BROWNFIELDS
STATE OF THE STATES

An End-of-Session Review of Initiatives and Program Impacts in the 50 States

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and

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NORTHEAST-MIDWEST INSTITUTE
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The Northeast-Midwest Institute, a non-profit policy center, engages in research and education to promote the region's economic development and to enhance the quality of its environmental and human resources. It conducts research, develops public policies, analyzes public programs and their impacts, provides technical assistance, sponsors regional conferences, and distributes publications.

The Institute is unique among Washington policy centers because of its close working relationship with the Northeast-Midwest Congressional and Senate Coalitions. Founded in 1976, the Congressional Coalition, co-chaired by Reps. Marty Meehan (D-MA) and Jack Quinn (R-NY), is a bipartisan group of over 100 representatives who recognize the common problems facing their states. The Northeast-Midwest Senate Coalition, formed in 1978, is co-chaired by Sens. Susan Collins (R-ME) and Jack Reed (D-RI). Together the Coalitions seek to inform members of Congress about the impact of federal legislation and build consensus on issues of regional importance.

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The Brownfields State of the States report continues to receive wide national circulation. As the report notes, elected officials and program staff across the country have endeavored to make certain that their programs reflect local brownfield project needs, run smoothly, and take advantage of opportunities to tie brownfield cleanup and redevelopment assistance with regulatory incentives. This updated report highlights their successes and challenges over the past year.

During 2002, many varied – but equally effective – approaches have been put into place to meet the multiple challenges and common objectives of brownfield reuse. Several states have implemented new legislative changes to encourage cleanups. For instance, Florida passed legislation that modified the “brownfield bonus,” making it available to companies which create jobs in brownfield areas. A company in Florida may now qualify for a tax refund of at least 20 percent of the average wage of the jobs created, provided that they give benefits to their employees, make a capital investment of at least $2 million, and create at least ten jobs. Other states also are offering new financial incentives to attract investment in brownfields. New Hampshire now provides low-interest loans and some direct financial assistance for its brownfield projects, and Nevada has added program targets which include rural communities, underground storage tanks (UST), mine-scarred lands, and drug labs.

Although they do not formally track economic benefits from brownfield cleanups, many states have provided us with a few cleanup success stories. In Nebraska, for example, sites near and along Omaha’s riverfront are in the process of being redeveloped. Plans for these sites include a convention center and arena complex, greenspace, a national park office, and the Gallup Educational Headquarters Campus. Program contacts from Nebraska report that as a result of this initiative, “more projects are likely to spawn off of this redevelopment.”

As we use this report as a springboard to look ahead to 2003, the picture is more troubling. Fiscally, 2003 promises to be a very rough year for all programs within the states, not just brownfields. Site reuse initiatives will find themselves competing with education, health care, and other basic services, which may make them hard to justify— even with their proven track record and growing rate of return on public investment. Brownfield financing programs across the country are bracing for funding cuts and incentive suspensions. A growing number will not only be asked to do more with less – they will be required to do more with nothing at all.

So it is from this vantage point that we examine the 2002 State of the States in brownfields. At the same time, it is important to emphasize that while these programs may be operating with severely reduced funding, they still exist – and still provide the building blocks for cities, developers, local groups, and others with an interest in brownfield site reuse to proceed.
Report Organization for Each State

**Program Description:** This section describes state voluntary cleanup programs (VCPs) and/or other brownfield-related cleanup programs, and the various types of liability relief it may offer. It lists legislative or program requirements, as well as changes or additions enacted or pending during 2002.

**Financial Elements:** Identifying “Financing Programs Targeted to Brownfields” and “Incentives to Attract Private Investment to Brownfields” continues to prove challenging. Typically, in practice, the applicability of specific programs comes down to an agency interpretation that brownfield-type site activities are eligible. This report includes information on programs directly available through state VCPs, as well as those identified by state agency staff as having consistent applicability to brownfield reuse efforts. The most common types of assistance include grants and revolving loan funds (RLFs). The report does not include federal resources passed through to states or cities that are widely available (except for a couple of instances noted, such as in the case of competitive EPA grants).

**Technical Elements:** This section provides information on state approaches to cleanup methods, standards, and controls. The section tracks how many state VCPs have entered into Memoranda of Agreement with U.S. EPA, which contaminants are allowed into the program, types of standards that are used, and whether or not the program uses institutional controls to monitor sites. This section also includes each state’s definition of “brownfields” (noted only when available) as a point of reference. Many states use the original U.S. EPA definition of brownfields – abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

In a related element, the Missouri Department of Natural Resources carried out its own “state of the states” survey this year to determine the state’s use of penalty provisions (and what types are imposed) as part of a program in which institutional controls are used in conjunction with a voluntary cleanup program. We are pleased to report the summary findings here and thank Missouri DNR for sharing them. DNR talked with 49 states and found that the most common penalty (as noted by 25 states) is revocation or voiding of a certificate of completion or other liability protections. Other penalties: enforceable action/authority (eight states), prison (two states); and monetary penalties (seven states). Five states reported no specific penalties.

**Reuse Benefits:** Consistent with prior years, we have tried to get information on five common redevelopment benefit areas associated with brownfields, to help provide some sense of the impact of the various VCPs. The five are: (1) number of sites that have entered the program and/or subsequently completed it; (2) jobs created; (3) housing units developed; (4) tax revenues added to the local economy; and (5) businesses created. As in past years, we have tried to get information on program impacts and benefits. Most states have yet to gather hard economic information on their programs. Many programs have not yet been able to find the resources to collect any data beyond the number of sites in their programs. However, increasingly states are finding that documenting the benefits of brownfield reuse are worth the investment of staff time and program resources. This year, we asked the states to provide us with information on economic benefits from brownfield remediation, “using whatever tracking system they had in place.”

**Impacts of New Federal Brownfields Law:** This new section of the report tracks how state VCPs are responding to the new federal brownfields law enacted in January 2002. The new law shifts both responsibilities and opportunities to the states. We asked if states have implemented any changes to accommodate the new brownfields law (listed under Changes to Accommodate Law) and if they felt the new law would help or hinder their brownfield cleanup efforts (listed under Impacts of Law). Many states reported that it is too early to tell how the new law will impact their brownfield cleanup efforts. However, there seems to be a confidence boost in the potential for more funding for program development and investigation and remediation assistance.

**Lessons and Advice:** As we have seen, many success stories are built on the lessons of others (i.e. leveraging resources, attracting new users and investment, site marketing, streamlining the process, etc.). This new section identifies the advice, frustrations and/or encouragement state agency staff wanted to share with others who work on brownfields.
Survey Methodology and Definitions

In 2002, 41 of the 50 states participated in the survey. As in previous surveys, information in the report’s tables is based on telephone interviews, faxed responses, and e-mail correspondence with environmental and/or economic development agency contacts in all 50 states. Several states are increasingly facing critical staffing issues – as communities market more of their local sites to new users who need VCP action in a timely manner, and as greater use of institutional controls increases the need for state monitoring of sites where these controls have been made an integral part of the cleanup remedy. Therefore, we would like to extend a most sincere and hearty “thanks!!” to all of the state staff who took the time to respond, often in great detail, about state program accomplishments, changes, and issues. We know that many of them provided this information on their own time (given those late night and weekend e-mail responses we received), because their work days have been filled with meetings and site inspections. Full information on all state changes this year are in the following report, which updates the November 2001 report.

Consistent with prior years, please note that:

- Eligible sites typically are limited to volunteers, but include all types of contaminated sites except for Superfund, RCRA, or LUST sites, as well as landfills; exceptions are noted on the table.

- The most common assurance provided, as noted below, are “No Further Action” (NFA) letters, “Certificates of Completion” (COCs), and “Covenants Not to Sue” (CNTS).

- Some states are developing generic cleanup standards pegged to types of site use, and virtually all voluntary cleanup programs take future site use into consideration. More and more states are using some type of risk-based corrective action (RBCA) approach (even if it is not a formal RBCA process).

- The new format provides more complete information on each state’s approach to cleanup standards, as well as information on whether or not the state VCP accepts sites with several common contaminants – petroleum, asbestos, lead-based paint, and PCBs. The table notes either “yes” or “OK” on each of these (sometimes, with certain conditions, such as being exterior contamination) – or simply “no”.

- As in the 2001 survey, we have tried to get information on state involvement with institutional or engineering controls (noted as “ICs” on the table), which are growing in importance as they help bring remediation costs down. Some states provided more complete information on conditions and constraints imposed on ICs, as well as the benefits they bring and concerns they carry.

A final note – States designated with an asterisk * after their name did not respond to the 2002 survey. The information shown is the most recent we have on file.

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ALABAMA
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, AL 36110
BEST INFO SOURCE: P: 334 271 7754
F: 334 279 3050
http://www.adem.state.al.us

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
The Alabama Land Recycling and Economic Redevelopment Act (ALER), signed into law on May 21, 2001, gave ADEM the authority to promulgate brownfield and voluntary cleanup regulations for abandoned or unused industrial sites, and provided for liability protection for program participants, particularly for ‘clean hands’ parties who did not cause or contribute to the contamination at a property. These regulations became effective on May 16, 2002, after a public review process.

Offers a “Letter of Concurrence” granting the various “limitations of liability” stated in ALERA upon receipt and review of a “certification of compliance” that confirms remediation efforts outlined in an approved cleanup plan have been met.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
Industrial development grants, up to $375,000; can be adapted for brownfield purposes.

Incentives to Attract Private Investment to Brownfields

- Regulations for the Alabama Dry-cleaning Environmental Response Trust Fund Act (ADERTFA) program currently being finalized. ADERTFA acts as a voluntary “insurance policy” for those dry-cleaning operations and wholesale distributors that opted for coverage. Covered sites will conduct initial investigations and, based on those investigations, will be given ADEM priority for further assessment and possible remediation.
- EPA capitalized a $1-million Brownfields Cleanup RLF targeted to counties and municipalities; awaiting passage of enabling legislation in 2003.

TECHNICAL ELEMENTS

MOA
No

Contaminants
Petroleum, asbestos, lead paint, PCBs all OK.

Standards
No formal RBCA or comparable/informal process in place; state uses U.S. EPA’s Soil Screening Levels using DAF of 1, background, or EPA’s Region III Risk-Based Concentrations table, using the residential numbers for soil and below MCLs for groundwater, at sites not using institutional controls. (see also next heading)
Institutional Controls
Sites using ICs are addressed through a site-specific risk assessment and must have a longer term enabling mechanism (such as a permit or order) defined in the settlement agreement to ensure that ICs are maintained.

IC Benefits/Problems:
“More sites being cleaned and reused.”

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<tr>
<th>REUSE BENEFITS</th>
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Number of Sites
ADEM is currently providing oversight to 167 sites under the Brownfield Redevelopment and Voluntary Cleanup Program. A total of 38 sites has completed voluntary cleanups, 37 of these before adoption of the Brownfield Redevelopment and Voluntary Cleanup Program regulations.

Economic Benefits
Although Alabama does not currently track economic impacts, three sites are projected to be used for public activities in post-cleanup scenarios.

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<tr>
<th>IMPACTS OF NEW FEDERAL BROWNFIELDS LAW</th>
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Changes to Accommodate Law
The new federal law currently is under review by the state. Revision of the recently adopted regulations will be considered by the department.

Impacts from Law
State agency staff believe the law should have a positive impact on Alabama’s brownfields program.

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<th>LESSONS AND ADVICE</th>
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“Alabama’s Brownfield Redevelopment and Voluntary Cleanup Program has officially been in effect for a relatively short period of time. The program already has proven to be very successful in terms of the number of sites that now have official oversight of assessments and or remediation activities by the state. The department has been contacted by numerous attorneys, consultants, lending institutions, and businesses concerning properties across the State. A major plus is that the regulations were written in ‘plain’ English and are not overly burdensome. Another major plus is having a clear understanding of where the program fits in terms of RCRA, CERCLA, and other programs that may have an overlapping interest. Incentives such as ‘Limitations of Liability’ and tax breaks can be essential to program promotion. This program needs promotion and in itself is self-promoting. Properties that have been sitting idle for long periods of time are now undergoing assessments and remediation and are being returned to use.”
**ALASKA**

Alaska Department of Environmental Conservation
Spill Prevention and Response Division
Contaminated Sites Program
555 Cordova Street
Anchorage, AK 99501
P: 907 269 7664
F: 907 269 7649

**BEST INFO SOURCE:** [http://www.state.ak.us/dec/dspar/csites/home.htm](http://www.state.ak.us/dec/dspar/csites/home.htm)

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**PROGRAM DESCRIPTION**

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program offers a streamlined cleanup process with less regulatory oversight for lower priority sites. Sites with petroleum and/or groundwater contamination are still eligible. Sites must meet specific inclusion criteria to participate.

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**FINANCIAL ELEMENTS**

Financing Programs Targeted to Brownfield Situations
- Cleanup grants for underground storage tanks.
- Contaminated Sites Remediation Program — response fund (not limited to brownfields) available when companies not able to clean up on their own.

Incentives to Attract Private Investment to Brownfields
N/A

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**TECHNICAL ELEMENTS**

Definition
Alaska does not define a brownfield site in regulation or statute.

MOA
No

Contaminants
Petroleum, petroleum compounds, and inorganic metals; asbestos not regulated and not applicable to VCP; PCBs not eligible for VCP, but are managed through the conventional oversight program.

Standards
Formal, streamlined, RBCA-like process in place for VCP that allows default cleanup levels protective of ingestion, inhalation, and migration to groundwater pathways. Site-specific cleanup levels and risk assessment methods are not allowed.

Institutional Controls
ICs not now available through VCP; they are available through the conventional oversight program (which does not normally involve administrative orders, compliance orders, or consent decrees).

IC Benefits/Problems
Under the VCP program, more sites are addressed, which can be less expensive and quicker than the conventional oversight process. ICs are not available in VCP, due to anticipated additional oversight in establishing, communicating, and implementing the IC.
### REUSE BENEFITS

**Number of Sites**
In total, 138 applications, 128 acceptances, four withdrawals, 45 site closures/no further remedial action planned. For fiscal 2001 (ending June 30): 34 applications, 33 acceptances, 16 site closures/no further remedial action planned.

**Economic Benefits**
N/A

### IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

**Changes to Accommodate Law**
N/A

**Impacts from Law**
N/A

### LESSONS AND ADVICE
N/A
ARIZONA
Arizona Department of Environmental Quality
3033 North Central Avenue, M0501D
Phoenix, AZ 85102-2809
P: 602 207-4109 or toll-free in Arizona 800 234-5677 ext 4109
F: 602 207 2302

BEST INFO SOURCE: http://www.adeq.state.az.us/environ/waste/capdev/voluntary/index.html

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
2000 legislation revised Voluntary Remediation Program (1996); replaces three-component program with
a single agency-wide VRP, that issues an NFA. Provides for participant reimbursement of ADEQ costs.
All sites eligible except those requiring a permit; UST sites seeking Assurance Fund reimbursement;
WQARF Registry sites; and sites under decrees, orders, or judgments. An interim fee rule became
effective in February 2001, but is currently under review.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
▶ Targeted site assessment grants available competitively, with priority given to applicants with
redevelopment and financing commitments; Phase I and Phase II assessments done by contractors
overseen by ADEQ staff.
▶ EPA capitalized Brownfields Cleanup RLF starting in November 1999; available to sites already
assessed, and located in Phoenix or Tucson (up to $500,000 per city).

Incentives to Attract Private Investment to Brownfields
▶ Starting in 1999, property used for environmental remediation (determined by ADEQ to be “reasonable
and necessary”) will be reclassified as Class 8 property with an assessment ratio of 5 percent of full
cash value.
▶ Starting in 2001, counties can forgive all or part of a property tax lien on a brownfield site, up to the
amount paid for remediation.

TECHNICAL ELEMENTS

Definition
Arizona uses the EPA definition of brownfields and does not itself define brownfields in regulation or
statute.

MOA
No

Contaminants
Outdoor asbestos, PCBs, outdoor lead paint OK; petroleum OK (unless UST site seeking State Assurance
Fund reimbursement).

Standards
No formal RBCA or comparable/informal process in place (except that UST program follows RBCA); VRP
participants have choice of remediating to background levels, predetermined (residential or non-
residential) standards, or site-specific cleanup levels; non-residential sites require deed restrictions.
Institutional Controls

- 2000 legislation allows a “Declaration of Environmental Use Restriction” (DEUR) that runs with the property title at sites where remediation is done to less-than-residential soil levels. A conditional NFA may be issued for remediations that rely on the use of ICs to meet residential or non-residential soil levels.

- 2001 Final Voluntary Remediation Program Interim Fee Rule: The VRP provides an opportunity for program participants to obtain the department’s review and approval of remedial actions. If remediation levels and controls meet statutory requirements, participants may obtain a determination that the department will not take or require further action at the site.

IC Benefits/Problems
“...expects more sites will be cleaned and reused as a result of this [DEUR] legislation.”

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<tr>
<td>Number of Sites</td>
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<tr>
<td>Since 1996, VRP has reviewed 121 sites. Of those 121 sites, 62 sites have been closed and 58 are still active.</td>
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<tr>
<td>Economic Benefits</td>
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<tr>
<td>Although the state does not formally track economic benefits, VRP can point to a number of specific examples: three sites are being remediated for residential units; two elementary schools are being remediated; and one remediation resulted in space for 1,500 new workers and 1,000 residents.</td>
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<td>Changes to Accommodate Law</td>
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<tr>
<td>ADEQ is still awaiting federal guidance.</td>
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<tr>
<td>Impacts from Law</td>
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<td>“At this time the VRP is looking forward to new program options with the implementation of the new federal brownfields law. The voluntary sites unit is constantly investigating opportunities for marketing/education of internal and external customers so that we can continue to grow our Brownfields/VRP programs.”</td>
</tr>
</tbody>
</table>
ARKANSAS*
Arkansas Dept of Environmental Quality
8001 National Drive
PO Box 8913
Little Rock, AR 72209
P: 501 682 0854
F: 501 682 0565

BEST INFO SOURCE: http://www.adeq.state.ar.us/default.htm

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
- Voluntary Cleanup Program (1995) offers CNTS, and comfort letters to lenders; limited to prospective purchasers of abandoned industrial, commercial, or agricultural properties.
- Voluntary Cleanup Program (1997) added Certificate of Completion to law that will be issued after remedy is completed; Certificate is transferrable to future owners with conditions.
- Voluntary Cleanup Program (2001) added Letter of Intent to law allowing title acquisition prior to completion of Implementing Agreement.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situation
Low-interest loan program for brownfield projects, created within existing state RLF program.

Incentives to Attract Private Investment to Brownfields
- Related incentives include credits on income tax for average wage multiplied by 100 if the firm is in the state enterprise zone program.
- Refund on sales and use taxes on machinery and building material for EZ participating firms.

TECHNICAL ELEMENTS

Definition
Arkansas defines a brownfield as “an abandoned or underutilized industrial, commercial or agricultural property, the redevelopment of which has been complicated by known or perceived contamination and for which no responsible party can reasonably be pursued.”

MOA

Contaminants
Real or perceived contamination of hazardous substances with acute or chronic effects.

Standards
EPA Region 6 Risk Based Standards applied for intended land use.

Institutional Controls
- Includes provisions for ICs in the implementation agreement (IA).
- Provides environmental relief to new purchaser, using EPA Region 6 Risk Based Standards for intended land use.
- Notice of IA to be filed within 30 days of acquisition of title.
- Deed restrictions are filed “when situation warrants.”
IC Benefits/Problems
At this time, no seriously contaminated sites have sought ICs. Using the risk-based approach, tied to intended land use, has resulted in minimal cleanup at most projects so far.

### REUSE BENEFITS

**Number of Sites**  
23 sites have entered the program. Four sites, totaling 178 acres, have completed the program.

**Economic Benefits**  
Not currently tracking economic impacts.

### IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

**Changes to Accommodate Law**  
N/A

**Impacts of Law**  
N/A

### LESSONS AND ADVICE

N/A
CALIFORNIA
California Department of Toxic Substances Control
8800 Cal Center Drive Way
Sacramento, CA 95826-3200
BEST INFO SOURCE: P: 916 255 3745
F: 916 255 3696
http://www.dtsc.ca.gov

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program (1993) offers NFA letter for sites needing no remediation; COC once cleanup is completed; prospective purchaser agreement policy adopted July 1996. Legislation passed in 2001 (Senate Bills 468 and 526) created the California Financial Assurance and Insurance for Redevelopment Program (FAIR) to make comprehensive and cost-effective site environmental insurance coverage available in California for redevelopment of brownfield properties. A Request for Proposals has been issued.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Mello-Roos Districts — designation allows community to abate property taxes and issue bonds to capitalize RLFs for site assessment and cleanup.
- Urban Cleanup Loan Program (signed into law September 2000) authorizes two low-interest loan programs: (1) up to $100,000 per applicant for “preliminary endangerment” assessments of underused urban properties (with a 75 percent repayment waiver if the site proves economically unfeasible); and (2) up to $2.5 million per project for additional investigation and site cleanup. (Due to budget constraints, no funds currently are available for additional projects.)

Incentives to Attract Private Investment to Brownfields
Mello-Roos designation allows property tax abatements.

TECHNICAL ELEMENTS

MOA
No

Contaminants
PCBs, asbestos are OK; petroleum OK (except for underground fuel tanks); no lead paint-only sites (except at school sites).

Standards
- State uses site-specific risk-based cleanup standards pegged to EPA risk assessment guidance for Superfund.
- DTSC also has devised a conservative “preliminary endangerment assessment” — which can be done quickly, with a hand-held calculator — to determine if further site evaluation is required.
Institutional Controls

- ICs used, generally land-use covenants that run with the land that are “geared to intended land use or more probable land use.” Deed restrictions can be removed if additional cleanup to unrestricted use level is done.
- DTSC released draft regulations regarding land-use covenants, and the private site manager program, and took comments through late July 2002; these are currently being evaluated.

IC Benefits/Problems
No problems; benefits are the assurance that land use will remain restricted to safe and appropriate uses consistent with cleanup.

REUSE BENEFITS

Number of Sites
As of June 2002, over 500 sites have entered the VCP, with about 315 completed and 185 ongoing. (This does not include the over 850 school-district sites required to enter the VCP as a result of a January 2000 law that stipulates DTSC review of proposed school sites that will use state funds for acquisition and/or construction.) DTSC anticipates 100-125 new entrants in 2002.

Economic Benefits
The state does not routinely collect benefit information, but can attribute the following to selected reused sites: more than 21,000 permanent jobs created; 5,200 housing units, many of them single-family dwellings; nearly $475 million in tax revenues added annually; 13 million square feet of office, commercial, recreational, and industrial space opened; and creation of parks, open space, and recreational areas. As of March 2001, more than 20,000 acres had been cleared for redevelopment.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
None has been required.

Impacts of Law
“It is too soon to know whether it will help our efforts.”

LESSONS AND ADVICE

“It is important for land-use planning issues to be resolved to facilitate remedial planning. There are many different strategies for redeveloping property. The most successful seem to involve cooperative working relationships between the property owner, his/her tenants, the developers, local agencies, and the community. It is important to have a good environmental consultant who has experience in site characterization and cleanup. Good site characterization saves money and time in the long run.”
COLORADO*
Colorado Department of Public Health and Environment
Hazardous Materials and Waste Management Division
HMWMD-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530
BEST INFO SOURCE: P: 303 692 3300
F: 303 759 5355
OR BEST INFO SOURCE: http://www.cdphe.state.co.us/hm/hmhom.asp

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program (1994) offers NFA letter; geared (but not limited to) current owners of
contaminated sites.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
Brownfield RLF — low-interest loans for site remediation.

Incentives to Attract Private Investment to Brownfields
2000 legislation provides a tax credit against the cost of the cleanup — 50 percent of the first $100,000, 30
percent of the second $100,000, and 20 percent of the next $100,000.

TECHNICAL ELEMENTS

Definition
Colorado does not define a brownfield in statute or regulation.

MOA
Yes — as of April 1996.

Contaminants
Petroleum, asbestos, lead paint, and PCBs all OK.

Standards
No formal RBCA or comparable/informal process in place; VCP applicants choose from various cleanup
standards or perform risk assessments. State allows risk-based closures.

Institutional Controls
Institutional controls are available at the land owner’s request.

IC Benefits/Problems
2001 legislation provides for use and enforcement of ICs; the system is new, with no long-term experience
yet.
## REUSE BENEFITS

### Number of Sites
As of July 2001, 215 sites representing over 1,600 acres have entered the state VCP program.

### Economic Benefits
At least 2,855 residential units added and 6,256 jobs created. VCP attributed with increasing tax revenues in each of several selected projects reviewed.

## IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

### Changes to Accommodate Law
N/A

### Impacts of Law
N/A

## LESSONS AND ADVICE

N/A
CONNECTICUT
Connecticut Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement, and Remediation Division
79 Elm Street
Hartford, CT 06106-5127
BEST INFO SOURCE: P: 860 424 3705
F: 860 424 4057
http://dep.state.ct.us/wtr/

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
- Voluntary Remediation Program (1992; revised 1995 and 1998) — DEP offers two types of CNTS to new owners, or to current owners not associated with contamination: a free and less restrictive CNTS with more potential re-openers; and a CNTS that costs 3 percent of appraised value of land to get, but has fewer re-openers and DEP discretion.
- DEP may use a state “licensed environmental professional” to verify remediation on its behalf, retain oversight itself.
- Lending institutions with a security interest in the property also may use the program to seek a CNTS.
- Property transfer program in place

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Urban Sites Remedial Action Program — originally capitalized with $40.5 million in state bond funds for assessment/remediation of sites in “Distressed Municipalities” and “Targeted Investment Communities”; DEP can clean up and the state can acquire a site if they choose, recovering cost from future users.
- Dry Cleaner Establishment Remediation Fund for financing (maximum $50,000/year) soil and groundwater remediation and prevention.
- Special Contaminated Property Remediation and Insurance Fund provides loans to municipalities and private entities for Phase II and III investigations and demolition costs.

Incentives to Attract Private Investment to Brownfields
Enterprise Zone Program incentives provide tax abatement of five years and 80 percent of local property taxes on real estate improvements; 10 years/50 percent tax credit; seven-year minimum deferral of increased taxes resulting from property value rise after remediation has been completed.

TECHNICAL ELEMENTS

MOA
No

Contaminants
Does not restrict on basis of contaminants; petroleum, asbestos, lead paint, and PCBs all OK.

Standards
Remediation Standard Regulations in effect since January 1996 apply; they permit use of background concentrations, site-specific conditions, and future property use to determine appropriate criteria. RBCA process was used as a guide for developing the criteria.
Institutional Controls
Land-use restrictions are an optional action of land owner only.

IC Benefits/Problems
“More sites cleaned up” because of the VCP.

REUSE BENEFITS

Number of Sites
Since 1995 – with “completion” meaning final remediation has been performed or all that may remain is groundwater/natural attenuation monitoring or the recording of an environmental land-use restriction – over 60 sites have entered the Urban Sites Remedial Action Program and about one-half are complete; 191 sites have entered the GA and GB groundwater resource voluntary remediation programs with 22 complete; and 883 Form III Property Transfer Filings recorded.

In general, the Property Transfer Program addresses certain commercial parcels when they are transferred and creates the obligation on the parties (e.g. seller or buyer) to investigate and provide all necessary clean up of the parcel. 66 sites have been completed since 1995 and six others sites notified as being complete are under review. 88 additional sites have been completed with final remediation in the property transfer program between 1985 and 1995.

Economic Benefits
Not currently tracking economic impacts; DEP does note that parks, open space, schools, day-care facilities, and recreational uses for brownfields are increasing since the legislature increased Department of Economic and Community Development's authority to address environmental liability concerns.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Comments reported from a CT brownfield stakeholder meeting on May 8, 2002:
› Under the new law, Quality Assurance Project Plan (QAPP) requirements very likely will be retained, but the QAPP may not need EPA approval in the future. EPA needs to be sure that federal funds are being used to generate quality data (not being wasted in generating data that doesn’t get the job done). In the past, QAPP review by EPA has identified areas/issues that otherwise would have been missed by the consultant.
› After existing funding is used, Connecticut’s USTfields Pilot Program will cease to exist, since petroleum sites will be eligible under the new brownfields law.
› Under the new law, Prospective Purchaser Agreements (PPA) may no longer be needed, since the statute is self-implementing. New PPAs will be limited from this point forward.

Impacts of Law
› Concern expressed that addressing lead and asbestos at residential sites could use up all available funding.
› Need more clarification on the definition of administrative costs.

LESSONS AND ADVICE

“As we have seen, many of the program's successes are built on the lessons of others (i.e., leveraging resources, attracting new users and investment, site marketing, streamlining the process, etc.).”

Comments from a CT brownfield stakeholder meeting on May 8, 2002:

“EPA should look at state models for RLFs. Many states in Region 1 (including Connecticut) are already operating large, highly successful grant and loan programs.”

Brownfields State of the States - 2002
Northeast-Midwest Institute
PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program (1995) offers NFA letters; prospective purchasers may sign a Consent Decree for contribution protection; and new owners of remediated sites may receive a CNTS, and can receive a COC for remedies, which provide liability protection waivers.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Grants for 50 percent of site assessment costs, up to $25,000.
- Low-interest loan program up to $250,000 for 90 percent of cleanup costs.

Incentives to Attract Private Investment to Brownfields
- Quasi-public Riverfront Development Corp has $55 million to acquire, investigate, and redevelop sites.
- Tax credits of $650/year per new job created related to cleanup and redevelopment ($900/year in poverty areas).

TECHNICAL ELEMENTS

Definition
Delaware defines “brownfield” as “a vacant or unoccupied site with respect to any portion of which the taxpayer has reasonable cause to believe may, as a result of any prior commercial or industrial activity by any person, have been environmentally contaminated by the release or threatened release of a hazardous substance as defined under 7 Del C. c. 91 in a manner that would interfere with the taxpayer’s intended use of such site.” (Title 30 § 2010)

MOA
Yes — as of August 1997.

Contaminants
Petroleum is OK on a conditional basis; asbestos and lead paint OK if in the soil.

Standards
Risk-based standards (but not RBCA) are in place; VCP references a cleanup guide with standards based on intended land use. (Sister UST office does use RBCA).

Institutional Controls
ICs/land-use controls are allowed, including deed restrictions, operation and maintenance plans, and groundwater management zones. State notes that most of the city of Wilmington is subject to a GMZ.
IC Benefits/Problems
State cites benefits of less expensive remedy; community concerns and fear over the efficacy of IC-linked remedies.

REUSE BENEFITS

Number of Sites
92 sites have entered the VCP (24 in 2000), and 49 sites currently are in the program.

Economic Benefits
The state has identified a number of economic benefits attributable to the VCP: more than 500 jobs and 50 businesses created; increased tax revenues; 266 apartment/housing units for University of Delaware students; three school sites in process; and several parks, open space, and recreational uses.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
N/A

Impacts of Law
N/A

LESSONS AND ADVICE
N/A
FLORIDA
Florida Department of Environmental Protection
2600 Blair Stone Rd, MS 4505
Tallahassee, FL 32399-2400
P: 850 413 0062
F: 850 922 4368

**BEST INFO SOURCE:** [http://www.dep.state.fl.us/waste/categories/brownfields/default.htm](http://www.dep.state.fl.us/waste/categories/brownfields/default.htm)

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<td><strong>Voluntary Cleanup Programs and Assurances Provided</strong></td>
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<tr>
<td>▶ Brownfield Redevelopment Program (1997; amended 1998 and 2000) offers NFA letters with or without restrictions; PRPs are eligible and liability protection offered under certain circumstances; state incorporates risk-based corrective action principles into cleanup rule; offers liability protection for lenders and non-profit organizations that agree to clean up sites.</td>
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<tr>
<td>▶ 2000 amendment extended/clarified liability to sites contaminated due to geophysical or hydrological reasons, including migration of contamination from a nearby designated brownfield area to sites that had never been occupied by a business that used or stored those or similar contaminants.</td>
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<tr>
<td>▶ 2000 amendment further specified that sites within any designated brownfield area that use alternative cleanup target levels need not use institutional controls, if certain criteria are met.</td>
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<td><strong>Financing Programs Targeted to Brownfield Situations</strong></td>
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<tr>
<td>▶ One-time (1997) $3 million provided for disbursement to U.S. EPA pilot communities or pilot applicants.</td>
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<td>▶ Revolving loan program provides low-interest loans to local governments, community redevelopment agencies, or non-profit corporations, for the purchase of outstanding, unresolved contractor liens, tax certificates, or other liens or claims.</td>
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<tr>
<td>▶ Loan guarantee program provides limited guarantees for up to five years for primary lenders financing redevelopment projects in brownfield areas.</td>
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<th>Incentives to Attract Private Investment to Brownfields</th>
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<tr>
<td>▶ $2500 tax credit “brownfield bonus” per job created at a remediated site for certain businesses. 2002 legislature modified the “brownfield bonus,” making it available to companies that create jobs at any site within a designated brownfield area. A company may now qualify for a tax refund of at least 20 percent of the average wage of the jobs created provided that they provide benefits to their employees, make a capital investment of at least $2 million, and create at least 10 jobs. Companies in certain targeted industry categories that create at least 10 jobs automatically are eligible for the maximum award of $2,500 per job, regardless of the amount of capital investment.</td>
</tr>
<tr>
<td>▶ 35 percent tax credit (with an additional 10 percent tax credit upon issuance of NFA letter), up to $250,000 per site, with a one-time transfer of the tax credit allowed; a local government (with no tax liability) is permitted a one-time transfer of the tax credit to induce private investment at a site.</td>
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<tr>
<td>▶ Projects in designated brownfield areas are eligible for an expedited permitting process.</td>
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<tr>
<td>▶ Local option sales surtax exemptions are available for sales made in an urban infill and redevelopment areas.</td>
</tr>
<tr>
<td>▶ 30 percent of funding appropriated annually for the Quick Response Training Program is set aside for six months to fund specialized training for employees of businesses choosing to locate in designated brownfield areas.</td>
</tr>
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</table>
State sales tax credit on building materials purchased on or after July 1, 2000, used for the construction of a redevelopment project (i.e., housing or mixed-use project) located in enterprise and empowerment zones, Front Porch communities, designated brownfield or urban infill areas.

- Petroleum stations and dry cleaning establishments eligible for participation in the Brownfields Redevelopment Program, and state-funded cleanups for eligible sites are available.
- Enterprise Zone program provides a variety of incentives in cooperation with local governments to encourage economic growth and investment in zones: job creation tax credits, enterprise zone property tax credits, building material sales tax refund, business equipment sales tax refund, and electrical energy sales tax exemption.

### TECHNICAL ELEMENTS

#### Definition
Florida defines a brownfield site as “a site that is generally abandoned, idled or under-used industrial or commercial property where expansion or redevelopment is complicated by actual or perceived environmental contamination.”

Florida defines a brownfield area as “a contiguous area of one or more brownfield sites, some of which may not be contaminated, that has been designated as such by a local government by resolution.” Both definitions are found in statute and regulation - 376.80, Florida Statute and Chapter 62-785, Florida Administrative Code.

- 50 designated areas in 2002, an increase of five from 2001.
- Since the inception of the program, 23 sites have executed a brownfield site rehabilitation agreement and six sites received an NFA letter as of July 25, 2002.

#### MOA
Yes - as of December 1999.

#### Contaminants
Petroleum and PCBs OK; asbestos and lead paint accepted conditionally

#### Standards
RBCA-like process in place that provides greater flexibility in achieving target levels by the use of institutional and engineering controls and established default levels for residential and commercial/industrial scenarios.

#### Institutional Controls
ICs key to RBCA approach, allowed in three program areas: petroleum, brownfields, and dry-cleaning solvents. Property owner must agree to the use of an IC (e.g., land-use restrictions, deed restrictions, etc.) on the property; FDEP cannot compel their use.

#### IC Benefits/Problems
- ICs may provide greater flexibility in protecting the public and the environment at many sites; state notes that “it is still too early to determine the number of sites or dollar amount of savings, or issues (such as long-term accountability and public awareness) that might arise from the use of institutional controls.”
- FDEP Institutional Controls Registry, or ICR, is a public, informational web site that provides information on contaminated sites. The ICR is a database of all contaminated sites in the state of Florida, pursuant to Chapter 376 or 403 F.S., which are subject to institutional and engineering controls. The web site uses ESRI's ArcIMS software, Internet mapping technology, to help visitors visualize, locate, and identify ICR sites in the state. The ICR is available at http://depmap1.dep.state.fl.us/website/icr or http://www.dep.state.fl.us/dwm/programs/programs.htm.
Number of Sites
- As noted, six sites have completed the Brownfields Redevelopment Program from the execution of a brownfield site rehabilitation agreement through cleanup and redevelopment. However, a number of other site owners and operators have chosen to clean up and redevelop sites using only the economic incentives offered to individual properties within a designated brownfield area. Once a property is contained within a designated brownfield area, the property is eligible for both economic and regulatory incentives. Some property owners have chosen to participate only in the economic incentives for business considerations.
- 15 sites underway in some phase of remediation and redevelopment. One additional site owner voluntarily withdrew from the program due to business reasons. As of July 25, 2002, 23 sites have entered the program with FDEP.
- In 2001, Florida’s RCRA and brownfields programs joined efforts in cleanup of a site under RCRA jurisdiction through the use of a site-specific brownfields/RCRA agreement. The agreement with the responsible party was the first in Florida for a RCRA site where the cleanup requirements and the economic incentives of the brownfields program were combined to achieve cleanup and redevelopment of the site. This project is an example of the flexibility of both programs to work toward a common goal.

Economic Benefits
The latest cumulative figures as of January 2002 show the creation of 1,158 direct jobs, 1,409 indirect jobs, and a capital investment of approximately $44.6 million. The average wage reported for the jobs is $40,693.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Florida’s Brownfields Redevelopment Program meets the criteria listed in Subtitle C of the new federal Brownfields law as a “State Response Program.” The 2002 Florida Legislative Session did not make any changes to accommodate the new federal brownfields law. Future changes may be required to accommodate the new federal law.

Impacts of Law
The new federal brownfields law will provide a mechanism for greater funding to state and local governments. With a recognized State Voluntary Response Program in place, the new law will provide another incentive to enter into the state’s program and complete a cleanup.

LESSONS AND ADVICE

“One of the greatest assets in brownfield redevelopment is to network with financial institutions, developers, consultants, federal agencies, and local and state economic development agencies. Establish a statewide brownfield association that encourages participation from a diverse group of stakeholders, which have a common goal.”
**GEORGIA**

Hazardous Site Response Program  
205 Butler Street SE  
Floyd Tower East, Suite 1462  
Atlanta, GA 30334  
**BEST INFO SOURCE:** P: 404 657 8600  
F: 404 657 0807  
http://www.dnr.state.ga.us/dnr/environ

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**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**  
Hazardous Site Reuse and Redevelopment Act program (1996, amended 1998 and 2002) offers limited liability relief to purchasers of properties that have had a release of a regulated substance; requires certification of compliance with one of the program’s Risk Reduction Standards.

New amendments effective July 1, 2002, expand universe of eligible properties by including sites not listed on the state’s hazardous site inventory, and provides additional incentive for reuse of contaminated property by allowing new owner to use the property without remediation of groundwater contamination, so long as the owner does not cause a new release or contribute to the existing release.

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**FINANCIAL ELEMENTS**

**Financing Programs Targeted to Brownfield Situations**

- Hazardous Waste Trust Fund provides local governments with money for site investigation and remediation at solid waste disposal facilities; no more than $2 million per site.
- Small issue (less than $10 million) industrial development bonds issued by local industrial development authorities can be used.

**Incentives to Attract Private Investment to Brownfields**

New law (HR 1111, passed in 2002 session) authorizes a public referendum (anticipated for 2002 election ballot), required to change Georgia’s property tax laws, requesting a new tax scheme for brownfield properties to provide developers with an offset for the costs of remediation. Costs of remediation will be charged against increased property taxes levied on the redeveloped property. Charges cannot reduce the taxes due on the property below the level of taxes paid prior to the redevelopment of the property. Charges can be carried over for a limited time, expected not to exceed 10 years.

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**TECHNICAL ELEMENTS**

**Definition**

“Brownfield” is not defined; however, the key element for a property to qualify for the program is a “pre-existing release” on the property. That term is defined (at 12-8-92, Hazardous Site Response/State Superfund program) as "any intentional or unintentional act or omission resulting in the spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including without limitation the abandonment or discarding of barrels, containers, and other closed receptacles, of any hazardous waste, hazardous constituent, or hazardous substance; provided, however, that such term shall not include any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons; emissions from the engine exhaust of any motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station; or the normal application of fertilizer.”
MOA
No

Contaminants
Petroleum, asbestos, lead paint, PCBs all OK.

Standards
No formal RBCA or comparable informal process in place; state superfund law provides applicants a choice between generic and site specific residential and non-residential cleanup standards for soil and groundwater.

Institutional Controls
ICs are permitted as part of some clean up standards, but the state does not rely on ICs in lieu of an actual remedy.

IC Benefits/Problems
“To date the program has not encountered significant problems. The major benefits accrue to the buyers and sellers involved in the program.”

REUSE BENEFITS

Number of Sites
Two sites have formally entered the program.

Economic Benefits
Not currently tracking economic impacts.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
N/A

Impacts of Law
N/A

LESSONS AND ADVICE

N/A
**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**
Voluntary Response Program (1997) offers Letter of Completion giving future liability exemption to prospective purchasers and future owners/operators; state oversight costs paid by participants.

**FINANCIAL ELEMENTS**

**Financing Programs Targeted to Brownfield Situations**
N/A

**Incentives to Attract Private Investment to Brownfields**
N/A

**TECHNICAL ELEMENTS**

**Definition**
Hawaii uses the federal EPA definition of brownfields.

**MOA**
No

**Contaminants**
Petroleum, asbestos, lead paint, PCBs all OK.

**Standards**
RBCA-like process in place; applicant chooses from Tier I, II, or III action levels, depending on end use.

**Institutional Controls**
ICs are allowed, but “not encouraged,” depending on the analysis of remedial actions.

**IC Benefits/Problems**
Benefits are more sites cleaned and reused and a better business climate. Problems are of a program capacity nature; program puts more strain on limited staffing/manager resources.

**REUSE BENEFITS**

**Number of Sites**
Nine sites, totaling 110 acres, in the program, with two complete.
Economic Benefits
Approximately 600 jobs created at one of the completed sites; three businesses created; tax benefits identified, but not tallied.

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**IDAHO**

Idaho Division of Environmental Quality  
Waste Management and Remediation  
1410 North Hilton  
Boise, ID 83706  
*BEST INFO SOURCE:* P: 208 373 0285  
F: 208 373 0576  
[http://www.deq.state.id.us/waste/waste1.htm](http://www.deq.state.id.us/waste/waste1.htm)

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**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**  
Voluntary Cleanup Program (1996) offers COC and CNTS; sites not subject to existing regulations may participate.

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**FINANCIAL ELEMENTS**

**Financing Programs Targeted to Brownfield Situations**  
N/A

**Incentives to Attract Private Investment to Brownfields**  
Idaho Land Remediation Act — sites receiving a CNTS may qualify for a seven-year, 50 percent tax break on property appreciation due to remediation.

---

**TECHNICAL ELEMENTS**

**Definition**  
Idaho considers a brownfield to be a site known to the state DEQ through the Land Remediation Act; in general, the Act allows any site not covered under an existing program to be considered for cleanup under the Act.

**MOA**  
No

**Contaminants**  
N/A

**Standards**  
N/A

**Institutional Controls**  
N/A

**IC Benefits/Problems**  
N/A

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**REUSE BENEFITS**

**Number of Sites**  
One four-acre site has entered the VCP.
### Economic Benefits
Not currently tracking economic impacts.

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**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**

Revisions to regulations allow contaminated soil to be managed on site. Sites to be used as schools are now subject to additional program and public notice requirements.

**FINANCIAL ELEMENTS**

**Financing Programs Targeted to Brownfield Situations**
- Brownfields Redevelopment Loan Program offers $10-million low-interest loans to local governments and private parties, to cover brownfield site investigation, remediation, and demolition costs.
- Brownfields Redevelopment Grant Program offers municipalities grants of up to $240,000 for brownfield-related activities such as site assessment or preparation of cleanup plans, and corrective action; 70/30 match required.
- Brownfield Cleanup RLF provides $3.5 million for low-interest loans to clean up former industrial commercial or industrial sites; $3 million reserved for six target cities, and the balance for other communities around the state.
- Bank Participation Loan Program (in Chicago) offers up to $250,000 or $350,000 for commercial and industrial loans (respectively) that are matched by banks at 75 percent of prime rate, for terms from 3 to 15 years.

(see [http://www.epa.state.il.us/land/brownfields/financial-help/chart.html](http://www.epa.state.il.us/land/brownfields/financial-help/chart.html))

**Incentives to Attract Private Investment to Brownfields**
- Environmental Remediation Tax Credit provides 25 percent income tax credit for developers who clean up contamination they did not cause – maximum credit of $40,000 per year and $150,000 per site; credits begin after the first $100,000 of development costs (this floor waived for sites in state enterprise zones); credits may be transferred to new owners. Credit is available for costs incurred after December 31, 1997, and on or before December 31, 2001, and can be carried forward and applied to the tax liability of the five taxable years following the excess credit year.
- Property Tax Credit in Cook County (Chicago area) for redevelopment and cleanup costs. Illinois EPA issues approval of tax credit.

(see [http://www.epa.state.il.us/land/brownfields/financial-help/chart.html](http://www.epa.state.il.us/land/brownfields/financial-help/chart.html))

**TECHNICAL ELEMENTS**

**Definition**
Illinois defines a brownfield site or brownfields to be “a parcel of real property, or a portion of the parcel, that has actual or perceived contamination and an active potential for redevelopment.” (Environmental Protection Act, Title 17, Section 58.2)
MOA
Yes, as of April 1995.

Contaminants
Petroleum and all hazardous substances.

Standards
Formal objectives based on RBCA and U.S. EPA soil screening levels in place; applicant has a choice of cleanup standards.

Institutional Controls
ICs allowed under the Tiered Approach to Corrective Action (TACO) objectives and may include engineered barriers, groundwater restrictions, highway authority agreements, and land-use restrictions.

IC Benefits/Problems
Cheaper and faster cleanups — more sites cleaned and reused.

REUSE BENEFITS

Number of Sites
Since 1989, 1,828 VCP program enrollments and 1,003 completion letters issued. In 2001, 273 sites enrolled; 169 completion letters issued; 632 sites as of August 5, 2002 still are underway in pursuit of completion letters.

Economic Benefits
Not currently tracking economic impacts.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Changed an Illinois law so federal brownfield funding can go into the state brownfield redevelopment fund.

Impacts of Law
- In accordance with Subtitle C, state proposes to establish a new Federal Sites Revitalization Response Program, add brownfield representative staff, perform additional Targeted Brownfields Assessments, continue outreach in partnership with a regional planning agency (including a new derived benefits study), and assure long-term remediation through the monitoring of institutional controls.
- Inclusion of petroleum will help further state efforts to clean up petroleum brownfield sites.

LESSONS AND ADVICE

"Better planning up front, developer willingness to accept deed restrictions for land use, use of engineered barriers, use of institutional controls, and more thorough investigation earlier in the process.”
Voluntary Cleanup Programs and Assurances Provided

- **Voluntary Remediation Program (1993)** offers liability protection through COC, issued by IDEM, followed by a CNTS from governor's office; any contaminated site may be determined to be eligible.

- **Brownfields Program (1997)** — mechanism for state to partner with communities to promote cleanup and redevelopment; sites using state loan money for remediation can only get a Comfort or Site Status Letter, unless they enter the VRP for a COC or CNTS. Brownfields Program offers Comfort and Site Status Letters to address liability issues; highest forms of “comfort” or “closure” offered at this time, even for sites remediated with federal or state brownfield funds, unless the sites enter the VRP for a COC or CNTS.

FINANCIAL ELEMENTS

**Financing Programs Targeted to Brownfield Situations**

- EPA-capitalized Brownfields Cleanup RLF for $350,000 (1997), increased in 2000 to $1 million; available to provide low-interest loan to eligible communities/private sector for cleanup/non-time critical removals per CERCLA; Indiana Development Finance Authority (IDFA) serves as fund manager.

- In 1997, State Environmental Remediation Revolving Loan Fund (ERRLF) established through legislation — $10 million over three years to eligible cities, towns, or counties (with funds having been reallocated to date); grants for IDEM-approved assessments; loans for IDEM-approved assessments or remediation (including demolition); applicants evaluated for several criteria, including ability to repay, matching funds available, and economic development potential; 60 percent allocated to jurisdictions with fewer than 22,000 people; IDEM/IDFA partnership.

- On July 1, 1999, extra $5 million was added through legislation to the ERRLF for forgivable loans; 20 percent of the ERRLF loan may be forgiven for projects meeting “community-determined economic development goals,” with priority given to former gas station or UST sites, or facilities located within one-half mile of a child care center or school; IDEM/IDFA partnership.

- ERRLF applicants may partner/co-apply with private entities who did not cause or contribute to any contamination. ERRLF loan recipients may re-loan money to a private entity, with 20 percent of the loan forgiven if it meets criteria (noted in the first column); referred to as the third-party model. Changes/clarifications to the ERRLF program/initiative include: (1) allocation of funds to jurisdictions based on populations above or below 22,000 vs. 35,000; (2) Just In Time Funding where $50,000 is available annually outside the normal grant rounds (but as part of the $500,000 available per calendar year) to fund site assessments that would enable immediate economic development project needs. A city, town, or county must match these grant dollars one for one and must certify that a company or developer is imminently interested; (3) clarification that funding for remediation costs and retroactive funding (reimbursement) for prior testing are not allowed.

- In March 2000, state Department of Commerce (DOC) began state Urban Enterprise Zone Brownfield Site Assessment Grant program; IDEM oversight provided through draft MOU.
In September 2001, state DOC began CDBG Brownfields Pilot Program with grants available for planning, remediation, and site preparation, and tax credits available for rehabilitation; IDEM oversight provided through draft MOU. Second grant round held in August 2002.

The new “Brownfields Petroleum Remediation Grant Incentive” (PRGI) is a result of the 2001/2003 state budget transfer of $9 million from the Excess Liability Fund (ELF) to ERRLF for remediation of petroleum-contamination at brownfield sites. In August 2002, PRGI implemented through IDEM/IDFA partnership. First state grants available for remediation of brownfield sites. Second grant round planned for spring/summer 2003.

Incentives to Attract Private Investment to Brownfields
- Brownfield Revitalization Zone tax abatements — available in locally designated “brownfield zones.”
- 2001 legislation provides tax credit of up to $100,000 for voluntary remediation of a brownfield, effective through December 31, 2003, and capped at $1 million annually statewide.

**TECHNICAL ELEMENTS**

**Definition**
Indiana defines in statute a brownfield as “an abandoned, inactive, or underutilized industrial or commercial property on which expansion or redevelopment is complicated as a result of actual or perceived environmental contamination.”

**MOA**
Yes — as of December 1995.

**Contaminants**
- In VRP, petroleum and PCBs are OK; no asbestos or lead paint.
- In Brownfields Program, asbestos, lead paint, and PCBs are OK; petroleum only OK for activities not funded by federal EPA programs.

**Standards**
- RBCA-like process in place.
- State’s “Risk Integrated System of Closure” (RISC) non-rule policy, which allows for consistent, risk-based standards among all IDEM cleanup programs, completed its one-year transition period in February 2002, through which time either RISC or VRP standards may be used. The RISC Technical Guide and User’s Guide are available.

**Institutional Controls**
Both programs generally view ICs as acceptable. ICs will be “an inherent part of RISC when determining remediation-type activities.” Brownfields Program Comfort/Site Status Letters indicate land-use restrictions.

**IC Benefits/Problems**
No issues at this time regarding the Brownfields Program; some issues raised regarding the deed restriction element of VRP, but data on this is not complete.

**REUSE BENEFITS**

**Number of Sites**
As of July 2002, 410 VRP applicants, with 369 active and completed sites; 224 Brownfields Program sites with 54 Comfort/Site Status Letters issued, 34 assessment sites completed or referred, 94 grants awarded, 13 loans approved.
Economic Benefits
Although Indiana does not formally track economic impacts, several of these sites have been reused as parks or greenways and the state has developed "property profile" surveys for future use.

<table>
<thead>
<tr>
<th>IMPACTS OF NEW FEDERAL BROWNFIELDS LAW</th>
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<tr>
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<th>LESSONS AND ADVICE</th>
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</table>
PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Land Recycling program (1997) offers NFA, transferable to new owner. Legislative revisions specify minimum public participation requirements, add consideration of cumulative risk, and add a factor of safety of ten to standards for possible carcinogens. Rule revisions to address the legislative changes and other modifications to soil standards will be made.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Physical Infrastructure Assistance Program offers loans, loan guarantees, or cost shares, adaptable to brownfield projects meeting development criteria.
- Iowa Brownfield Redevelopment Program may cover up to 25 percent of the financial cost towards the acquisition or cleanup of qualified brownfield sites. The program has made nine awards to date, but due to state budget shortfalls the program was not funded for the current fiscal year.

Incentives to Attract Private Investment to Brownfields
- TIF mechanism allows cities or counties to reimburse response action costs, over a six-year period.
- 1997 statute authorized a new land recycling fund to provide financial assistance and incentives.

TECHNICAL ELEMENTS

MOA
Currently negotiating. Legislative revisions should address residual issues.

Contaminants
Any contaminant that has appropriate toxicity information available.

Standards
State uses statewide, background, and site-specific standards. Site-specific standards are risk based.

Institutional Controls
Statutorily-based environmental protection easement (EPE) is required for use with non-residential standards.

IC Benefits/Problems
May be possible to move the point of compliance with standards outside of area with an IC or appeal to a less restrictive standard with an IC. Use of an IC may not be allowed to address free product or “gross contamination.”
**REUSE BENEFITS**

**Number of Sites**
29 sites are currently enrolled in the Land Recycling Program. Several other sites are also listed with the state’s contaminated sites program. As of July 2002, two sites had completed the program and 27 were underway.

**Economic Benefits**
The Iowa Brownfield Redevelopment Program is requiring performance reporting by award recipients. First reports are due in June 2003. In addition, the state is planning to implement more comprehensive inventorying of brownfield sites.

**IMPACTS OF NEW FEDERAL BROWNFIELDS LAW**

**Changes to Accommodate Law**
N/A

**Impacts of Law**
Associated funding should help further develop the state's brownfield program. The liability protections may lessen brownfield-related concerns.

**LESSONS AND ADVICE**

N/A
KANSAS

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup and Property Redevelopment Program (1997) — anyone capable of gaining access to a contaminated property for assessment and/or cleanup activities, and adjacent property owners, can receive NFA determination; cleanup levels for soil and water specified in state program cleanup manual.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situation
- U.S. EPA-capitalized Brownfields Cleanup RLF awarded to KDHE; loans will be provided to qualifying municipalities and not-for-profit organizations for remediation.
- Kansas Agricultural Remediation Fund was created in July 2000 to assist in the investigation and remediation of qualifying properties with ag-related contaminants. The program provides direct reimbursement up to $200,000, and low-interest loans up to $300,000.

Incentives to Attract Private Investment to Brownfields
N/A

TECHNICAL ELEMENTS

MOA

Contaminants
Petroleum, asbestos, lead paint, PCBs all OK.

Standards
RBCA-like process in place; applicant can choose from a range of cleanup options based on a three-tired system.

Institutional Controls
- State currently uses restrictive covenants, deed notices, and deed restrictions.
- An Environmental Use Control bill was introduced in the 2002 legislature to statutorily define and establish a program for tracking institutional controls. The bill was passed by the House but defeated in the Senate and will be reworked next session.

IC Benefits/Problems
Issues include tracking, funding to track, enforceability, transfer of IC to subsequent land owner.
# REUSE BENEFITS

## Number of Sites
Since 1997, 250 sites have entered the program, and 44 sites have received NFA letters.

## Economic Benefits
Not currently tracking economic impacts, but KDHE has conducted brownfield assessments of at least two properties to be redeveloped as parks and one as a recreation center.

# IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

## Changes to Accommodate Law
N/A

## Impacts of Law
“It will help our efforts by providing much needed federal funding for various state efforts.”

# LESSONS AND ADVICE

“Develop a tracking system early on to monitor redevelopment at brownfields sites such as jobs created, increased tax revenue, etc. Also work with economic development department early in the process.”
**KENTUCKY**

Kentucky Division of Waste Management  
14 Reilly Road  
Frankfort, KY 40601  
*SECONDARY SOURCE:* P: 502 564 6716  
F: 502 564 5096  

### PROGRAM DESCRIPTION

**Voluntary Cleanup Programs and Assurances Provided**
- In 2001, the Kentucky Legislature passed the Voluntary Environmental Remediation Act (VERA), which provided a formalized process for obtaining a Covenant Not To Sue.
- Volunteers may apply to obtain a CNTS under VERA. Volunteers may also conduct cleanups under a less formal process and obtain a Notice of Completion or an NFA letter, the later being limited to public entities.
- Proposed regulations for voluntary cleanups published August 1, 2002, for public comment.
- The Governor established a Commonwealth Brownfields Task Force to bring together representatives of chief stakeholders to exchange information and to coordinate efforts to redevelop brownfields.

