

The IFA's Environmental Programs, which consist of the Indiana Brownfields Program and the State Revolving Fund (SRF) Loan Programs, continuously seek ways to stay on the forefront of national financial and environmental trends to attract new businesses, create more jobs, and improve the health of Hoosiers. Incorporating sustainability into the Indiana Brownfields Program and the SRF Loan Programs is a natural outgrowth of this goal. In Indiana and across the country, redevelopment professionals have been discovering the numerous benefits of sustainable redevelopment and green building practices, including increased profitability, more efficient use of resources, and improvements in the general well-being of the community. This Web page will highlight the Indiana communities already benefiting from sustainable redevelopment practices, as well as provide resources to help guide and encourage others to incorporate sustainability into their brownfield projects.

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## Indiana Brownfields Program and Sustainability

Brownfield redevelopment itself is a sustainable development practice. Reusing a brownfield site offers additional opportunities to reduce environmental impact through the reuse of existing site structures and infrastructure, the recycling of demolition materials, and other sustainable practices.

The Indiana Brownfields Program is making programmatic changes to encourage the incorporation of sustainable remediation and development techniques into Indiana's brownfield redevelopment projects. The Program's financial incentive guidelines have been revised to add scoring criteria pertaining to projects that anticipate and plan for environmental benefits beyond the assessment and/or remediation of on-site contamination as demonstrated by the reuse of existing buildings, connection of the site to existing modes of transportation, new construction of LEED-certified buildings, use of renewable energy sources, etc. For more information, [click here](#) to view individual financial assistance guidelines.

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## Examples of Sustainable Indiana Brownfield Redevelopment Successes

- [Former Lakeview Nursing Home/Maple Street Pond Park, Terre Haute](#) - Trails and Parks Initiative Project
- [Former Ertel Manufacturing, Indianapolis](#) - Winner of 2008 Governor's Award for Environmental Excellence in Land Use
- [Former Essex Wire, Ligonier](#)

- [Former Studebaker 8/Green Tech, South Bend](#) - Winner of 2008 Governor's Award for Environmental Excellence in Recycling/Reuse
  - [U.S. EPA Fact Sheet "Value-added Deconstruction in South Bend, IN Generates a \\$1.4 Million Revenue Stream"](#)
  - [Keep Indianapolis Beautiful Headquarters, Indianapolis](#)
  - [Green Remediation in South Bend-Windmills are a Sight For Sore Eyes-January 2011, Page 5](#)
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## Items of Interest

### **U.S. EPA Resources Available for Local Governments on Transportation Control Measures, Smart Growth, and Energy Efficiency in Affordable Housing**

**New and Updated U.S. EPA Resources Available for Local Governments on Transportation Control Measures, Smart Growth, and Energy Efficiency in Affordable Housing.** U.S. EPA's State and Local Climate and Energy Program has released three documents that give straightforward overviews of how local governments can use transportation control measures, smart growth principles, and energy efficiency in affordable housing to reduce greenhouse gas emissions. These documents are part of the Local Government Climate and Energy Strategy Series, which helps policy makers and program staff plan, implement, and evaluate cost-effective climate and energy projects that generate economic, environmental, social, and human health benefits.

- NEW: Transportation Control Measures, developed jointly with U.S. EPA's Office of Transportation & Air Quality
- UPDATED: Smart Growth
- UPDATED: Energy Efficiency in Affordable Housing

In 2009, U.S. EPA, the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation formed the Partnership for Sustainable Communities to help communities increase transportation choices, improve access to affordable housing, and lower transportation costs while protecting the environment. Although these documents are not issued by the Partnership, they support Partnership goals by helping communities integrate energy efficiency, transportation efficiency, and smart growth principles into their climate protection programs.

