower About the Same Higher
- The rest of Pennsylvania: Lower About the Same Higher

F. In Pennsylvania, the statewide median household income is \$59,445. Describe the median household income in the census tract where your project is located relative to:

- The rest of the municipality: Lower About the Same Higher
- The rest of your county: Lower About the Same Higher
- The rest of Pennsylvania: Lower About the Same Higher

G. In Pennsylvania, the statewide crime rate for 2012 was 17.96 crimes per 1,000 residents. Describe the crime rate income in the municipality in 2012 where your project is located relative to:

- The rest of your county: Lower About the Same Higher
- The rest of Pennsylvania: Lower About the Same Higher

8. OTHER STATE or FEDERAL DESIGNATIONS

Please indicate if the project site is located within an area that has any of the following additional CURRENT designations:

- A PA Act 47 Municipality
- A PA Strategic Management Planning Program (Formerly Early Intervention)
- A PA Enterprise Zone
- A PA Innovation Zone
- A Federal Opportunity Zone
- A Federal HUB Zone
- A current or past Federal Home Loan Bank of Pittsburgh Blueprint Community
- Other Designation: _____
- Other Designation: _____
- Other Designation: _____

1. Site Feasibility Studies

The most requested KCS technical assistance service is that of a property-specific “Site Feasibility Study” (SFS). Almost every community has one or more properties that they just don’t know what to do with. The property may be in the possession of a private sector owner, may be up for tax sale or may be in the possession of the local municipal government or a non-profit organization. While usually in a state of significant disrepair, the property is far from needing to be demolished. When facing the decision as how to move forward with dealing such a structure, the obvious first question is where do we begin? And the obvious answer is to determine if the project is feasible. Feasibility however is not just an architectural or financial question. In providing this technical assistance, KCS uses the *Feasibility Manual for Reusing Historic Buildings*, authored by Donovan Rypkema, the principal of Place Economics. This extensive and intensive multi-month process helps the local organization to determine if a proposed project is *feasible*, where feasibility is defined as the project having “a reasonable likelihood of satisfying explicit objectives when a selected course of action is tested for fit to a context of specific constraints and limited resources.” This service is the most comprehensive offered by KCS and includes many of the activities detailed in this technical assistance menu. The SFS includes 1) a determination of the “participants” objectives, 2) identification of the legal limitations the project is facing, 3) constraints imposed by the participants, 4) national, regional and local market factors, 5) real estate market factors, 6) identification of target customers for the proposed uses, 7) political factors impacting the project, and 8) physical and technical constraints on the project, 9) intervention tools available, 10) a preliminary financial synthesis of the project and finally 11) a set of conclusions as to the feasibility of the project. This service does not include architectural rendering of the proposed completed project, but such services may be added for an additional charge.

2. Developer’s Request for Qualifications / Proposals

Expanding upon the work undertaken through the Site Feasibility Study, KCS can transform the report generated through the SFS process into a developer’s request for qualifications (RFQ) or request for proposals (RFP). This is accomplished by preparing a set of weighted criteria desired from developer’s who may be interested in rehabilitating or redeveloping the specific property question. The developers RFQ/RFP is then distributed to an extensive list of private sector developers to solicit their interest in the project. A development submission format is prepared as part of this process. KCS staff then work with the local organization to review, score, and interview potential developers for the property in question. While the final decision rests solely with the local organization as to which, if any developer, will be selected for the project, KCS staff will provide input and guidance to assist the local organization with making the best possible decision in selected a project developer.

3. Assistance with Professional Service Studies

Many site-specific projects require up-front specialized up-front technical assistance. These services may include architectural, engineering and/or environmental, as well as other services from licensed or certified technical assistance providers. Often times, these services carry a hefty front-end, “pre-development” cost. Ensuring that the local organization is getting the services it requires at the best possible price is an important part of this pre-development phase. Making sure that the local organization is comparing “apples-to-apples” is accomplished by putting together a well-thought out and comprehensive work scope for such services. KCS staff will assist the local organization with crafting such a work scope, a contract template and a scoring system for such services. KCS will then assist the local organization with advertising the professional services opportunity, helping to ensure that funding source contractual requirements are met including Minority, Women-Owned, Veteran, and other disadvantaged business advertising and outreach requirements are met. KCS staff will then assist the local organization with making the appropriate decision for the required professional services. Finally, KCS staff will assist the local organization through the final contract development-negotiation process.