### FINANCIAL ELEMENTS

**Financing Programs Targeted to Brownfield Situations**
- VERA clarifies that brownfield redevelopment qualifies for several existing economic development incentives.
- VERA also established a new "Agricultural Warehousing Sites Cleanup Fund" to address a growing number of closed tobacco warehouses.

**Incentives to Attract Private Investment to Brownfields**
- N/A

### TECHNICAL ELEMENTS

**Definition**
Kentucky does not have a definition provided by statute or regulations. There is no practical distinction between brownfield cleanups and other voluntary cleanups.

**MOA**
- No

**Contaminants**
- Petroleum and PCBs are OK; asbestos and lead paint OK if not in a building.

**Standards**
- No formal RBCA or comparable/informal process in place.
- State Superfund statute provides four cleanup options; proving that no action is required; proving that site/release can be managed with institutional controls; removal; or any combination of these three. KDWM currently is developing the cleanup standards and "tiered remediation options" mandated by that Act and expects to promulgate regulations incorporating those standards by the statutory deadline of June 22, 2002.
Institutional Controls
ICs frequently are used. Proposed regulations provide generic Preliminary Remediation Goals for both residential and commercial/industrial land-use scenarios. The regulations also provide guidance for conducting site-specific risk assessments.

IC Benefits/Problems
ICs resulted in more and cheaper site cleanups.

<table>
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<tbody>
<tr>
<td><strong>Number of Sites</strong></td>
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<tr>
<td>Kentucky has identified 953 privately-funded cleanups from 1993-1997. Well over 1,000 sites have completed an informal VCP. One site has entered the new Voluntary Environmental Remediation Program. It is expected that the number will increase once the VERP regulations are finalized.</td>
</tr>
</tbody>
</table>

| Economic Benefits |
| Although Kentucky does not currently track economic impacts, several sites have been reused for parks and recreational facilities. Some of the most notable sites are Papa John’s Stadium (a Phoenix Award winner), Louisville Slugger Field, and the Louisville Riverfront Development Project. |

| IMPACTS OF NEW FEDERAL BROWNFIELDS LAW |
| Changes to Accommodate Law |
| VERP appears to be compatible with the federal program. |

| Impacts of Law |
| Increased availability of federal funding for cleanups should help. Program representatives expect to be aided by the federal law’s over-filing protection. |

| LESSONS AND ADVICE |
| N/A |
LOUISIANA
Louisiana Department of Environmental Quality
PO Box 2178
Baton Rouge, LA 70884-2178
BEST INFO SOURCE: P: 225 765 0333
F: 225 765 0617
http://www.deq.state.la.us/remediation/ias/vcp.htm

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program (1996) can offer COC and exemption from liability; eligible sites must qualify as “identifiable area of immovable property.” The Louisiana Voluntary Remediation Regulations were adopted in April 2001 to implement the state’s voluntary cleanup statute.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
N/A

Incentives to Attract Private Investment to Brownfields
N/A

TECHNICAL ELEMENTS

Definition
Louisiana does not have a definition of a brownfield, but its environmental statutes recognize the need to address former commercial and industrial sites that are contaminated with hazardous pollutants and return them to productive use through a voluntary cleanup program.

MOA
LDEQ has submitted a draft MOA to U.S. EPA and currently is awaiting approval from headquarters.

Contaminants
Does not restrict on basis of contaminants; petroleum, asbestos, lead paint, PCBs all OK.

Standards
RBCA-like process in place; applicant can choose the RECAP (Louisiana’s RBCA) standard, as appropriate to site and reuse.

Institutional Controls
“Allows and/or requires use restrictions and institutional controls.”

IC Benefits/Problems
Facilitating business and job creation; too early to identify any problems.
### REUSE BENEFITS

**Number of Sites**
18 sites have entered the program, two sites have completed the VRP and approximately 16 sites are pending.

**Economic Benefits**
“Economic benefits cannot be quantified.”

### IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

**Changes to Accommodate Law**
Not yet.

**Impacts of Law**
Program representatives believe the new law should help state efforts.

### LESSONS AND ADVICE

N/A
**MAINE**

Maine Department of Environmental Protection  
#17 State House Station  
Augusta, ME 04333-0017  
P: 207 287 4854  
F: 207 287 7826  

**BEST INFO SOURCE:** [http://www.state.me.us/dep/rwm/rem/brown.htm](http://www.state.me.us/dep/rwm/rem/brown.htm)

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**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**  
Voluntary Response Action Program (1993) offers COC for all pollutants identified in site assessment and cleanup to the program's satisfaction.

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**FINANCIAL ELEMENTS**

**Financing Programs Targeted to Brownfield Situations**  
Pilot contractor service grants to municipalities for site assessments of tax delinquent properties are now complete. Grants will be distributed to three sites: a job-training center for those in metal-working trades; a boat-building facility; and a site on a city's waterfront, which will likely combine public and private use.

**Incentives to Attract Private Investment to Brownfields**  
N/A

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**TECHNICAL ELEMENTS**

**MOA**  
No

**Contaminants**  
Petroleum, PCBs are OK; no asbestos and lead paint.

**Standards**  
Draft cleanup guidelines consider three separate exposure scenarios for soil contact: residential, commercial/industrial, and trespasser. Alternatively, a site-specific goal may be established using the state's risk-assessment guidance document. If these options fail, applicants may follow a RBCA-like process, which always includes institutional controls.

**Institutional Controls**  
ICs are part of most certifications at VCP/brownfield sites.

**IC Benefits/Problems**  
Both cheaper cleanups, and more sites cleaned and reused.
### REUSE BENEFITS

**Number of Sites**
260 sites have completed investigation and remedial action as of July 31, 2002; 40 sites are underway.

**Economic Benefits**
Economic impacts not formally tracked, but the state has documented specific sites, such as the Bangor Gas Works site, which increased state tax revenues by $1.3 million annually. A number of remediated sites are now parks, ballfields, and at least two marinas.

### IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

**Changes to Accommodate Law**
Maine is waiting to see what the final implementation of the legislation looks like before making any changes.

**Impacts of Law**
Not able to evaluate at this time.

### LESSONS AND ADVICE

N/A
MARYLAND

Maryland Department of the Environment
2500 Broening Highway
Baltimore, MD 21224

Best Info Source: P: 410 631 3493
F: 410 631 3472

or Best Info Source: http://www.mde.state.md.us/Programs/LandPrograms/ERRP_Brownfields/

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program (1997) offers COC or No Further Requirements letter; sites contaminated after October 1, 1997, listed on the NPL, or under active enforcement are not eligible.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
Brownfields Revitalization Incentive Program fund offers low-interest loans/grants to persons conducting voluntary cleanups; low-interest loans or grants available for conducting environmental site assessments.

Incentives to Attract Private Investment to Brownfields
Brownfields Revitalization Incentive Program — five-year, 50 percent state (and optional 20 percent local, for a total tax credit of 70 percent) to offset increase in property tax due to remediation; tax credits may be extended to 10 years in designated EZs; incentive available in jurisdictions which agree to contribute 30 percent of the increase to the state’s Brownfield Revitalization Incentive Fund.

TECHNICAL ELEMENTS

MOA
Yes — as of February 1997.

Contaminants
PCBs are OK; other contaminants accepted conditionally — petroleum (not exclusively, but along with other contaminants); paint and asbestos (as long as they comply with all other applicable laws and regulations).

Standards
VCP provides a “menu” of cleanup options: uniform risk-based standards, site-specific risk assessment, federal/state soil standards or water quality standards, federal/state MCLs, and other federal/state standards. Site-specific risk assessments follow a RBCA-like process.

Institutional Controls
“Institutional controls are allowed and are included in the No Further Requirements Determination or Certificate of Completion.”

IC Benefits/Problems
ICs “probably have resulted in more cleanups and more properties reused. [ICs] also have probably lowered the cost of cleanups.”
### REUSE BENEFITS

**Number of Sites**
79 sites totaling approximately 1,573 acres have been accepted into the VCP, and 60 sites totaling approximately 1,317 acres have completed it.

**Economic Benefits**
An estimated 100 businesses and 3,700 jobs have been created on brownfield sites; another 160 businesses have been located on, created and/or retained on brownfield sites. One site was redeveloped as a golf course.

### IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

**Changes to Accommodate Law**
None made.

**Impacts of Law**
The new law is expected to enhance brownfield cleanup efforts in Maryland.

### LESSONS AND ADVICE

N/A
Voluntary Cleanup Programs and Assurances Provided
Privatized, voluntary cleanup program since 1993; state-licensed site professionals manage and oversee most cleanups.
- Cleanups are tied to reuse, activity, and use limitations, and land-reuse restrictions.
- Generic liability endpoints apply to cleanups and voluntarily undertaken cleanups by innocent land owner. Site can be transferred prior to completion, provided cleanup continues and is completed.
- Offers liability exemptions for innocent tenants and down-gradient property owners.
- Lenders are exempt unless they cause the contamination or cause the borrower to contaminate. The 1998 Brownfields Act authorizes the Commonwealth to enter into Brownfields CNTS. These agreements provide owners and operators with individually-tailored liability relief that goes beyond that provided directly by the Act and offers broader eligibility and increased flexibility to potential developers.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
MassDevelopment, in partnership with the Brownfields Advisory Group, administers the Brownfields Redevelopment Fund, designed to provide flexible financing for site assessments and cleanup actions in economically-distressed areas of the Commonwealth.
- Site Assessment Program provides interest-free financing of up to $50,000. The borrower or project sponsor must be an innocent owner or operator of the site, or must be an eligible person with site control or evidence of the right to enter the site for purposes of conducting environmental testing.
- Remediation Loan Program offers low-interest financing of up to $500,000 for cleanup actions. Remediation loans are secured by a mortgage or other substantial collateral, and the borrower must be the owner or tenant of the site. Terms are quite flexible, and determined on a case-by-case basis.

Incentives to Attract Private Investment to Brownfields
- Brownfield Redevelopment Access to Capital (BRAC) — $15 million for environmental insurance fund based on two state-negotiated policies provided by AIG: one to pay for unanticipated costs associated with planned cleanup, third-party liability, business interruption and cleanup of previously existing unknowns; the second protects lenders from defaults on private loans made for cleanup and redevelopment while environmental conditions remain on site. BRAC subsidizes premiums for both policies by 50 percent. Environmental policy is for a five-year term, and the lender policy is for a 10-year term.
- State Tax Credit for remediation – 25 percent (with reuse restrictions) or 50 percent (without reuse restrictions), for innocent parties who “diligently” pursue site cleanups begun before August 5, 2003, in economically-distressed areas.
- Municipal Tax Abatement — Municipalities can negotiate back taxes on contaminated sites in exchange for commitment by new owner to clean and restore site to tax rolls.
Massachusetts Economic Development Incentive Program (EDIP) — menu of tax options including:
(1) negotiated prospective municipal property taxes on all value or enhanced value, up to 20 years;
(2) exemption from local personal property taxes; (3) 5 percent state-investment tax credit; and (4) 10
percent abandoned-building tax deduction (the latter two geared toward properties in Economic Target
Areas).

Gubernatorial level state Office for Brownfields Revitalization helps with access to brownfield and
economic development programs, information on project sequence, municipal assistance, and trouble
shooting for all government-related issues.

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**TECHNICAL ELEMENTS**

**MOA**
No

**Contaminants**
Petroleum, asbestos, and PCBs are OK; no lead paint.

**Standards**
Risk-based regulatory program in place; offers a choice of a chemical-specific approach with numerical
standards, or a cumulative-risk approach based on site specific information.

**Institutional Controls**
N/A

**IC Benefits/Problems**
N/A

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**REUSE BENEFITS**

**Number of Sites**
As of June 30, 2002, over 650 projects have received funding approval and/or direct project assistance as
a result of the Brownfields Act implementation. Approximately 125 projects are pending and partner
agencies have provided concerted outreach in over 140 communities. From a universe of 26,951 sites
that have been reported to DEP, 15,422 sites cleanups have been completed.

**Economic Benefits**
Although not all programs track economic benefits from brownfield redevelopment, several have some
information on impacts.

- BRAC reports as of June 2002, 7,399 jobs have been created, 121 businesses have been located on
  or near sites, and tax revenues have increased by $796 million.
- Brownfields Redevelopment Fund reports that of the 121 projects entered into the BRAC program, the
  following have been redeveloped for public use: one marina, one arts center, three open-space
  projects, and 12 affordable-housing projects.

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**IMPACTS OF NEW FEDERAL BROWNFIELDS LAW**

**Changes to Accommodate Law**
DEP is participating in conference calls and workgroups related to the legislation, and has sponsored
workshops to educate state and local private officials and the private sector on changes that the legislation
will make to existing programs.
Impacts of Law
The legislation is expected to help efforts in Massachusetts to cleanup and redevelop brownfield sites by providing more resources to complement existing efforts. The new legislation also allows funding to be used for state environmental insurance programs, such as BRAC.

LESSONS AND ADVICE

“The partnerships between state and federal agencies, as well as the public and private sectors, have been critical to making brownfield redevelopment a success in Massachusetts. Massachusetts has been recognized as a leader in its brownfield efforts.”
Voluntary Cleanup Programs and Assurances Provided
Natural Resources Environmental Protection Act (1994, amended in 1995) — completion of a baseline environmental assessment and submitting it to DEQ prior to or within 45 days of purchase provides an exemption to liability for existing contamination; non-liable new owners must use “due care” when redeveloping the property; clean-up standards are land-use based. CNTS also may be sought. Liable and non-liable parties may request approval of a remedial action plan and response activities from DEQ. Liability is based on causation.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Site Reclamation/Site Assessment Grants— $45 million in bond proceeds; $35 million for assessment and cleanup at sites where a developer has been identified, and $10 million for assessment at sites "with redevelopment potential," available until funding exhausted. As of 2002, this fund is not yet exhausted, but it is dependent on bond sales.
- Revitalization RLF — $30 million (authorized, but re-allocated in 2002 due to statewide budget difficulties); can make loans to cities for site assessment, demolition, and removal actions, with an interest rate of 2.25 percent, repayable over 15 years with five-year deferral of repayment and interest to allow cities to repay loans from tax increments collected by a Brownfield Redevelopment Authority.
- Brownfield Redevelopment Authorities, which have TIF/bonding authority, also can set up a site remediation revolving fund from tax increments captured after remedial actions are paid for. Amendment in 2000 allows functionally-obsolete and blighted properties in urban communities to use TIF for infrastructure, demolition, site preparation, and lead and asbestos abatement. (Authority expires on January 1, 2003, and legislature must reauthorize.)
- Clean Michigan Initiative — $675-million bond issue approved by voters in November 1998 ballot, included $255 million for brownfield cleanup; $60 million for cleanup of sites with acute hazards; $20 million is designated for grants to local governments and Brownfield Redevelopment Authorities for cleanup of sites with "redevelopment potential" and $50 million for grants to redevelop waterfront brownfields. (Bond sales temporarily ceased because of budget problems, thus no grants currently being made from this source.)

Incentives to Attract Private Investment to Brownfields
- 10 percent single business tax credit ($1 million cap) for innocent party’s development costs (not cleanup costs) on a property included in the brownfield plan of a Brownfield Redevelopment Authority; credit carries forward for 10 years. (Expires January 1, 2003; legislature must reauthorize.)
- New brownfield credit enacted in 2000, as part of the Obsolete Property Rehabilitation Act, allows the abatement of up to 100 percent of taxes on real property for up to 12 years when an urban community creates an Obsolete Property Rehabilitation District. (Expires January 1, 2003; legislature must reauthorize.)
TECHNICAL ELEMENTS

Definition
Michigan’s functional definition of “brownfield” is any contaminated property with a potential for redevelopment. In 88 urban areas statewide, this includes blighted and functionally obsolete properties as well as contaminated properties.

MOA
Yes — as of July 1996.

Contaminants
Does not restrict sites from the VCP on the basis of contaminant; petroleum, asbestos, lead paint, PCBs all OK. There are some restrictions on use of grant funds for asbestos and lead paint.

Standards
Risk-based standards in place for soils and groundwater (although not a formal RBCA) in several land-use categories — residential, commercial, and industrial, and “limited” uses with ICs. MDEQ may also approve site-specific criteria.

Institutional Controls
“ICs are accepted and, with respect to cleanup grants to communities, encouraged as cost saving as well as protection action.”

IC Benefits/Problems
ICs have decreased cleanup costs and increased the number of properties reused.

REUSE BENEFITS

Number of Sites
- Since 1992, 5,485 Baseline Environmental Assessments have been submitted and 243 brownfield grants and loans have been issued.
- Voluntary cleanups undertaken by liable parties or property owners are not tracked by the DEQ. These numbers are for brownfield grants and loans ONLY: 243 grant/loan projects completed to date; 112 completed; and 131 still in progress.

Economic Benefits
- Since 1992, state has made $103 million in brownfield grants and loans. On sites where benefit information has been available, the state estimates that its VCP efforts have generated an estimated 13,000 jobs, created an estimated 150-175 businesses now located on redeveloped land, and stimulated $2.3 billion in private investment, as well as over 1,500 housing units on 29 different sites. The private sector has invested approximately 28 private dollars per every dollar of grant funds.
- Clean Michigan Initiative funds cannot fund projects where marinas or stadiums will be developed. They also do not generally fund parks or open space because the programs require job creation and/or private investment associated with the new use. Some of the projects have included recreational facilities along with private development, but the number is probably less than 10.
- Program officials note that the budget situation combined with expiration of critical redevelopment incentives has temporarily slowed the brownfield programs in Michigan, but hope for activity to resume early in 2003.
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<td>Federal grants can be used to supplement existing state efforts.</td>
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MINNESOTA
Minnesota Pollution Control Agency
Major Facilities and Remediation Division
520 Lafayette Road
St. Paul, MN 55155
P: 651 296 6139 or 651 296 7212
F: 651 297 8676 or 651 296 9701
BEST INFO SOURCE: http://www.pca.state.mn.us/cleanup/brownfields.html

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
- Voluntary Investigation and Cleanup Program (1988) offers six levels of assurance ranging, from No Action Letters to COC.
- AgVIC Program (1993) – Minnesota Department of Agriculture offers similar assurances as MPCA’s VIC program for sites contaminated with agricultural chemicals.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Contamination Cleanup Grant Program — $21.47 million for 2002-2003 biennium to DTED for grants to cities for cleanup at sites with development potential; covers up to 75 percent of project costs.
- Dry-cleaning fund reimburses current or former owners and operators for cleanup costs over $10,000, at dry-cleaning facilities that have entered the state’s VIC program.
- Metropolitan Council in Twin Cities region offers brownfield project grants in seven-county area.

Incentives to Attract Private Investment to Brownfields
Hazardous waste subdistrict TIF, values brownfields at zero to maximize increment/ redevelopment finance resources.

TECHNICAL ELEMENTS

Definition
Minnesota uses the EPA definition of brownfields.

MOA
Yes — as of May 1995.

Contaminants
Petroleum contamination is allowed in the VCP if not the sole contaminant. The VCP works with asbestos or lead paint only if there is a release to the environment. PCB sites are handled only if contamination resulted from a release prior to 1978.

Standards
State uses a risk-based approach that considers future use.

Institutional Controls
“ICs are present.”
IC Benefits/Problems

- “Helps redevelopment on lots of properties, cheaper.”
- MPCA is currently undertaking a program assessment of the VIC program and is in the process of determining what enhancements should be made.

REUSE BENEFITS

**Number of Sites**
As of July 2002, over 1,900 projects have entered the VIC program; 1,366 sites are completed and 571 sites currently are underway.

**Economic Benefits**
- From the completed sites, over 3000 jobs created and a $3-million increase in tax base is attributable to VIC assistance.
- Recent figures pegged to DTED sites note that 12,560 jobs will be created at DTED sites and 4,180 housing units will be created (865 deemed affordable housing). Tax-base increases are estimated at $31,486,315. Approximately 5 percent of all brownfield sites have been reused for parks, open space, or recreational facilities. Private leverage is estimated at almost $1 billion.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

**Changes to Accommodate Law**
Still waiting to see what the new federal changes will be.

**Impacts of Law**
N/A

LESSONS AND ADVICE

“Strong communication among programs, users, and others is essential to make the program work.”
Voluntary Cleanup Programs and Assurances Provided

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
Promotes use of federal EPA grant resources.

Incentives to Attract Private Investment to Brownfields
Liability protection is offered before actual cleanup.

TECHNICAL ELEMENTS

Definition
Mississippi defines a brownfield property using the CERCLA definition (42 USCS 9601 et seq (1997); state defines a brownfield site as a brownfield property that has been remediated under a brownfield agreement.

MOA
Not yet; discussions on draft MOA with EPA Region 4 were held in July 2001.

Contaminants
Asbestos, lead paint, PCBs are OK; petroleum generally is OK, although some UST sites may fall under UST program.

Standards
The brownfield program uses a tiered risk-based approach to remediation. The approach is reasonable, flexible, while still protective of human health and the environment.

Institutional Controls
ICs are in state statute, and thus allowable in the brownfield program.

IC Benefits/Problems
State notes that ICs may mean “Cheaper short-term costs; however, continued long-term costs may result in significant total costs.” Agency resources may be stretched to “manage” ICS in the future.
## REUSE BENEFITS

### Number of Sites
Since July 2002, 18 sites have entered the Voluntary Evaluation program and three have completed it. The number of sites that have entered the brownfield program has more than doubled during the past year.

### Economic Benefits
Not currently tracking economic impacts.

## IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

### Changes to Accommodate Law
N/A

### Impacts of Law
N/A

## LESSONS AND ADVICE

N/A
Northeast-Midwest Institute

Brownfields State of the States - 2002

Missouri
Missouri Department of Natural Resources
Hazardous Waste Program
Voluntary Cleanup Section
1738 East Elm
Jefferson City, MO 65101
P: 573 526 8913
F: 573 526 8922

BEST INFO SOURCE: http://www.dnr.state.mo.us/alpd/hwp/hwpvcp.htm

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program (1994) — COC issued by the state; any interested party can apply with
property owner’s permission. Includes risk-based cleanup criteria, tied to future land use, and institutional
control provisions.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Brownfield Redevelopment Program offers loans and loan guarantees geared toward capital
  improvements, for parties that have purchased properties abandoned or underutilized for at least three
  years.
- Grant of 50 percent of cost (up to $100,000) to investigate site feasibility.
- Public infrastructure grant up to $1 million.

Incentives to Attract Private Investment to Brownfields
Brownfield Redevelopment Program offers menu of state tax credits for up to the entire amount of
remediation costs; tax credits of between $500-$1300/year (for up to 10 years) for each new job created;
capital investment tax credit of 2 percent; an income exemption of 50 percent; a tax abatement of up to 15
years for local property taxes.

TECHNICAL ELEMENTS

Definition
Missouri defines a brownfield as a site that is contaminated by hazardous substances.

MOA
Yes — as of September 1996.

Contaminants
Petroleum, asbestos, lead paint, and PCBs all OK.

Standards
RBCA-like process in place; applicants can select standards for residential (or unrestricted), commercial,
or industrial uses. Cleanup standards are based on current and intended future use of the property.
**Institutional Controls**
The VCP does not encourage IC use in lieu of active, permanent remediation, but it does permit various ICs to be used as part of site cleanup when the participant elects to clean a site to a standard other than state’s unrestricted use level. The primary IC is a restrictive covenant combined with a monitoring contract; the contract specifies monetary penalties if the restrictive covenant provisions are not adhered to. The restrictive covenant runs with the land, not the owner. Six of 18 state-defined brownfield sites completed to date have elected to use institutional controls to achieve closure.

**IC Benefits/Problems**
The IC option gives more flexibility to VCP participants who can choose to cleanup to less stringent standards, and thereby save in remediation expenses. State notes that “the most frequent complaint about the restrictive covenant is that it lowers the value of the remediated property and that the penalty provisions in the monitoring contract are too severe.”

---

**REUSE BENEFITS**

**Number of Sites**
354 sites have entered the program since 1994 (including 66 in 2001), and 127 have completed it; 150 sites are active.

**Economic Benefits**
Missouri is not currently tracking economic impacts, but the state notes that benefits must meet or exceed the value of any incentives provided.

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**IMPACTS OF NEW FEDERAL BROWNFIELDS LAW**

**Changes to Accommodate Law**
N/A

**Impacts of Law**
N/A

---

**LESSONS AND ADVICE**
N/A
MONTANA
Montana Department of Environmental Quality
PO Box 200901
Helena, MT 59620-0901
BEST INFO SOURCE: P: 406 444 0492
F: 406 444 1901
http://www.deq.state.mt.us/Rem/hwc/Srs/brownfields.asp

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup and Redevelopment Act (1995) offers closure letters; program can be used by any interested person with the property owner’s permission to address all or a portion of a site.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Controlled Allocation of Liability Act and orphan share fund offers reimbursement for expenditures beyond applicant’s responsibility from an orphan share fund; level depends on available funding.
- Loans available through state Board of Investments program may apply to brownfield sites.

Incentives to Attract Private Investment to Brownfields
Legislation requiring state to define possible need for tax incentives, for consideration by the 2001 legislature, postponed.

TECHNICAL ELEMENTS

Definition
Montana has no definition of a brownfield in statute or regulation and applies the U.S. EPA definition when necessary.

MOA
No

Contaminants
Petroleum, asbestos, lead paint, all OK, with some conditions.

Standards
Choice of cleanup standards available.

Institutional Controls
ICs “allowed as appropriate.”

IC Benefits/Problems
“More sites cleaned and reused, but difficult to ensure that ICs are appropriate and can be maintained.”
REUSE BENEFITS

Number of Sites
As of July 2002, 26 sites have entered the program, 19 sites have completed voluntary cleanups on all or a portion of the site (including no further action VCPs), and one site is currently underway.

Economic Benefits
Although Montana does not currently track economic impacts, of the sites entered in the program, two have been remediated for parks, open space or recreation facilities, and nine sites have greenspace activities as their proposed reuse. One site was donated to the Nature Conservancy and used for river access.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Not yet.

Impacts of Law
Potentially additional funding for program development and investigation/remediation assistance.

LESSONS AND ADVICE

N/A
Voluntary Cleanup Programs and Assurances Provided
Nebraska’s Remedial Action Plan Monitoring Act (RAPMA) (1995) authorizes state to offer NFA letter to volunteers; any site with low or moderate levels of contamination is eligible.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
The RAPMA is available to anyone, but it is primarily targeted to low to moderate environmental priority sites.

Incentives to Attract Private Investment to Brownfields
N/A

TECHNICAL ELEMENTS

MOA
No, but state is in the process of drafting an MOA with EPA, and may adjust wording within RAPMA to address requirements for an MOA. This likely will include stronger wording regarding public participation.

Contaminants
Petroleum, asbestos, lead-based paint, and PCBs all OK.

Standards
If cleanup values are not established by statute, such as groundwater MCLs, then RBCA or a RBCA-like process is used. This is generally coordinated through a risk assessor at the NE Health and Human Services Systems.

Institutional Controls
Yes

IC Benefits/Problems
ICs make cleanup cheaper and more readily attainable.

REUSE BENEFITS

Number of Sites
As of July 2002, 21 sites have entered the program, four have completed cleanup and received an NFA letter, and 15 sites are underway.
Economic Benefits
Does not track economic benefits, but state noted that it plans to do so in the future. State noted that two sites are being used for park and recreational space.

Nebraska emphasized that adjacent RAPMA voluntary cleanup sites near and along Omaha’s riverfront will greatly change and improve the area as cleanup and redevelopment continue. Omaha’s Convention Center and Arena Complex, Lewis and Clark Landing, National Parks Office and Gallup Educational Headquarters Campus will be the first results of this brownfield effort. More projects are likely to spawn off of this redevelopment.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Work to establish an MOA with EPA for Nebraska’s VCP is underway

Impacts of Law
Anticipate an increase in brownfield activities and redevelopment and, as assisted through EPA funding, will generate interest among more sites in RAPMA’s NFA letter.

LESSONS AND ADVICE

“Education, early and often, regarding the voluntary cleanup program and its requirements are essential to a successful investigation and cleanup. Don’t assume consultants know what they are doing.”
NEVADA
Nevada Division of Environmental Protection
333 West Nye Lane
Carson City, NV 89706-0851
BEST INFO SOURCE:  P: 775 687 4670 ext 3024
F: 775 687 6396
http://ndep.nv.gov/bca/BROWNFLD.HTM

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Incentives for Voluntary Removal program (1999) offers COC; liability relief transferable to new owners.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- U.S. EPA capitalized Brownfield Cleanup RLF in 2001 with coalition partner, Hawthorne, NV, for $2 million.
- State has targeted $1 million for all projects within Nevada. New program targets for 2002 (reflecting the new brownfields law) include rural communities, USTfields, mine-scarred lands, and drug labs.

Incentives to Attract Private Investment to Brownfields
N/A

TECHNICAL ELEMENTS

Definition
Nevada defines an eligible property in its voluntary cleanup program as real property not listed on the NPL, owned by anyone under current investigation with respect to the property and containing the probable site of a release of a hazardous substance.

MOA
No

Contaminants
Asbestos, lead paint, PCBs are OK; petroleum OK only if commingled with another hazardous substance.

Standards
RBCA process in place.

Institutional Controls
ICs not encouraged at this point; state anticipates more receptivity to ICs in the future, at more complicated brownfield sites having extensive contamination.

IC Benefits/Problems
ICs not encouraged because they are hard to track and state has no authority to enforce.
Number of Sites
One site now in program and in the process of negotiating the remedial agreement. Outreach workshops planned for the next year to educate about and market the program to prospective volunteers. State has several sites close to entering program.

Economic Benefits
Nevada is working with various cities to potentially use funds through the Trust for Public Land. The state also is working with several communities on incorporating a greenspace element in their EPA brownfields assessment grant proposals. Nevada did receive a pilot for Nye County, which also received $50,000 for a greenspace project.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Will not consider changes until more information on new law's implementation is available.

Impacts of Law
So far, the new law appears to be of tremendous benefit for Nevada, especially with rural development. The state has modified its brownfield program targets to reflect new federal eligible activities, such as mine-scarred lands and petroleum-contaminated sites.

The only concerns raised by the state stem from the unallowed expenses of administrative costs with the Brownfields Cleanup Revolving Loan Fund Pilots.

LESSONS AND ADVICE

“Even though Nevada's Brownfields Program and VCP Program are just beginning to test the waters within our state, I have found brownfields to be the most rewarding and challenging program to implement. One must maintain a vision, develop a continued flow of optimism, be aggressive, but move softly with a determined step, stay focused on the good things a project will do for the environment and the improvements to its citizen’s well-being. The most important aspect that attracted me to brownfields is the whole concept of empowering local governments, states, and tribes. Empowerment means allowing those affected to stand up, have a voice, make decisions, creating new boxes to bring projects to completion and utilizing our thinking. To effect change requires an incredible amount of dedication, determination, and heart-felt enthusiasm or a passion for brownfields, constant discussions for anyone who will listen, and most of all tenacity.”

“I have found the most frustration with certain mind-sets by governments – whether it is our own state government, federal government, or some nonprofit entities. This really has to do with people who work within these systems and who choose to exist as they have always existed. Brownfields require participation and partnerships to help projects move forward for the benefit of others. Sometimes all it takes [to derail a project] is one person (in a certain position) who refuses to become a partner or a team member or chooses to see things as black and white. Your stakeholder project team needs to be forward thinking and involved to help make things really happen.”
New Hampshire Department of Environmental Services
PO Box 95
Concord, NH 03301-0095

**BEST INFO SOURCE:**
P: 603 271 6422
F: 603 271 2456

or **BEST INFO SOURCE:** [http://www.des.state.nh.us/hwrb/hwrbbfld.htm](http://www.des.state.nh.us/hwrb/hwrbbfld.htm)

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**NEW HAMPSHIRE**

**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**

Brownfields Program (1996) offers NFA letter, COC, and CNTS.

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**FINANCIAL ELEMENTS**

**Financing Programs Targeted to Brownfield Situations**

- Municipally-owned sites eligible for state clean water revolving fund loans (as of October 1, 1999).
- U.S. EPA-capitalized Brownfield Cleanup RLF provides low-interest loans and some direct financial assistance to brownfields cleanup. Two loans have been made so far. Sites statewide are eligible.

**Incentives to Attract Private Investment to Brownfields**

- “Qualified holder” provisions of hazardous waste and petroleum statutes provide protection to lenders and municipalities (for tax deeding).
- Brownfield sites are exempt from state hazardous waste generator fees.
- Municipalities can abate taxes at brownfield sites.
- Site investigation and remedial action planning services available to municipalities through Department of Environmental Services Brownfields Program (with EPA grant money used to pay state environmental consulting contractors).
- U.S. EPA USTfields grant being used to address abandoned gas stations and other similar sites with petroleum contamination. State makes grants of services on behalf of municipalities.

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**TECHNICAL ELEMENTS**

**Definition:**

New Hampshire defines brownfields in statute to be “properties which have been environmentally contaminated, subject to limitations of R.A. 147-F:4, II. These limitations include requiring that the property be in compliance with any corrective actions or compliance orders and the property can not be eligible for cost reimbursement from the oil discharge and disposal cleanup fund, the fuel oil discharge fund or the motor oil discharge cleanup fund unless it receives substantially less than full reimbursement from these funds.” In addition, state uses U.S. EPA definition as its working definition for broader brownfield redevelopment efforts (including those outside the VCP).

**MOA**

No

**Contaminants**

Petroleum, asbestos, lead paint, PCBs all OK.

**Standards**

Risk characterization and management policy includes a three-tiered risk-based approach. Contaminant-specific generic soil and groundwater cleanup standards are provided in table form; alternatives can be developed based upon site-specific information.
Institutional Controls
“Activity and Use Restrictions” (AUR) are used when the risk characterization depends upon the restriction of site activities and uses to achieve or maintain protection of human health and/or environment. After completion of active remedial measures, a groundwater management permit (an IC itself) is typically issued to monitor groundwater quality until it meets standards.

IC Benefits/Problems
When properly applied, AURs are protective and provide for cost-effective risk management. Use of AURs has helped make site redevelopment feasible at some sites. “Few problems have been encountered; however, there is some concern about the adequacy of notice that occurs with deed recordation.”

REUSE BENEFITS

Number of Sites
Since program inception, 24 sites have enrolled in program and 11 received CNTS; three new entrants and two CNTS this past year. As of July 2002, 12 sites have completed the VCP and six sites are underway.

Economic Benefits
Currently reviewing economic impacts. To date, about 750 jobs created or retained; 13 businesses created and five retained; one town office and a local chamber of commerce have located on brownfield sites; in excess of $35 million in new development has been leveraged. Two properties are underway for redevelopment as public parks.

New Hampshire state and local governments have most certainly seen increased business and property tax revenues, but these have not been quantified. A good example – the former Whitney Screw site project in Nashua, New Hampshire, won an Environmental Merit Award in 2002. It used the Brownfields Covenant Program, Brownfields Cleanup RLF program, and state petroleum reimbursement funds to leverage private redevelopment investments in excess of $2 million.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
No.

Impacts of Law
The new law will help New Hampshire’s brownfield cleanup efforts.

LESSONS AND ADVICE

“The most successful approach for New Hampshire has been to integrate brownfield redevelopment efforts with all other existing state and federal forms of assistance and ‘cobble’ together a package for each site that will ensure its attractiveness to private investors. To that end, it is important to foster good working relationships with both government partners and private developers.”
NEW JERSEY
New Jersey Department of Environmental Protection
401 East State Street, 6th Floor
P.O. Box 028
Trenton, NJ 08625
P: 609 984 3122
F: 609 777 1914

BEST INFO SOURCE: http://www.state.nj.us/dep/srp/brownfields/

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Industrial Sites Recovery Act (1993; amended 1998), replaced Environmental Cleanup and Responsibility Act, offers NFA letter; PRPs can participate; 1998 amendment authorized CNTS, applicable to subsequent owners.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Hazardous Discharge Site Remediation Fund — $75 million low-interest loan/grant program; loans and grants up to $1 million to private entities for remediation activities; $2 million in grants and loans available to local governments for orphan sites and sites obtained through tax sale certificates or by voluntary conveyance for redevelopment purposes.
- Provides low-interest loans for water related brownfield activities from NJ’s Infrastructure Trust fund.

Incentives to Attract Private Investment to Brownfields
- Qualifying Environmental Opportunity Zones, designated by municipalities, supported by incrementally increasing real property tax abatements (to offset cleanup costs) for up to 15 years as needed.
- 25 percent matching grants to qualified persons for innovative technology cleanups.
- 25 percent matching grants for unrestricted or limited-restricted reuse cleanups.
- Tax rebates from the state, through redevelopment agreements with developers, allow recovery of up to 75 percent of cleanup costs.

TECHNICAL ELEMENTS

Definition
New Jersey defines a brownfield as “any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of contamination.”

MOA
No

Contaminants
Petroleum, asbestos, lead paint, and PCBs all OK.

Standards
State allows three cleanup levels: unrestricted use remedial actions, limited restricted use remedial actions, and restricted use remedial actions; natural attenuation allowed in some circumstances. In any situation, contamination source must be removed.
Institutional Controls
N/A

IC Benefits/Problems
N/A

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### REUSE BENEFITS

#### Number of Sites
- In 2001, 2,444 voluntary cleanup memoranda of agreement were signed and 1,774 no further action letters were issued. In 2000, 2,301 voluntary cleanup memoranda of agreement were signed, 1,995 no further action letters were issued, and over 100 redevelopment agreements for cleanup cost recovery were requested by private developers.

- As of June 2001, the NJDEP financing programs have approved over 500 projects totaling more than $41 million.

