
CONTENTS

Acknowledgments	xxix
Preface	xxxi
<i>Todd S. Davis and Scott A. Sherman</i>	
Preface to the First Edition	xxxv
<i>Vice President Al Gore</i>	
Introduction	xxxvii

Part I: Background Information

Chapter 1

Defining the Brownfields Problem	2
<i>Todd S. Davis</i>	
What Is a Brownfield?.....	4
Why Are Brownfields Demanding Attention?	5
How Did the Brownfields Issue Evolve to a Crisis State?.....	6
Barriers to Brownfield Redevelopment	7

Chapter 2

Overview of Federal and State Law Governing Brownfield Cleanups ...	13
<i>Based on the work of Wendy E. Wagner</i>	
The Legal Landscape.	14
Cleanup of Brownfields under Federal or Parallel State Laws	15
Federal and State Reforms for Brownfield Redevelopment	21
Conclusion	21

Chapter 3

Cost Recovery under CERCLA: The Impact of <i>Aviall</i> and <i>Atlantic Research on Voluntary Cleanups</i>	28
<i>Martha L. Judy and O. Thomas Armstrong, Jr.</i>	
Background: Road Closed to PRP Cost Recovery under Section 107 ..	28

Aviall: A Bottleneck on the Contribution Superhighway 29

ARC: Detours and Road Construction on the Way
to the Supreme Court 30

Road Construction: The Supreme Court Reopens Section 107(a)(4)(B)
to PRPs Seeking Recovery of Cleanup Costs 31

New Maps: How Many Roads Lead to Cost Sharing under CERCLA
and Where Do They Cross? 33

Conclusion 34

**Part II: Legal, Business, Financial, and Political Issues Associated with
Redeveloping Contaminated Property**

Chapter 4

Federal Brownfields Legislation 40

David B. Hird

Historical Introduction 40

Overview of the 2002 Federal Brownfields Legislation 41

Prospective Purchaser and Innocent Landowner Defenses 43

CERCLA Enforcement Bar Protecting Persons Who Clean Up
Property under State Voluntary Cleanup Programs 53

Liability Protection for Contiguous Property Owners 58

Federal Funding of Brownfields Cleanup
and State Voluntary Cleanup Programs 62

Deferral of Additions to the National Priorities List 63

Conclusion 63

Chapter 5

Strategies for Resolving Federal Liabilities at Brownfield Sites 70

Scott A. Sherman

Introduction 70

Getting EPA’s Attention: Expediting Agreements to Limit Liability . . 71

Take a Closer Look at Superfund Sites 74

Exit Strategy: From Federal Oversight to State VCP 76

Conclusion 78

Chapter 6

Phase I and Phase II Environmental Site Assessments 81

Julie Kilgore

Background 81

Developing an ASTM Standard Practice 82

Developing a Regulation	83
The All Appropriate Inquiries Process	86
New Requirements	89
Conclusions of the Phase I ESA Process.	91
Phase II Environmental Site Assessments	91

Chapter 7

Environmental Disclosure 101	93
---	-----------

Greg Rogers

The Law and Accounting Sandwich.	93
Generally Accepted Accounting Principles.	94
Accounting Standards for Environmental Liabilities.	94
Accounting’s Contribution to the Brownfields Problem: Don’t Ask, Don’t Tell	95
Accounting’s Contribution to the Brownfields Solution.	98
Conclusion	105

Chapter 8

Doing the Brownfields Deal	109
---	------------

Kevin D. Margolis and Todd S. Davis

Valuing the Target Site—Setting a Baseline for Negotiating the Purchase Price	109
Evaluating the “Environment” Surrounding the Deal	111
The Outline of the Deal—The Purchase Agreement	112
Environmental Liability—Defining Exposure.	116
Investigating the Target Site.	117
Do the Deal!	118

Chapter 9

Acquisition Considerations for Brownfield Properties:

Sizing Up the Deal	120
-------------------------------------	------------

B. Robert Amjad

Setting the Stage.	121
A Risk/Reward Primer—Would You Jump Out of an Airplane?	121
Understanding the Risk Factors	122
Sizing Up Risk—The Remediation Risk Spectrum.	124
A Quick Word on Upside-Down Properties	125
Reducing Risk—How Can I Get a Bigger Parachute?	126
Sizing Up Required Return—How Much Is Enough?	127
Understanding the Required Return	127
Is the Juice Worth the Squeeze?	128

*Chapter 10***Valuing Brownfields 129***Bill Mundy and John A. Kilpatrick*

Introduction	129
Physical Status of the Brownfield	130
Market Analysis and Feasibility	131
Highest and Best Use	134
The Valuation Process	135
Why Does the Market Devalue a Brownfield Site?	138
Theoretical Issues	139
Market Value	140
Appraisal Methodology	141
Suggested Reading	144

*Chapter 11***Creative Financing of Brownfields Sites 147***Robert A. Simons and Adam Saurwein*

Introduction: The Nature of the Brownfield Problem	147
Characterizing Brownfield Investment Opportunities	148
Steps in Brownfield Redevelopment	149
Obtaining Funds for Project Development	151
Financing Brownfield Development Costs: Expect a Gap	151
Ongoing Cash Flow Issues	156
A Commercial Brownfield Redevelopment Example	157
Conclusion	164

*Chapter 12***The Deductibility of Environmental Remediation Costs 165***Alan S. Doris, Mitchell S. Thompson, and John W. Hutchinson*

To Deduct or to Capitalize? That Is the Question.	165
The Case Law Brief Overview	167
Potential Impact of Proposed Regulations.	171
Applicability of the Tax Law to Brownfields.	178

*Chapter 13***Building Consensus for the Project 182***Howard C. Landau*

The Cast of Characters	182
The Role of Public Relations	183
The Direct Approach	184
The Steps	184
The Media	186
Building Consensus: An Ongoing Process	186

Chapter 14

Environmental Insurance in Brownfield Transactions 188

William McElroy and Todd S. Davis

Brief History of Environmental Insurance.	188
Applicability of Environmental Insurance to Brownfield Projects . . .	189
Insurance Underwriting Risks for	
Environmentally Impacted Properties	190
The Underwriting Process	191
Appropriate Coverage and the Insurance Contract.	191
The Cost and Value of Environmental Insurance.	193
Limitations of Available Insurance	194
A Comment on the State of the Environmental Insurance Market . . .	195

Chapter 15

**Environmental Insurance in Brownfield Transactions:
Issues and Answers 197**

Jack Fersko and Ann M. Waeger

Introduction	197
Environmental Insurance—Generally	198
Types of Coverage	199
The Anatomy of an Environmental Insurance Policy	200
General Issues.	207
Conclusion	207

Chapter 16

Using Old Insurance as a Brownfields Funding Tool 208

Diane R. Butler

Insurance Coverage Issues Raised by Brownfield Projects.	208
Insurance Archaeology	208
Making a Claim under Old Commercial General Liability Policies . .	210
Defenses Applicable under CGL Coverage.	213
How Much Coverage Can One Get?	216
Stacking	217
Negotiating Settlements with Insurance Companies.	218

Chapter 17

Institutional Controls 224

Amy L. Edwards

Introduction	224
Definition of Institutional Controls.	225
Examples of Institutional Controls	226
The Enforceability of Institutional Controls	237
Implementation Considerations	239
Conclusion	243

Chapter 18

Brownfield Sites: Removing Lender Concerns as a Barrier to Redevelopment	248
Lender Concerns Regarding Brownfield Sites	249
Federal Initiatives That Limit Lender Liability and Other Concerns	250
State Approaches to Limiting Lender Liability	252
Insuring against Liability	257
Conclusion	257

Chapter 19

Hiring the Right Laboratory	261
<i>Christine Dicato-Thaxton</i>	
Analytical Expenses	261
Coordination between Client, Environmental Consultant, and Laboratory	261
Selecting the Appropriate Laboratory	262
Auditing	262
Selecting the Appropriate Analytical Tests	263
The Most Common Analytical Tests	264
Insurance, Contracts, and Confidentiality	265
Data Validation, Certifications, and Prices	266
Comfort Levels and Responsiveness	266

Part III: Community Building through Brownfield Redevelopment

Chapter 20

The New Market Frontier: Unlocking Community Capitalism through Brownfield Redevelopment	270
<i>Tara A. Butler and Daniel S. Wilson</i>	
Brownfield Redevelopment Promotes Livable Communities	271
Success Stories/Case Studies	271
Keys to the Process	273
Conclusion	280

Chapter 21

Community Participation in Brownfield Redevelopment	282
<i>John C. Chambers</i>	
The Community Perspective: A Historical Grounding	283
Community Concerns	284
Current Methods of Participation	288
Conclusion	289

Chapter 22

Sustainable Brownfield Redevelopment 291

James R. Rocco

Introduction 291
 Sustainable Development 292
 Conclusion 296

Part IV: Scientific Concepts Used to Address Contaminated Property

Chapter 23

The Science of Brownfields 300

Dan B. Brown

Subsurface Geology and Hydrogeology 300
 Phases of Contamination 302
 Site Investigation Process 305
 Determining Remedial Alternatives for the Property 308
 Established Protocols in the Ohio VAP 311
 The Context of the Cleanup Standards 312
 Conclusion 313

Chapter 24

The Role of Risk Assessment in Redeveloping Brownfield Sites 315

Thomas F. Long, Michael L. Gargas, Richard P. Hubner, and Robert G. Tardiff

The Need for Risk Assessment 317
 What Is Risk? 317
 The Rise of Environmental Risk Assessment 319
 The Risk Assessment Process 320
 Risk Assessment and the Creation of Brownfields 324
 Risk Assessment and the Elimination of Brownfields 326
 Pitfalls and Promises in Risk Assessment for Brownfields 329
 Case Studies in Improving Risk Assessments for Brownfields 347
 Conclusion 349

Chapter 25

Practical Aspects of Risk Assessment for Brownfield Redevelopment . . 354

William R. Rish and Monica R. Williamson

Introduction 354
 Site Conceptual Models 355
 Blob Maps 355
 Vapor Intrusion 358
 Managing the Point of Compliance 359
 Institutional Controls 360

Asbestos in Soil 362
 Building Clearance Levels 363
 Risk-Based Materials Reuse 364

Chapter 26

Risk-Based Decision Making for Brownfield Sites 366

James R. Rocco and Lesley Hay Wilson

Introduction 366
 Background 366
 Risk-Based Decision Making 368
 Conclusion 372

Chapter 27

Risk Assessment—A Physician’s Introduction 375

Richard L. Salberg, M.D.

The Jargon of Health Risk Assessment 375
 Human Genetics 376
 Chemical Transmission 377
 Epidemiology and Study Design 377
 Conclusion 378

Part V: State Voluntary Cleanup Programs

Chapter 28

Alabama 380

Rebecca Wright Pritchett

Description of Program 380
 Eligibility 380
 Variances 381
 Liability Protection 381
 Lender Liability 382
 The Process 383
 Fees 384
 Cleanup Standards 385
 Institutional Controls 387
 Financial Incentives under the Voluntary Cleanup Program 388
 Success of the Program 388
 State Website 388

Chapter 29

Alaska 392

Steven Scott Tervooren

Eligibility	392
Benefits Generally	393
Streamlined Cleanup Program Waivers	393
Reuse & Redevelopment Initiative (RRI) Benefits	394
The SCP Process	394
Site Characterization Requirements	395
Cleanup Standards	396
Cost Recovery	397
Groundwater Monitoring	397

Chapter 30

Arizona 400

Joel L. Herz

Summary of Major Provisions of the Voluntary Programs	401
Cleanup Standards	405
Obtaining and Releasing a Restrictive Covenant on Property with Contamination That Has Been Addressed	407
The Mechanics of Participating in the Voluntary Remediation Program	408
The Determination of No Further Action (NFA)	410
Cost Recovery	410
Early Response Actions	411
Brownfields Cleanup Revolving Loan Fund Program	412
Remedial Action Costs Credit	413
Innovative Technologies	414
Conclusion	414

Chapter 31

Arkansas 417

Allan Gates

Participation in the Arkansas Brownfields Program	418
Liability Protection	419
Financial Incentives	420
Cleanup Standards	420
The Mechanics of Participating in the Arkansas Brownfields Program	422
Remedy Failure or Ineffectiveness	423
Cost Recovery	424
Conclusion	424

Chapter 32

California..... 428
Stacy E. Kray, Gregory N. Mandel, and Jane B. Kroesche

- Voluntary Cleanup Program 429
- California Land Reuse Revitalization Act of 2004 (CLRRA)—
 - Prospective Purchasers and Innocent Landowner Program 432
 - Prospective Purchaser Agreements and Similar Measures..... 436
 - Expedited Remedial Action Program..... 436
- California Land Environmental Restoration and Reuse Act—Local
 - Agency Directed Cleanup..... 441
 - Underground Storage Tank Cleanup Requirements 442
 - The Private Site Manager Program..... 443
 - The Environmental Responsibility Acceptance Act..... 443
 - Which Agency Will Control the Cleanup?..... 444
 - What Cleanup Standards Will Apply?..... 446
- Funding Sources and Additional Measures That Benefit Brownfield
 - Redevelopment..... 447
- Identification of Brownfields Sites 448
- Conclusion 448

Chapter 33

Colorado..... 460
Scott H. Reisch, Andrew L. Spielman, and Jennifer E. McClister

- Summary of the Program..... 460
- Eligibility for the Program 461
- Protections Offered by the Program..... 461
- Environmental Assessments 462
- Cleanup Standards and Risk 463
- Approval Process and Implementation 464
- Financial Incentives..... 465
- Conclusion 466

Chapter 34

Connecticut..... 471
Elizabeth C. Barton, Graham J. Stevens, and Michael B. Taylor

- Overview and Perspective 471
- The Regulatory Framework..... 472
- Licensed Environmental Professionals (LEPs) 473
- Regulatory Programs 474
- Liability Considerations and Brownfield Sites 478
- Financial Incentives..... 482
- Conclusion 487

Chapter 35

Delaware 490

Megan Ward Cascio

Summary of Major Provisions 490
 Brownfields Legislation 491
 VCP 493
 Brownfields Development Program 495
 Cost Recovery and Financial Assistance 496
 Conclusion 498

Chapter 36

The District of Columbia 503

James B. Witkin

Introduction 503
 Major Provisions 503
 Voluntary Remediation Action Program 507
 Environmental Policy Act 508

Chapter 37

Florida 513

Roger D. Schwenke and Kenneth Anthony Tinkler

Eligibility for the Program 513
 Brownfield Site Rehabilitation Agreement 514
 Cleanup Criteria and the Remediation Process 515
 Liability Protection 516
 Memorandum of Agreement 517
 Economic Incentives 517
 Recent Changes 518
 Land Use and Institutional Control Issues 519
 Conclusion 520

Chapter 38

Georgia 526

Gerald L. Pouncey, Jr. and Heather T. Friedman

Redevelopment Act 527
 HSRA 531
 Voluntary Remediation Program Act 533
 Conclusion 535

Chapter 39

Idaho 541

Deborah E. Nelson

Description and Evolution of Idaho’s
 Voluntary Remediation Program 541

The IDEQ Component of the VCP Provides Regulatory Flexibility
 and Protection from State Enforcement 542

IDEQ Retains Broad Discretion in Determining Which Projects
 to Approve 542

The VCP Contemplates Use of Risk-Based Cleanup Standards. 543

The VCP Requires Applicants to Pay IDEQ’s Costs. 543

The Act Sets Specific Procedures for Project Approval 544

Under Certain Circumstances, a Party May Unilaterally
 Opt Out of the Process. 544

Once the Project Is Completed, the Owner Receives Some Protection
 from Subsequent Enforcement Actions. 545

The VCP Codifies Strong Lender Liability Protections 545

The Tax Commission Component of the VCP Provides a Seven-Year,
 50 Percent Property Tax Exemption on
 the Increase in Land Value 546

A 2006 Amendment to the Act Provides a New Incentive
 for Participation in the VCP 547

Website. 548

List of Pertinent Primary Sources 548

Chapter 40

Illinois 554

Jane E. Montgomery

Site Remediation Program Summary of Major Provisions 554

Practical Program Experience 555

Participation in the Program 555

Eligibility for the Program 556

Sites Ineligible for the Program 556

Liability Protection under Illinois Law 556

Program Financial Incentives. 558

Cleanup Objectives 559

Environmental Covenants 561

The Mechanics of Program Participation. 561

Helpful Websites 567

Conclusion 567

Chapter 41

Indiana 573

Sharon A. Hilmes

Summary of Major Provisions	573
Participation in the Voluntary Remediation Program	574
Memorandum of Agreement	574
Lender and Fiduciary Liability Protection	575
Financial Incentives	575
Cleanup Standards	576
The Mechanics of the Voluntary Remediation Program	577
Public Involvement	578
Liability Protection	578
Liability Protection during the Project	578
Voluntary Environmental Audit Privilege and Voluntary Disclosure Penalty Reduction	579
Costs and Cost Recovery	579
Conclusion	581

