## Index

 $\mathbf{A}$ 

**Agricultural operations** 

Abatement orders Enforcement, 16:11, 16:20	Groundwater protection systems, 20:37
Accidental releases Air pollution, 10:10  Acid deposition Air pollution, 10:27	Air pollution Generally, 10:1 to 10:32 Accidental releases, jurisdiction, 10:10 Acid deposition, 10:27
Actions and remedies See Litigation (this index)  Adequacy or inadequacy Challenges to agencies. See Chal-	Agricultural burning, 10:30.50 Ambient air quality standards, 6:4, 10:7 Asbestos, 10:30 Attainment status, 10:4
lenging Regulatory Agency Actions (this index)  Adjudicatory procedures Agencies. See Procedures of Agency, Review of (this	BACT, 10:17 Banking, 10:31 Breakdowns, 10:20 Bubbles, 10:31 Burning, agricultural, 10:30.50
index)  Administrative agencies  See Regulations and Regulatory Agencies (this index)	California standards, 10:21 Conditions of permits, 10:19 Construction of permits, 10:14 Consumer products, 10:28 Controls on stationary sources,
Administrative Procedure Acts Challenging regulatory agency actions, 14:7	10:17, 10:18 Emergencies, 10:20 Federal Clean Air Act, generally, 6:2 to 6:6, 10:2 to 10:5
Advertising and labeling Disclosures. See Disclosure Legislation (this index)	Federal standards, generally, <b>6:3</b> to <b>6:5</b> , <b>10:21</b> Fees, <b>10:32</b>
Agency lawyers State organizational patterns, 7:17	Implementation of Federal Clean Air Act in state legislation, 10:2
Agents and agencies See Regulations and Regulatory Agencies (this index)	Indoor air pollution, <b>10:28.50</b> Jurisdiction, <b>10:8 to 10:11</b> LAER, <b>10:17</b>
Agricultural burning Air pollution, 10:30.50	Legislative functions, <b>8:9</b> Medical waste incinerators, <b>10:29</b>

## Air pollution—Cont'd Mobile sources, 10:21 to 10:24 Nuisance, air pollution as, 10:26 Odors, jurisdiction, 10:9 Operating permits, 10:15 Opt-in states, 10:22 Other state controls on vehicle emissions, 10:23 Overview. 10:1 **Permits** Generally, 10:13 to 10:16 Features and issues, 10:19, 10:20 Pollutants, jurisdiction, 10:8 to 10:10 Procedures for issuing permits, 10:16 Quality rulemakings, 10:12 RACT, 10:17 Regulatory bodies, 10:6 Rulemakings, 10:12 SIP implementation of Federal Clean Air Act, 10:3 Sources of jurisdiction, 10:11 State ambient air quality standards, 10:7

dards, 10:7
State implementation of clean air act, 6:3 to 6:5
Stationary sources, controls on,

10:17

Title V of Clean Air Act, permits under, **10:13** 

Toxic air emissions programs, 10:25

Trading, **10:31** 

Transportation improvements, 10:24

Upsets, **10:20** Variances, **10:20** 

#### Alabama

Reference guide, App. A

## Alaska

Reference guide, App. A

Alternative water supply programs

Hazardous waste site cleanup, 9:39

Ambient air quality standards
Air pollution, 10:7

## **Analytic and practical themes**

State organizational patterns, 7:3 to 7:10

## Appeal and review

Executive functions, 8:19
Factual findings and conclusions.
See Factual Conclusions
and Legal Interpretations
of Agency, Review of (this index)

Judicial review. See **Judicial Review** (this index)

Jurisdiction of agency, review of. See **Jurisdiction of Agencies** (this index)

Procedures of agency. See
Procedures of Agency,
Review of (this index)

Reviewing decisions. See **Review**ing **Decisions and Reason**ing (this index)

Substantive decisions. See
Substantive Decisions and
Reasoning of Agency,
Review of (this index)

#### **Apportionment**

Hazardous waste site cleanup, **9:20** 

## **Approval**

See Consent and Approval (this index)

## **Arbitrary actions**

Agencies, decisions of. See
Substantive Decisions and
Reasoning of Agency,
Review of (this index)

Enforcement, arbitrary penalty assessments, **16:43**, **16:44** 

Index-2

Arbitrary actions—Cont'd

Judicial review, arbitrary and capricious test, **15:5** 

Arizona

Reference guide, App. A

**Arkansas** 

Reference guide, App. A

**Articles** 

State Environmental Law, App. A

**Asbestos** 

Air pollution, 10:30

Assessment laws

Constitutional law matters, **5:28 to 5:30** 

Attorneys' fees

Challenging regulatory agency actions, **14:54**, **14:61** 

B

**BACT** 

Air pollution, 10:17

**Balancing** 

Enforcement, balancing of equities, **16:36** 

Preemption, balancing rule, 5:15

Nuisance, changing role of balancing, **3:9 to 3:12.50** 

**Banking** 

Air pollution, 10:31

Biodiversity Conservation Act of Michigan

Endangered species protection, 17:30

**Boards and commissions** 

State organizational patterns, 7:16

**Bonds and undertakings** 

Challenging regulatory agency actions, **14:47** 

**Bottle deposit legislation** 

Economic incentives, 21:22 to 21:24

Breakdowns

Air pollution, 10:20 Enforcement, 16:45

**Brownfields** 

Hazardous waste site cleanup, 9:52, 9:53

**Bubbles** 

Air pollution, 10:31

Burden of proof

See Presumptions Burden of Proof (this index)

Burning

Air pollution, agricultural burning, 10:30.1

 $\mathbf{C}$ 

California

Air pollution, 10:21

Disclosures. See **Disclosure** 

**Legislation** (this index) Endangered species protection,

17:28

Hazardous waste site cleanup, **9:4**, **9:51** 

Reference guide, **App. A**Toxic discharge fees, **21:20** 

California Global Warming Solutions Act

Greenhouse gas emissions, 22:6

Candidate and threatened species

Endangered species protection, **17:6** 

Cap-and-trade

Regional Greenhouse Gas Initiative (RGGI), 22:3

Carbon

See **PGreenhouse gas emissions** (this index)

Challenging regulatory agency

#### Enforcement, 16:33 actions—Cont'd Exhaustion of administrative rem-Nuisance, 3:12.50 edies-Cont'd Strict liability, 4:8 Completing the process and Cease and desist orders raising issues, 14:17 Enforcement, 16:11 Constitutional issues, 14:21 Exceptions to exhaustion **CERCLA** requirement, 14:16 Hazardous waste. See Hazardous Futility, 14:19 Waste Site Cleanup (this Irreparable injury, 14:20 index) Issues of law, 14:22 Challenging regulatory agency Practitioner's perspective, actions exhaustion doctrine from, Generally, 14:1 to 14:61 14:23 Adequacy or inadequacy Principles applied, 14:17 to Exhaustion of administrative 14:22 remedies, 14:18 Purposes of requiring, 14:15 Representation, adequacy of, Finality, 14:25, 14:26 14:42 Futility of exhaustion of Administrative Procedure Acts, administrative remedies, statutory standing, 14:7 14:19 Administrative record, generally, Government entities and officials, 14:49 to 14:53 standing of, **14:10** Administrative standing, **14:12** Hardship to parties, 14:30 Application for stay of proceed-Immunities, SLAPP suits, 14:60 ings, 14:45 Individual standing, generally, Attorneys' fees, 14:54, 14:61 14:3 to 14:6 Authority for stay of proceedings, Injury in fact, 14:4 14:44 Interests affected by intervention, Bonds and other conditions for 14:40 stay of proceedings, 14:47 Intervention. 14:39 to 14:43 Constitutional issues, 14:21 Irreparable injury, 14:20 Content of administrative record. Judicial responses, 14:56 14:50 Jurisdiction, 14:32 to 14:34 Costs and expenses, 14:52, 14:61 Legislative responses, 14:57 Damages, SLAPP suits, 14:61 Motion practice, changes to, 14:59 Environmental Procedure Acts, Organizations, standing of, 14:9 statutory standing, 14:8 Overview. 14:1 Evidence outside of administrative Parties, 14:36 to 14:38 record, 14:51 Practitioner's perspective Exceptions to exhaustion requirement, 14:16 Exhaustion doctrine from. Exhaustion of administrative rem-14:23 edies Intervention from, 14:43 Generally, 14:14 to 14:23 Primary jurisdiction from, Adequacy of remedy, 14:18 14:34

Causation

Challenging regulatory agency actions—Cont'd Practitioner's perspective—Cont'd	Classes and classification Groundwater protection systems, 20:11 to 20:13
Record from, 14:53 Ripeness from, 14:31 Standing from, 14:13	Clean Air Act Generally, 6:2 to 6:6
Stay orders from, <b>14:48</b> Primary jurisdiction, <b>14:32 to 14:34</b>	Clean energy initiatives Greenhouse gas emissions, 22:10
Private party defendants, <b>14:38</b> Public agency defendants, <b>14:37</b>	Cleanup levels Hazardous waste, 9:21.50
Ripeness Generally, <b>14:24 to 14:31</b> Concept of, <b>14:24</b>	Clean Water Act Generally, 6:7 to 6:9
Finality, 14:25 Legal versus factual analysis, 14:29 Principles applied, 14:28 to 14:30	Colorado Groundwater protection systems, 20:20 Hazardous waste site cleanup, 9:5 Reference guide, App. A
Stage of agency proceedings, 14:28 SLAPP suits Generally, 14:55 to 14:61	Coming to the nuisance Generally, 3:12
Attorneys' fees, <b>14:61</b> Costs, <b>14:61</b> Damages, <b>14:61</b>	Committees of citizens Hazardous waste site cleanup, 9:46
Definitions, 14:55, 14:58 Immunities, 14:60 Motion practice, changes to, 14:59	Common law Generally, 2:1, 2:2 Greenhouse gas, 22:16
Standards for granting stay of proceedings, 14:46	Importance of common law doctrines in age of statutes, 2:2
Standing, generally, 14:2 to 14:13 Statutory standing, 14:7, 14:8 Stay of proceedings, 14:44 to 14:48	Nuisance. See <b>Nuisance</b> (this index) Overview, <b>2:1</b>
Taxpayers, standing of, 14:11 Timeliness of intervention, 14:41 Venue, 14:35 Zone of interests, 14:5	Public trust doctrine. See <b>Public Trust Doctrine</b> (this index) Strict liability. See <b>Strict Liability</b> (this index)
Chemicals	Trespass. See <b>Trespass</b> (this index)
Disclosures. See <b>Disclosure Legislation</b> (this index)	Compensation Constitutional law. See
Civil penalties See Penalties (this index)	Constitutional law Matters (this index)

## Compensation—Cont'd

Hazardous waste site cleanup, 9:38 to 9:40

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Generally, 6:15

# Comprehensive state legislation Oil spill legislation, 18:7

## Conditional approvals of permits

Substantive decisions and reasoning of agency, review of, 15:56 to 15:59

## **Confidentiality rights**

Constitutional law matters, 5:33

## **Conflict in implementation**

Implied preemption by, 5:8

### Conflicts in evidence

Factual conclusions and legal interpretations of agency, review of. **15:33** 

### **Congressional intent**

Implied preemption by, **5:7** 

#### Connecticut

Hazardous waste site cleanup, 9:50

Reference guide, App. A

## Consent and approval

Enforcement of consent orders and decrees, 16:23, 16:50, 16:51
Nuisance, 3:19

## Consolidated agency model

State organizational patterns, 7:13 to 7:17

#### **Constitutional law matters**

Generally, **5:1 to 5:31**Agency regulations, generally, **5:29, 5:30**Assessment laws, **5:28 to 5:30** 

Challenging regulatory agency actions, 14:21

## Constitutional law matters

#### —Cont'd

Compensation for takings
Generally, **5:19 to 5:30**Agency regulations, **5:29, 5:30**Assessment laws, **5:28 to 5:30**categorial, **5:20**Catergorical takings, **5:22**Compensation, **5:20** 

compensation laws, **5:31** complete deprivation determination, **5:23**, **5:24** 

Jurisprudence, 5:19

Miscellaneous taking provisions, **5:32** 

Penn Central framework, **5:25** Regulatory exactions, imposition of, **5:26** 

State takings legislation, **5:23 to 5:27** 

takings framework, **5:21**Confidentiality rights, **5:33**Due process, **5:16.50**, **5:17.50**Economic deprivation, extent of, **5:20** 

Enforcement, constitutional defenses, **16:48** 

Equal protection, 5:16.50

Federal government

Federal standards, shift to, **5:3**Preemption by. See **Preemption**(this index)

Greenhouse gas, 22:16

Hazardous waste site cleanup, **9:31** 

Jury trial, right to, 5:34

Nondelegation doctrine, 5:18

Other constitutional constraints,

5:16 to 5:30

Overview, 5:1

Preemption. See **Preemption** (this index)

Procedural due process, **5:17.50** 

Public trust doctrine, 4:13

Regulatory exactions, imposition of, **5:26** 

### **Constitutional law matters**

-Cont'd

Ripeness, 5:20

Self-incrimination, 5:33

Substantive due process, 5:16.50

Takings. Compensation for takings, supra

Traditional state and local powers, **5:2** 

Void for vagueness doctrine, 5:17

## Construction and interpretation

Air pollution permits, 10:14

## **Construction permits**

Executive functions, 8:15 to 8:19

#### Consultation

Endangered species protection, 17:17

#### **Consumer products**

Air pollution, 10:28

#### Contamination

Groundwater, contamination of. See **Groundwater Protection Systems** (this index)

#### Contingency plans of state

Oil spill legislation, 18:9, 18:18

#### **Contractors**

Hazardous waste site cleanup, 9:16

#### **Controlled trading systems**

Economic incentives. See Economic Incentives (this index)

## **Cooperative solutions**

State organizational patterns, 7:4

## Corporate employees and officers

Enforcement, 16:29

## Costs and expenses

Challenging regulatory agency actions, **14:52**, **14:61** 

#### Criminal law

Endangered species protection, 17:25

Enforcement, 16:54 to 16:56

## Critical habitat designation

Endangered species protection, 17:12

D

### **Damages**

Challenging regulatory agency actions, 14:61
Enforcement, 16:16
Nuisance, 3:20, 3:22

Strict liability, 4:8

Trespass, 4:4

## **Decision-making procedures**

Endangered species protection, 17:10, 17:21

## **Defenses**

Enforcement. See **Enforcement** (this index)

Nuisance. See **Nuisance** (this index)

Oil spill legislation, 18:24

## Deference principle

Factual conclusions and legal interpretations of agency, review of, **15:39 to 15:42** 

Substantive decisions and reasoning of agency, review of, 15:48

## Delaware

Reference guide, App. A

## Delaware risk management plans

Disclosure legislation, 19:23

## **Delay**

See Laches or Delay (this index)

## **Delisting procedures**

Endangered species protection, **17:11** 

Pollution prevention plans,

Risk management plans, 19:22

19:31

Overview, 19:1

**Dillon Reservoir controlled** Disclosure legislation—Cont'd point-nonpoint source trading Emergency Planning and Community Right-to-know Act of program 1986 Economic incentives, 21:12 to generally, 19:3 to 19:7 21:14 Chemical reporting, 19:4 **Disbursements** Enforcement, 19:7 Oil spill legislation, 18:25 Release planning, 19:6 Requirements beyond EPCRA, **Discharge prohibition** generally, 19:20 to 19:28 Disclosure legislation, 19:25 Response planning, 19:5 **Disclosure legislation** State laws implementing Generally, 19:1 to 19:37 EPCRA, 19:10 Emergency release, definitions, Additional enforcement provisions, 19:19 19:14 Additional reporting facilities, Enforcement 19:11 California Proposition 65, 19:28 Advertising and labeling Emergency Planning and Comgenerally, 19:33 to 19:37 munity Right-to-know Act of 1986, 19:7 Federal efforts, 19:34 Federal statutes Seals of approval and official Generally, 19:2 to 19:8 emblems, 19:37 State regulation, 19:35 to 19:37 Advertising and labeling, 19:34 Emergency Planning and Com-Background to state public hazard disclosure laws, 19:9 munity Right-to-know Act of 1986, supra California pollution prevention plans, 19:32 Pollution Prevention Act of 1990. **19:8** California Proposition 65 Generally, 19:24 to 19:28 Fee structures. 19:18 Discharge prohibition, 19:25 Government employees, disclosures by, 19:27 Enforcement, 19:28 Hazardous chemicals, definitions, Government employees, 19:13 disclosures by, 19:27 Identifying hazards, standards for, Public warnings requirement, 19:12 to 19:15 19:26 Inventory reporting, 19:16 Chemicals Labeling. Advertising and label-Definitions, 19:13 ing, supra Emergency Planning and Com-Massachusetts pollution prevenmunity Right-to-know Act tion plans, 19:30 of 1986, 19:4 New Jersey Definitions, 19:13, 19:14

Index-8

19:23

Delaware risk management plans,

Discharge prohibition, California Proposition 65, **19:25** 

#### Disclosure legislation—Cont'd **Due process** Pollution Prevention Act of 1990, Constitutional law matters, 5:16.50, 5:17.50 Pollution prevention plans, 19:29 to 19:32 $\mathbf{E}$ Public warnings requirement of **Economic deprivation** California Proposition 65, 19:26 Constitutional law matters, 5:20 Release planning, 19:6 **Economic incentives** Reports and reporting, 19:15 to Generally, 21:1 to 21:24 19:17 Bottle deposit legislation, 21:22 to Requirements beyond EPCRA, 21:24 generally, **19:20 to 19:28** California toxic discharge fees, Response planning, 19:5, 19:16 21:20 Risk management plans, 19:21 to Controlled trading systems 19:23 Generally, 21:4 to 21:17 Seals of approval and official emblems, 19:37 Dillon Reservoir controlled point-nonpoint source trad-Standards for identifying hazards, ing program, 21:12 to 19:12 to 19:15 21:14 State legislation South coast air quality manage-Advertising and labeling ment district's marketable legislation, 19:35 to 19:37 permit system, infra Pollution prevention plans, Tar-Pimlico trading system, 19:29 to 19:32 21:15 to 21:17 Public hazard disclosure laws, generally, 19:9 to 19:28 Criticisms of existing system of Supplemental provisions, state pollution control, 21:2 laws with, generally, 19:11 to Debate over pollution control the-19:19 ory, 21:2, 21:3 Dillon Reservoir controlled point-Discretion nonpoint source trading Enforcement, discretion of agency, program, 21:12 to 21:14 16:7 Endangered species protection, State organizational patterns, 7:6 17:31 "Disposal" of "hazardous waste" Enforcement "Passive migration," 9:6.50 Dillon Reservoir controlled point-nonpoint source trad-**Disposition of trust resources** ing program, 21:14 Public trust doctrine, 4:18 South coast air quality manage-Division of authority between ment district's marketable agencies permit system, 21:11 Jurisdiction of agency, review of, Tar-Pimlico trading system, 15:13 21:17 Fees, 21:18 to 21:21 **Dormant commerce clause** application Florida newsprint disposal fees, Preemption by, **5:9 to 5:13** 21:21

#### Economic incentives—Cont'd El Paso Heating oil tax of Texas, 21:19 Groundwater protection strategy, Mechanisms for economic incen-20:34 tives, 21:3 **Emergencies** Monitoring, south coast air quality Air pollution, 10:20 management district's mar-Disclosures. See **Disclosure** ketable permit system, 21:10 **Legislation** (this index) Newsprint disposal fees of Flor-Enforcement, emergency orders, ida, 21:21 16:12 Oregon bottle bill, 21:23 Oil spill legislation, 18:16 Overview, 21:1 Pollution fees, 21:18 to 21:21 **Emissions** Rates of reduction, south coast air Performance standards, 22:9 quality management district's marketable permit system, **Endangered species protection** 21:7 Generally, 17:1 to 17:31 Reconciliation of emissions, south Biodiversity Conservation Act of coast air quality management Michigan, 17:30 district's marketable permit California protections, 17:28 system, 21:9 Candidate and threatened species, South coast air quality manage-17:6 ment district's marketable Consultation, 17:17 permit system Criminal enforcement, 17:25 Generally, 21:4 to 21:11 Criteria Baseline allocations, 21:6 Decision-making processes of Ending allocations, 21:6 agencies, 17:21 Enforcement, 21:11 Listing species, **17:8 to 17:11** Monitoring, 21:10 Critical habitat designation, 17:12 Procedure, 21:8 Decision-making procedures, Rates of reduction. 21:7 17:10, 17:21 Reconciliation of emissions, Delisting procedures, 17:11 21:9 Enforcement, 17:25, 17:26 Scope of program, 21:5 Evidence, 17:26 Tar-Pimlico trading system, 21:15 Federal Endangered Species Act, to 21:17 generally, 17:2, 17:3 Texas heating oil tax, 21:19 Fifth amendment, 17:24 Toxic discharge fees of California, Florida protections, 17:29 21:20 Incentives, 17:31 Trading mechanisms Information for listing species, Dillon Reservoir controlled 17:8 to 17:11 point-nonpoint source trad-Jeopardizing species, 17:13 ing program, 21:13 Tar-Pimlico trading system, Limitations on listing species, 21:16 17:8 Listing of species, 17:5 to 17:7 **Effluent limitations and standards** Federal environmental statutes, Manatee Sanctuary Act of Florida, 6:8 17:29

Endangered species protection —Cont'd	Enforcement—Cont'd Actions and remedies—Cont'd
Mandatory versus permissive list-	Judicial review, 16:22, 16:41
ing of species, 17:5	Prerequisites to enforcement
Michigan protections, 17:30	actions, 16:24, 16:25
Miscellaneous protections, 17:27	Administrative agencies
to 17:31	Generally, 16:2
Natural Communities Conserva- tion Planning Act of Califor- nia, 17:28	Enforcement, generally, <b>16:9 to 16:18</b>
Overview, <b>17:1</b>	Inspections and search warrants generally, <b>16:3 to 16:8</b>
Permitting, 17:18	Prerequisites to enforcement
Plant species, 17:7	actions, <b>16:25</b>
Problems of proof, 17:26	Statutory framework, generally,
Procedural methods of protection,	16:9 to 16:18
generally, <b>17:16 to 17:23</b>	Agencies. Administrative agen-
Public trust doctrine, 17:23	cies, supra
Recovery plans, 17:20	Agents and independent contractors as defendants, <b>16:28</b>
Regulations, <b>17:19</b> Regulatory features of state	Appropriate defendants, <b>16:27 to</b>
endangered species legisla-	16:29
tion, generally, 17:4 to 17:24 Scope of protection, 17:15	Arbitrary penalty assessments, <b>16:43, 16:44</b>
Standard of protection, 17:13, 17:14	Authority to seek search warrants, <b>16:5</b>
State Environmental Policy Acts,	Balancing of equities, 16:36
17:22	Breakdowns as defense, 16:45
State role in Federal Endangered	Burden of proof, 16:31
Species Act, 17:3	Causation, 16:33
Takes and incidental takes, 17:14	Cease and desist orders, 16:11
Enforcement	Citizen suits, 16:52
Generally, 16:1 to 16:56	Civil penalties
Abatement orders, 16:11, 16:20	Generally, <b>16:39 to 16:44</b>
Actions and remedies Generally, 16:19 to 16:22	Administrative enforcement, generally, <b>16:14</b>
Abatement orders, actions to enforce, <b>16:20</b>	Arbitrary penalty assessments, <b>16:43, 16:44</b>
Administrative enforcement, remedial actions, <b>16:15</b>	Factors in penalty assessments, <b>16:40</b>
Arbitrary penalty assessments, remedy for, <b>16:44</b>	Indicators of arbitrary penalty assessments, <b>16:43</b>
Civil penalties, infra	Judicial enforcement, generally,
Enforcement actions, generally,	16:21
16:27 to 16:53	Judicial review, tests on, 16:41
Injunctive relief, <b>16:19</b> , <b>16:35 to 16:38</b>	Reasoning in assessment penalties, importance of, <b>16:42</b>

#### Enforcement—Cont'd Enforcement—Cont'd Civil penalties—Cont'd Financial incapability, defense of, Remedy for arbitrary penalty 16:46 assessments, 16:44 Groundwater protection systems, 20:40 Tests on judicial review, 16:41 Hearing requirements, 16:17 Common issues for criminal Independent contractors as enforcement, 16:56 defendants, 16:28 Consent orders and decrees, Indicators of arbitrary penalty 16:23, 16:50, 16:51 assessments, 16:43 Constitutional defenses, 16:48 Injunctive relief, 16:19, 16:35 to Corporate employees and officers 16:38 as defendants, 16:29 Inspections, generally, 16:3 to Criminal enforcement, 16:54 to 16:8 16:56 Irreparable injury, 16:36 Damages, 16:16 Judicial enforcement. Actions and Defenses remedies, supra Generally, 16:45 to 16:49 Judicial review, 16:22, 16:41 Breakdowns, 16:45 Laches, defense of, 16:47 Constitutional defenses, 16:48 Landowners as defendants, 16:27 Estoppel, 16:47 Mandatory injunctions, 16:37 Financial incapability, 16:46 Methods of administrative Laches, 16:47 enforcement, generally, 16:10 Miscellaneous defenses, 16:49 to 16:16 Technological impossibility, Notice of violations, 16:10 16:45 Oil spill legislation, 18:26 Unclean hands, 16:47 Overview, 16:1 Disclosures. See Disclosure Penalties. Civil penalties, supra **Legislation** (this index) Discretion of agency, standards Enforcement outside of permit for. **16:7** process, 16:18 Economic incentives. See Eco-Executive functions, 8:22 nomic Incentives (this Injunctions to enforce permit index) system, 16:19 Emergency orders, 16:12 Suspensions or revocations of, Endangered species protection, 16:13 17:25, 17:26 Pervasively regulated businesses, Environmental Protection Acts, 16:6 private enforcement under, Prerequisites to agency authority, 16:53 16:24 to 16:30 Estoppel, 16:47 Private enforcement, 16:52, 16:53 Evidence, 16:31 to 16:34 Probable cause for search war-Executive functions, enforcement rants, 16:8 of permit, 8:22 Proof issues, 16:31 to 16:34 Facility operators as defendants, Reasoning in assessment of penal-16:27 ties, importance of, 16:42

#### Enforcement—Cont'd

Recurring enforcement issues, 16:24 to 16:51

Regulatory authority, scope of, **16:26** 

Remedies. Actions and remedies, supra

Scienter, 16:32

Scope of agency authority, generally, **16:24 to 16:30** 

Searches and search warrants, 16:5 to 16:8

Self-auditing and self-reporting, 16:30

Settlements and settlement agreements, **16:23**, **16:50**, **16:51** 

Status quo injunctions, **16:37** Statutory framework

Administrative enforcement, generally, **16:9** to **16:18** 

Criminal enforcement, **16:55** 

Success on merits as prerequisite to injunctive relief, **16:35** 

Sufficiency of evidence, **16:34** Suspensions or revocations of permits, **16:13** 

Technological impossibility, defense of, **16:45** 

Tests on judicial review, **16:41** Unclean hands, defense of, **16:47** 

Waiver and estoppel, **16:47**Warrantless inspections, principles

## Environmental impact assessment and decisionmaking

Greenhouse gas emissions, 22:14

## **Environmental Procedure Acts**

Challenging regulatory agency actions, 14:8

## **Environmental Protection Acts**

Enforcement, 16:53

of, 16:4

## **Equal protection**

Constitutional law matters, **5:16.50** 

## **Estoppel**

Enforcement, 16:47

## Evidence

Agency consideration of evidence in record, requirement, **15:46** 

Challenging regulatory agency actions, **14:51** 

Endangered species protection, 17:26

Enforcement, 16:31 to 16:34

Factual conclusions. See Factual Conclusions and Legal Interpretations of Agency,

**Review of** (this index)

Familiarity of agency decisionmaker with evidence, **15:47** 

Oil spill legislation, 18:22

Substantial evidence. See

Substantial Evidence (this index)

#### **Exceptions**

Challenging regulatory agency actions, 14:16

### **Executive functions**

Generally, **8:12 to 8:22** 

Appeal opportunity, **8:19** 

Applicant-staff public consultation, **8:17** 

Application for permit to construct, **8:15** 

Construction permits, 8:15 to 8:19

Enforcement of permit, 8:22

Issuance of permits, generally,

8:14 to 8:21

Operation permit, review and issuance of, **8:20** 

Pre-permit functions, 8:13

Renewal of permit, 8:21

Review and issuance of permits, generally, **8:14 to 8:21** 

Staff review of application, 8:16

## **Exhaustion of remedies**

Regulatory agency actions. See Challenging Regulatory

# Exhaustion of remedies—Cont'd Agency Actions (this index)

## **Expertise**

State organizational patterns, 7:5
Substantive decisions and reasoning of agency, review of, 15:48, 15:49

 $\mathbf{F}$ 

## **Facility operators**

Enforcement, 16:27

## **Facility plans**

Oil spill legislation, 18:19

## Factual conclusions and legal interpretations of agency, review of

Generally, **15:29 to 15:42**Compliance with agency regulations, **15:41**, **15:42** 

Conflicts in evidence, 15:33

Deference to agency's interpretation, **15:39 to 15:42** 

Factual conclusions, generally, 15:29 to 15:36

Finding or non-finding of substantial evidence, **15:35**, **15:36** 

Inferences, 15:32

Intensity of judicial review, **15:37** Legal interpretations, generally,

15:38 to 15:42

Limits of deference, **15:40**, **15:42** Sources of substantial evidence, **15:31** 

Statutes and statutory provisions, 15:30, 15:38

Substantial evidence, generally, 15:29 to 15:33

Test applied, **15:34 to 15:37** Weight of evidence, **15:32** 

#### Fault

Nuisance, role of fault, **3:6 to 3:8** Trespass, fault requirement, **4:2** 

#### Federal environmental statutes

Generally, **6:1 to 6:15** 

Air pollution. See **Air Pollution** (this index)

Clean Air Act. See **Air Pollution** (this index)

Clean Water Act. See Water Pollution (this index)

Comprehensive Environmental Response, Compensation, and Liability Act, **6:15** 

Constitutional law. See

**Constitutional Law Matters** (this index)

Disclosures. See **Disclosure Legislation** (this index)

Effluent limitations and standards, **6:8** 

Endangered Species Act. See

Endangered Species Protection (this index)

Generator standards, **6:12** 

Groundwater protection systems, 20:8, 20:9, 20:24

Hazardous waste. See Hazardous Waste Site Cleanup (this index)

National ambient air quality standards, **6:4** 

Oil spills. See Oil Spill Legislation (this index)

Overview, 6:1

Plans for state implementation of clean air act, **6:5** 

Resource Conservation and Recovery Act, generally, **6:10** to **6:14** 

State implementation of clean air act, 6:3 to 6:5

Transporter standards, 6:13

TSD facility standards, 6:14

Water pollution. See Water Pollution (this index)

## Federal model

State organizational patterns, 7:11

## **Federal preemption**

See **Preemption** (this index)

#### Fees

Air pollution, 10:32
Disclosure legislation, 19:18
Economic incentives, 21:18 to 21:21

Hazardous waste site cleanup, 9:10

#### **Fiduciaries**

Hazardous waste site cleanup, **9:14** 

#### **Fifth Amendment**

Due process, **5:16.50**, **5:17.50** Endangered species protection, **17:24** Self-incrimination, **5:33** 

#### **Finality**

Challenging regulatory agency actions, **14:25**, **14:26** 

#### Finances and funds

Enforcement, financial incapability, **16:46** 

Hazardous waste site cleanup, financial incentives, **9:61** 

Oil spill legislation, **18:11**, **18:22**, **18:23**, **18:25** 

## **Findings**

Substantive decisions and reasoning of agency, review of, 15:60 to 15:63

## Fines and penalties

See **Penalties** (this index)

#### **Florida**

Endangered species protection, 17:29

Newsprint disposal fees, **21:21** Reference guide, **App. A** 

## Formal rulemaking procedures

Legislative functions, 8:5

# Functional patterns and decision points

Generally, **8:1 to 8:25**Executive functions. See **Executive Functions** (this index)

Judicial functions. See **Judicial Functions** (this index)

Legislative functions. See **Legislative Functions** (this index)

Overview, 8:1

## **Fungibility of tests**

Judicial review, 15:9

G

#### Generators

Hazardous waste, 9:12.50

#### **Generator standards**

Federal environmental statutes, **6:12** 

#### Georgia

Reference guide, App. A

## Government officials and employees

Challenging regulatory agency actions, **14:10** 

Disclosure legislation, 19:27

#### Grants

Hazardous waste site cleanup, **9:45** 

## Greenhouse gas (ghg)

Generally, 22:1 to 22:16

Agencies and public utilities, 22:15

California Global Warming Solutions Act of 2006, **22:6** 

Cap and trade, Regional Greenhouse Gas Initiative (RGGI), 22:3

Clean energy initiatives, **22:10** Common law litigation, **22:16** 

Constitutional litigation, 22:16

#### Greenhouse gas (ghg)—Cont'd Greenhouse gas (ghg)—Cont'd Emissions performance standards, State and local initiatives-Cont'd Transportation related actions, Environmental impact analysis, 22:11 litigation, 22:14 State commissions, 22:8 Litigation Transportation related actions, generally, 22:13 to 22:15 22:11 common law, 22:16 Western Climate Initiative, 22:4 constitutional, 22:16 **Groundwater protection systems** Environmental impact analysis, 22:14 Generally, 20:1 to 20:40 Nuisance, 22:13 Agricultural operations, Public utilities and other agencontamination from, 20:37 cies, 22:15 Classification of groundwater, Local government actions, 22:7 20:11 to 20:13 Midwestern Greenhouse Gas Colorado quality standards, 20:20 Reduction Accord, 22:5 Contamination, generally, 20:6, New Jersey Global Warming 20:7 Response Act, 22:7 Controls on specific sources of Nuisance, litigation, 22:13 contamination, generally, Public utilities and other agencies, 20:35 to 20:39 22:15 Criteria and classes of Regional Greenhouse Gas Initiagroundwater, 20:12 tive (RGGI), 22:2, 22:3 Definitions, 20:4 Regional initiatives El Paso groundwater protection generally, 22:2 to 22:5 strategy, **20:34** cap and trade, Regional Enforcement, 20:40 Greenhouse Gas Initiative Examples (RGGI), 22:3 Classification systems, 20:13 Midwestern Greenhouse Gas Groundwater quality standards, Reduction Accord, 22:5 20:19 to 20:23 Regional Greenhouse Gas Ini-Federal legislation, 20:8, 20:9, tiative (RGGI), 22:2, 22:3 20:24 Western Climate Initiative, 22:4 Hidden resources and hidden State and local initiatives problems, 20:1 generally, 22:6 to 22:12 Hydrology, generally, 20:3 to 20:7 California Global Warming Illinois wellhead protection Solutions Act of 2006, 22:6 program, 20:31 Clean energy initiatives, 22:10 Implementation and enforcement, Emissions performance stan-20:40 dards, 22:9 Injection wells, controls on, 20:36 Local government actions, 22:7 Local governments, protections New Jersey Global Warming adopted by, 20:29 Response Act, 22:7 Massachusetts quality standards, State commissions, 22:8 20:21

Groundwater protection systems —Cont'd	Groundwater protection systems —Cont'd
Minnesota Groundwater Protection Act, 20:27	Standard setting for groundwater quality standards, <b>20:14</b> State regulatory efforts, generally, <b>20:2</b>
Numeric standards, <b>20:17</b> Narrative standards, <b>20:18</b> Nebraska	Storage and storage tanks, 20:5, 20:38
Groundwater Management Protection Act, 20:28	Underground wells or tanks, <b>20:36, 20:38</b> Wellhead protection programs,
Quality standards, <b>20:22</b> New Hampshire wellhead protection program, <b>20:32</b>	20:30 to 20:34 Wisconsin numeric standards,
New Jersey quality standards, 20:23	20:16 H
New York, sole source of aquifer protection in, <b>20:26</b> Numeric quality standards, <b>20:15</b>	Hardship
to 20:17 Overview, 20:1, 20:2 Patterns of contamination, 20:7	Challenging regulatory agency actions, <b>14:30</b>
PFAS, <b>20:39</b> Policies of states, generally, <b>20:10</b>	Hawaii Reference guide, App. A
Quality standards Generally, 20:14 to 20:23	Hazardous chemicals Disclosure legislation, 19:13
Colorado, 20:20 Examples of groundwater stan- dards, 20:19 to 20:23	Hazardous waste Generally, 9:1 to 9:62
Massachusetts, <b>20:21</b> Minnesota numeric standards,	Actions and remedies, generally, 9:32 to 9:37 Alternative water supply
20:17  Narrative standards, 20:18  Nebraska, 20:22	programs, <b>9:39</b> Apportionment, joint and several
New Jersey, 20:23 Numeric standards, 20:15 to	liability with, <b>9:20</b> Brownfields, concern over, <b>9:52</b> , <b>9:53</b>
20:17 Standard settings, 20:14	California approaches and procedures, 9:4, 9:51
Wisconsin numeric standards, 20:16 Sensitive area designations, 20:25	Categories of liable parties, 9:11 to 9:17 CERCLA elements, state varia-
to 20:29 Sources and types of	tions on, generally, <b>9:22 to 9:47</b>
contaminants, 20:6 Special area protection programs, generally, 20:24 to 20:34	Citizen suits, generally, 9:32 to 9:37 Cleanup levels, 9:21.50

Hazardous waste—Cont'd	Hazardous waste—Cont'd
Colorado statutory approaches,	Liens for cleanup costs—Cont'd
9:5	Prerequisites to imposition of
Comment, public participation,	liens, <b>9:30</b>
9:43 Committees of citizens, 9:46	Priority of superlien provisions, 9:28
Compensation for victims, 9:38 to	Superliens, 9:27 to 9:29
9:40	Limitations and restrictions
Connecticut, real estate transac-	Land use, restrictions on, 9:60
tion, <b>9:50</b>	Liability, limitations of, <b>9:57</b>
Constitutional issues, <b>9:31</b>	Meetings, 9:44
Contractors, liability of, 9:16	Monetary penalties, 9:25
"Disposal," <b>9:6.50</b>	Natural resource damages, <b>9:9</b>
Federal government	New Jersey approaches and
Brownfields, federal response	procedures, <b>9:3</b> , <b>9:49</b>
to, <b>9:53</b> Environmental statutes, gener-	Notice of public participation,
ally, <b>6:11</b>	9:42
Strict liability on federal model,	Objective of state legislation, <b>9:54</b>
9:7	Operators, categories of liable
Fees, <b>9:10</b>	parties, 9:12
Fiduciaries, liability of, 9:14	Oversight fees, 9:10
Financial incentives, 9:61	Overview, 9:1
Generators, 9:12.50	Owners, categories of liable parties, 9:12
Grants, <b>9:45</b>	Parties to citizen suits, 9:33, 9:34
Identification of hazardous wastes, <b>6:11</b>	"Passive migration," <b>9:6.50</b>
	Penalties. 9:25
Innocent landowners, categories of liable parties, <b>9:12</b>	Personal injury programs, victim
Intervenors in citizen suits, 9:35	compensation, <b>9:40</b>
Involuntary owners, liability of,	Preemption of citizen suits by
9:14	agency action, 9:36
Joint and several liability, 9:18 to	Pre-enforcement review of
9:21.50	cleanup orders, 9:24
Land use restrictions, 9:60	Priority of superlien provisions,
Legislative functions, 8:11	9:28
Lenders' liability, 9:15, 9:59	Procedural reforms, 9:58
Levels of cleanup, statutory provisions, <b>9:56</b>	Property damage programs, victim
	compensation, 9:40
Liability	Proportional liability, <b>9:21</b>
Generally, 9:6 to 9:21	Public participation, 9:41 to 9:47,
Limitations of liability, <b>9:57</b>	9:62
Liens for cleanup costs	Real estate transaction and owner-
Generally, 9:26 to 9:31	ship impacts, <b>9:48 to 9:51</b>
Constitutional issues, 9:31	Restrictions. Limitations and
Conventional liens, 9:27	restrictions, supra

#### Hazardous waste—Cont'd Identification—Cont'd State Hazardous wastes, federal environmental statutes, 6:11 Superfund management board, 9:47 Nuisance, identifying the parties, Variations on CERCLA ele-3:4, 3:5 ments, generally, 9:22 to Illinois 9:47 Groundwater protection systems, Voluntary cleanup legislation, generally, 9:52 to 9:62 Reference guide, App. A Statutes and statutory provisions Approaches to site cleanup, 9:2 **Immunities** to 9:5 Challenging regulatory agency Basis for cleanup orders, 9:23 actions, 14:60 Voluntary cleanup legislation, generally, 9:55 to 9:62 **Impairment of resources** Strict liability or fault, 9:7 to 9:10 Public trust doctrine, 4:18 Superfund management board, **Implied preemption** 9:47 Superliens for cleanup costs, 9:27 Generally, 5:7, 5:8 to 9:29 **Incentives** Transporters, liability of, 9:13 See Economic Incentives (this Variations on CERCLA elements, index) generally, 9:22 to 9:47 Victim compensation, 9:38 to **Independent contractors** 9:40 Enforcement, 16:28 Voluntary cleanup legislation, generally, **9:52 to 9:62** Indiana Reference guide, App. A **Hearings** Agencies. See Procedures of Indoor air pollution Agency, Review of (this Air pollution, **10:28.50** index) Enforcement, 16:17 Injection wells Groundwater protection systems, Heating oil tax of Texas 20:36 Economic incentives, 21:19 Injunctions Hydrology Enforcement, 16:19, 16:35 to Groundwater protection systems, 16:38 20:3 to 20:7 Nuisance, 3:21 I Inspections Idaho Enforcement, 16:3 to 16:8 Reference guide, App. A Intensity of judicial review **Identification** Substantive decisions and reasoning of agency, review of, Disclosure legislation, identifying hazards, 19:12 to 19:15 15:2

#### **Interstate nuisances**

Generally, 3:13

## Intervention

Challenging regulatory agency actions, **14:39 to 14:43**Hazardous waste site cleanup, **9:35** 

#### Introduction

Broader objectives, 1:3 Organization of the treatise, 1:2 Underlying assumptions, 1:1