4. Assistance with Project Specific Market Analysis

No property-specific project exists in a vacuum. Every project should have a target customer base and geographic area that it intends to serve. These potential customers and the area(s) that they are drawn from, are defined by households within the projected “trade area” or “capture zone.” These households exhibit not only specific socio-economic characteristics, but equally specific “lifestyle (psychographic) preferences.” Utilizing data from national data-mining companies, KCS staff will prepare a defined-geography specific report that details both the socio-economic and psychographic profile. By having access to such data, the developer should be able to craft a better mix of business uses for the site as well as more targeted marketing efforts. KCS staff will assist in defining the trade area geography, prepare a socio-economic/psychographic “data-run” for that particular trade area geography, draft a rudimentary report and assist the local organization with interpreting the data. It is important to note here that this information is only available to the local revitalization working with a developer on a property specific site. Developers may not request this information without a defined connection to a local revitalization organization’s effort.

5. Assistance with Conservatorship Projects

In certain circumstances, an area may be negatively impacted by virtue of the neglect of a property owner to adequately maintain, market or otherwise take responsibility for a property that they own. In those cases where such neglect on the part of the property owner exists, and in accordance with ACT 135 of 2008, the KCS staff may assist the local revitalization organization with initiating legal action against the property owner in Common Pleas Court.

6. Assistance with Drug Nuisance Projects

In certain circumstances, a property may be negatively impacted by the presence of illicit drug activity on the site. In those cases where such illicit drug activity exists, and in accordance with ACT 140 of 1992, the KCS staff may assist the local revitalization organization with initiating legal action against the property owner in Common Pleas Court.

7. Blighted Property Inventory

The only service “group” offered by KCS that is not tied to a specific property deals with collecting and analyzing data of the condition of the building stock within a defined geographic area. Utilizing definitions from various Pennsylvania Commonwealth laws, including Act 79 of 2019 and the International Property Maintenance Code (IPMC), this service is provided to assist a local organization in determining the extent and severity of blight within a defined geographic area. Using a 1 to 5 rating scale, where 1 is a “dilapidated” property and 5 is a property in “good” condition, each property is given a numeric rating across the various IPMC criteria. These ratings are then used to further detail the extent to which any individual property meets the blight/distress criteria associated with any number of PA laws including the Conservatorship Law, The Drug Nuisance Law, the Urban Redevelopment Law, etc. By so doing, the local organization will be able to determine the magnitude of the blight remediation effort it would have to undertake to mitigate blighting influences within the defined geographic area.

8. Blighted Property Prioritization Assistance

In communities with many blighted properties, one of the most formidable challenges is where to begin. Initiating a blight mitigation strategy in a time of scarce financial and human resources to deal with blight can be a daunting task. A sensible approach to crafting a comprehensive blight mitigation strategy is to prioritize the inventory of blighted properties using a weighted criteria system. KCS, utilizing a system developed in cooperation with Carnegie Mellon University and the Western PA Brownfield Center, has a quantifiable solution to this problem. The Multi-Attribute Decision Matrix (MADM) process allows KCS staff to work with a local revitalization organization to develop a series of evaluation criteria that compares community goals and objectives with the “attributes” of blighted properties. By so doing, blighted

properties can then be rank-ordered to ascertain which properties will show the best return on investment given the overall revitalization goals of the community.

9. Property Revitalization Action Plan

Utilizing the Blighted Property Inventory detailed above, KCS staff, working with the local revitalization organization, will assist with developing a “thumb-nail” action plan for each property within the defined revitalization area. The thumb-nail plan is a very brief description of the action that should be considered for each property inventoried. Typical actions might include, “façade improvements needed,” “acquire and demolish,” “consider Conservatorship Act effort,” etc. The completion of the Blighted Property Inventory is a pre-requisite to undertaking this activity.

10. Project Funding Plans

No property-specific revitalization effort succeeds without adequate funding. Utilizing their knowledge of Federal, Commonwealth, county, non-profit and other funding sources, KCS staff members will help to craft a POTENTIAL funding plan to meet the physical revitalization needs of a given property specific project. Attention is called to the fact that the Funding Plan will include the programs, application windows, application requirements, maximum and average amounts of funding awards, and other pertinent information designed to assist the local revitalization organization with making a decision as to which funding sources to pursue. It should be noted here that this service DOES NOT include the submission of any individual funding application but is a detailed roster of programs that the local organization may choose to apply for.

11. Assistance with Funding Applications

While the preparation of a “Funding Plan” as defined in item 10 above may significantly advance a property-specific revitalization effort, often times the submission requirements of funding programs can be overwhelming, particularly for smaller organizations with limited staff time and limited knowledge of the grant writing process. For those organization’s desiring assistance, KCS staff will assist with preparing funding applications. This technical assistance may run the gamut from providing coaching to the local organization in preparing and submitting an application, to actually preparing the funding application, to acting as the fiduciary agent on behalf of the local organization.

12. Assistance with Zoning Issues

Often times, a property-specific project will be stymied by the fact that local zoning ordinances are not compatible with the proposed project. This may be particularly true for more recent project types such as maker-space, coworking space, commercial kitchens for rent, micro-breweries and micro-distilleries, live-work space and other more recent and more modern land uses. KCS staff will assist the local property-specific project effort by working with the local revitalization effort to conduct an evaluation of the extent to which the current zoning ordinance either helps or hinders the proposed project. Once this evaluation has been conducted, KCS staff will assist the local revitalization organization and local planning commission in considering fixes to the local zoning ordinance that will address the concerns, not only from the property-specific project perspective, but from the perspective of improving the overall investment environment in the municipality.

13. Patient Real Estate Pre-Development Loan Program (PREPD Loan)

KCS does have available a VERY limited pool of financial resources to assist with any of the above detailed services. Such financial resources are offered as a longer-term, “patient-capital” pre-development loan to the project. By this we mean that there is no immediate repayment of the loan and there is no defined time frame within which the loan must repaid. As long as the project is moving forward, the KCS Board of Directors may let the loan sit. The loan becomes repayable to KCS when the project stalls with no likelihood of getting back on track or when the project advances to the construction stage. A minimum of a 50% match is required by the organization requesting the funding assistance.

Polychlorinated Biphenyls

Although no longer commercially produced in the United States, PCBs may be present in products and materials produced before the 1979 PCB ban. Products that may contain PCBs include:

- Transformers and capacitors
- Other electrical equipment including voltage regulators, switches, reclosers, bushings, and electromagnets
- Oil used in motors and hydraulic systems
- Old electrical devices or appliances containing PCB capacitors
- Fluorescent light ballasts
- Cable insulation
- Thermal insulation material including fiberglass, felt, foam, and cork
- Adhesives and tapes
- Oil-based paint
- [Caulking](#)
- Plastics
- Carbonless copy paper
- Floor finish

The PCBs used in these products were chemical mixtures made up of a variety of individual chlorinated biphenyl components, known as congeners. Most commercial PCB mixtures are known in the United States by their industrial trade names. The most common trade name is Aroclor. – *U.S. EPA website*

Volatile Organic Compounds

VOCs are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and, subsequently, analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of...

- paints
- adhesives,
- petroleum products
- pharmaceuticals
- refrigerants

They often are compounds of

- fuels
- solvents
- hydraulic fluids
- paint thinners
- dry-cleaning agents

VOC contamination of drinking water supplies is a human-health concern because many are toxic and are known or suspected human carcinogens. - *U.S. Geological Survey, 2005*

Polycyclic Aromatic Hydrocarbons

PAHs are a group of chemicals that are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. There are more than 100 different PAHs. PAHs generally occur as complex mixtures (for example, as part of combustion products such as soot), not as single compounds. PAHs usually occur naturally, but they can be manufactured as individual compounds for research purposes; however, not as the mixtures found in combustion products. As pure chemicals, PAHs generally exist as colorless, white, or pale yellow-green solids. They can have a faint, pleasant odor. A few PAHs are used in medicines and to make dyes, plastics, and pesticides. Others are contained in asphalt used in road construction. They can also be found in substances such as crude oil, coal, coal tar pitch, creosote, and roofing tar. They are found throughout the environment in the air, water, and soil. They can occur in the air, either attached to dust particles or as solids in soil or sediment.

Although the health effects of individual PAHs are not exactly alike, the following 17 PAHs are considered as a group in this profile:

- acenaphthene
- acenaphthylene
- anthracene
- benz[a]anthracene
- benzo[a]pyrene
- benzo[e]pyrene
- benzo[b]fluoranthene
- benzo[g,h,i]perylene
- benzo[j]fluoranthene
- benzo[k]fluoranthene
- chrysene
- dibenz[a,h]anthracene
- fluoranthene
- fluorene
- indeno[1,2,3-c,d]pyrene
- phenanthrene
- pyrene
-

These 17 PAHs were chosen to be included in this profile because (1) more information is available on these than on the others; (2) they are suspected to be more harmful than some of the others, and they exhibit harmful effects that are representative of the PAHs; (3) there is a greater chance that you will be exposed to these PAHs than to the others; and (4) of all the PAHs analyzed, these were the PAHs identified at the highest concentrations at NPL hazardous waste sites. – *Center of Disease Control - Agency for Toxic Substances and Disease Registry*