- **Interim Resource Guide: Greener Cleanups through Sustainable Materials Management.** This resource guide, released by U.S. EPA Region 5 in May 2001, will help you find opportunities to:
  - reuse and recycle the construction and demolition debris generated on sites as part of the cleanup;
  - use compost for erosion control;
  - use compost, foundry sand, and other materials as soil amendments or growing medium;

- incorporate native plants to reduce long-term maintenance and protect water quality;
- use recycled or reclaimed materials as fill or as a component in pavements;

The document addresses benefits, techniques, and specifications, and includes a number of project spotlights to give real-world examples of these techniques being used in remediation around the Midwest

- **U.S. EPA: RE-Powering America's Land Initiative Management Plan.** Resources from U.S. EPA to Evaluate Renewable Energy Development Potential on Indiana Sites. U.S. EPA is encouraging the development of renewable energy by identifying currently and formerly contaminated lands and mining sites that present opportunities for renewable energy development. Through the following link, <http://www.epa.gov/renewableenergyland/>, you will find information and resources for developers, industry, and anyone interested in renewable energy development on formerly contaminated land and mining sites. EPA's Fact Sheet with specific information pertaining to Indiana Incentives for Clean and Renewable Energy and Development of Contaminated Land can be found at : [http://www.epa.gov/renewableenergyland/incentives/in\\_incentives.pdf](http://www.epa.gov/renewableenergyland/incentives/in_incentives.pdf).

## Resources

### *Web links*

#### National/Federal

- [U.S. Green Building Council](#) (LEED ratings system)
- [Green Building Initiative](#) (Green Globes)
- [U.S. Environmental Protection Agency](#)
- [U.S. EPA Midwest Clean Diesel Initiative](#)
- [U.S. EPA Re-Powering America's Land](#)
- [Sustainable Remediation Forum](#) (SURF)
- [Sustainable Communities Network](#)
- [Procurement of Innovative Technologies and Strategies](#)

#### State

- [IDEM Diesel Wise Program](#)
- [IDEM Idle Reduction Program](#)
- [Illinois Greener Cleanups](#)

#### Local

#### Not-for-Profit

- [Water Environment Research Foundation](#)

- [Stormwater Manager's Resource Center](#)

## *Fact sheets and guidance documents*

### **National/Federal**

- New Adjuncts to ASTM Standard Guide for Greener Cleanups (ASTM E2893-13e1). ASTM Incorporated recently released two adjuncts that facilitate use of the Standard Guide for Greener Cleanups. One adjunct is the Appendix X2 "Technical Summary Form" as a writable PDF (ADJE289301). The second adjunct is the Appendix X3 "Greener Cleanup BMPs" table containing over 160 best management practices (BMPs) in an Excel format (ADJE289302). With the Excel format, users can sort BMPs applying to particular remediation technologies and core elements and add more BMPs. These adjunct files are available to purchase from ASTM separately or at a reduced rate with the standard. For more information on purchasing the standard and adjuncts, see <http://www.astm.org/Standards/E2893.htm>

**“On the Road to Reuse: Residential Demolition Bid Specification Development Tool”** - U.S. EPA Region 5 produced a residential demolition bid specification toolkit for entities engaged in residential demolition operations. The bid specification development tool highlights environmental issues and concerns that may arise in connection with a demolition project, particularly those concerns that can be factored into the demolition contracting process. The use of environmentally beneficial demolition practices can result in long- and short-term environmental benefits and set the stage for vacant lot revitalization. This report identifies the environmentally-sensitive activities associated with demolishing residences, from pre-planning to demolition to site rehabilitation (e.g. hazardous materials abatement, fill material selection and placement, material recycling or deconstruction). For each of the activities, the report provides decision-making information and bid specification language suggestions to assist local government officials in updating their bid specification documents. [Report available](#)

**U.S. EPA Guide Addresses Runoff at Brownfield Sites.** The Environmental Protection Agency (U.S. EPA) released [guidance](#) September 25 to inform urban planners, engineers and developers how they can use bioswales, rain gardens and porous pavements to capture stormwater runoff at brownfield sites without mobilizing pollutants in the soil and contaminating groundwater. The guidance, "**Implementing Stormwater Infiltration Practices at Vacant Parcels and Brownfield Sites**", addresses six key

questions to determine whether infiltration - which allows accumulated stormwater runoff to percolate into the subsoil - or other management approaches are appropriate for a specific brownfield property. The guidance, prepared by the EPA Office of Water and Office of Solid Waste and Emergency Response, indicates that stormwater management planning should be done alongside site investigation, site approvals, selection of cleanup approaches and design and engineering of site improvements. The guidance is available [here](#)