## **Invasion requirement**

Trespass, 4:3

## **Inventory reporting**

Disclosure legislation, 19:16

#### Iowa

Reference guide, App. A

## Irreparable injury

Challenging regulatory agency actions, **14:20**Enforcement, **16:36** 

### J

## Jeopardizing species

Endangered species protection, 17:13

## Joint and several liability

Hazardous waste site cleanup, 9:18 to 9:21.50

## **Judicial enforcement**

See Enforcement

## **Judicial functions**

Generally, 8:23 to 8:25 Permit disputes, 8:25 Variances, 8:24

### Judicial review

Generally, **15:1 to 15:63**Arbitrary and capricious test, **15:5**Enforcement, **16:22, 16:41**Fungibility of tests, **15:9** 

#### Judicial review—Cont'd

Introduction, **15:1** Method of review, **15:10** 

Other tests, 15:7

Presumptions and burden of proof, 15:10

Quasi-legislative and quasiadjudicatory acts, **15:3** 

Questions of law, 15:8

Statutes governing, 15:4

Substantial evidence test, 15:6

Tests for reviewing agency action, 15:3 to 15:9

Themes in judicial review of environmental issues, **15:2** 

#### Jurisdiction of agencies

Generally, **15:11 to 15:18** 

Air pollution, **10:8 to 10:11** 

Challenging regulatory agency actions, **14:32 to 14:34** 

Division of authority between agencies, **15:13** 

Extent of authority, 15:14 to 15:17

Introduction, 15:11

Method of procedure, 15:15

Overview, 15:10

Prerequisites of agency action, 15:18

Remedial authority, 15:17

Review of, generally, **15:11 to 15:18** 

Scope of regulatory authority, **15:16** 

## Jury trial

Constitutional law matters, 5:34

## K

#### Kansas

Reference guide, App. A

## Kentucky

Reference guide, App. A

Index-20

L

#### Labeling

Disclosures. See **Disclosure Legislation** (this index)

## Laches or delay

Enforcement, **16:47**State organizational patterns, **7:9** 

#### LAER

Air pollution, 10:17

## Land use restrictions

Hazardous waste site cleanup, **9:60** 

#### **Legislative definitions**

Nuisances, 3:3

## Legislative functions

Generally, 8:2 to 8:11

Air pollution, medium-specific regulations, **8:9** 

Categories of environmental regulations, **8:3** 

Development and promulgation of regulations, **8:4**, **8:7** 

Formal rulemaking procedures, **8:5** 

Hazardous waste, medium-specific regulations, **8:11** 

Informal communications, **8:6**Medium-specific regulations, **8:8**to **8:11** 

Participation of legislature, **8:7** Rulemaking procedures, **8:5** Sources of proposed regulations, **8:4** 

Water pollution, medium-specific regulations, **8:10** 

## Lenders' liability

Hazardous waste site cleanup, 9:15, 9:59

## Licenses

See **Permits** (this index)

#### Liens and encumbrances

Hazardous waste. See Hazardous Waste Site Cleanup (this index)

#### **Limitations and restrictions**

Endangered species protection, 17:8

Hazardous waste. See Hazardous Waste Site Cleanup (this index)

### Listing of species

Endangered species protection, 17:5 to 17:7

## Litigation

Challenging agency actions. See
Challenging Regulatory
Agency Actions (this index)

Greenhouse gas emissions (this index)

Hazardous waste site cleanup, citizens suits, **9:32 to 9:37** 

Review. See **Appeal and Review** (this index)

## Local governments or powers

Greenhouse gas emissions, **22:12** Groundwater protection systems, **20:29** 

#### Louisiana

Reference guide, App. A

## $\mathbf{M}$

#### Maine

Reference guide, App. A

## Manatee Sanctuary Act of Florida

Endangered species protection, 17:29

#### **Mandatory injunctions**

Enforcement, 16:37

## Maryland

Reference guide, App. A

#### Massachusetts

Groundwater protection systems, **20:21** 

Pollution prevention plans, disclosure legislation, **19:30** Reference guide, **App. A** 

Medical waste incinerators
Air pollution, 10:29

Medium-specific program of

Medium-specific program offices
State organizational patterns, 7:14

Medium-specific regulations
Legislative functions, 8:8 to 8:11

Meetings

Hazardous waste site cleanup, **9:44** 

Michigan

Endangered species protection, 17:30

Reference guide, App. A

Midwestern Greenhouse Gas Reduction Accord

Greenhouse gas emissions, 22:5

Minnesota

Groundwater protection. See
Groundwater Protection
Systems (this index)
Reference guide, App. A

Missouri

Reference guide, App. A

**Mobile sources** 

Air pollution, 10:21 to 10:24

Monetary penalties

Hazardous waste site cleanup, **9:25** 

Montana

Reference guide, App. A

**Motion practice** 

Challenging regulatory agency actions, **14:59** 

N

Narrative standards

Groundwater protection systems, **20:18** 

National ambient air quality standards

Federal environmental statutes, **6:4** 

**Natural Communities** 

Conservation Planning Act of California

Endangered species protection, 17:28

Natural resource damages

Hazardous waste site cleanup, 9:9

Navigable waters and navigability

Generally, 4:21

Public trust doctrine, 4:10, 4:11

Nebraska

Groundwater protection. See
Groundwater Protection
Systems (this index)
Reference guide, App. A

Nevada

Reference guide, App. A

**New Hampshire** 

Groundwater protection systems, 20:32

Reference guide, App. A

New jersey

Global Warming Response Act, 22:7

**New Jersey** 

Disclosures. See **Disclosure Legislation** (this index)

Groundwater protection systems, **20:23** 

Hazardous waste site cleanup, 9:3, 9:49

Reference guide, App. A

New Mexico	Nuisance—Cont'd
Reference guide, App. A	Flexibility of remedy, 3:23
Newsprint disposal fees	Future directions for common law. <b>4:22</b>
Economic incentives, 21:21  New York	Greenhouse gas emissions, litigation, 22:13
Groundwater protection systems, 20:26	Identifying the parties, <b>3:4</b> , <b>3:5</b> Injunctions, <b>3:21</b>
Reference guide, App. A	Interstate nuisances, 3:13
Nondelegation doctrine	Legislative definitions of nuisances, <b>3:3</b>
Constitutional law matters, 5:18	Permits and statutory authoriza-
North Carolina	tion, <b>3:16</b> Per se nuisances, <b>3:8</b>
Reference guide, <b>App. A</b>	Plaintiffs, identifying, <b>3:4</b>
North Dakota Reference guide, App. A	Preemption of state common law, 3:15
Notice and knowledge Enforcement, 16:10 Hazardous waste site cleanup, 9:42 Oil spill legislation, 18:8  Nuisance Generally, 3:1 to 3:23 Air pollution as, 10:26 Balancing, changing role of, 3:9 to 3:12.50 Causation, 3:12.50 Coming to the nuisance, 3:12 Consent and related doctrines, 3:19 Damages, 3:20	Preferences in balancing, 3:11 Presumptions in balancing, 3:11 Primary jurisdiction, 3:17 Public and private nuisances, generally, 3:1, 3:2 Public trust doctrine, 4:22 Punitive damages, 3:22 Remedies, generally, 3:20 to 3:23 Restatement's modification, 3:10 Statutes of limitation, 3:18 Substantial and unreasonable interference, 3:9  Numeric quality standards Groundwater protection systems, 20:15 to 20:17
Defenses Generally, <b>3:14 to 3:19</b>	0
Consent and related doctrines, 3:19	Odors Air pollution, 10:9
Permits and statutory authorization, <b>3:16</b>	Ohio Reference guide, App. A
Preemption of state common law, <b>3:15</b>	
Primary jurisdiction, 3:17 Statutes of limitation, 3:18 Definitional aspects of nuisance law, 3:1 to 3:3 Fault, role of, 3:6 to 3:8	Oil spill legislation Generally, 18:1 to 18:27 Administration of prevention and cleanup efforts, 18:15 Aftermath of 1989-1990 oil spills, 18:1

