

Understanding Risk-Based Brownfield Cleanups

What is a Brownfield?

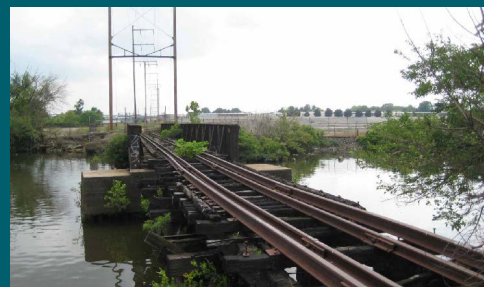
Brownfields are properties where contamination (or suspected contamination) makes redevelopment harder. These sites are often old gas stations, factories or dry cleaners and may be located near homes, schools or parks.



Fort Peck Airfield in Poplar, MT before redevelopment.



Cadillac Stamping Plant in Detroit, MI before redevelopment.



Paseo Verde railway in Philadelphia, PA before redevelopment.

Many brownfields are cleaned up under "risk-based" cleanup programs. What does that mean?

A risk-based cleanup means making the site safe for its intended reuse -- like stores, offices, industry or public parks -- rather than any or all reuse purposes. Risk-based cleanup focuses on reducing risk and preventing harmful exposures. A typical result of a risk-based cleanup is that some contamination is left on site.

Example: A site might be safe for a business but not for housing unless additional cleanup happens.

How are sites kept safe?

If some contamination remains after site cleanup, long-term controls help prevent exposure such as:

- **Engineering controls (physical barriers):** Soil caps, vapor barriers, fences
- **Institutional controls (rules and restrictions):** Land use limits, groundwater bans, deed notices

These measures protect people from harmful exposure and must be maintained by future property owners.

Risk-Based Cleanup Steps

1. **Site Assessment** - Testing for soil and water contamination
2. **Risk Evaluation** - Understanding the health and environmental risks
3. **Cleanup Plan** - Working with your State or Tribal Response Program to choose the best cleanup strategy
4. **Controls & Monitoring** - Ensuring the site stays safe over time

Real Success Stories

Roxy Theater (Chanute, KS):

A former gas station was safely reused as a movie theater using a risk-based cleanup and land use controls.

Station Place (Portland, OR):

A 154-acre rail yard was turned into housing and businesses with targeted cleanup, soil caps and vapor barriers.

Why it matters for Public Health

Risk-based cleanups turn once-dangerous sites into safe spaces for work, play and community life -- especially in neighborhoods most impacted by industrial pollution.



Construction workers lay gravel over cement soil cap in Woodbridge, NJ.



Roxxy Theater after redevelopment.

Learn more about risk-based cleanups:

