

Making the Remediation Dollars Make Sense

EPA Brownfields Cleanup Grant ABCAs, Cost Estimating & Community Engagement



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TAB
TECHNICAL ASSISTANCE TO
BROWNFIELDS COMMUNITIES

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If you have questions, please ask in the chat or email wwutab@mail.wvu.edu.



About Us

Mid-Atlantic TAB is a collaboration between leading programs. The TAB Program **provides technical assistance** to communities and stakeholders **to help address their brownfield sites and to increase their understanding and involvement in brownfields cleanup, revitalization and reuse.**

The TAB Program is funded by EPA and available to all stakeholders for free.

Announcements

Zoom Basics

Ice Breaker Questions for Chat

- Where are you physically located?
- What's your role?
- What brought you to this webinar?



Welcome

Today's Speakers



Patrick Kirby

Downstream
Strategies



Carrie Staton

Mid-Atlantic TAB

What you will be able to do after today

1 | Build the ABCA

Recognize the required elements of an Analysis of Brownfields Cleanup Alternatives (ABCA) and connect them to site conditions, cleanup standards, reuse and resilience.

2 | Understand the numbers

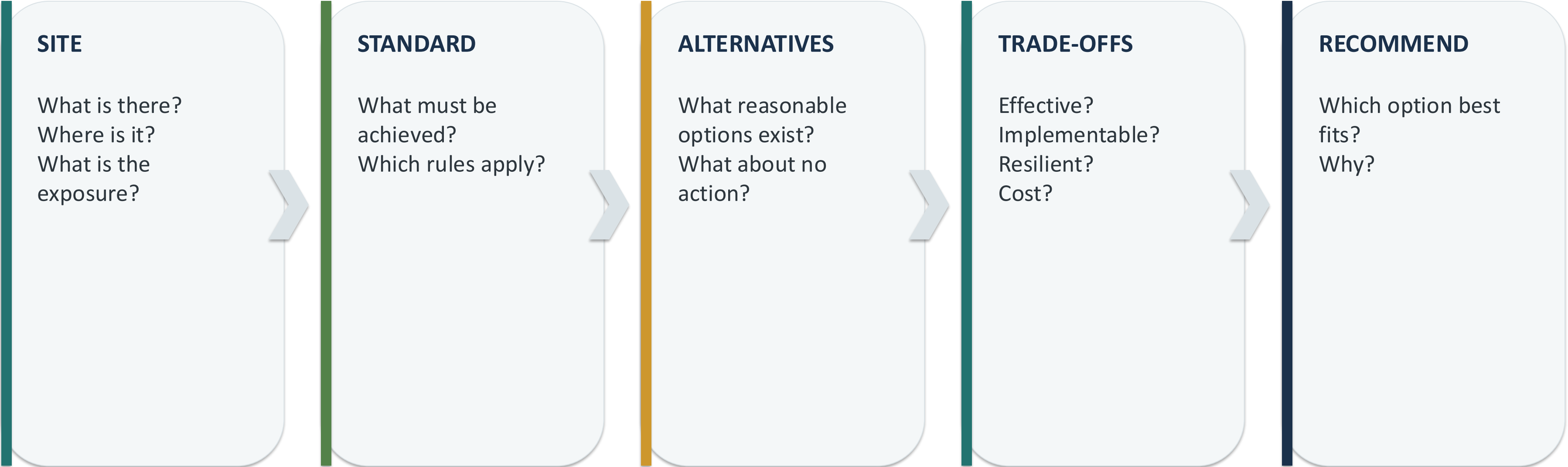
Develop a practical, transparent remediation cost estimate using quantities, unit costs, assumptions, contingencies and local market checks.

3 | Engage before deciding

Use community input to shape the cleanup decision—not simply to announce a decision that has already been made.



Think of the ABCA as a decision matrix



COMPARING CLEANUP PATHS TO FIND THE RIGHT FIT FOR THIS SITE

Compare realistic cleanup paths, explain the trade-offs, and show why the recommended remedy makes sense for this site and its future use.