**ITRC's Technical & Regulatory Guidance Document: Green and Sustainable Remediation: A Practical Framework (GSR-2, 2011) and ITRC's Overview Document: Green and Sustainable Remediation: State of the Science and Practice.**

Many state and federal agencies are just beginning to assess and apply green and sustainable remediation (GSR) into their regulatory programs. These documents provide basic GSR principles and definitions, background on GSR concepts, a scalable and flexible framework and metrics, and tools and resources to conduct GSR evaluations on remedial projects. This information should help organizations initiating GSR programs, as well as those organizations seeking to incorporate GSR considerations into existing regulatory guidance.

- **Sustainable Redevelopment Best Management Practices.** The Sustainable Brownfields Consortium, based at the University of Illinois at Chicago and including researchers and technical advisors from UIC, the University of Illinois at Urbana-Champaign, University of Wisconsin-Milwaukee, Resources for the Future, Ryerson University, and Kandiyo, has posted numerous case studies and research reports from work under a U.S. EPA Brownfields Training, Research and Technical Assistance grant on best management practices and benefits of sustainable redevelopment of brownfield sites.
- **Engineering Issue Paper: Sustainable Materials Management in Site Cleanup (EPA 542-F-13-001).** Sites undergoing cleanup provide opportunities for reducing waste and diverting it from landfills. Many of the opportunities involve reusing onsite materials, reusing or recycling materials offsite, and procuring construction materials with recycled content. Site-specific examples of applying these and other strategies and an extensive compendium of related tools and resources are now available in this issue paper compiled by the Engineering Forum of the U.S. EPA's Technical Support Project (March 2013, 12 pages).
- **New CLU-IN Focus Area on Bioremediation.** The new bioremediation focus area provides a general introduction to aerobic, anaerobic, and cometabolic biodegradation mechanisms, as well as guidance, and site specific information. Both in situ and ex situ technologies are addressed. [View and use](#)
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- **ASTSWMO's Community Gardening on Brownfields Toolbox,** October 2012 - The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) Brownfields Focus Group has finalized its general toolbox on community gardens. This is designated to assist States by providing a reference guide for community gardening at

brownfield sites. States can add their own State-specific and other regulatory information to increase the document's applicability and usefulness.

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- [U.S. EPA Green Cleanup Standard Initiative](#) - *February 2009 Update*
- [U.S. EPA Region 5 Greener Cleanup Interim Policy](#) - *March 2010*
- [U.S. EPA Greener Cleanups Fact Sheet](#) - *August 2010*
- [U.S. EPA Technology Primer, Green Remediation: Incorporating sustainable Environmental Practices into Remediation of Contaminated Sites](#)
- [U.S. EPA Fact Sheet: Incorporating Sustainable Practices into Site Remediation](#)
- [Green Remediation: Best Management Practices for Excavation and Surface Restoration](#)
- [Green Building Impact Report: Do Green Buildings Demonstrate Environmental Improvement](#)
- [The National Academy of Sciences \(NAS\) Sustainability and the U.S. EPA](#)
- [New Green Remediation Focus RSS Feed](#)
- [Technology Innovation News Survey](#)

#### State

- [Demolition and Construction Debris Recycling](#)
- [Illinois Greener Cleanups Matrix](#)

#### *Articles/Media*

- [CitiesGoGreen magazine - February/March 2009](#)
- [CitiesGoGreen magazine - October 2008](#)
- [IFA Special Edition News Letter - Summer 2008](#)
- [BusinessGreen.com - Us Targets Brownfield Sites for Solar Makeover - July 28, 2009](#)
- *Events/Presentation materials*
- April 23, 2013  
WEBINAR: [Green and Sustainable Remediation](#)  
2:00PM-4:15PM EDT  
For more information: <http://www.itreweb.org/>
- IFA Sustainability Workshop - June 5, 2008

### **[Archive of Past Items](#)**

#### **Disclaimer**

Mention of non-Indiana Finance Authority (IFA) Web site links does not constitute an IFA endorsement of their contents, only an acknowledgement that they exist and may be relevant to our brownfields redevelopment stakeholders.