



Tier 1 – Establishing a Tribal Response Program

Module 3: TRP Element 1 - Inventory

**What is a “Brownfield”, how to identify potential Brownfields
and develop an inventory of potential Brownfields**

TribalTAB.org

The “Law”

CERCLA Section 128(a)(1)(A)(i) lists the four elements of a State or Tribal Response Program:

Element 1: Timely survey and inventory of brownfield sites

Congressional Record states: “...*a system or process to identify the Universe of brownfield sites in their Tribal lands.*”



What is a Brownfield?

*"...real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or **potential presence** of a hazardous substance, pollutant, or contaminant."*

Small Business Liability and Brownfields Revitalization Act,
Public Law 107-118





Click to play video, which will open in YouTube.

Video 3.1: Brownfield

Hans Bradley

TRP Coordinator, Standing Rock Sioux Tribes, ND/SD



Examples of Brownfields in Indian Country

“White Goods” (appliances, etc.) and other bulky wastes



Open Dumps

note any suspicious items



Abandoned Buildings*

**includes underutilized or those not being used for original intended purpose*



Burned Buildings



Abandoned Hazardous Waste



Closed Factory or Commercial Facility



E-Waste & Bird Waste (Guano)



Storm Damaged Building

(note the waste barrels)



Partial Demolition or Collapse of Building on Tribal Land



Demolition Waste in a Stream



Old/Former Schools or Institutions



Tire or Waste Piles



Junk Vehicles

(leaked fluids, batteries, etc.)



Burned/Abandoned Business



Large Closed Institutions

(Hospitals, clinics, etc.)



Abandoned Homes

(Asbestos, lead-based paint,
meth, other wastes)



Abandoned Underground Storage Tank



Former Marinas, Boat Repairs, etc.



Former Utilized Defense Sites (FUDs)



Mine Sites & Mine-Scarred Lands



Meth Labs & Contamination from Meth or Other Drug Usage



Cattle or Sheep Dip Vats



Lead-based Paint Releases



Historic Sites

(Ft. Totten, ND)



Spills and Releases



Oil & Gas Country Spills and Releases



Today's Disasters (Emergency Response) becomes Tomorrow's Brownfield?



Today's Disasters (Emergency Response) becomes Tomorrow's Brownfield?



Open Dump Sites are an ongoing problem





Click to play video, which will open in YouTube.

Video 3.2: Conducting a Visual Inventory

Mickey Hartnett

KSU Tribal TAB (retired)

EPA Guidance

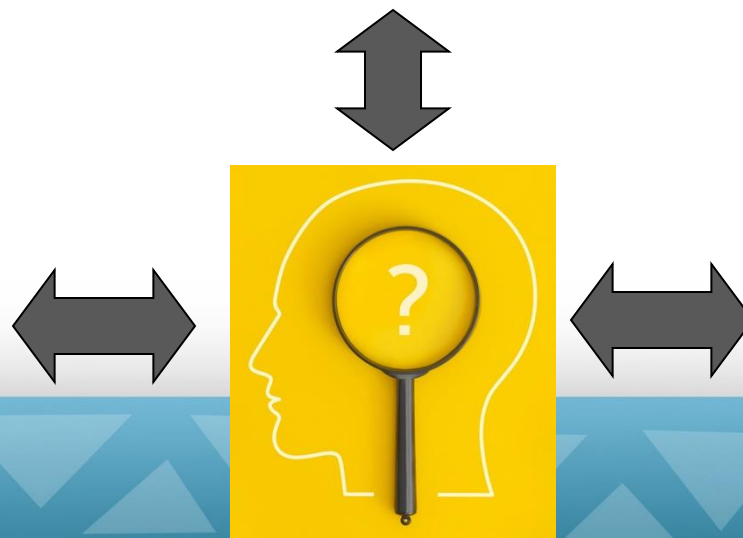
EPA's Goal in funding activities under Element 1 is to enable the Tribe to establish or enhance a system or process that will provide a reasonable estimate of the number, likely locations, and the general characteristics of brownfields in their jurisdictions.



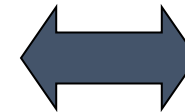
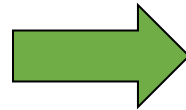
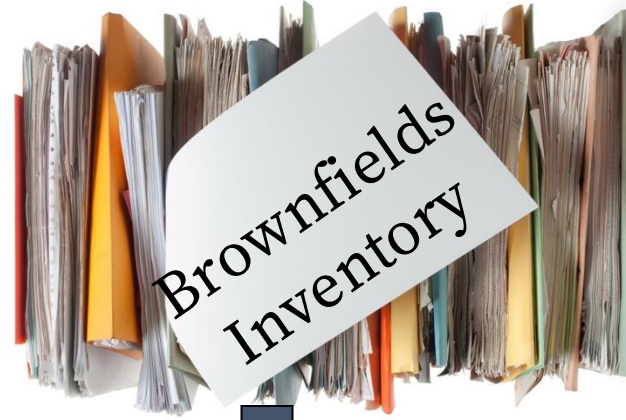
**Many sources of
Information on sites**



**Document and
Record Sources**



Site Information is critical for Site Prioritization



General Guidelines:

- ❖ All Tribes are urged to begin the establishment of their brownfield inventory in the first year of the program grant.
- ❖ A Tribe may use its own judgment or definition of what is a potential “brownfield” for the purpose of developing the inventory. EPA will not require states and Tribes to submit a “list” of brownfields sites.



General Guidelines:

- ❖ At a minimum, the Tribe should develop and/or maintain a system or process that can provide a reasonable estimate of the number, likely location, and general characteristics of brownfields sites within their Tribal lands.
- ❖ Database systems and formats are available for compiling an Inventory (such as the Brownfield Inventory Tool [BiT] from Kansas State University TAB)



How Many Brownfields Are There?

The 2002 Congressional Record states: “there are an estimated **450,000 brownfield sites nationally**”. (there were fewer than 1,300 Superfund NPL sites)

Therefore:

- 1) No one really knows how many brownfield sites there are across the country, including on the Reservations or other Tribal lands; and
- 2) The U. S. EPA Superfund Program does not have the capacity to address all of the brownfields in the country.



Whose Inventory Is It?

- ✗ Federal Government?
- ✗ U.S. EPA?
- ✗ Tribes?
- ✗ States?



It is Yours!



Which Brownfields?

- ❖ On Tribal land ?
- ❖ In Tribal jurisdiction or reservation ?
- ❖ On Federal, Fee or Trust land ?
- ❖ May Impact Tribal land ?
- ❖ May impact Tribal members ?
- ❖ All of the above ?



Whose Brownfields Definition Applies for the Tribal Inventory?

- ✗ Congress?
- ✗ U.S. EPA?
- ✗ CERCLA Section 101 (39)?
- ✗ State?
- ✗ Webster's Dictionary?



The Tribe's*

* For inventory purpose only

When does EPA definition apply? When you want to use EPA Grant funds to do site specific work, such as assessment or cleanup



Inventory vs Public Record

The “**Brownfield Inventory**” is a list of ALL actual or potential brownfield sites.

The “**Public Record**” is at a minimum a list of sites that have been cleaned up last year or will be cleaned up next year, plus Institutional Controls in place and any other information the Tribe wants to include, such as past and future assessments or cleanups. *{See Tier I Module 7}*



Sources of Brownfield Information

Interviews of former workers and maintenance staff of potential brownfields buildings to obtain historical and maintenance information on specific sites.

Reports from community members (verbal, web site, report form)

Records and Databases: Use of Tribal GIS and mapping

Old photos & maps: Tribal and others

Visual Field Survey: Go Look!



Other Sources of Brownfield Information

- ❖ Reviews of existing inventories, reports or databases such as:
 - State & EPA databases
 - UST/LUST inventories
 - Open Dump Surveys (IHS, EPA)
 - Abandoned Mine Inventory (states/USGS)
- ❖ Insurance maps
- ❖ Old topographic and soil survey maps and aerial photos (“Soil Conservation Service”, USGS, BLM, BIA, etc.)



Other Sources of Brownfield Information

- ❖ RCRA treatment, storage & disposal facility **lists**
- ❖ US EPA CERCLA/Superfund PA & RI/FS **Reports**
- ❖ Oil & gas well & mine site inventories (BLM, USGS, State, etc.)
- ❖ State or near-by county/community brownfield **inventories** (other grantees)
- ❖ **Interviews** of federal agencies (BIA, USGS, BLM, etc.)
- ❖ **Interviews** of other Tribal Staff and program members



Interview Elders

(Manokotak, Alaska)



Do you have Unique Transportation, Resource, or Equipment Needs? *(discuss with EPA)*



Resources Needed

Note: Inform the EPA if you have **unique resource needs** to conduct the inventory and gather information such as equipment and costs to access remote areas and/or seasonal limitations so that these can be accounted for in the grant budget and work plan.



Tribe Acquiring/Buying Brownfields?

Work with the Tribal economic development or real estate office to assist in **screening properties** that the Tribe may be considering acquiring for potential contamination issues to prevent **Tribal acquisition of a “Brownfield”** unknowingly.



Brownfields Inventory Format

Your Choice:

- ❖ Simple List or Spreadsheet
- ❖ Detailed Checklist
- ❖ Your Own Database
- ❖ Other Database
- ❖ **KSU Brownfield Inventory Tool (BiT)**



Basic Inventory List

Site No.	Name	Location	Description	Owner/ <u>Leasee</u>	Land Status
1	Garage	3 mi. N on BIA 2	Former auto repair shop	Bob S.	Fee
2	House 1	L512 Red Bird Ln Clay Town, NE <u>Lat/Long.</u>	Burned House	Tribal Housing	Tribal Trust
3					



Brownfields Inventory Tool (BiT)

BiT Brownfields Inventory Tool

► www.tab-bit.org

This tool, available online and as a mobile app, helps with comprehensive site inventories and brownfields program management. **BiT** was designed for users working under an EPA cooperative agreement requiring submittals through the Assessment Cleanup and Redevelopment Exchange System (ACRES). However, anyone establishing a site inventory database or consolidating environmental administration information will find **BiT** helpful.