1 COMPARE REALISTIC CLEANUP PATHS

Evaluate practicable remediation options tailored to the site.



OPTION A
Excavation &
Off-Site Disposal



OPTION B
On-Site Treatment



OPTION C
Capping / Institutional
Controls



NO ACTION
Leave site as is



2 EXPLAIN THE TRADE-OFFS

We weigh the key factors for each option so you can see the full picture.



Schedule



Risk
Reduction



Community
Impact



Future
Land Use



3 SHOW WHY THE RECOMMENDED REMEDY MAKES SENSE

Select the solution that best protects people and the environment while supporting the site's next chapter.



- ✓ Meets regulatory requirements
- ✓ Effectively manages risk
- ✓ Provides long-term protectiveness
- ✓ Cost-effective and achievable
- ✓ Aligned with the site's envisioned use



RECOMMENDED: OPTION B
On-Site Treatment



4 A SMARTER, BRIGHTER FUTURE

A cleaner, safer site, ready for what's next.



**CLEANER, SAFER
ENVIRONMENT**



**STRONGER
COMMUNITY**



**GREATER ECONOMIC
OPPORTUNITY**



**LONG-TERM VALUE
FOR GENERATIONS**



5 NO ACTION: THE HIDDEN COSTS

Doing nothing may seem easier now, but the risks — and costs — grow over time.



Risks to human health
and the environment
remain



Limits future use
and development



Potential for higher
cleanup costs later



Liability and uncertainty
continue

Understanding the Project is key to the Cost

What is being bid?

- What work is being done?
- Is the contractor using Davis Bacon Wages or Prevailing Wages ?
- What assumptions are being used?



Understand the Quantities about your site

- How many Square Feet
- How many Cubic Yards
- How many truckloads?
- How many tons?

Other Factors

- Mobilization
- Design
- Permits
- Oversight QA/QC
- Disposal Considerations
- Traffic planning
- Site restoration



I'm NOT a Contractor

- Where to Start: LOCAL
 - Call the landfill or transfer Station
 - Call local trucking companies
 - Call local utilities
 - Call a contractor
 - Call Local or State agencies for recent bids

GRAVEL DUMP TRUCKS & TONNAGE CAPACITY

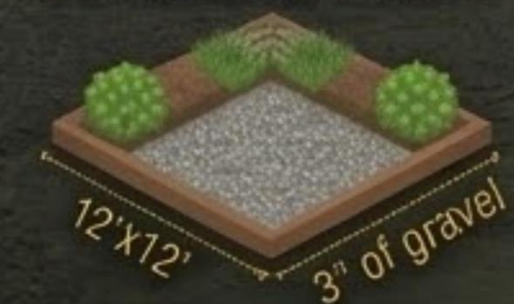
EXAMPLES



SINGLE AXLE

10 TONS

COVERS APPROX.



Ideal for garden paths
& small beds



TRI-AXLE

20 TONS

YOUR PROJECT: FROM RAW LAND TO READY SITE

BEFORE & AFTER



EXCAVATION, GRADING, & SITE PREPARATION



QUAD AXLE

25 TONS

COVERS APPROX.



Whole house foundation footprint or a
Essential for foundation prep & large areas



TYPES OF DIRT

IN CONSTRUCTION – SIMPLIFIED



TOPSOIL



Dark, rich soil with organic matter. Best for plant growth.

COMMON USES:

- Landscaping
- Lawns
- Garden beds

FILL DIRT



Natural soil used to raise or level areas. May contain rock and clay.

COMMON USES:

- Site grading
- Building pads
- General leveling

BACKFILL



Soil placed and compacted behind walls, around pipes, or in excavated areas.

COMMON USES:

- Around foundations
- Utility trenches
- Behind retaining walls

IMPORTED SOIL



Soil brought in from off-site to meet project needs and quality requirements.