#### Economic Benefits
N/A

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### IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

#### Changes to Accommodate Law
N/A

#### Impacts of Law
N/A

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### LESSONS AND ADVICE

N/A.
NEW MEXICO

New Mexico Environment Department
Ground Water Quality Bureau
1190 St. Francis Drive, Room –2300
Santa Fe, NM 87502
P: 505 827 2754
F: 505 827 2965

BEST INFO SOURCE: http://www.nmenv.state.nm.us/gwb/VRP.html

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Remediation Act (1997) — regulations effective July 15, 1999; offers CNTS to prospective purchasers; participants can get COC; removes lender liability; enforcement shield offered to participants.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Municipally-owned brownfields eligible for low interest loans from Clean Water State Revolving Fund.
- U.S. EPA-capitalized Brownfields Cleanup RLF makes low-interest loans available to developers and municipalities for site cleanup activities.
- Money available to NMED to conduct Phase I and II assessments at municipally-owned sites.

Incentives to Attract Private Investment to Brownfields
- Liability protection for lenders.

TECHNICAL ELEMENTS

Definition
New Mexico does not define a brownfield in statute or regulations; MOA used U.S. EPA definition.

MOA
Yes — as of December 1999.

Contaminants
Does not restrict on basis of contaminants; petroleum, asbestos, lead paint, and PCBs all OK.

Standards
RBCA-like process in place; applicants choose from statewide soil guidelines, background concentrations, or a site-specific RBCA-style process. State has developed a “look-up” table for soil contaminants.

Institutional Controls
“ICs are a commonly sought after remedy, but are difficult for the state to enforce.” The state currently is working on legislation to establish enforceable institutional controls. The VCP does permit conditional closure of sites with ICs.

IC Benefits/Problems
Key benefit is identifying a practical cleanup option for some sites, with more flexibility in finding a remedial solution. But “because New Mexico in general is so highly dependent on its groundwater resource, ICs must be approached carefully.”
**REUSE BENEFITS**

**Number of Sites**
As of July 2002, 27 sites have applied to the program, 10 sites have closed, and 15 are currently active.

**Economic Benefits**
“Open space is a popular option considered by municipalities interested in brownfield reuse.” Although New Mexico’s VCP does not currently track economic impacts, program officials estimate that approximately seven businesses have been located on, created and/or retained operations on brownfield sites and that new businesses have moved into the state, which would indicate an increase in tax revenues. At least three small communities are currently working on redeveloping former rail yards as open space.

**IMPACTS OF NEW FEDERAL BROWNFIELDS LAW**

**Changes to Accommodate Law**
None made.

**Impacts of Law**
VCP officials reported that if the new legislation allows the state to use federal funds at sites contaminated with hydrocarbons, that it will help quite a bit. New Mexico has a significant legacy of oil and gas exploration and a number of small, defunct refineries. These types of sites have been excluded from assistance with federal brownfield funding in the past.

**LESSONS AND ADVICE**

“We work with many small, rural communities that have not benefitted from the recent economic boom that impacted much of the nation. It is difficult to get them interested in moving forward with projects, because they have difficulty envisioning the path forward and the ultimate goals of brownfield redevelopment. It is difficult to attract developers and dollars to such isolated communities. We have one small community (Deming, New Mexico, pop. 13,000) that has taken on a major cleanup and redevelopment of a mill tailings site that was plaguing their town with blowing dust and potential contamination. New Mexico’s VCP has provided assistance where we could; however, it is the ingenuity and forward thinking of Deming’s leadership that has gotten them far along on this project. The cleanup should be completed in 2002 and they plan a major industrial park on the site. New Mexico’s VCP has been able to use this project as an inspiring example to show other small towns what can be done if they tackle these problems head on and actively look for solutions. We hope other small New Mexico towns will follow in Deming’s footsteps.”
NEW YORK

NY State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233-7012
P: 518 402 9711
F: 518 402 9722

BEST INFO SOURCE: [http://www.dec.state.ny.us/website/der/](http://www.dec.state.ny.us/website/der/)

<table>
<thead>
<tr>
<th>PROGRAM DESCRIPTION</th>
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<tbody>
<tr>
<td>Voluntary Cleanup Programs and Assurances Provided</td>
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<tr>
<td>▶ Voluntary Cleanup Program (1994) offers an assignable release and CNTS (transferrable to future non-PRP owners); covers any site over which NYSDEC has enforcement jurisdiction (except Class 1 NYS Registry sites; NPL sites; and most TSDFs). PRPs excluded on class 2 NYS Registry sites; petroleum sites; and sites where owners are subject to a cleanup/enforcement action. Acceptable cleanup is determined by present or intended use of property.</td>
</tr>
<tr>
<td>▶ Environmental Restoration Project (Brownfields) Program (1996) gives liability release and indemnification to municipalities and non-PRP successors, including future owners, lenders, or lessees.</td>
</tr>
<tr>
<td>▶ Proposed state Superfund reform legislation would codify the Voluntary Cleanup Program; provide tax incentives; expand the types of sites eligible for Superfund cleanups; and adopt liability reforms to protect innocent parties.</td>
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<tr>
<th>FINANCIAL ELEMENTS</th>
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<tr>
<td>Financing Programs Targeted to Brownfield Situations</td>
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<tr>
<td>▶ Clean Water/Clean Air Bond Act — $200 million earmarked for Environmental Restoration Project grants to investigate and/or remediate brownfields; non-responsible municipalities can use grants to cover up to 75 percent of investigation and remediation costs at sites which they own or co-own with not-for-profit organizations.</td>
</tr>
<tr>
<td>▶ Clean Water State Revolving Fund offers interest-free short-term loans, and low-interest long-term loans for water-related projects.</td>
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<tr>
<td>▶ Proposed legislative changes to the Environmental Restoration Projects program would increase the State’s share of eligible costs from 75 percent to 90 percent; provide for the state to pay 100 percent of state-mandated off-site remediation; eliminate the requirement that the municipality own the property prior to participation for investigations; allow the municipality to recoup its full cost prior to repaying the state; eliminate the profit sharing requirement; allow the municipality to use federal or other state funds to pay their share; allow the state to waive all or any portion of its costs from non-responsible parties; and enhance public participation.</td>
</tr>
</tbody>
</table>

| Incentives to Attract Private Investment to Brownfields |
| ▶ Empire Zones – designated areas that offer special incentives to encourage economic development, business investment and job creation. |
| ▶ “Build Now-NY” pilot program to assist businesses in finding “shovel ready” sites of at least 15 acres in size, with access to transportation, water, and sewer systems, and work forces. |

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<tr>
<th>TECHNICAL ELEMENTS</th>
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<tr>
<td>Definition</td>
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</table>
New York does not define a brownfield in statute or regulation but uses the following working definition: “an abandoned, idled, or underused property where expansion or redevelopment is complicated by real or perceived environmental contamination.”
MOA
No

Contaminants
- In the brownfield program — petroleum, asbestos, and PCBs are OK; no lead paint.
- In the VCP — petroleum, asbestos, lead paint, and PCBs all OK.

Standards
- Brownfield program does not have a formal RBCA or comparable/informal process in place.
- The VCP features a RBCA-like process.

Institutional Controls
Institutional controls are allowed in both programs, if they are protective of public health and the environment.

IC Benefits/Problems
Cheaper cleanups, less time required to do them.

REUSE BENEFITS

Number of Sites
- Environmental Restoration (Brownfields) Program – 83 sites have entered the program, and 17 have completed it. Of the 83 sites, 21 are proposed for open space uses and five for community-oriented facilities.
- Voluntary Cleanup Program – 338 sites have entered the program and 83 have completed it with signed agreements.

Economic Benefits
Not currently tracking economic impacts at individual sites.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Not at this time.

Impacts of Law
Not able to determine at this time.

LESSONS AND ADVICE

N/A
NORTH CAROLINA

North Carolina Department of Environment and Natural Resources
Special Remediation Branch/Superfund Section
401 Oberlin Road, Raleigh, NC 27605
Phone: 919 733 2801 ext. 353 or 287, Fax: 919-733-4811
BEST INFO SOURCE: http://www.ncbrownfields.org

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
North Carolina’s brownfield statute is a redevelopment initiative that treats non-responsible parties differently than the manner in which the VCP treats polluting parties. VCP operates separately from the Brownfields Program.

- Brownfields Program (1997) is administered by the Special Remediation Branch of the Superfund Section. Site polluters are not eligible for the brownfields program. The brownfields agreement provides the assurance that DENR will not enforce against prospective developer (PD) for cleanup beyond what is required in the agreement, as long as PD complies with its terms.
- Program requirements: PD must certify that it did not cause or contribute to site contamination. The property must be abandoned, idled, or underused and must have real or possible contamination that has inhibited site redevelopment. It cannot be an NPL site. Proposed project must be a bona fide redevelopment with identified public benefits commensurate with the liability protection provided by the brownfields agreement.
- Voluntary Cleanup Program (1987) is administered by the Inactive Hazardous Sites Branch of the Superfund Section. Site polluters are eligible for the VCP. VCP can offer NFA letter.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
None

Incentives to Attract Private Investment to Brownfields
2000 legislation authorized sliding scale of property tax abatements for increased value of sites being redeveloped under a brownfields agreement (90 percent for year one, down to 10 percent in year five), effective July 1, 2001.

TECHNICAL ELEMENTS

MOA
No

Contaminants
Sites with exclusively petroleum hydrocarbon contamination from USTs are ineligible for the brownfields program. Otherwise, all soil and groundwater contaminants are OK.

Standards
Site cleanup under the brownfields program is required only when necessary to make the site safe for the intended reuse. Site-specific risk-based cleanup standards are used.

Institutional Controls
The North Carolina brownfield process assumes that land-use restrictions (LURs) will be an integral part of nearly all brownfields agreements. LURs run with the land. LURs are used less often in VCP.
IC Benefits/Problems
Potential IC enforcement problems were eliminated with specific statutory language that provides IC enforcement mechanism; this is making the use of ICs an effective approach at brownfield sites.

<table>
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<tr>
<th>REUSE BENEFITS</th>
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Number of Sites
As of July 2002, 20 sites have completed the brownfields process and 35 sites are currently in various stages of the process. Redevelopment projects include manufacturing, residential, and commercial uses. About two-thirds of the projects are in urban areas, with the remainder in rural settings.

Economic Benefits
Based on information provided by 8 of the 12 developers whose projects are either in the public comment phase or completed, redevelopment under the program has resulted in private investment commitments exceeding $140 million. The NC Brownfields Program has several projects in its inventory slated for redevelopment as recreational facilities, but none are completed.

North Carolina has seen the dollar impacts of brownfield cleanup, such as increased tax revenue, but there is no formal tracking system in place. The state has asked developers in the program to estimate the private investment anticipated for their projects, and estimates provided (for only 14 projects) indicate that the program’s expenditure of approximately $150,000 to provide technical oversight and guidance for necessary site assessment and cleanup activities paid for by the developer has resulted in committed private brownfield redevelopment investment in excess of $210 million.

A state staffing innovation also is leading to benefits. To meet staffing needs, the state added a brownfield staff person who works exclusively to advance brownfield redevelopment in Charlotte, NC. The position is funded by the City of Charlotte under a cooperative agreement with the state DENR.

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<th>IMPACTS OF NEW FEDERAL BROWNFIELDS LAW</th>
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Changes to Accommodate Law
None yet; changes may be made to VCP after EPA promulgates its implementation guidance for the new federal law.

Impacts of Law
The new federal law will help the brownfields program by providing an opportunity to secure funding needed to expand program resources, enabling it to be more responsive to and effective in meeting the growing demand for brownfields program services.

<table>
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<th>LESSONS AND ADVICE</th>
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N/A
NORTH DAKOTA

North Dakota Department of Health
Division of Waste Management
PO Box 5520
Bismarck, ND 58506-5520

BEST INFO SOURCE: P: 701 328 5166
F: 701 328 5200
http://www.health.state.nd.us/ndhd/environ/wm

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
No program in place.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
N/A

Incentives to Attract Private Investment to Brownfields
N/A

TECHNICAL ELEMENTS

MOA
No

Contaminants
Petroleum, asbestos, lead paint, PCBs addressed through non-VCP actions.

Standards
Cleanup standards are site specific, in the absence of a program.

Institutional Controls
Various ICs allowed, based on individual sites, future use, location, etc.

IC Benefits/Problems
Quicker and cheaper cleanups if cleanup standards are based on future industrial use versus residential cleanup standards.

REUSE BENEFITS

Number of Sites:
As of July 2002, two to three sites have been redeveloped.

Economic Benefits
One known site was redeveloped into a park/open space.
## IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

<table>
<thead>
<tr>
<th>Changes to Accommodate Law</th>
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</thead>
<tbody>
<tr>
<td>No</td>
</tr>
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</table>

**Impacts of Law**  
Unknown at this time.

## LESSONS AND ADVICE

N/A
**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**
Voluntary Action Program (1994) — private-licensed site professional, working with each site, develops NFA letter that is offered by the state; PRPs are eligible.

**FINANCIAL ELEMENTS**

**Financing Programs Targeted to Brownfield Situations**
- Urban Redevelopment Loan Program makes loans up to $5 million to municipalities or nonprofit economic development organizations for real estate activities leading to developable parcels in distressed areas, including site remediation.
- Water Pollution Control Loan Fund issues low-interest loans for water-related brownfield activities, up to $3 million per project, for terms up to 20 years.
- Ohio Water Development Authority extends loans to public or private entities for “remediation of property.”
- Competitive Economic Development Program provides grants to small cities (less than 50,000) and small counties for business expansion and retention purposes; cities, in turn, may loan up to $500,000 to businesses for brownfield remediation, for projects that will create or retain jobs.

**Incentives to Attract Private Investment to Brownfields**
- Tax abatements for up to 10 years for the increase in property tax due to remediation
- Grant-subsidized technical assistance to volunteers, to support assessment and cleanup under the Voluntary Action Program.

**TECHNICAL ELEMENTS**

**Definition**
Ohio defines a brownfield as “former/current industrial or commercial property with real or perceived contamination.”

**MOA**
No

**Contaminants**
Sites contaminated with petroleum not from USTs are allowed entry into the VAP. In general, sites contaminated with PCBs after 1978, and which exceed 50ppm, are excluded from the program without prior remediation/compliance. Sites containing asbestos and lead-based paint are eligible for the VAP.

**Standards**
Ohio EPA has developed industrial, commercial, and residential risk-based standards. VAP standards also can be met via property-specific risk assessments or cleaning to background levels.
Institutional Controls
N/A

IC Benefits/Problems
N/A

<table>
<thead>
<tr>
<th>REUSE BENEFITS</th>
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<tbody>
<tr>
<td><strong>Number of Sites</strong></td>
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<tr>
<td>85 sites have entered program, totaling 1,420 acres.</td>
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</table>

| Economic Benefits |
| Approximately 7,100 jobs have been created. |

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<tr>
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<tbody>
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| Impacts of Law |
| N/A |

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<td>N/A</td>
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</tbody>
</table>

**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**
- Oklahoma Brownfields Voluntary Redevelopment Act (1997) offers risk-based Certificates of No Action Necessary and COCs; any “abandoned, idled, or underused industrial or commercial facility complicated by environmental contamination” is eligible; PRPs are eligible; UST projects are encouraged to pursue closure under the Oklahoma Corporation Commission Petroleum Storage Tank Indemnify Fund.
- Applicants decide after site characterization whether to pursue a formal brownfield certification or an informal voluntary cleanup.

**FINANCIAL ELEMENTS**

**Financing Programs Targeted to Brownfield Situations**
- Brownfield projects in urban areas that have or have applied for a stormwater discharge permit may be eligible to tap the Clean Water State Revolving Fund (administered by the Oklahoma Water Resources Board).
- U.S. EPA-capitalized Brownfield Cleanup RLF.

**Incentives to Attract Private Investment to Brownfields**
- Oklahoma Sales Tax Code exempts sales tax on machinery, fuel, chemicals, and equipment used in cleanup projects.
- Oklahoma Quality Jobs Act provides quarterly incentive payments for 10 years to firms who locate on a minimum 10-acre site that qualifies as an NPL site, a Superfund removal site, an official Superfund deferral site, or a state voluntary cleanup/brownfield site.

**TECHNICAL ELEMENTS**

**Definition**
Oklahoma defines a brownfield as “an abandoned, idled, or underused industrial or commercial facility or other real property at which expansion or redevelopment of the real property is complicated by environmental contamination caused by regulated substances.”

**MOA**
Yes — as of April 1999.

**Contaminants**
Petroleum, asbestos, lead paint, PCBs may participate in the brownfield program, but state VCP will refer applicants to other agencies.
**Standards**
RBCA-type process and standards in place; VCP features a risk-based system based on the proposed use of the site. DEQ uses a three-tiered approach: (1) sampling data is compared to screening levels; (2) if data is higher than screening levels, state will generate default levels using EPA RAGS-based methodology; or (3) applicants may choose to do a full risk assessment and make a case based on those levels (which the state may or may not accept).

**Institutional Controls**
ICs allowed if they “adequately protect the public.”

**IC Benefits/Problems**
Key benefit is that “there is more awareness among the real estate professionals that a Phase II environmental assessment showing contamination is no longer a ‘deal breaker.’” More communities feel able to acquire and clean up properties because they feel they can manage the liability issues.

---

**REUSE BENEFITS**

**Number of Sites**
As of July 2002, 250 sites in the VCP database. Of these four have Brownfield COCs, four have Brownfield Certificates of No Action Necessary, four have received NFA letters, 20 are conducting post construction groundwater monitoring, and 15 were referred to other divisions and/or withdrew from the VCP.

**Economic Benefits**
Although Oklahoma is not currently tracking economic impacts, one site has been redeveloped into a park/open space.

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**IMPACTS OF NEW FEDERAL BROWNFIELDS LAW**

**Changes to Accommodate Law**
No

**Impacts of Law**
Program officials report that it is too soon to tell.

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**LESSONS AND ADVICE**

N/A
Oregon Department of Environmental Quality
811 S.W. 6th Avenue
Portland, OR 97204
P: 503 229 6834
F: 503 229 6954

BEST INFO SOURCE: http://www.deq.state.or.us/wmc/cleanup/brn0.htm

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
- Voluntary Cleanup Program (1991) offers NFA letter; liability release available through Prospective Purchaser Agreement.
- 1995 change provides for an “Independent Cleanup Pathway” with less oversight and quicker review.
- Regional brownfield advocates aid applicants through process.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Capital Access Program offers loan portfolio insurance for environmental actions and brownfield redevelopment projects.
- Credit Enhancement Fund allows loan guarantees for environmental actions and brownfield redevelopment projects as an allowable use, providing loan or credit guarantees to specific businesses.
- Brownfield Redevelopment Fund can finance, with grants or loans environmental actions (if certain criteria are met); feasibility studies or site remediation not eligible for BRF support.
- Special Public Works Fund is available to small local and tribal governments for environmental evaluations on municipal property.
- Brownfield assessment grants from DEQ may be used at publically-controlled sites.
- City of Portland (through the Portland Development Commission) has its own brownfield RLF.