Chapter 42

Iowa 585

Charles F. Becker

Summary of Major Provisions	585
Participation in the Land Recycling Program	586
The Mechanics of Program Participation	590
Memorandum of Agreement	591
Cost Recovery	592
Admission against Interests	592
Confidentiality	592
Tax Relief	592
Financial Assistance	592
Withdrawal	593
Conclusion	593

Chapter 43

Kansas 597

James T. Price

Eligibility for the Program	598
Memorandum of Agreement	598
Liability Protection	599
Financial Incentives	599
Cleanup Standards	600
Participating in the Kansas Program	600

Fees.....	601
Websites.....	601
Cost Recovery Actions	601
Conclusion	601
 <i>Chapter 44</i>	
Kentucky	605
<i>Henry L. Stephens, Jr.</i>	
Summary of Major Provisions	605
Background Surrounding the Passage of Kentucky’s Brownfields Legislation	606
Rationale for Kentucky’s Brownfields Legislation	607
Implementation of Kentucky’s Brownfields Legislation	608
Recent Legislation: New Incentives Encourage Redevelopment.	608
NFR Letters.....	609
Conclusion	610
 <i>Chapter 45</i>	
Louisiana	614
<i>Richard A. Curry</i>	
“Ready for Reuse”	616
Brownfields Investor Tax Credit	616
 <i>Chapter 46</i>	
Maine	621
<i>Juliet T. Browne and Scott D. Anderson</i>	
Summary of Major Provisions	621
Mechanics of Participating in the Maine Program	622
Liability Protection under the Program	626
Financial Incentives under the Program	629
Recovery of Cleanup Costs	629
Practical Programming	630
Conclusion	630
 <i>Chapter 47</i>	
Maryland	635
<i>James B. Witkin and Kathleen J. Trinward</i>	
Eligibility	635
Application Process	636
Preparing the Response Action Plan (RAP).....	637
Public Participation	637
Withdrawal	637

Certificate of Completion and Liability Protection	638
Memorandum of Agreement	638
Incentives	639
Cleanup Standards	639
Institutional Controls	639
Practical Experience.....	640

Chapter 48

Massachusetts	644
<i>Ned Abelson, William M. Seuch, Jonathan Z. Pearlson, and Joanna Hilvert</i>	
Introduction	644
Summary of Major Provisions	644
Understanding the Massachusetts Superfund Statute.....	645
Understanding the Massachusetts Contingency Plan	649
Covenants Not-to-Sue.....	655
Available Economic Incentives	656
Conclusion	657

Chapter 49

Michigan	663
<i>Grant R. Trigger and H. Kirk Meadows</i>	
Introduction	663
Brownfield Financial Incentives	664
Liability Reform.....	678
Conclusion	690
Appendix: Qualified Local Governmental Units under Public Act 146 of 2000	710

Chapter 50

Minnesota	711
<i>Paul S. Moe</i>	
Major Provisions of the VIC Program	711
Eligibility for the VIC Program	713
Memorandum of Agreement	714
Liability Protection	715
Financial Incentives.....	715
Cleanup Standards	717
Confidentiality, Consultants, and Fees.....	718
Mechanics of Participating in the VIC Program.....	718
Cost Recovery.....	719
Practical Experience with the Program	720
Conclusion	721

Chapter 51

Mississippi 726

John E. Milner and Gene Wasson

Summary of Major Provisions	726
Eligibility for the Brownfields Program	727
U.S. EPA Acceptance of the Mississippi Brownfields Program	727
Liability Protection	727
No Further Action Letter	729
Financial Incentives	730
Cleanup Standards	730
Certified Professionals and Laboratories	731
Fees	731
Steps of the Brownfield Application Process	732
Conclusion	732

Chapter 52

Missouri 736

James T. Price and Jennifer Downs O'Shaughnessy

Summary of Major Provisions	736
Eligibility for Programs	737
Memorandum of Agreement	738
Liability Protection	738
Financial Incentives	740
Cleanup Standards	741
Participating in the Missouri Brownfields Programs	741
Fees	743
Cost-Recovery Actions	743
Key Websites	743
Conclusion	743

Chapter 53

Montana 746

Robert A. Lorenz

Summary of Major Provisions	746
Memorandum of Agreement	747
Liability Protection for Lenders, Trustees, and Fiduciaries	747
Financial Incentives	748
Site Listing and Delisting; Priority List	748
Cleanup Standards	748
DEQ Website	749
Cost Recovery and Contribution under CECRA	749

Chapter 54

Nebraska 752

James T. Price and Annette Kovar

Summary of Major Provisions	752
Participation in the Program	753
Sites Ineligible for the Program	754
Memorandum of Agreement	754
Liability Protection	754
Financial Incentives under the Program	754
Cleanup Standards	755
Mechanics of Participation in the Program	755
Institutional Controls	756
Cost Recovery	756
Practical Experience with the Program	756
Conclusion	756

Chapter 55

New Hampshire 759

Robert R. Lucic and John E. Peltonen

Summary of Major Provisions	759
Participation in the Program	760
Memorandum of Agreement	760
Liability Protection	761
Financial Incentives under the Brownfields Program	762
Cleanup Standards	762
Certified Professionals and Laboratories	764
Mechanics of Participating in the New Hampshire Brownfields Program	764
Covenant Not-to-Sue	765
Withdrawal from Program	765
Sale or Transfer of Property in the Program	765
Civil and Criminal Penalties	766
Cost Recovery	766
Defenses/Exemptions from Liability	766
Conclusion	766
Statutes and Resources	768

Chapter 56

New Jersey 771

Sean Monaghan

The Site Remediation Reform Act	771
Site Remediation	772
Reporting Obligations and Confidentiality	775

Liability Protection	777
Financial Incentives	781
Condemnation	785
Technical Regulations	785
Cleanup Standards	786
Remedy Selection	787
Institutional and Engineering Controls	788
No Further Action Letters, Response Action Outcomes, and Covenants Not-to-Sue	789
Natural Resource Damages	789
Recovery from Third Parties	790
Public Participation	791
Examples of Brownfields Projects in New Jersey	791
Recommendations for Brownfield Redevelopment in New Jersey . . .	792
Future Developments	793
Conclusion	793

Chapter 57

New Mexico 800

Marte D. Lightstone

Summary of Major Provisions	800
Participation in the Voluntary Remediation Program	801
Memorandum of Agreement	802
Liability Protection	802
Financial Incentives under the Voluntary Remediation Program . . .	803
Cleanup Standards	803
Participating in the New Mexico Voluntary Remediation Program . .	805
Status of Program	807

Chapter 58

New York..... 810

Jeffrey L. Salinger and Seth Kerschner

Description of the Brownfield Program	810
Eligibility for the New York Brownfield Cleanup Program	810
Memorandum of Agreement	811
Parties Offered Liability Protection	811
Financial Incentives under the BCP	812
Cleanup Standards	815
Extent of Liability Protection	817
Criteria/Mechanisms Necessary for Participation in the Voluntary Program	818
Certified Professionals	818

Statutory Provision for State Review and Comment.....	819
What Happens if the Voluntary Action Is Not Approved by the State.....	819
Program Activity	819
Areas for Improvement/Proposed Changes.....	819
The Process of Performing Cleanup under the Program	821
Useful Web Resources.....	824
Conclusion	825

Chapter 59

North Carolina	830
-----------------------------	------------

Charles D. Case and Matthew F. Hanchey

Purpose and Structure of the NC Brownfields Program.....	831
Summary of the Mechanics of the NC Brownfields Program	832
Eligibility for a BFA	833
Brownfields Agreement	835
Liability Protection	836
Remediation Standards.....	838
Land-Use Restrictions	839
The Brownfields Property Plat	840
Transfer of the Property	841
Public Notice and Participation.....	841
Fees and Financial Incentives	842
Interpretation	843
Other North Carolina Programs Available for Brownfield Sites	843