COMMON USES:

- When on-site soil is poor
- Landscaping
- Building pads
- Topsoil replacement



And don't get me started on "clean" fill... **BUT** sense you asked....





Importing Dirt

Trucking in Soil from a
“borrow” site requires
environmental testing

Your LRS will know this NOT
the trucking company

What makes a defensible estimate?

Cost element	Quantity	Unit	Unit cost	Extended cost	Basis / assumption
Excavation	3,200	CY	\$38	\$121,600	Local contractor quote / recent public bid
Disposal	4,800	tons	\$92	\$441,600	Waste profile + disposal facility quote
Cap system	48,000	SF	\$4.80	\$230,400	Engineered section + local unit pricing
Monitoring	8	events	\$4,500	\$36,000	Sampling + lab + reporting
Oversight / QA	LS	—	\$55,000	\$55,000	Professional estimate

The point is transparency: another reviewer should be able to understand where the number came from.

COMPARE REALISTIC CLEANUP PATHS, EXPLAIN THE TRADE-OFFS, AND SHOW WHY THE RECOMMENDED REMEDY MAKES SENSE FOR THIS SITE AND ITS FUTURE USE.



PATH A

EXCAVATE & OFF-SITE DISPOSAL



PROTECTION
High – removes contamination



COST
High



SCHEDULE
Longest



IMPACT
High – more truck traffic,
disruption, disposal emissions



SUSTAINABILITY
Lower – more off-site disposal



TRADE-OFF
Most protective but most
expensive and disruptive

PATH B

CAP & COVER (ENGINEERED BARRIER)



PROTECTION
Good – isolates contamination



COST
Moderate



SCHEDULE
Moderate



IMPACT
Lower – minor excavation,
less disruption



SUSTAINABILITY
Moderate – minimal off-site disposal



TRADE-OFF
Balances protection, cost,
and timeline

PATH C

IN-SITU TREATMENT



PROTECTION
Variable – reduces contamination
over time



COST
Lower initial cost



SCHEDULE
Longest for full results



IMPACT
Low – minimal excavation



SUSTAINABILITY
Higher – reduces disturbance



TRADE-OFF
Less intrusive but slower
and more uncertain

RECOMMENDED REMEDY ✓

TARGETED EXCAVATION + CAP & COVER



PROTECTION
High – addresses hotspot risk,
isolates remaining soils



COST
Cost-effective



SCHEDULE
Efficient



IMPACT
Moderate – limited excavation,
less disruption



SUSTAINABILITY
Higher – reduces off-site disposal



WHY IT MAKES SENSE
Right-sized for the site, protects people
and the environment, and supports
the site's future use.

FOR THE FUTURE



SAFE FOR PEOPLE



READY FOR
REDEVELOPMENT



SUPPORTS ECONOMIC
GROWTH



A FOUNDATION FOR
LONG-TERM VALUE



**THE RECOMMENDED REMEDY IS THE RIGHT BALANCE OF PROTECTION,
PRACTICALITY, AND LONG-TERM BENEFIT FOR THIS SITE AND ITS FUTURE.**





Community engagement is part of the cleanup decision

BETTER ENGAGEMENT ♦ BETTER DECISIONS ♦ BETTER FUTURES



EPA REQUIREMENT: EPA requires cleanup grant applicants/recipients to incorporate community involvement and notify the community about the proposed brownfields work.



MEANINGFUL ENGAGEMENT: Meaningful engagement gives residents a way to understand contamination, ask questions, identify concerns and influence how cleanup and reuse decisions are framed.



USE THE ABCA AS A COMMUNICATION TOOL: Use the ABCA as a communication tool: explain the alternatives, trade-offs, costs and protections in plain language.

CLEANUP ALTERNATIVES			
OPTION	COST	PROTECTION	TRADE-OFFS



DOCUMENT & SHOW IMPACT: Document questions and responses—and show how public input affected the decision when it did.



INPUT SHAPES OUTCOMES



STRONG COMMUNITIES. SMARTER DECISIONS. LASTING RESULTS.