Incentives to Attract Private Investment to Brownfields
- Technical assistance through DEQ workgroup identifies resources — including federal, state, and private funding, and financing available through Oregon Economic and Community Development Department.
- While not labeled as brownfield elements, pending rule changes will affect UST and dry-cleaner cleanups. These changes may result in more cleanups and changes in use.

TECHNICAL ELEMENTS

Definition
Oregon defines brownfields in statute ORS 285A.185, but uses the following working definition: “a vacant or underutilized commercial or industrial property where environmental, economic and social obstacles hinder use and redevelopment.”

MOA
No
Contaminants
Petroleum, lead paint, PCBs can be addressed through state brownfield program; so can CERCLA-declined contaminants.

Standards
Applicant has a choice of approach (i.e., removal or institutional controls), but the same 1x10-6 standard must always be met. Applicants can use standard or site-specific RBCA-style assessment approaches. Currently working on new sediment standards and TPH standards.

Institutional Controls
Oregon has a range of ICs. These include statewide land-use planning requirements, including the use of Urban Growth Boundaries.

IC Benefits/Problems
The shorthand of “industrial standards” may not accommodate the various mixed-use brownfield projects.

REUSE BENEFITS

Number of Sites
Currently there are 291 sites in VCP with 12 on the waiting list; for calendar year 2002 there have been 38 NFA letters, four removals, five RODs, and two consent orders.

Economic Benefits
State is not currently tracking economic impacts. Also, while greenspace uses from former brownfields are not tracked specifically, a number of sites have been remediated to include some form of public benefit (e.g., a new branch library, a community art center, etc.) that may not be the focal point of the project.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
No changes made directly as a result of the new law.

Impacts of Law
Oregon VCP officials anticipate that the new law help their brownfield efforts. The state expects to secure more grants and is optimistic that the petroleum grants may help a number of smaller communities.

LESSONS AND ADVICE

“One consistent key is to have a brownfield champion that will stick with the project. The state VCP now has regional brownfield coordinators and this technical assistance is getting more publicly-owned sites into VCP.”
Pennsylvania Department of Environmental Protection
Land Recycling and Cleanup Program
PO Box 8471, 400 Market St
Rachel Carson State Office Building
Harrisburg, PA 17105-8471
P: 717 783 7816
F: 717 787 0884

Best Info Source: http://www.dep.state.pa.us/dep/deputate/airwaste/wm/landrecy/

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**PROGRAM DESCRIPTION**

Voluntary Cleanup Programs and Assurances Provided
Land Recycling Program (1995) offers clients release from liability for approved cleanups and PRPs may participate. The program identifies risk-based standards for cleanup, simplifies the approval process, and limits future liability when standards are attained.

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**FINANCIAL ELEMENTS**

Financing Programs Targeted to Brownfield Situations
- **Industrial Sites Reuse Program** provides loans and grants to municipalities and private entities for site assessment and remediation; maximum of $200,000 for site assessment, or $1 million for remediation per year; all require a 25 percent match; loans carry a 2 percent rate for terms up to five years (for assessments) or 15 years (for remediation).
- **Infrastructure Development Program** provides public and private developers with grants and loans for site remediation, clearance, and new construction, up to $1.25 million per project at 3 percent interest for 15 years.
- **Brownfield Inventory Grant (BIG) program** grants up to $50,000 to cities and development authorities to carry out brownfield inventories.

Incentives to Attract Private Investment to Brownfields
- **Key Sites Initiative** for municipalities and economic development agencies, uses state-funded contractors to conduct site assessments and prepare cost estimates and remediation plans to promote reuse of abandoned industrial properties.
- **Keystone Opportunity Zones** — in newly designated KOZs, all taxes maybe forgiven for up to 12 years.
- **Job Creation Tax Credit Program** created a tax credit of $1000 per new job for firms that increase employment by 25 jobs or 20 percent within three years from start date (with program).
- **PA SiteFinder** – web site for marketing previously-used commercial and industrial properties available for redevelopment in Pennsylvania; a person can list a site for sale or lease and also search for one to purchase or lease. PA SiteFinder can be searched by property location, acreage, building square foot, or cost. Once a potential site is identified, additional information can be retrieved including county, municipality, property size, zoning, buildings and conditions, and utility access.

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**TECHNICAL ELEMENTS**

Definition
Pennsylvania defines brownfields as “abandoned, idle, or under-used industrial or commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”
Contaminants
Petroleum, asbestos, lead paint, PCBs all OK.

Standards
No formal RBCA or comparable/informal process in place; applicant has a choice of background, statewide health, or site-specific standards. “Special industrial area” provisions may apply to VCP cleanups at sites used for industrial purposes prior to enactment of Act 2, in 1995.

Institutional Controls
ICs may be part of site specific responses, but they are not permitted for attainment of background or statewide health standard cleanups.

IC Benefits/Problems
“ICs have expedited remediations, improved cost-effectiveness, and stimulated creative solutions. We have not experienced community concern or skepticism.”

REUSE BENEFITS

Number of Sites
As of July 2002, 1,097 sites have completed the program and over 500 sites are underway.

Economic Benefits
- Although economic benefits from redeveloped sites are not officially tracked by Pennsylvania’s VCP, officials estimate that 30,000 jobs have been created and approximately 1,097 business located on redeveloped brownfields. A wide variety of industrial and commercial, along with residential projects, schools, recreational facilities (a golf course, athletic fields, trails), and open space are being developed on brownfields, and green infrastructure is encouraged.
- DEP has entered into several multi-site agreements. One, with Penn Fuel Gas, included the remediation of a former manufactured gas plant and rail yard and the development of two ballfields for the Shippensburg Little League. A portion of this site also has been dedicated for green space and a wetland project.
- A number of the redeveloped sites have been located in Keystone Opportunity Zones (KOZ); benefits have resulted, but it is difficult to quantify what type of “dollar” impact this may have on the state and local communities.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
None.

Impacts of Law
N/A
“Pennsylvania has continued to excel in redevelopment by providing additional incentives or programs that complement the implementation of the Land Recycling Program. One of those applications of which we are most proud is our online resource for assisting users to market, find, redevelop, and finance their brownfield transactions – PA SiteFinder (www.pasitefinder.com). PA SiteFinder has been recognized by the National Association of Environmental Professionals with its National Environmental Excellence Award and by the International Association of Business Communicators as a "outstanding example of communications excellence.” The Pennsylvania Department of Environmental Protection’s Land Recycling Program created PA SiteFinder as a “one-stop-shop” for brownfield buyers and sellers. PA SiteFinder compiles the necessary information and resources so you can recycle real estate into a sound investment. To date, over 360 sites have been listed on PA SiteFinder, with over 40 sites having been leased or sold from this listing. PA SiteFinder entertains over 7,000 user sessions per month. With new enhancements on the horizon, we only envision PA SiteFinder getting stronger and playing a more important role in brownfield development in Pennsylvania.”
**PUERTO RICO**

Puerto Rico Environmental Quality Board (EQB)
Emergency Response and Superfund Program
PO Box 11444
Santurce, Puerto Rico 00910

*BEST INFO SOURCE: P: 787 767 8181 ext 2229-32
F:787 766 0150

<table>
<thead>
<tr>
<th>PROGRAM DESCRIPTION</th>
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<tbody>
<tr>
<td><strong>Voluntary Cleanup Programs and Assurances Provided</strong></td>
</tr>
<tr>
<td>Property Redevelopment and Voluntary Cleanup Program (2000); EQB authorized to provide liability clarification and relief for prospective purchasers and lenders, through letters, certificates, and/or agreements.</td>
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<tr>
<th>FINANCIAL ELEMENTS</th>
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<tbody>
<tr>
<td><strong>Financing Programs Targeted to Brownfield Situations</strong></td>
</tr>
<tr>
<td>New program, none yet in place. Statute authorizes EQB to create a Steering Committee to explore possible program approaches.</td>
</tr>
<tr>
<td><strong>Incentives to Attract Private Investment to Brownfields</strong></td>
</tr>
<tr>
<td>None yet in place; Steering Committee will explore alternatives.</td>
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<thead>
<tr>
<th>TECHNICAL ELEMENTS</th>
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<tbody>
<tr>
<td><strong>MOA</strong></td>
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<tr>
<td>No</td>
</tr>
<tr>
<td><strong>Contaminants</strong></td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td><strong>Standards</strong></td>
</tr>
<tr>
<td>Not yet defined; EQB authorized to set standard for voluntary party cleanups.</td>
</tr>
<tr>
<td><strong>Institutional Controls</strong></td>
</tr>
<tr>
<td>N/A</td>
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<tr>
<td><strong>IC Benefits/Problems</strong></td>
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<tr>
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<tr>
<th>REUSE BENEFITS</th>
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<tbody>
<tr>
<td><strong>Number of Sites</strong></td>
</tr>
<tr>
<td>Program just underway; no results yet.</td>
</tr>
<tr>
<td><strong>Economic Benefits</strong></td>
</tr>
<tr>
<td>N/A</td>
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<tr>
<td>IMPACTS OF NEW FEDERAL BROWNFIELDS LAW</td>
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<th>LESSONS AND ADVICE</th>
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<tr>
<td>N/A</td>
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</table>
**RHODE ISLAND**

Rhode Island Department of Environmental Management
235 Promenade Street
Providence, RI 02908-5767

*BEST INFO SOURCE:* P: 401 222 2797
F: 401 222 3812
http://www.brownfields.state.ri.us/

### PROGRAM DESCRIPTION

**Voluntary Cleanup Programs and Assurances Provided**
Industrial Property Remediation and Reuse Program (1995) offers Letters of Compliance to responsible parties, and CNTS (which is transferable) to volunteers, prospective purchasers, and lenders; PRPs are not eligible for CNTS.

The General Assembly passed brownfields legislation H-7489 SubA on June 4, 2002, to make technical corrections to the existing brownfields law (see also "Impacts of New Federal Brownfields Law" below).

### FINANCIAL ELEMENTS

**Financing Programs Targeted to Brownfield Situations**
- U.S. EPA-capitalized Brownfields Cleanup RLF provides low-interest loans for site cleanup.
- RIDEM has funding for site assessment work for municipalities and nonprofit associations, through U.S. EPA’s targeted brownfield assessment program.

**Incentives to Attract Private Investment to Brownfields**
- Rhode Island Mill Building and Economic Revitalization Act offers a 10 percent tax credit on the cost of substantial rehabilitation for certified sites.
- Incentives are available to lenders that provide financing to mill developers.

### TECHNICAL ELEMENTS

**Definition**
Rhode Island does not define a brownfield in statute or regulations, but RIDEM uses the following definition: “vacant or under-utilized properties with contamination or suspicion of contamination which hinders redevelopment. These are properties where voluntary parties perform cleanup action and redevelopment, typically in accordance with a settlement agreement and covenant not to sue.”

**MOA**
Yes — as of February 1997. The MOA expired during February 2002 and was renewed in its entirety for one year.

**Contaminants**
Petroleum and PCBs are included under the Site Remediation Regulations. Lead-based paint from industrial/commercial properties also are covered under the regulations, but only in cases where they are in the environment and not still on a structure. Lead-based paint contamination at residential properties falls under the jurisdiction of the Department of Health.
Standards
Standards based on risk and potential reuse. RIDEM has developed two new policies for 2002. One deals with “Marginal Risk” sites and accelerates its review schedule. The second deals with elevated arsenic levels in soils. It is intended that the Remediation Regulations will be updated and the new Industrial/Commercial Direct Exposure Criteria for Arsenic will become 7.0 mg/kg instead of the current 3.8 mg/kg.

Institutional Controls
State encourages Environmental Land Usage Restrictions (ELURs) on industrial/commercial properties. Monitoring wells and annual ELUR-IC monitoring usually are required.

IC Benefits/Problems
More sites are being cleaned and reused. Community concerns are being addressed by mandatory public notice requirements at various points in investigation and remedy selection. In addition, a 14-day public comment period is required prior to any settlement agreement and CNTS.

REUSE BENEFITS

Number of Sites
As of July 2002, 426 sites have completed the VCP program, and 450 sites are currently underway; 79 sites have entered into Settlement Agreements and CNTS – totaling 810 acres.

Economic Benefits
An estimated 958 jobs have been created; 79 businesses have been created or retained on brownfield sites; based on the 79 sites with agreements in place, new value of remediated properties is $71.8 million; they have generated about $2.1 million in sales and property taxes, and $3.7 million in income tax revenues. At least six sites have been redeveloped for open space and recreational uses, and 13 sites are being developed into schools.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
The General Assembly passed Brownfields Legislation H-7489 SubA on June 4, 2002, which added additional language to reflect the new federal brownfields law. It requires RIDEM to generate a list of sites that have been remediated within the last year and a list of sites that will be addressed in the upcoming year, and requires reports to the General Assembly on the issues of environmental insurance and the licensing of environmental professionals.

State is waiting for the new U.S. EPA guidelines to come out to see how the VCP program and the RLF.

Impacts of Law
RIDEM believes that the new legislation will help its efforts in the VCP program because they currently have a MOA with U.S. EPA and the potential for funding on site specific issues is greatly needed due to current state budget constraints.

LESSONS AND ADVICE

N/A
SOUTH CAROLINA
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, SC 29201
Best Info Source: P: 803 896 4082
F: 803 896 4292
or Best Info Source: http://www.scdhec.net/lwm/html/site.html

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program statute is now in place (S.C. Code Ann § 44-56-710, et seg. [May 1, 2002]). Previously, an informal Voluntary Cleanup Program was operated under state’s Hazardous Waste Management Act (since 1988, expanded 1995). A Certificate of Completion is offered to entrants who successfully complete the requirements of the Voluntary Cleanup Contract. All non-NPL sites are eligible.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
Brownfields cleanup RLF – $4.25 million for low-interest loans to clean up brownfield sites around the state.

Incentives to Attract Private Investment to Brownfields
Legislature passed financial incentives in 2002 as amendments to state tax code.
- Dry Cleaning Restoration Trust Fund to clean up operating dry-cleaning sites.
- If non-PRP spends at least $1 million for cleanup conducted pursuant to VCP program, the investment threshold requirement is met and the site is eligible for fees in lieu of property taxes.
- $1000 credit for each new full-time job created for cleanup performed at a brownfield site by a non-PRP through a voluntary cleanup contract, in addition to the current credits.
- Five-year property tax exemption for property and improvements at brownfield sites at which a cleanup has been performed by a non-PRP through a voluntary cleanup contract with county concurrence.
- Corporate income tax credit for expenses paid and accrued by a non-PRP performing a voluntary cleanup – lesser of 50 percent or $50,000 in a taxable year (unused credit up to $100,000 may be carried forward for five years). An additional credit of 10 percent of cleanup costs (not to exceed $50,000) is allowed in the year that the cleanup is certified.

TECHNICAL ELEMENTS

Definition
South Carolina uses the following working definition, “brownfields are industrial or commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”

MOA
No

Contaminants
Under South Carolina’s brownfields/VCP law, asbestos, PCBs, and lead-based paint can be addressed if there is an environmental exposure. Petroleum is addressed through UST program or Bureau of Water.
Standards
No formal RBCA or comparable/informal process in place; state generally uses EPA Region 3 Risk-Based Concentration Tables and EPA Region IX Preliminary Remediation Goals as screening levels. Applicants can choose from risk-based concentrations, background concentrations, and site-specific assessment standards.

Institutional Controls
ICs — land-use restrictions and/or ongoing groundwater monitoring — generally required as part of site cleanup in state voluntary cleanup contracts (VCCs). "If contamination in excess of residential standards exists after work required under our VCCs is done, the party entering into the VCC must restrict future land use to industrial purposes only." South Carolina enters into a restrictive covenant with the property owner, which must be filed on the deed. Annual reporting is required on sites with restrictive covenants.

IC Benefits/Problems
IC allows for reuse of property without cleanup to unrestricted use, but with cleanup for current use with a restrictive covenant. “As a whole, this process has been beneficial to our state and its communities.”

REUSE BENEFITS

Number of Sites
As of July 2002, total of 18 sites (comprising 760 acres) have entered the program (four in 2002), and six sites (totaling 422.72 acres) have received certificates of completion. 16 sites are underway.

Economic Benefits
South Carolina is in process of compiling economic benefit information, but the state has noted increases to tax base and development/retention of businesses. Two housing developments have been built, and three sites will be developed for reuse as recreational space. So far, most projects have been business redevelopments. Only three sites planned for greenspace.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Not yet.

Impacts of Law
Unsure; still evaluating potential impacts.

LESSONS AND ADVICE

N/A
SOUTH DAKOTA
South Dakota Department of Environment and Natural Resources
Ground Water Quality Program
Joe Foss Building
523 East Capitol Avenue
Pierre, SD 57501-3181
BEST INFO SOURCE: P: 605 773 3296
F: 605 773 6035
http://www.state.sd.us/denr/DES/Ground/Brownfields/Brownfields.htm

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
The state has negotiated site-specific agreements.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situation
N/A

Incentives to Attract Private Investment to Brownfields
The state is proceeding with a Targeted Brownfields Assessment Program.

TECHNICAL ELEMENTS

MOA
No

Contaminants
N/A

Standards
The state will use existing groundwater and soil standards.

Institutional Controls
Allows ICs on all spills or release cases both in the assessment and remediation phase of the project.

IC Benefits/Problems
Lack mechanisms to track long-term institutional controls.

REUSE BENEFITS

Number of Sites
As of July 2002, South Dakota currently has three brownfield projects.

Economic Benefits
Projects have not progressed far enough to provide data that would reveal economic benefits. However, each project has a “greenspace,” park, or recreational aspect to its proposed redevelopment plan.
### IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

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<th>Changes to Accommodate Law</th>
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**Impacts of Law**

Brownfield program representatives are encouraged that the new federal law will benefit the state. The state plans to spend more time and resources promoting brownfield reuse.

### LESSONS AND ADVICE

N/A.
TENNESSEE
Tennessee Department of Environment and Conservation
401 Church Street
Nashville, TN 37214
P: 615 532 0912
F: 615 741 1115

BEST INFO SOURCE: http://www.state.tn.us/environment/dsf/voap.htm

| PROGRAM DESCRIPTION |

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Oversight and Assistance Program (1994, amended 1995, 2001) offers NFA letter indicating that obligations under consent orders have been completed. New statute allows for “interim” NFA letters and liability relief under all state environmental statutes. Program allows use of state’s apportioned liability statute at appropriate sites, as well as Third Party Contribution Protection.

| FINANCIAL ELEMENTS |

Financing Programs Targeted to Brownfield Situations
- Dry Cleaning Environmental Response Program trust fund can be used to clean up eligible active and abandoned dry-cleaning sites.
- Any local government having jurisdiction over any part of a brownfield project is authorized to use tax increment financing.
- Grants and/or loans from any federal funds available to the department and any state funds used as a match to obtain those federal funds may be used by municipalities, counties, and/or other governmental instrumentalities to assess and clean up the project sites.

Incentives to Attract Private Investment to Brownfields
N/A

| TECHNICAL ELEMENTS |

Definition
New statute (August 2001) lays out provisions and conditions.

MOA
No

Contaminants
Petroleum, asbestos, PCBs OK; lead paint OK if other hazardous substances are present; statute covers hazardous substances, solid waste, or any other pollutant.