#### Oil spill legislation—Cont'd Oil spill legislation—Cont'd Civil penalty provisions, 18:5 Technological requirements, 18:20 Comprehensive state legislation in Third party claims against fund, general, 18:7 18:12 Vessel plans, 18:19 Contingency plans of state, 18:9, 18:18 Water pollution regulation, gener-Defenses, 18:24 ally, **18:6** Developments in oil spill legisla-Oklahoma tion, generally, 18:14 to Reference guide, App. A 18:26 Disbursements, 18:25 **Ongoing operations** Emergency powers, 18:16 Oil spill legislation, 18:13 Enforcement, 18:26 **On-scene coordination** Evidence of financial responsibil-Oil spill legislation, 18:16 ity, 18:22 Facility plans, 18:19 **Operating permits** Federal responses to 1989-90 oil Air pollution, 10:15 spills, generally, 18:2 **Operational limits** Financial responsibility, 18:22, 18:23 Oil spill legislation, 18:20 Funds and funding, 18:11, 18:22, **Opt-in states** 18:23, 18:25 Air pollution, 10:22 Future developments, 18:27 Increased funding requirements, Oregon 18:23 Reference guide, App. A Institutional improvements, 18:15 Oregon bottle bill to 18:17 Economic incentives, 21:23 Liability, 18:4, 18:24 Licensing, 18:21 Oversight fees Notification requirements, 18:8 Hazardous waste site cleanup, Ongoing operations and facilities, 9:10 regulation of, 18:13 On-scene coordination, **18:16** P Operational limits, 18:20 Organization of chapter, 18:3 **Parties** Oversight functions, 18:17 Challenging regulatory agency Overview. 18:1 to 18:3 actions, 14:36 to 14:38 Patterns of response, 18:10 Hazardous waste site cleanup. 9:33, 9:34 Permits. 18:21 Planning reforms, 18:18, 18:19 "Passive migration" Regulatory framework, generally, "Disposal" of "hazardous waste," 18:4 to 18:6 9:6.50 Response and recovery actions, **Penalties** generally, 18:7 to 18:12 State responses to 1989-90 oil Enforcement. See Enforcement

(this index)

spills, generally, 18:2

## Penalties—Cont'd

Hazardous waste site cleanup, 9:25

Oil spill legislation, 18:5

## Pennsylvania

Reference guide, App. A

#### **Permits**

Air pollution. See**Air Pollution** (this index)

Clean Water Act, 6:9

Enforcement. See **Enforcement** (this index)

Executives. See Executive Functions (this index)

Judicial functions, 8:25

Nuisance, 3:16

Oil spill legislation, 18:21

State organizational patterns, 7:7 Substantive decisions and reasoning of agency, review of,

15:56 to 15:59

#### Per se nuisances

Generally, 3:8

## Plans and planning

Oil spill legislation, **18:18**, **18:19** State implementation of clean air act, **6:5** 

## **Plant species**

Endangered species protection, 17:7

## **Pollution fees**

Economic incentives, 21:18 to 21:21

#### Pollution Prevention Act of 1990

Disclosure legislation, 19:8

#### **Preemption**

Generally, **5:4 to 5:13**Balancing rule, **5:15**Basic principles of federal preemption, **5:5**Conflict in implementation, implied preemption by, **5:8** 

## Preemption—Cont'd

Congressional intent, implied preemption by, **5:7** 

Dormant commerce clause application, preemption by, 5:9 to 5:13

Express preemption by statutory declaration, **5:6** 

Express state law preemption, statute, **5:10** 

Federal preemption of state pow-

Generally, 5:4 to 5:13

Balancing rule, **5:15** 

Basic principles of federal preemption, **5:5** 

Conflict in implementation, implied preemption by, **5:8** 

discrimination, 5:14

dormant commerce clause, 5:13

Dormant commerce clause application, preemption by, **5:9 to 5:13** 

Express preemption by statutory declaration, **5:6** 

Implied preemption, 5:7, 5:8

Inferred Congressional intent, implied preemption by, **5:7** 

Tenth amendment limits on federal power, **5:15.50** 

Hazardous waste site cleanup, preemption of citizen suits by agency action, **9:36** 

Implied preemption, 5:7, 5:8

Implied state law preemption, 5:11, 5:12

Nuisance, preemption of state common law. **3:15** 

State over local environmental regulation, **5:9** 

Statutory declaration, express preemption by, **5:6** 

Tenth amendment limits on federal power, **5:15.50** 

#### **Preferences**

Nuisance, 3:11

## **Pre-permit functions**

Executive functions, 8:13

## Presumptions and burden of proof

Enforcement, 16:31 Judicial review, 15:10 Nuisance, 3:11

## **Primary jurisdiction**

Nuisance, 3:17

#### **Priorities**

Hazardous waste site cleanup, **9:28** 

## **Procedural due process**

Constitutional law matters, 5:17.50

## Procedures of agency, review of

Generally, **15:19 to 15:28**Adjudicatory procedures, generally, **15:22 to 15:28** 

Choice between rulemaking and adjudication, **15:20** 

Conduct of hearing, **15:25 to 15:28** 

Hearings, generally, **15:23 to 15:28** 

Issues arising at hearing, **15:27** Overview, **15:10** 

Post-hearing issues, **15:28** Pre-hearing proceedings, **15:26** 

Right to hearing, **15:23**, **15:24** 

Rulemaking procedures, 15:19 to 15:21

Type of hearing, 15:24

#### **Proportional liability**

Hazardous waste site cleanup, **9:21** 

## **Proximate cause**

See Causation (this index)

### Public disclosure

See **Disclosure Legislation** (this index)

#### **Public trust doctrine**

Generally, **4:9 to 4:23** 

Access to trust resources, **4:19**Application of doctrine, **4:17 to** 

Constitutional provisions, 4:13

Effect of doctrine, 4:14 to 4:16

Endangered species protection, 17:23

Future directions for common law, 4:23

Navigable waters and navigability, 4:10, 4:11

Nuisance, future directions for common law, **4:22** 

Other trust resources, 4:12

Perspective, doctrine in, 4:9

Procedural component, **4:15** 

Resources subject to trust, 4:10 to 4:13

Statutory provisions, 4:13

Strict liability, future directions for common law, **4:22** 

Substantive component, 4:16

Tidelands, 4:10

Use, impairment, or disposition of trust resources, **4:18** 

Water rights

Generally, 4:20

Navigable waters and navigability, **4:10**, **4:11**, **4:21** 

### Public utilities agencies

Greenhouse gas emissions, 22:15

#### **Punitive damages**

Nuisance, 3:22

## Q

## Quality rulemakings

Air pollution, 10:12

## **Quality standards**

Groundwater protection. See
Groundwater Protection
Systems (this index)

## Quasi-legislative and quasi-adjudicatory acts Judicial review, 15:3

Questions of law and fact Judicial review, 15:8

## R

#### **RACT**

Air pollution, 10:17

#### Rates of reduction

South coast air quality management district's marketable permit system, **21:7** 

## Reasoning of agency

See Substantive Decisions and Reasoning of Agency, Review of (this index)

## **Reconciliation of emissions**

South coast air quality management district's marketable permit system, 21:9

#### Record

Substantive decisions and reasoning of agency, review of, 15:4, 15:46

## Reference guides

State reference guides, App. A

## Regional Greenhouse Gas Initiative (RGGI)

Greenhouse gas emissions, 22:2, 22:3

# Regulations and regulatory agencies

Air pollution, 10:6

Appeals. See **Appeal and Review** (this index)

Challenges to. See Challenging Regulatory Agency Actions (this index)

Constitutional limits on regulation. See Constitutional law matters

# Regulations and regulatory agencies—Cont'd

Endangered species protection, 17:19

Enforcement of regulations. See **Enforcement** (this index)

Evidence in record, consideration by agency, **15:46**, **15:47** 

Federal regulations. See **Federal Environmental Statutes**(this index)

Greenhouse gas emissions, 22:15
Hazardous waste. See Hazardous
Waste Site Cleanup (this index)

Oil spill legislation, **18:4 to 18:6** Process of regulation. See

Functional patterns and decision points

Regulatory structure,. See **State Organizational Patterns**(this index)

Review of actions. See Appeal and Review (this index) State reference guides, App. A

#### Release planning

Disclosure legislation, 19:6

## Remedial authority

Jurisdiction of agency, review of, 15:17

## Renewal of permit

Executive functions, 8:21

## Reports and reporting

Disclosure legislation, 19:15 to 19:17

## Resource Conservation and Recovery Act

Generally, **6:10 to 6:14** 

## Response planning

Disclosure legislation, 19:5, 19:16

## Restrictions

See **Limitations and Restrictions** (this index)

#### Review

Appeals. See **Appeal and Review** (this index)

## Reviewing decisions and reasoning

Generally, 15:43

Enabling statutes, decisional consistency, **15:45** 

Intensity of judicial review, 15:44

#### **Rhode Island**

Reference guide, App. A

## **Ripeness**

Regulatory agency actions. See
Challenging Regulatory
Agency Actions (this index)

## Risk management plans

Disclosure legislation, 19:21 to 19:23

## Rules and rulemaking

Air pollution, 10:12 Legislative functions, 8:5 Procedures of agency, review of, 15:19 to 15:21

S

## Safety valves

State organizational patterns, 7:8

#### Sanctions

See **Penalties** (this index)