Chapter 60

North Dakota	851
---------------------------	------------

Daniel N. Itzkowitz and Paul S. Moe

Chapter 61

Ohio	852
-------------------	------------

Todd S. Davis and Jenifer A. Kwasniewski

Summary of Major Provisions.....	852
Participation in the Voluntary Action Program	853
Memorandum of Agreement	854
Liability Protection	855
Financial Incentives under the Voluntary Action Program.....	855
Cleanup Standards	856
Certified Professionals and Laboratories.....	857
Mechanics of Participating in the Ohio Voluntary Action Program ..	858

Cost Recovery.....	861
Conclusion	863
 <i>Chapter 62</i>	
Oklahoma	868
<i>Michael D. Graves</i>	
Participation in the Oklahoma Brownfields Program	868
Memorandum of Agreement	869
Liability Protection	869
Financial Incentives	870
Cleanup Standards	870
The Mechanics of Participating in the Oklahoma Brownfields Program	871
Conclusion	874
 <i>Chapter 63</i>	
Oregon	878
<i>Richard M. Glick and John Benazzi</i>	
Summary of Major Provisions	878
Participation in Oregon Brownfields Programs	879
The Voluntary Cleanup Program	880
Independent Cleanup Pathway.....	881
Costs.....	881
Cleanup Standards	882
Risk Assessment.....	882
Remedy Selection.....	882
Prospective Purchaser Agreements.....	883
Liability Protection	885
Lender Liability	885
U.S. EPA Involvement.....	886
Federal “Bona Fide Purchaser” and “All Appropriate Inquiry”	886
Financial Incentives	887
Cost Recovery and Reimbursement	888
Brownfield Redevelopment Case Studies and Emerging Programs ..	888
Conclusion	889
 <i>Chapter 64</i>	
Pennsylvania	893
<i>Robert L. Collings and Ronald S. Cusano</i>	
Summary of Major Provisions	894
Elements of the Pennsylvania Program	894
Cleanup Standards	896

Procedures for Performing Act 2 Cleanups 898

Liability Protection 899

Appealability of DEP Decision 900

Financial Assistance 900

Guidance and Regulations/Buyer-Seller Agreements 900

Recent Legislative, Regulatory, and Other Brownfields Initiatives:

 Uniform Environmental Covenants Act 903

 Management of Separate Phase Liquids (SPLs) 905

 Memorandum of Agreement with EPA Region III/
 One Cleanup Program 906

 Vapor Intrusion 909

 Keystone Opportunity Zones 909

 Outreach and Coordination of Local Government Efforts/
 Brownfield Action Teams (BATs) 911

 The Low-Risk Sites Program 912

 Clean Fill Policy 913

 Pennsylvania’s Economic Stimulus Package 914

 Practical Program Experience 914

Chapter 65

Rhode Island 928

Dennis H. Esposito and Brian R. Birke

Introduction 928

Major Provisions of the Rhode Island Brownfields Program 929

Cleanup Standards 930

Liability Protections 930

Liability Reopeners 932

Fees 932

Private Cost Recovery 932

Lender Liability Protections 935

Conclusion 936

Chapter 66

South Carolina 941

Ronald E. Cardwell

Summary of Major Provisions 941

Participation in the Voluntary Cleanup Program 942

Certification by NRPs 943

The Voluntary Cleanup Contract 943

Liability Protection 944

Financial Incentives 945

Cleanup Standards 945

Memorandum of Agreement	946
Professionals and Laboratories	946
Institutional Controls	946
Mechanics of Participating in the Program	946
Termination of the Contract	948
Admission of Liability and Confidentiality	948
Practical Experience with the Program	948
Conclusion	948
 <i>Chapter 67</i>	
South Dakota	952
<i>Daniel N. Itzkowitz and Paul S. Moe</i>	
The Program	952
Eligibility	953
Memorandum of Agreement	953
Liability Protection	953
Financial Assistance	953
Cleanup Standards	954
Conclusion	954
 <i>Chapter 68</i>	
Tennessee	957
<i>William L. Penny and E. Joseph Sanders</i>	
Overview	957
Eligibility for Brownfield Projects	959
Processing the Brownfield Agreement	959
Protections Offered by the Brownfield Agreement	961
Examples of Brownfield Projects	964
Tips and Pitfalls	966
Conclusion	967
 <i>Chapter 69</i>	
Texas	983
<i>John Slavich</i>	
Summary of Major Provisions	983
Eligibility for the Program	983
Protection from Enforcement	984
Liability Protection	985
Financial Incentives	985
Cleanup Standards	985
The Municipal Setting Designation	986
Participation in the VCP	987