MOBILE APP

BiT Mobile lets you access and update site data while working in the field, even when you're out of range of cell service or Wi-Fi. Modify existing information, create new sites, add a new program, take photos or generate GPS coordinates — all on the go. Then simply sync with the online tool once you have internet access.

BiT Mobile



Brownfields Tool



BENEFITS OF BiT

- Free and user friendly
- Helpful resources and instructions
- Easy data entry and document uploads
- Import and export data for individual or multiple sites
- Interface with EPA ACRES for reporting and data transfer
- Mapping feature displays sites and sample locations
- Collaborative for multiple users
- Password-protected to prevent unauthorized access

BiT was developed by the TAB program at Kansas State University with funding from the U.S. Environmental Protection Agency.

www.ksutab.org/tools

TAB E-Tools
www.ksutab.org/tools



TAB EZ: etools.ksutab.org/tools/tabez
BiT: www.tab-bit.org

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Prioritizing Sites for “Site Specific Work”

The next step after creating your Inventory



Prioritization of Sites

For assessment and/or cleanup

Inventories should be developed in direct coordination with

- ❖ Communities
- ❖ Tribal Leaders

And they should evolve to a **prioritization of sites** based on

- ❖ Community needs
- ❖ Planning priorities
- ❖ Protection of human health and the environment





Click to play video, which will open in YouTube.

Video 3.3: Prioritization of Sites

Shawn Lahr

Blackfeet Tribe, Montana

Tribal Site Priorities

- ❖ Immediate threats to public health
- ❖ Immediate threats to the environment
- ❖ Long term threats to public health or the environment
- ❖ Impacts on cultural sites/resources
- ❖ Impacts on the local economy
- ❖ Impacts on long term economic development
- ❖ Impacts on the local quality of life



Prioritizing Brownfield Sites for Further Actions

(Example of a Tribal ranking system)

Ranking Factor	1	2	3	4	5	Total Points
Human Exposure	Contamination pathways have no direct impact on any population.	Contamination pathways have potential to affect human recreational activities.	Contamination pathways have the potential to affect employee population.	Contamination pathways have the potential to affect a small residential population.	Contamination pathways have the potential to affect an entire residential population.	
Environmental Exposure	Site not located near environmentally sensitive areas.	Site located within a mile of an environmentally sensitive area.	Site located within a ½ mile of an environmentally sensitive area.	Site located within environmentally sensitive area.	Site located immediately in environmentally sensitive area (RECs)	
Ecological Exposure	No exposure to endangered or threatened species habitat areas.	Potential exposure to endangered or threatened species habitat areas.	Potential exposure to critical habitats of endangered or threatened species habitat areas.	Actual known releases of hazardous substances in endangered or threatened species habitat areas.	Actual known releases of hazardous substances in critical area of endangered or threatened species habitat areas.	
Cultural Sensitive Area	Potential area not located within a culturally significant area.	Potential area within a 5mile radius of a cultural significant area.	Potential area within a 1mile radius of a cultural significant area.	Potential area adjacent to a cultural significant area.	Potential area in immediate cultural significant area.	
Potential for Beneficial Site Redevelopment	No site development.	Low likelihood of site redevelopment.	Moderate potential for redevelopment.	High potential for site redevelopment.	Redevelopment plan ready, waiting for site to be re-mediated to begin redevelopment.	
Creation of Jobs	No increase of jobs.	1 to 5 new jobs created.	5 to 10 new jobs created.	10 to 20 new jobs created.	More than 20 jobs created.	
Land Ownership Status	Allotted Land	Fee Land within boundaries of Reservation (Tribal Land taken out of trust).	State Land (school sections)	Sub marginal Lands (purchased land outside of reservation boundaries)	Tribal Owned/Reserve (Held in trust for tribal Government)	
Total Cumulative Points						



Then What?

The information obtained through the inventory process can facilitate the EPA approval process for **“Site Specific Work”** (Assessments & Cleanups*)

*sometimes it can trigger an Emergency Response Action!



Tribal Accomplishments

- ❖ Many sites inventories
- ❖ Some inventories listed on Tribal web sites
- ❖ Staff gaining experience in recognizing brownfield sites and releases
- ❖ More input on past sites from elders and community members
- ❖ More detailed site information gathering (pre-Phase I & II informal assessments & BIA Trust applications)



Tribal Property Issues

- ❖ Property and site records are difficult to find or incomplete (i.e., BIA Land Status Reports)
- ❖ Site ownership, leases, status, and history are unclear
- ❖ Multiple Tribal property owners
- ❖ Jurisdictions are not clear (Tribal, state, federal, etc.)
- ❖ Responsible party for contamination is not clear or no longer exists
- ❖ Illegal “squatters” on Tribal property



We Would Like to Hear From You

Questions about this Module or need other
brownfields assistance?

Contact the Tribal TAB team at
Tribal-TAB@ksu.edu



Scan this QR image to provide feedback on this TRP Module

TribalTAB.org