When communities are informed and involved,
better cleanups and brighter futures follow.



Five engagement activities that work well for ABCA development

1 ABCA 101 meeting

Explain contamination, cleanup standards and the decision process before asking for preferences.

2 Alternative comparison workshop

Give residents a one-page scorecard: effectiveness, duration, disruption, cost, long-term obligations.

3 Site walk / visual mapping

Walk the property or use maps/photos to identify access, drainage, sensitive receptors and community concerns.

4 Office hours / pop-up engagement

Meet people where they already are—library, community center, neighborhood event or project site.

5 Response matrix

Publish questions/comments, the project team's response, and what changed—or why it did not.

The public meeting: make it about a decision

0–10	Welcome + why the site matters
10–25	What we know about contamination
25–40	Cleanup standards + alternatives
40–55	Cost + trade-offs
55–70	Questions + public input
70–75	Next steps + how comments will be used

Don't hide uncertainty—show it

Known scope

Use measured quantities and documented design assumptions. Better site characterization generally improves estimate confidence.

Known unknowns

Examples: waste characterization, groundwater depth, rock, utility conflicts, disposal classification, access constraints.

Contingency

Explain what the contingency covers. Avoid using one unexplained percentage as a substitute for thinking through uncertainty.

Translate technical choices into public questions

Technical Jargon

Public Facing

Excavation and Off site
Disposal

“How much soil would leave the site, where would it go, and how long would removal take?”

Institutional Control

“What restrictions would remain after cleanup, and who keeps track of them?”

“CAP”

“What will cover the contamination, how durable is it, and what happens if it is damaged?”

Risk Based?

“What evidence shows the contamination will decline or be kept away from us without active treatment – and how will we know?”

ABCA readiness checklist



Site conditions and contamination are current and traceable to assessment data.



Cleanup standards and applicable requirements are identified.



Reasonable alternatives—including no action—are compared.



Cost estimates show quantities, assumptions and sources.



☐ Resilience / extreme weather considerations are documented.



The recommended remedy clearly fits the cleanup goal and future use.



Community notification/input is documented and comments are addressed.

Common ABCA mistakes—and the fix

Alternative list is generic

Tie each alternative to the contamination, cleanup goal, future use and site constraints.

Cost is a single lump sum

Show quantities, unit costs, sources and assumptions.

No-action is missing

Include it as a baseline and explain its consequences.

Community sees the decision too late

Engage while alternatives and reuse assumptions are still open.

Resilience is an afterthought

Screen hazards early and explain how they affect remedy performance.

The best ABCA does three things:

- 1 Makes the cleanup decision defensible
- 2 Makes the costs understandable
- 3 Makes the community part of the decision





AUGUST
20

Delaware Brownfield Conference
Wilmington, DE

AUGUST
27

**Perfecting the 3 P's: Planning, Preparing,
and Positioning for Federal Grants**

SEPTEMBER
1

**Jump Start Your Grant – Navigating
SAM.gov and grants.gov**
In Partnership with KSU TAB

SEPTEMBER
8-10

WV Brownfields & Main Street Conference
Huntington, WV

Upcoming Events

Don't Miss the MARC Series

June 5 @ 9:30 AM – Grant Overview, SAM.gov, & grants.gov

July 10 @ 9:30 AM – Inventories & Property Transfers

August 4 @ 9:30 AM – Partners, Coalitions, and Community Input

September 1 @ 9:30 AM – Budgets, ABCAs, & Federal Forms

October 29 @ 9:30 AM – Crafting Your Narrative

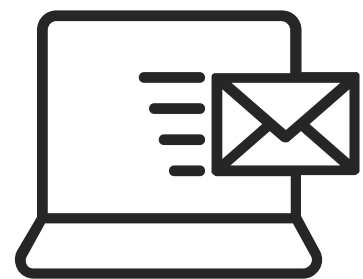
November 10 @ 9:30 AM – Dash to the Finish

Thank You!



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