## Scienter

Enforcement, 16:32

## Seals of approval and official emblems

Disclosure legislation, 19:37

## Searches and search warrants Enforcement, 16:5 to 16:8

Self-auditing and self-reporting Enforcement, 16:30

### **Self-incrimination**

Constitutional law matters, 5:33

## Sensitive area designations

Groundwater protection systems, 20:25 to 20:29

## Settlements and settlement agreements

Enforcement, 16:23, 16:50, 16:51

## **SIP** implementation

Federal Clean Air Act, 10:3

#### **SLAPP** suits

Regulatory agency actions. See
Challenging Regulatory
Agency Actions (this index)

## South coast air quality management district's marketable permit system

Economic incentives. See Economic Incentives (this index)

## South Dakota

Reference guide, App. A

## Standing

Challenging agency actions. Challenging Regulatory Agency Actions (this index)

## **State commissions**

Greenhouse gas emissions, 22:8

## **State Environmental Policy Acts**

Generally, 13:1 to 13:24

Endangered species protection, 17:22

## State organizational patterns

Generally, 7:1 to 7:17

Agency chief and staff, 7:15

Agency lawyers, 7:17

Analytic and practical themes, 7:3 to 7:10

Boards and commissions, 7:16

Consolidated agency model, 7:13 to 7:17

Cooperative solutions, orientation toward, 7:4

Delay, importance of, 7:9

#### State organizational patterns Storage and storage tanks -Cont'd Groundwater protection systems, Discretion, exercise of, 7:6 20:5, 20:38 Expertise, application of, 7:5 Strict liability Federal model, 7:11 Generally, 4:5 to 4:8 Medium-specific program offices, Applying strict liability to 7:14 environmental pollutants, 4:6 Overview, 7:1 Causation, 4:8 Permits, role of, 7:7 Damages, 4:8 Public decision-making, 7:10 Future directions for common law, Relationship to other chapters, 7:2 4:22 Safety valves, need for, 7:8 Hazardous waste site cleanup, 9:7 State programs, generally, 7:12 to to 9:10 7:17 Recurring issues, **4:7** Timing, importance of, 7:9 Theory of strict liability, 4:5 State reference guides Substantial and unreasonable Generally, App. A interference **States** Nuisance, 3:9 Reference guides, App. A Substantial evidence Factual conclusions. See Factual Status quo injunctions **Conclusions and Legal** Enforcement, 16:37 Interpretations of Agency, **Statutes and statutory provisions Review of** (this index) Challenging regulatory agency Judicial review, 15:6 actions, 14:7, 14:8 Substantive decisions and Enforcement. See Enforcement reasoning of agency, review of (this index) Generally, 15:1 to 15:21 Environmental statutes, role of. See Federal Environmental Adequacy of findings, 15:62 Arbitrary decision-making, gener-**Statutes** (this index) Factual conclusions and legal ally, 15:50 to 15:55 interpretations of agency, Authority for conditional permits, review of, 15:30, 15:38 15:56 Hazardous waste. See Hazardous Challenging agency expertise, Waste (this index) 15:49 Judicial review, 15:4 Changes in position, 15:54 Preemption by statutory declara-Conditional approvals of permits, tion, **5:6** 15:56 to 15:59 Public trust doctrine, 4:13 Conformance to environmental protection purposes, 15:52 Statutes of limitation Consistency of decisions with Nuisance, 3:18 enabling statutes, 15:3 Stay of proceedings Deference principle, 15:48 Challenging regulatory agency Disagreements among regulatory actions, 14:44 to 14:48 agencies, 15:55

# Substantive decisions and reasoning of agency, review of —Cont'd

Expertise of agency, decisions based on, **15:49** 

Findings, 15:60 to 15:63

Illogical agency reasoning, **15:50** Inconsistent treatment of similar situations, **15:51** 

Intensity of judicial review, **15:2**Internal logic of agency reasoning, **15:63** 

Overview, 15:1

Permits, conditional approvals of, 15:56 to 15:59

Reasonableness of conditions for permits, **15:57** 

Record, consideration of evidence in, **15:4**, **15:46** 

Theory and practice, findings in, 15:61

Undermining regulatory expectations, **15:53** 

Validity of conditions for permits, 15:57 to 15:59

Violation of statute or regulation, 15:58

#### **Substantive due process**

Constitutional law matters, **5:16.50** 

## Sufficiency of evidence

Enforcement, 16:34

## Superfund management board

Hazardous waste site cleanup, **9:47** 

## **Superliens**

Hazardous waste site cleanup, 9:27 to 9:29

# Suspensions or revocations of permits

Enforcement, 16:13

T

#### Takes and incidental takes

Endangered species protection, 17:14

## Takings, compensation for

Constitutional law. See

Constitutional Law Matters
(this index)

## Tar-Pimlico trading system

Economic incentives, 21:15 to 21:17

## **Taxpayers**

Challenging regulatory agency actions, **14:11** 

## **Technological impossibility**

Enforcement, 16:45

## Technological requirements

Oil spill legislation, 18:20

#### **Tennessee**

Reference guide, App. A

#### **Tenth Amendment**

Preemption, limits on powers of, **5:15.50** 

#### **Tests and testing**

Enforcement, 16:41
Judicial review of agency action,
15:3 to 15:9

#### Texas

Reference guide, App. A

## Texas heating oil tax

Economic incentives, 21:19

## Third parties

Oil spill legislation, 18:12

#### **Tidelands**

Public trust doctrine, 4:10

#### Time or date

Challenging regulatory agency actions, **14:41**State organizational patterns, **7:9** 

# **Toxic air emissions programs** Air pollution, **10:25**

## Toxic discharge fees of California

Economic incentives, 21:20

**Trading** 

Air pollution, 10:31

**Trading mechanisms** 

Economic incentives. See Economic Incentives (this index)

Transportation

Greenhouse gas emission actions, 22:11

Improvements, air pollution, 10:24

**Transporters** 

Hazardous waste site cleanup, **9:13** 

**Transporter standards** 

Federal environmental statutes, **6:13** 

**Trespass** 

Generally, **4:1 to 4:4**Damages, **4:4**Fault requirement, **4:2**Invasion requirement, **4:3**Traditional elements, **4:1** 

Trust doctrine

See **Public Trust Doctrine** (this index)

TSD facility standards

Federal environmental statutes, **6:14** 

U

Unclean hands defense

Enforcement, 16:47

Underground wells or tanks

Groundwater protection systems, 20:36, 20:38

**Upsets** 

Air pollution, 10:20

Use of trust resources

Public trust doctrine, 4:18

Utah

Reference guide, App. A

V

Variances

Air pollution, 10:20 Judicial functions, 8:24

Venue

Challenging regulatory agency actions, **14:35** 

Vermont

Reference guide, App. A

Vessel plans

Oil spill legislation, 18:19

Victim compensation

Hazardous waste site cleanup, 9:38 to 9:40

Virginia

Reference guide, App. A

Void for vagueness doctrine

Constitutional law matters, 5:17

Voluntary cleanup legislation

Hazardous waste. **Hazardous Waste Site Cleanup** (this index)

W

Waiver and estoppel

Enforcement, 16:47

**Warrantless inspections** 

Enforcement, 16:4

Washington

Reference guide, App. A

Water and water rights

Navigable waters. See Navigable Waters and Navigability (this index)

Pollution. See Water Pollution (this index)

Water and water rights—Cont'd
Public trust. See Public Trust
Doctrine (this index)

## Water pollution

Generally, 11:1 to 11:33 Antidegradation policy, 11:23, 11:24

Clean Water Act, generally, **6:7 to 6:9** 

Effluent limitations and standards, **6:8** 

Federal Clean Water Act, 11:2 et seq.

Implementing water quality standards, 11:16 to 11:22

Jurisdiction, 11:4 to 11:8 Legislative functions, 8:10

Oil spills. See Oil Spill Legislation (this index)

Permits, 11:9 to 11:15

Permits required by Clean Water Act, **6:9** 

Section 401 certification power, 11:30 to 11:33

Sewage treatment, **11:28, 11:29**Storm water regulation, **11:25 to 11:27** 

## Weight of evidence

Factual conclusions and legal interpretations of agency, review of, 15:32

#### Wellheads

Groundwater protection systems, 20:30 to 20:34

## **Western Climate Initiative**

Greenhouse gas emissions, 22:4

#### West Virginia

Reference guide, App. A

#### Wisconsin

Groundwater protection systems, **20:16** 

Reference guide, App. A

## Wyoming

Reference guide, App. A

Z

## **Zone of interests**

Challenging regulatory agency actions, **14:5**