Innocent Landowner Protection	989
Cost Recovery.....	990
Audit Privilege.....	990
The Dry Cleaner Remediation Program.....	991
Practical Program Experience	992
Resources.....	993

Chapter 70

Utah.....	997
------------------	------------

H. Michael Keller and Mary Jane E. Wagg

Summary of Major Provisions.....	997
Eligibility for the Utah VCP.....	998
Coordination with U.S. EPA.....	998
Environmental Law in Utah.....	998
VCP Application Process	999
Voluntary Cleanup Agreement	1001
Work Plan	1002
Certificate of Completion.....	1002
Release from Liability	1002
Permits.....	1003
Cleanup Standards	1003
Certified Professionals and Laboratories.....	1004
Reservation of Causes of Action	1004
Right of Contribution	1004
Enforceable Written Assurance Program.....	1004
Generic Comfort Letters.....	1005
Uniform Environmental Covenants Act.....	1006
Conclusion	1006

Chapter 71

Vermont.....	1011
---------------------	-------------

A. Jay Kenlan, David R. Cooper, and Michael A. Stahler

Remediation “Inside” and “Outside” the BRELLA Program.....	1012
Summary of Major Provisions.....	1012
Application and Eligibility Determination	1013
Site Investigation and Site Remediation	1015
Corrective Action Plan	1017
Liability Protection	1017
Additional Obligations of the Program Participant.....	1020
Cleanup Standards	1021
Funding Resources	1021
Practical Experience with the Program	1023
Conclusion	1025

*Chapter 72***Virginia** 1032*James B. Witkin and Kathleen J. Trinward*

Introduction	1032
Eligibility	1032
Application Process	1033
Cleanup Standards	1034
Public Notice	1034
Voluntary Remediation Report	1035
Termination	1035
Certification of Satisfactory Completion	1035
Memorandum of Agreement	1036
Liability Protection	1036
Liability Amnesty	1037
Incentives	1037

*Chapter 73***Washington** 1042*Ivy Anderson and Bradley M. Marten*

Model Toxics Control Act (MTCA)	1043
Grant and Loan Programs	1046
Conclusion	1048

*Chapter 74***West Virginia** 1049*Gale Lea Rubrecht*

Summary of Major Provisions	1049
Eligibility for the WV VRRP	1050
Limited Environmental Liability Protection	1051
Licensed Remediation Specialists	1052
Risk Assessments	1053
Risk-Based Cleanup Standards	1053
Engineering and Institutional Controls	1054
Certificate of Completion	1055
Reopening Remediation	1056
Financial Incentives under the Act	1057
Special Provisions under the Act Applicable to Brownfield Sites	1057
West Virginia Brownfield Assistance Centers	1058
Criminal Penalties	1059
Mechanics of Participating in the WV VRRP	1059
Memorandum of Agreement	1064
Program Activity	1064

Speed of Regulatory Process	1064
Changes Pending	1064
Web Sites	1065
Conclusion	1065

Chapter 75

Wisconsin	1070
----------------------------	-------------

Arthur J. Harrington and Matthew T. Kemp

Summary of Major Provisions	1070
Cleanup Liability—The Wisconsin Spill Statute	1071
Liability Protection	1073
Soil Cleanup Standards	1080
New Funding Sources for Contaminated Property	1082
Memorandum of Agreement	1084
Brownfields Site Assessment Grants	1084
Brownfields Green Space Grants	1084
Conclusion	1085

Chapter 76

Wyoming	1092
--------------------------	-------------

Mary A. Throne

Summary of Major Provisions	1092
Applicability and Eligible Sites	1093
Application and Initial Public Participation Requirement	1094
Cleanup Standards and Remedy Selection	1094
The Remedy Agreement with WDEQ	1096
The Goals of Voluntary Remediation: Covenant Not-to-Sue, Certificate of Completion, and No Further Action Letters	1098
Reopeners and Termination	1099
Enforcement and Immunity for Innocent Owners	1100
Fees and Dispute Resolution	1101
Taking Advantage of Voluntary Remediation in Wyoming	1101
Conclusion	1103

About the Editors	1109
------------------------------------	-------------

About the Contributors	1112
---	-------------

Index	1149
------------------------	-------------