Standards
Region 9 PRGs are used for initial screening. No formal RBCA or comparable/informal process in place, but risk based cleanups can be done via a Site-Specific Risk Assessment, with standards based on risk. Applicant can also request or develop a standard based on future use.

Institutional Controls
New statute allows for enforceable land-use restrictions.

IC Benefits/Problems
None noted to date.
### REUSE BENEFITS

**Number of Sites**  
As of July 2002, 109 sites have entered program and 34 have received NFA letters.

**Economic Benefits**  
Not currently tracking economic impacts.

### IMPACTS OF NEW FEDERAL BROWNFIELDs LAW

**Changes to Accommodate Law**  
Not yet. However, funding requirements may necessitate changes.

**Impact of Law**  
Program officials believe the new law will help Tennessee's brownfield efforts.

### LESSONS AND ADVICE

N/A
TEXAS
Texas Natural Resource Conservation Commission
PO Box 13087, MC-221
Austin, TX 78711
P: 512 239 2498
F: 512 239 1212

Best Info Source: http://www.tnrcc.state.tx.us/permitting/remed/vcp

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program (1995) offers COC that provides a liability release to all non-responsible parties, including prospective purchasers and future lenders.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
N/A

Incentives to Attract Private Investment to Brownfields
Four-year property tax abatements are available to COC recipients, on a sliding scale (100 percent the first year, then 75 percent, 50 percent, 25 percent).

TECHNICAL ELEMENTS

Definition
Texas does not have a formalized definition of a brownfield.

MOA
Yes — as of May 1996.

Contaminants
Petroleum, PCBs OK; asbestos and lead paint OK conditionally.

Standards
Formal RBCA process in place; VCP provides the applicant with a choice of standards.

Institutional Controls
ICs “must be placed on a property record for a site which uses commercial/industrial risk-based standards, and for any property which relies upon the use of a physical control (e.g., cap or remediation system) to prevent exposure.”

IC Benefits/Problems
“Institutional controls have always been an effective way to prevent exposure at many contaminated properties in Texas.”
REUSE BENEFITS

Number of Sites
As of July 2002, 1,407 sites have entered VCP since its adoption (119 this past year) and 685 sites have received COCs (95 last year).

Economic Benefits
Based on a VCP survey of sites receiving certificates (as of July, 2002), 160 respondents report 12,175 jobs created; $379 million net increase in appraised property value; $486 million in real estate sales at these sites. 97 percent of those surveyed said their property transaction would not have occurred without the VCP. Several parks and golf courses have been constructed, as well as two major league stadiums. Several nonprofit community centers have also been built on brownfield sites.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
No.

Impacts of Law
Still evaluating and further awaiting guidance from U.S. EPA.

LESSONS AND ADVICE

N/A
Voluntary Cleanup Programs and Assurances Provided
Voluntary Release Cleanup Program (1997) offers COC.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
N/A

Incentives to Attract Private Investment to Brownfields
N/A

TECHNICAL ELEMENTS

Definition
Utah does not define a brownfield in statute or regulation but applies the U.S. EPA definition where EPA pilots have been awarded.

MOA
No

Contaminants
Does not restrict on basis of contaminants; petroleum, asbestos, lead paint, and PCBs all OK.

Standards
No formal RBCA or comparable/informal process in place. Applicant has a choice of cleanup standards, including background values, generic risk-based levels, site-specific risk-based levels not relying on ICs, site-specific risk-based levels which rely on ICs, and others based on consultation with DEQ. A RBCA process is in place for petroleum contamination (under the LUST Program).

Institutional Controls
ICs may be allowed as part of a site cleanup strategy; their use is reviewed and decided on a site-specific basis.

IC Benefits/Problems
“One benefit is that we may issue a COC while groundwater monitoring is ongoing at a site, with the caveat that monitoring is performed as outlined in a Site Management Plan and that monitoring results continued to show stabilization or reduction of contamination over time. Problems with ICs are that they generally do not work over time. Programs and processes are forgotten and the state has no ability to enforce except through the COC.”
REUSE BENEFITS

Number of Sites
In total, 32 applications have been received: 10 sites have completed program and 16 sites are active. Of the remaining six sites: one withdrew, one needed no action, one applicant rejected, one applicant ineligible, one site terminated, and one site deferred until completion of a targeted brownfield assessment is performed by the state.

Economic Benefits
Not currently tracking economic impacts, although COCs are informally credited with facilitating property transactions.

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
UDEQ currently is awaiting U.S. EPA guidance; it is difficult to predict impacts until the guidance is completed.

Impacts of Law
It is possible that the new law may help the Utah VCP grow.

LESSONS AND ADVICE

“From the state’s standpoint, it is important to ensure that the site is properly and thoroughly characterized so the appropriate risk assessment, risk management and cleanup decisions can be made.”
VERMONT

Vermont Department of Environmental Conservation
103 South Main Street
Waterbury, VT 05671-0540

Best Info Source: P: 802 241 3888
F: 802 241 3296
http://www.anr.state.vt.us/dec/wmd.htm

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Redevelopment of Contaminated Properties Program (1995) offers COC covering contamination identified in site plan; 1998 amendment expanded liability protection to current owners.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Tax incentives for rehabilitation of existing properties in designated “downtown” areas; not specific to brownfields, but contaminated properties are eligible.
- New legislation introduced in 2002 establishes a Brownfields Revitalization Fund for purposes associated with grants and loans; however, no appropriations or capitalizations were specified in the legislation

Incentives to Attract Private Investment to Brownfields
Program that caps prospective purchases share of cleanup at 130 percent of estimate in state-approved plan, reauthorized until 2006 without pilot. Program enhancements under consideration for the next legislative session.

TECHNICAL ELEMENTS

Definition
Vermont defines a brownfield as “actual or threatened release of a hazardous material at a site which is vacant, abandoned, substantially underutilized or to be acquired by a municipality.”

MOA
No

Contaminants
Asbestos, lead paint, and PCBs OK; petroleum OK if not eligible under the Petroleum Cleanup Fund.

Standards
No formal RBCA or comparable/informal process in place. State uses EPA RBCs as screening values, and allows for site-specific or risk-based evaluations of alternative standards.

Institutional Controls
“Specifically provided for in the statute.”

IC Benefits/Problems
“Not enough experience/data yet.”
## REUSE BENEFITS

**Number of Sites**
Six sites have entered the program; one is complete, four are underway, and one was abandoned/withdrawn.

**Economic Benefits**
Vermont does not currently track economic impacts. However, one former manufacturing plant has been remediated for use as a fire station.

## IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

**Changes to Accommodate Law**
Anticipates receipt of federal dollars for capitalization of new state Revitalization Fund.

**Impacts of Law**
N/A

## LESSONS AND ADVICE

N/A
**PROGRAM DESCRIPTION**

**Voluntary Cleanup Programs and Assurances Provided**
Voluntary Remediation Program (1997) offers “certification of satisfactory completion of remediation.” Revised VRP regulations went into effect July 1, 2002; major “assurance” components include amnesty from civil penalties, and limitation on liability.

**FINANCIAL ELEMENTS**

Financing Programs Targeted to Brownfield Situations
New grant and loan funds authorized in 2002 statute.

Incentives to Attract Private Investment to Brownfields
Defines “environmental restoration sites” holding COCs as a separate class of property and allows local governments to adopt an ordinance partially or fully exempting that class from taxation.

**TECHNICAL ELEMENTS**

**MOA**

**Contaminants**
Petroleum, asbestos, lead paint and PCBs all OK if not regulated under another program.

**Standards**
RBCA-like process in place; applicants have a choice of remediation standards — Tier I (background), Tier II (“look-up” values adopted/modified from EPA standards), or Tier III (risk-based, including ICs).

**Institutional Controls**
ICs allowed.

**IC Benefits/Problems**
“Quicker cleanup.”

**REUSE BENEFITS**

**Number of Sites**
As of July 2002, 150 sites have entered the VRP, 61 sites have completed the VRP program and 89 sites are currently underway.
**Economic Benefits**
Not currently tracking economic impacts, although most sites are being redeveloped as commercial sites.

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**IMPACTS OF NEW FEDERAL BROWNFIELDS LAW**

**Changes to Accommodate Law**
Virginia's new brownfield law became effective on July 1, 2002, and mirrors the new federal law in many respects.

**Impacts of Law**
Officials believe the new law will help Virginia’s brownfield program.

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**LESSONS AND ADVICE**

N/A
WASHINGTON

WA Department of Ecology
3190 160th Avenue SE
Bellevue, WA 98008-5452

BEST INFO SOURCE: P: 425 649 7202
F: 425 649 7098
http://www.ecy.wa.gov/programs/tcp/vcp/Vcpmain.htm

PROGRAM DESCRIPTION

Voluntary Cleanup Programs and Assurances Provided
Voluntary Cleanup Program (1997), replaced Independent Remedial Action Program, offers NFA letter for some sites, and CNTS for sites with heavy level of state oversight (latter rarely done, consent decree necessary). Regulatory changes were implemented August 15, 2001.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
Remedial Action Grant Program — up to $5 million per project can be awarded (although money is tight right now for grants); program targeted only to local governments, not private parties.

Incentives to Attract Private Investment to Brownfields
Some grants available for public/private partnerships (remedial action grants), USTfield grants (in limited cases), U.S. EPA-capitalized Brownfield Cleanup RLF available through state Department of Community, Trade, and Economic Development.

TECHNICAL ELEMENTS

Definition
Washington defines brownfields as "properties that are abandoned or underused because of environmental contamination from past industrial or commercial practices," but this definition is in neither statute nor regulation.

MOA
No

Contaminants
Does not restrict on basis of contaminants; petroleum, asbestos, lead paint, and PCBs all OK.

Standards
Applicant has a choice of cleanup standards, including risk-based standards, although they are not based on RBCA. They are in state law and regulation.

Institutional Controls
ICs allowed as part of remedy selection, within the parameters of the state’s cleanup regulations.

IC Benefits/Problems
“More sites cleaned and reused” without achieving cleanup standards (while still protective of human health and the environment), although state notes that restrictive covenants may attach stigma to the property.
REUSE BENEFITS

Number of Sites
A total of 910 sites have entered the program (including 180 in the past year), and 392 have completed it (341 last year).

Economic Benefit
Not currently tracking economic impacts, although some reuse for parks and recreational facilities has occurred. Redeveloped sites have been used for greenspace “to a moderate degree.”

IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

Changes to Accommodate Law
Not enough information on the federal changes to think about changes yet.

Impacts of Law
Unknown, although there appears to be more funding coming, so hopefully that will help.

LESSONS AND ADVICE

“Washington’s VCP is very successful and popular. So popular that we don’t have the resources to keep up with all the requests to review cleanups that we get. Our VCP is popular because it is effective and flexible; you can get a letter from the Department of Ecology for many things, including completed cleanups, partial cleanups, and plan review.”
PROGRAM DESCRIPTION

**Voluntary Cleanup Programs and Assurances Provided**
Brownfields Program (1997) offers Certificate of Completion that provides liability relief.

FINANCIAL ELEMENTS

**Financing Programs Targeted to Brownfield Situations**
- Low-interest loans for site assessment and cleanup, about 50 percent of loan (rest comes from bank) at a 5 percent rate.
- RLF targeted for remediation (authorized but not yet funded).

**Incentives to Attract Private Investment to Brownfields**
N/A

TECHNICAL ELEMENTS

**MOA**
No

**Contaminants**
N/A

**Standards**
N/A

**Institutional Controls**
N/A

**IC Benefits/Problems**
N/A

REUSE BENEFITS

**Number of Sites**
N/A

**Economic Benefits**
Not currently tracking economic impacts.
## IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

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<th>Changes to Accommodate Law</th>
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<td>Impacts of Law</td>
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## LESSONS AND ADVICE

N/A
Voluntary Cleanup Programs and Assurances Provided
Voluntary Party Liability Exemption (VPLE) (1994; amended 1997 and 1999) offers COC and exemption from liability that is transferable to new owners. Any party, including RPs, are eligible. Any type of contamination site is eligible including LUST, hazardous waste, spills, etc. After WDNR approves environmental investigation and cleanup of an entire property the voluntary party receives a COC and is protected from future liability. In 2001, parties can use natural attenuation to get COC if they pay for environmental insurance through state program. Wisconsin also offers other specific liability exemptions:
- Lenders and representatives — five situations in which lenders are exempt, including if a lender forecloses on a contaminated property.
- Local governments — municipalities acquiring properties through means such as tax delinquency, blight elimination, or eminent domain are exempt from liability.
- Property owners whose contamination comes from off-site sources are exempt from liability.
DNR was given authority to issue a variety of assurance letters to clarify liability in various situations.

FINANCIAL ELEMENTS

Financing Programs Targeted to Brownfield Situations
- Brownfield Grant Program — $14 million (2001-2003 biennium) for public or private use, for investigation, cleanup and redevelopment; 20 percent to 50 percent match required.
- Land Recycling Loan Program— $20 million for no-interest loans to municipalities, for site assessment and cleanup; 0.5 percent service fee.
- Site Assessment Grant Program — $3.4 million (2001-2003 biennium) for grants to local governments for site assessment, investigation, demolition, and tank removal; requires 20 percent match.
- Brownfields Green Space and Public Facilities Grant program - $1 million in 2003 in grants to local governments for environmental remediation of brownfields that will be reused as green space, recreation areas or used by a local government.
- Blight Elimination and Brownfield Redevelopment (BEBR) grants — uses $2.5 million in state-administered CDBG funds for small cities (less than 50,000 people) for assessing or remediating sites in a blighted area; covers up to $100,000 for assessment, and $500,000 for cleanup.
- Dry Cleaner Environmental Response Fund — funded through industry tax, will reimburse up to $500,000 per facility to clean up solvent discharges.
- Environmental Fund — $10-12 million (2001-2003 biennium) available for state-funded cleanups at priority contamination sites including some brownfields.
- Sustainable Urban Development Zone (SUDZ) pilot program — provides funds to communities to address area-wide groundwater contamination problems.
Incentives to Attract Private Investment to Brownfields

- Development Zone Tax Credits, 50 percent of remediation costs in designated zones.
- Business Improvement Districts (BIDs) use special tax assessments in designated districts to raise revenues for Phase I and II assessments, public improvements, redevelopment staff, and cleanup costs.
- Environmental Remediation Tax Increment Financing — districts can be created by local governments to recoup investigation and remediation costs, with increment based on value-added of the clean site; eligible costs expanded in 1999 to include underground tanks, and container and asbestos removal.
- Counties (and Milwaukee) can cancel delinquent taxes if owner agrees to clean up contaminated property.
- Counties (and Milwaukee) can transfer tax-delinquent brownfield property to a new owner if the new owner agrees to complete cleanup.

### TECHNICAL ELEMENTS

#### Definition
Wisconsin defines brownfields as “abandoned, idled, or under-used industrial or commercial facilities or sites, the expansion or redevelopment of which is adversely affected by actual or perceived environmental contamination.”

#### MOA
Yes — as of October 1995.

#### Contaminants
Petroleum, asbestos, lead paint, PCBs all OK.

#### Standards
Wisconsin has performance based cleanup standards (NR 700 rule series) that apply to all cleanup sites including VPLE sites. RBCA-like process is in place; applicants have a choice of cleanup standards for soil contamination — numeric values in regulation, site-specific cleanup standards, or risk-based performance standards. Groundwater must meet enforcement standards or demonstrate it will meet standards.

#### Institutional Controls
Wisconsin's regulations allow for/require the use of ICs to obtain site closure in some cases. Types of ICs used include deed restrictions for soil performance standards, groundwater use restrictions for sites closed using natural attenuation, and calculations of site-specific soil cleanup standards based on the type of land use.

#### IC Benefits/Problems
Flexible cleanup standards and closure options allow consideration of redevelopment as part of remedy and more cost-effective remedies.

### REUSE BENEFITS

#### Number of Sites
Approximately 14,000 sites have received close-out letters from DNR (including those for traditional spill cleanups); 115 active sites are in the VPLE program and 30 sites have received COCs. In the first two years of the program, Site Assessment Grants were awarded to 103 brownfield sites in 72 different communities on more than 330 acres of land.
Economic Benefits
Economic impact information tracked only for the Brownfield Grant program. 56 brownfield projects have received $22.2 million in brownfield grants, which will create an estimated 3,950 jobs and an estimated $356 million in increased property value on 687 acres.

In addition, several properties have been reused as parks on these types of projects. Wisconsin has created a new grant program (see above) that specifically pays for the cleanup of sites being used for parks or public facilities that will begin awarding funding in 2003.

| IMPACTS OF NEW FEDERAL BROWNFIELDS LAW |

Changes to Accommodate Law
Staff at the Wisconsin DNR are participating in efforts with U.S. EPA to interpret and implement the federal brownfields legislation. No specific known changes to our laws are anticipated at this time.

Impacts of Law
Not sure at this time.

| LESSONS AND ADVICE |

“The Wisconsin Brownfields Study Group has been a success tool that we have used to build support for our programs and to assist the state agencies to improve their programs to be more effective. This advisory group made up of stakeholders has been critical voice to recommend new programs and expanded funding in the state budget process for the state brownfield programs.”
**Wyoming**

Wyoming Department of Environmental Quality  
Herschler Building  
122 West 25th Street  
Cheyenne, WY 82002  
**Best info source:** P: 307 777 7752  
F: 307 777 5973  
[http://deq.state.wy.us/](http://deq.state.wy.us/)

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**Program Description**

**Voluntary Cleanup Programs and Assurances Provided**  
Voluntary Remediation of Contaminated Sites program (2000) provides four types of assurances: remedy agreements, CNTS, COCs, and NFA letters. A series of 14 guidance documents (fact sheets) was developed as part of program initiation activities.

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**Financial Elements**

**Financing Programs Targeted to Brownfield Situations**  
N/A

**Incentives to Attract Private Investment to Brownfields**  
N/A

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**Technical Elements**

**MOA**  
On March 14, 2002, the Wyoming DEQ and EPA Region 8 signed the final Resource Conservation and Recovery Act Memorandum of Understanding and the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) Memorandum of Agreement.

**Contaminants**  
Wide variety of contaminants and types of sites are eligible for participation.

**Standards**  
Soil cleanup level look up table for unrestricted use has been developed. Framework also under development for establishing standards for restricted cleanup. All sites are required to meet drinking water standards for hazardous constituents in groundwater, and to maintain class of use for nonhazardous constituents. DEQ may set alternate standards if it is not technically practicable to meet the primary standards.

**Institutional Controls**  
Soils are cleaned up to meet either an unrestricted use standard, or an equally protective standard based on restricted uses, if the owner agrees to restrict future uses of the site and obtain a "use control area" (UCA) designation from a local government.

**IC Benefits/Problems**  
To be determined.
## REUSE BENEFITS

**Number of Sites**  
Five sites completed the VCP, and 18 are still in progress.

**Economic Benefits**  
N/A

## IMPACTS OF NEW FEDERAL BROWNFIELDS LAW

**Changes to Accommodate Law**  
Not yet.

**Impacts of Law**  
N/A

## LESSONS AND ADVICE

N/A